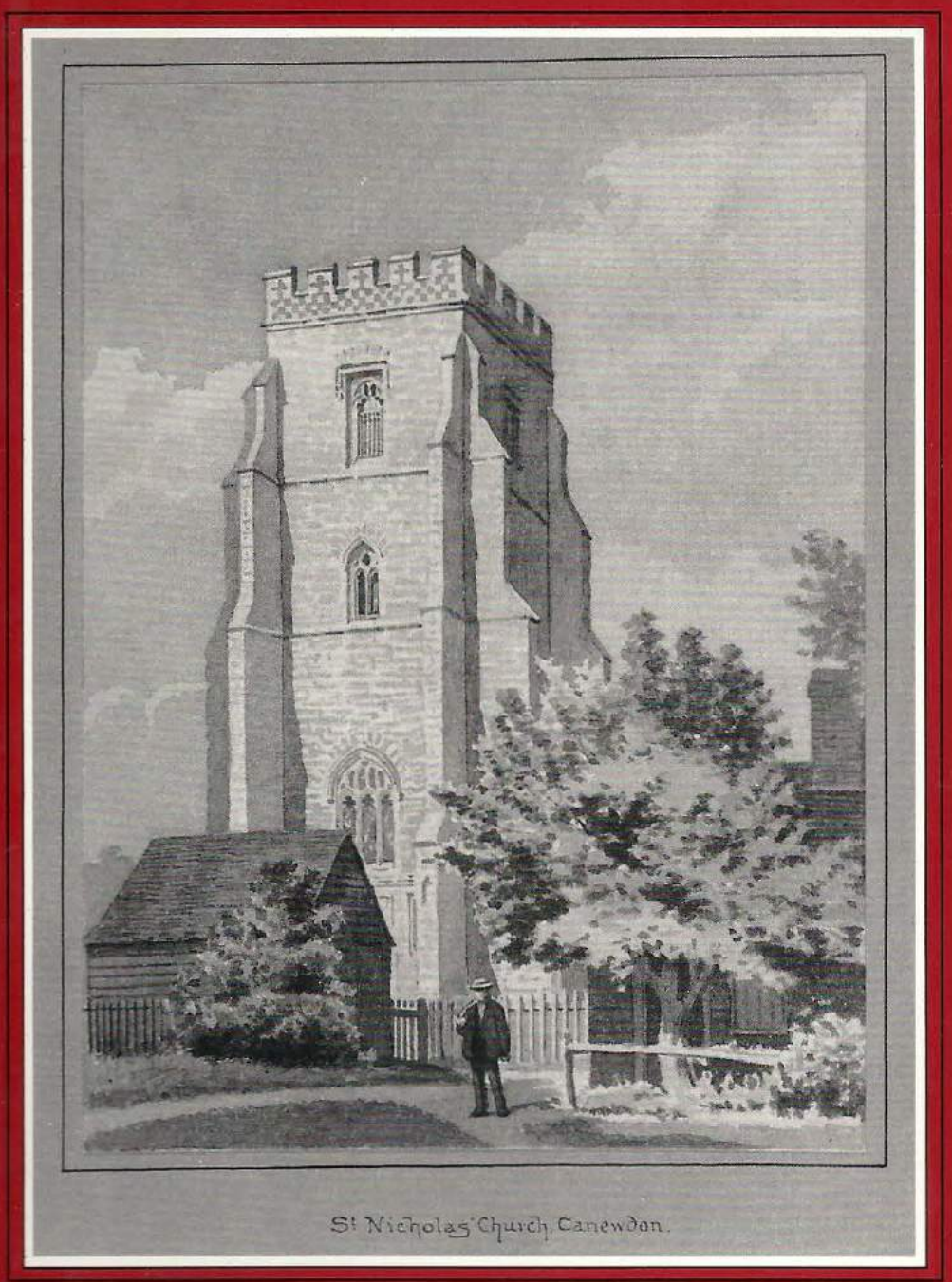
ESSEX

ARCHAEOLOGY AND HISTORY



TRANSACTIONS OF THE ESSEX SOCIETY

FOR ARCHAEOLOGY AND HISTORY

Volume 26

1995

ESSEX

ARCHAEOLOGY AND HISTORY

THE TRANSACTIONS OF
THE ESSEX SOCIETY FOR ARCHAEOLOGY AND HISTORY

VOLUME 26 (Third Series)

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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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Shorter Notes

Cover illustration: St Nicholas' church, Canewdon, showing 15th-century west tower. Drawing by A.B. Bamford (1857-1939) in the Essex Record Office (see 'Short studies in topography and family history' [pp. 162-73]).

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A Late Bronze Age enclosure at Broomfield, Chelmsford

by Mark Atkinson

with specialist contributions by Nigel Brown, Hilary Major, Peter Murphy and Alan Saville

Excavation in advance of a housing development revealed a sub-rectangular enclosure of Late Bronze Age date. The excavation of the interior revealed a single hut circle with associated fence lines and pits belonging to a small farmstead for which a mixed agrarian economy is suggested. Occupation is thought to have been short-lived.

Introduction

Excavation of the enclosure was prompted by residential development. The work was undertaken by the Field Archaeology Group of Essex County Council in December 1991 and January 1992, and funded by the developer, Bellway Homes.

The site was originally identified in the 1970s from aerial photographs (TL 7011/4/59). It was evident as a cropmark of a sub-rectangular enclosure with a single ditch and entrance. A probable Iron Age date was assigned to it. The site is located on the edge of gently sloping terraces of the Chelmer Valley at the north end of Broomfield, Essex at TL 705 114 (Fig. 1), at a height of *c.* 47.0m OD, on glacially laid gravel and sand with irregular patches of brickearth. The site commands extensive views over the terraces and flood plain of the river below. Other linear cropmarks have also been identified to the east of the site, extending beyond the Hospital approach road.

The enclosure is one of a number of Late Bronze Age enclosed settlements known in the mid-Chelmer Valley and its excavation has produced a further insight into the nature of settlement and economy of the area during this period, previously summarised by Brown and Lavender (1994).

No archaeological work had been undertaken in this vicinity prior to the excavation although an area of some 2 hectares was later fieldwalked in 1992 at Broomfield Hospital only 500m to the north-west (Ecclestone 1992). While a number of worked and burnt flints were collected, their small number does not appear to indicate the presence of further prehistoric features at this location.

The Excavation

Two areas, A and B, totalling *c.* 1200 sq m were stripped of topsoil by machine to expose approximately two thirds of the enclosure (Figs 2 and 3). The location of each area was dictated by the positioning of houses within what is now the Windmill Field residential development. Approximately one third of the enclosure interior was left uninvestigated and agreement made to preserve it under garden plots. Due to plough disturbance, all deposits overlying natural were removed revealing the features cutting into the gravel, sand and brickearth at a depth of *c.* 0.3m below ground surface.

Excavation, under the directorship of the author, focused upon the enclosure ditch and its interior as there was no opportunity to investigate any of the development area beyond the immediate vicinity of the enclosure. Linear features were sampled by segments, and all other distinct features such as post holes and pits were half-sectioned. Natural features were also sampled. Feature definition was generally good across the site, although the distinction between archaeological and natural features was made difficult by the similarity of their fills and absence of artefacts in many pits and post holes. It is possible that some smaller features may not have been recognised. The relatively acidic nature of the natural gravel also resulted in very poor bone preservation.

The investigation produced evidence for a total of four phases of occupation from the Late Neolithic to Roman periods, of which the Late Bronze Age was the most significant and substantial. These phases are discussed below and their component groups of features described.

Pre-enclosure features

The evidence for pre-enclosure activity on the site is in the form of two Late Neolithic/Early Bronze Age pits, 2004 and 2008, and a linear cut, 2030, tentatively dated to the Early or Middle Bronze Age.

The pits were located to the east of the later enclosure entrance in Area A (Fig. 2). Both were rounded, though slightly irregular, in plan. Their excavation revealed moderately sloping sides and flat bases cut into natural gravel. Each contained dark brown silty fills which yielded Grooved Ware pottery and worked flints, including waste flakes derived from blade manufacture and a good example of a knife from 2008 (Fig. 14, 65).

A shallow linear ditch, 2030, which ran north-south across Area B was clearly earlier than the

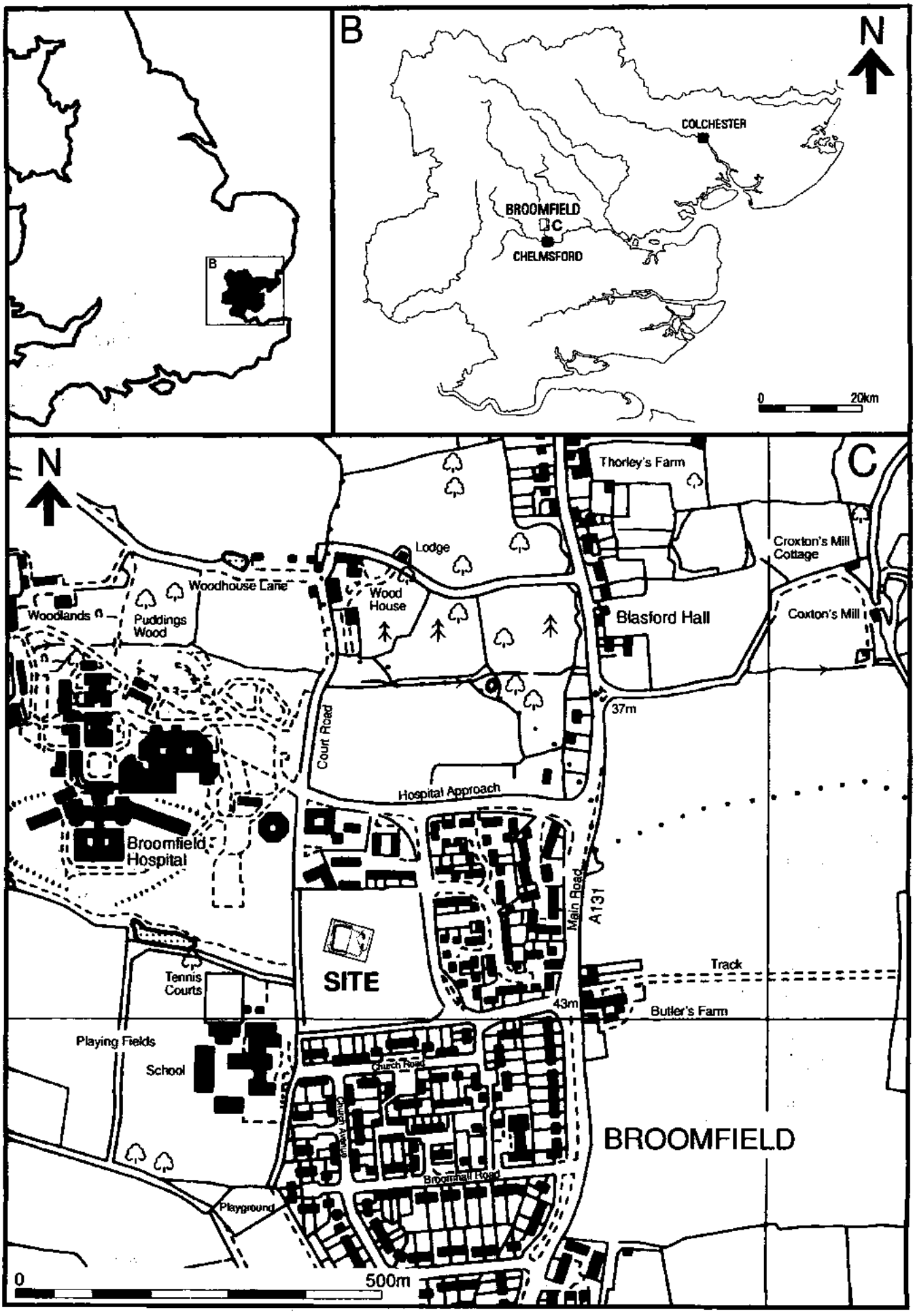


Fig. 1 Windmill Field, Broomfield. Site location.

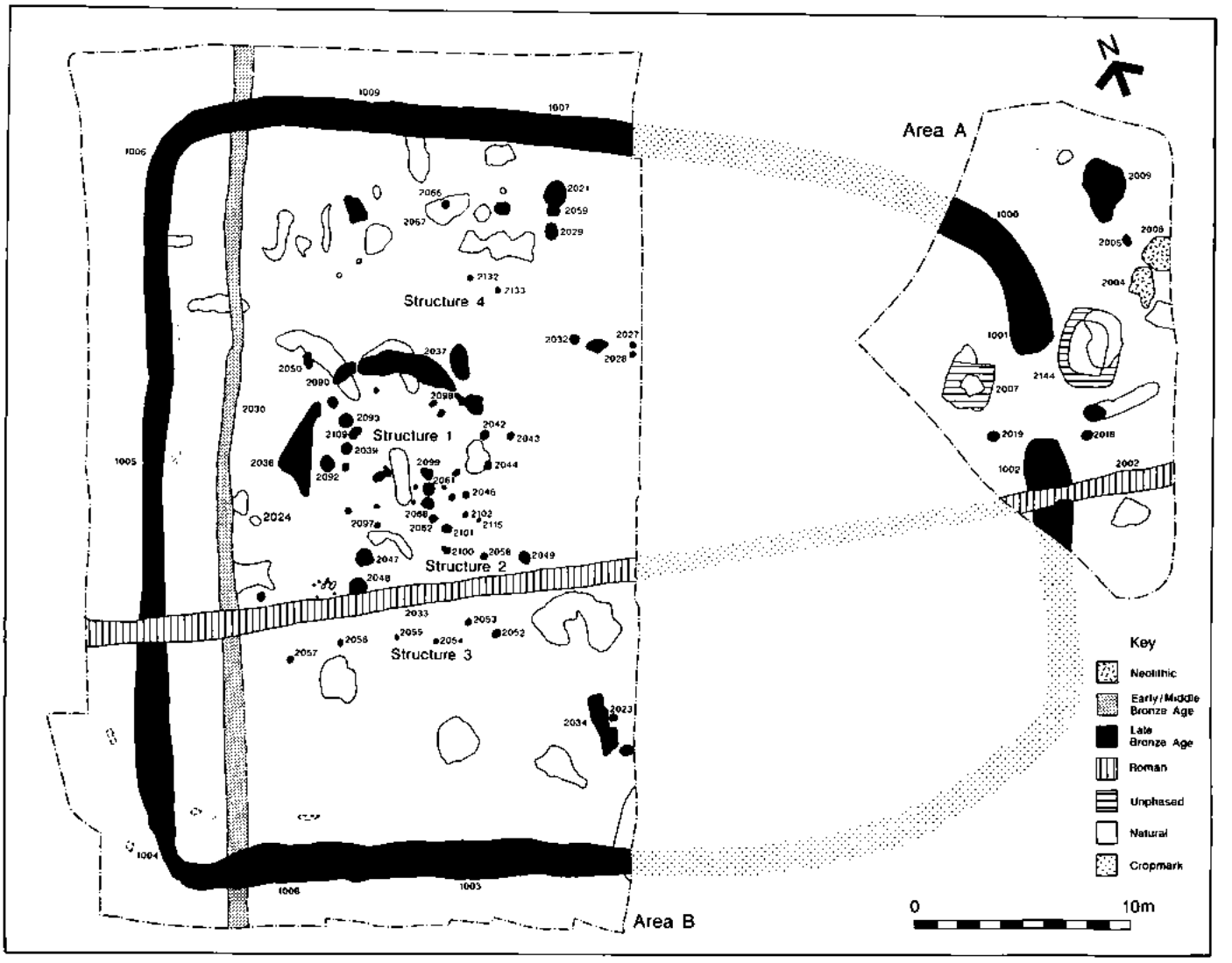


Fig. 2 Windmill Field, Broomfield. Phase plan.

enclosure ditch (Fig. 2). Segments excavated across it revealed a U-shaped profile and a single fill of very stony clay-silt. No diagnostic finds were collected from this fill.

The Enclosure Ditch (Fig. 2)

Excavation confirmed the aerial photographic evidence, revealing a single sub-rectangular ditched enclosure, with rounded corners, measuring approximately 35 m north-south by 44 m east-west, enclosing a total area of some 1450 sq m.

As indicated by the aerial photographs, the entrance was located on the east with a pair of rounded terminals marking an opening some 4.0 m wide. A pair of post holes, 2018 and 2019, located either side of the southern-most terminal, appear to indicate that there was a gate structure at this point.

A total of ten 2 m long segments were excavated across the ditch at regular intervals to provide a representative sample of the feature as a whole. The ditch itself was widest and deepest at the terminals, as exposed in Segments 1001 and 1002 in Area A. These revealed its splayed V-shaped profile surviving to a maximum width of 2.0 m and depth of 0.95 m (Figs 3 and 4). It was also within the terminals that the most complex of the ditch-fill stratigraphy was recorded, with the exposed section of Segment 1001 displaying what appears to be the original profile of the ditch cut, 2000. This contained a stony primary fill, 021, which was overlain by dumps 005 and 020. Fill 005 was a black charcoal-rich silt which had been tipped down the inside edge of the ditch, presumably from inside the enclosure itself. A large amount of pottery was collected from 020 (see Specialist Report). These deposits may have been simply the result of the dumping of waste by the occupants of the enclosure, but may also have served a symbolic purpose. They were overlain by a relatively massive fill 006, which was probably derived from the erosion and slippage of a postulated upcast bank. This fill also contains a smaller recut,

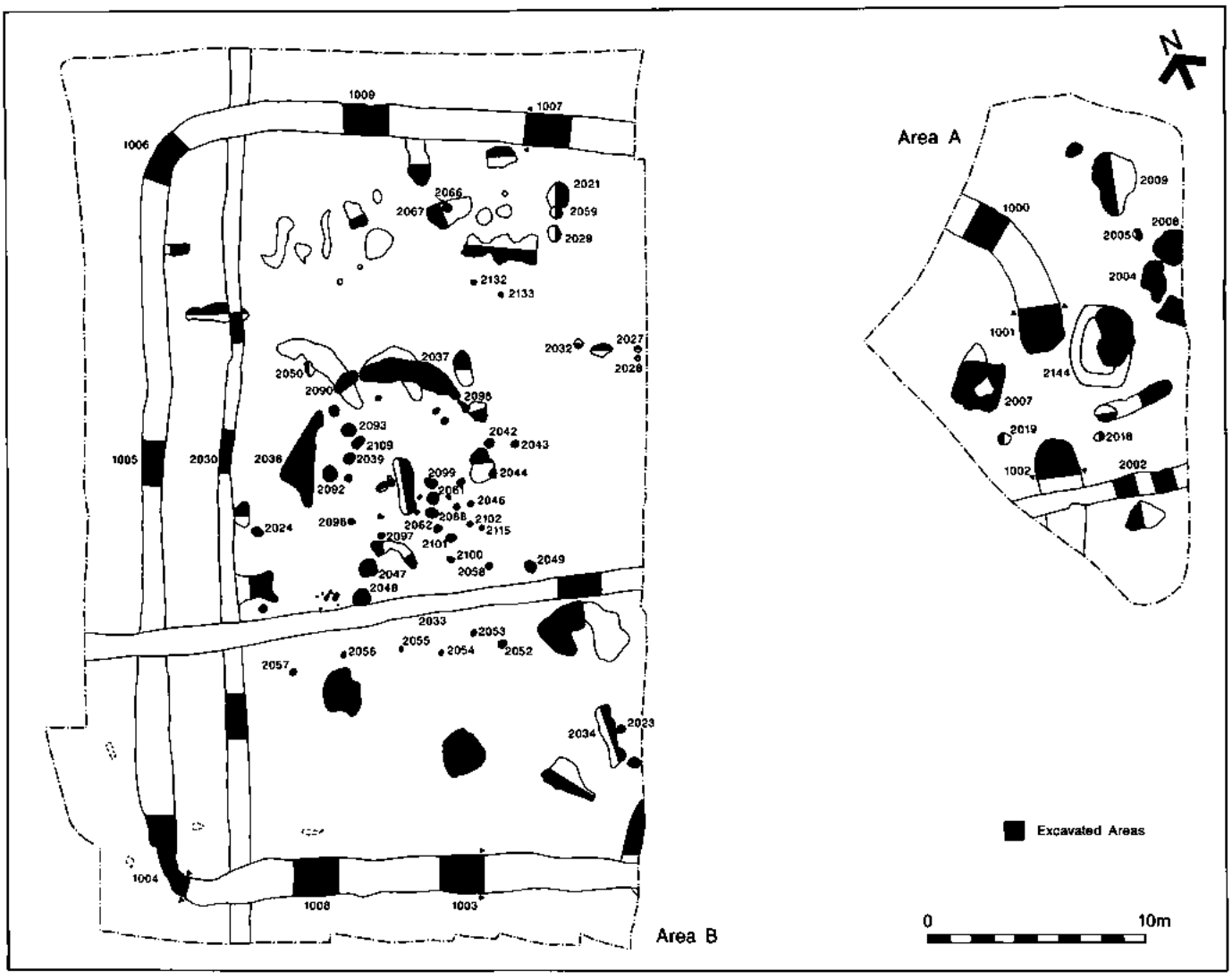


Fig. 3 Windmill Field, Broomfield. Plan of excavated areas.

2003, some 0.8 m wide and 0.4 m deep in its top (Figs 3 and 4). Segment 1002, excavated through the southern terminal, revealed a sequence of three recuts in the upper fill of the original ditch (Figs 3 and 4). The inside edge and base of the original cut survived with a primary fill, 014, being overlain by a massive deposit, 003, which was similar to 006 discussed above. Within this was a substantial recut, 2138, which in turn was truncated by later recuts 2137 and 2136. All of these features were filled with similar pebbly fills which seem to have been derived from the degradation of an upcast bank.

Single recuts were also recorded in Segments 1000, 1003 (Fig. 3), 1006, 1007 (Fig. 3), 1008 and 1009. These tended to be shallower and more rounded in section. The excavation of the ditch segments revealed that its width and depth decreased toward the west of the enclosure. 1003, 1007, 1008 and 1009, roughly corresponding segments along the north and south sides, all shared similar, slightly rounded, profiles 1.4 m to 1.7 m wide and 0.5 m to 0.7 m deep. The dimensions of the ditch contracted noticeably along the west side, with its width reducing to 1.0 m in the vicinity of 1005 and to as little as 0.3 m at the south-west corner (Segment 1004) (Fig. 3). This contraction in width was accompanied by a decrease in depth from *c.* 0.6 m along the north and south sides to between 0.2 m and 0.3 m in segments 1004 and 1005.

As already discussed above, many of the ditch fills appear to be derived from the slumping of an internal bank. The existence of such a feature is further evidenced by the lack of Late Bronze Age features inside the enclosure within 1.5 to 2.0 m of the enclosure ditch. To be an effective barrier, the ditch, especially on its west side, would need the addition of an upcast bank to accentuate its depth. However, no trace of a revetment such as that known from the Springfield Lyons enclosure (Buckley and Hedges 1987) was found.

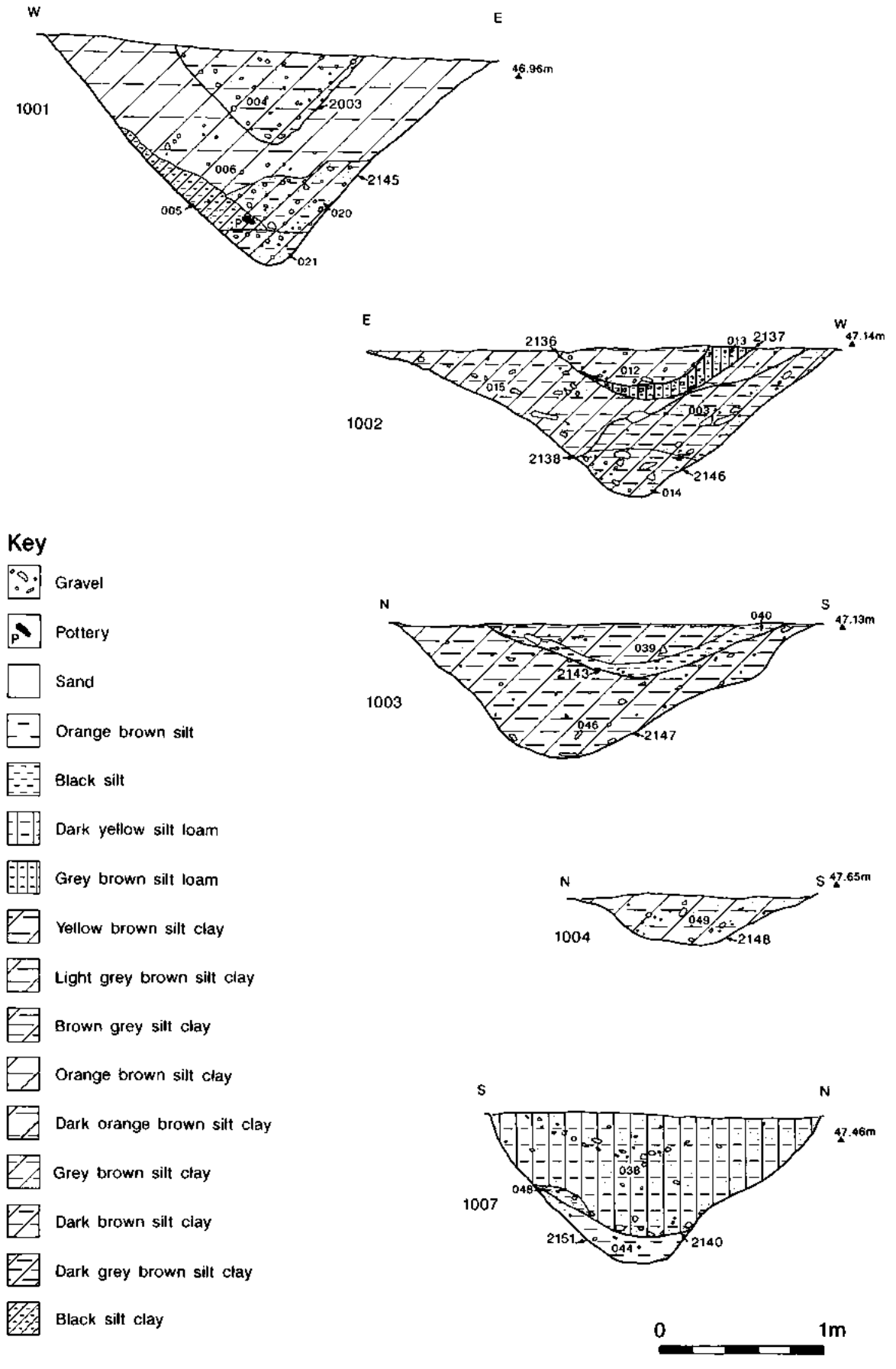


Fig. 4 Windmill Field, Broomfield. Sections through enclosure ditch; refer to Fig. 3 for positions of these sections.

Structure 1 (Figs 5 and 6)
This comprised 15 post holes which, when considered together with three gullies and an area of disturbed natural, form a circular pattern with a maximum diameter of *c.* 8.0 m. This has been interpreted as a hut circle.

The post holes can be divided into an outer and inner ring. Six of these features, 2042, 2044, 2046, 2062, 2096 and 2097, form an arc delineating the wall of the structure on its southern and eastern sides. They are fairly regularly spaced, averaging 1.85 m apart, and contain single fills showing no signs of post pipes. Two of these features, 2042 and 2044, were much deeper than the rest, at 0.28 and 0.36 m respectively, whereas the remaining four averaged 0.165 m. They appear to be associated with another post hole 2043. These three have been interpreted as the doorway into Structure 1. Although a fourth may be postulated directly to the east of 2044, its presence was not identified during excavation. Accepting the interpretation as a doorway, Structure 1 had a porch-like entrance projecting 1.2 m out from its eastern wall line and a doorway some 1.0 m wide.

However, these post holes account for only half of the structure's circuit. The remaining perimeter is delineated by apparently non-structural features. A roughly curving, almost triangular, area of disturbed natural, 2036, was identified on its west side. Although only a few centimetres deep in the surface of the natural gravel, it appears that it was associated with the structure's perimeter in some way. This is reinforced by its position on the arc shared with three apparent gullies 2037, 2090 and 2098.

By far the larger gully, 2037, measured 4.5m north-south by 10.0m east-west, tapering toward either end to form a crescent-shaped cut 0.3m deep. The smaller, shallower features, 2090 and 2098, were located at either end of 2037. All contained fills markedly different from the post holes of Structure 1, being loose silts, rich in charcoal and occupation debris. They yielded pottery, burnt stone, worked flint, daub and, from 2037, large fragments of saddle querns (Fig. 15). These gullies would not appear to be structural, but rather belong to the destruction of the building. Gullies 2090 and 2098 may represent the remains of individual cuts from which the posts were dug out. Their spacing is similar to that noted for the outer circle of post holes as discussed above, which would seem to support this interpretation. The much greater dimensions of 2037 may indicate that the hut circle had a more substantial structural element at this point on its perimeter, whose destruction required more digging-out.

A roughly concentric arrangement of nine post holes within the perimeter of Structure 1, 2045, 2051, 2091, 2094, 2103, 2104, 2106 and 2122, appear to represent a ring of roof supports while a further five small cuts may belong to internal structures, divisions, or simply additional supports and repairs.

Pits associated with Structure 1 (Figs 5 and 6)
Two groups of small, rounded pits averaging 0.55 m in diameter and surviving to a depth of 0.22 m, were excavated within Structure 1. The first, comprising features 2039, 2092, 2093 and 2109, was a cluster along the western side of the hut interior. These pits contained yellow-brown pebbly fills from which only a small amount of domestic material was recovered. This differed from the second group of pits, 2061, 2088 and 2099, which were located in the south-eastern area of the hut. The latter group contained darker brown, silty fills which, in the case of 2061 and 2088, yielded large pottery sherds (Figs 8 and 9). Those within the fill of pit 2061 apparently lined the cut. Both 2061 and 2088 contained burnt flints and stones, charcoal and daub, together with lenses of scorched earth indicating that *in situ* burning had taken place after the pit had passed out of use.

Outside Structure 1, to its south, were two circular pits 2047 and 2048, in close proximity to one another and within 2 m of the hut perimeter. Though of a similar depth as the pits within Structure 1, they have diameters of *c.* 0.7 m, giving them a greater capacity. Although they may have been in use at the same time, their differing fills indicate that they were backfilled separately. Both yielded pottery sherds and charcoal, and 2084 contained a thin, lower, fill of orange-brown clay; perhaps the remains of lining material and suggesting its use as a storage pit, perhaps for cereals.

Structure 2 (Fig. 2)
This comprised three post holes 2049, 2058 and 2100, averaging 0.3 m in diameter and 0.16 m in depth, which appear to share an east-west alignment. Containing silty fills which yielded small amounts of pottery sherds and charcoal fragments, they have been interpreted as the remains of a fence line perhaps adjoining the south of Structure 1, or else passing close by and possibly meeting with post hole 2024 some 9.0 m further to the west.

Structure 3 (Fig. 2)
A longer east-west alignment of six post holes was excavated to the south of Structures 1 and 2. Cuts 2053, 2054, 2055, 2056 and 2057 were found to have an average diameter of 0.165 m and depth of 0.095 m while 2052, located at the south end of the line, was significantly larger at 0.4 m by 0.22 m.

All contained a uniform brown loam fill, though only 2057 yielded pottery sherds which were of Late Bronze Age date. This line of post holes appears to have been the remains of another fence line with occasional larger supporting posts, such as 2052, placed at intervals along its length.

Structure 4 (Fig. 2)
A pair of small, shallow post holes 2132 and 2133 were excavated approximately 4.5 m to the north of

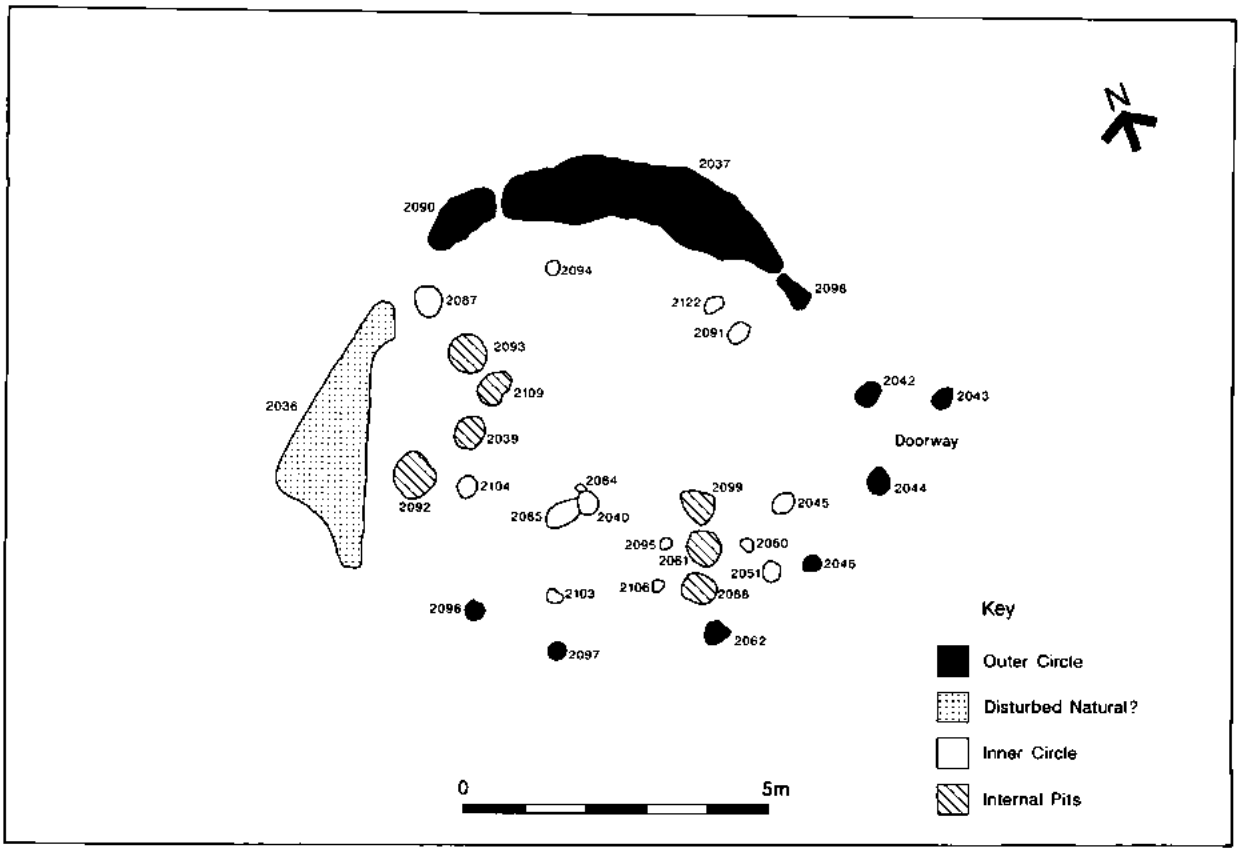


Fig. 5 Windmill Field, Broomfield. Plan of round house (Structure 1).

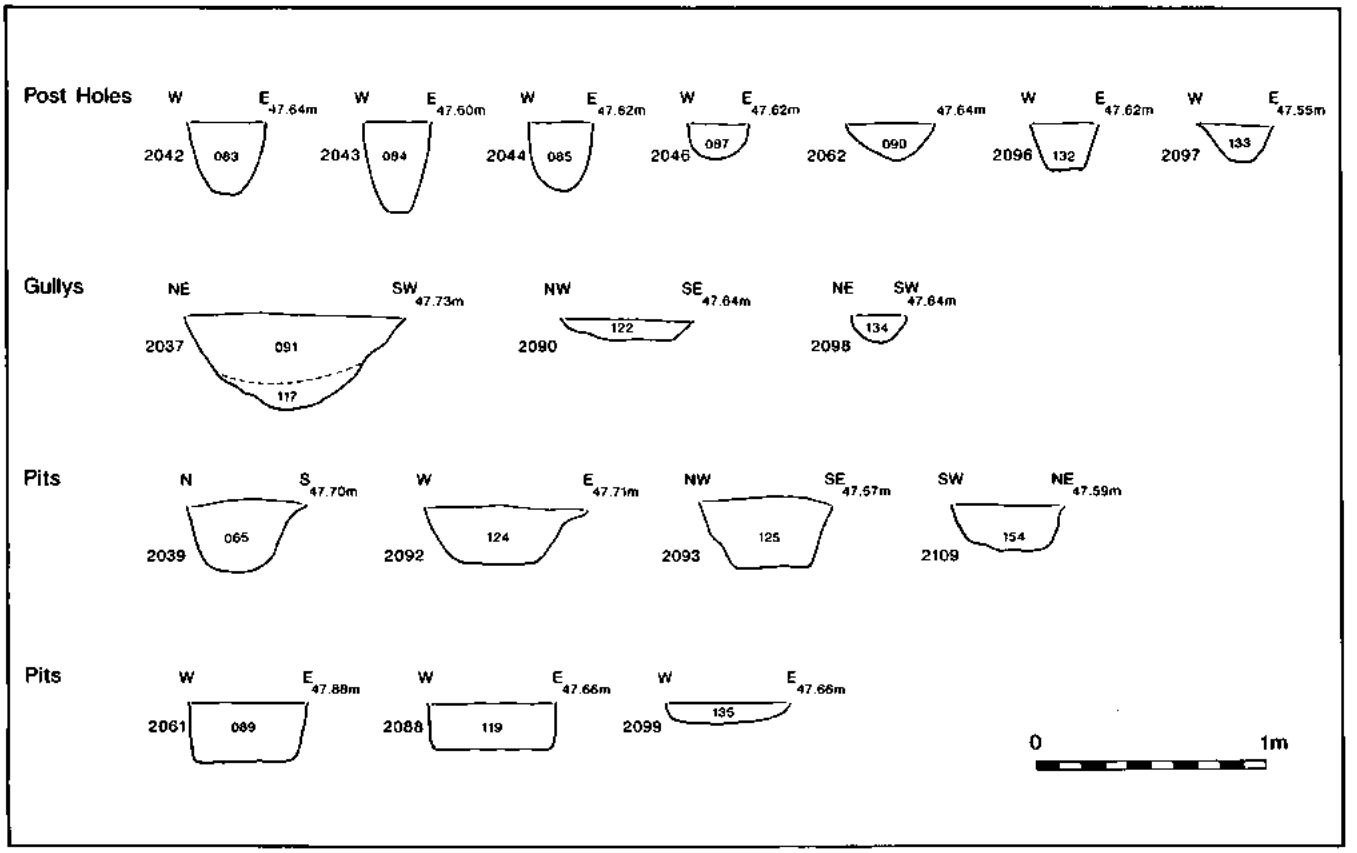


Fig. 6 Windmill Field, Broomfield. Profiles of post holes, gullies and pits.

Structure 1. Both 0.22 m in diameter and 0.11 m deep, these features were 1.4 m apart and may well be the remains of a two-post structure, such as a drying rack which faced inward toward the hut.

Miscellaneous post holes (Fig. 2)
A further ten post holes were discovered, for most of which no pattern or function could be identified. All but one, 2005 (Area A), were inside the enclosure. Only 2027 and 2028, in close proximity to one another, may be part of a structure though their position on the eastern limit of Area B makes further interpretation impossible. Post holes 2101, 2102 and 2115 are grouped immediately to the south-east of Structure 1 and, perhaps along with 2050, may be the remains of structures associated with domestic activities centred on the hut. The remainder, 2023, 2032 and 2066, appear to have been individual post holes for which no function could be ascertained.

Other pits (Fig. 2)
Many likely features were excavated across the site but only ten inside the enclosure, and two outside, in the vicinity of the entrance, were identified as probable pits; the remainder were found to be natural, probably periglacial in origin.

Those cuts interpreted as pits may be grouped into two categories according to size and shape: relatively small rounded cuts; and larger irregular-shaped cuts. All were found to be cut into the natural gravel and survived to a depth of between 0.15 m and 0.35 m.

The former category, of smaller pits, included features 2021, 2029 and 2059. These were oval or rounded, bowl-shaped, pits with diameters between 1.5 m and 0.6 m and found to be grouped to the north of Structure 1 in Area B.

Cuts 2009, 2034 and 2067 are examples of the larger, irregular-shaped cuts which were again mostly found to the north of the hut circle, though 2009 was actually outside the enclosure, just north of the entrance. These varied from being oval to elongated and generally had undulating bottoms.

The fills of both these types of feature were similar light brown clay-silts with a relatively low flint pebble content. Very few contained finds though some, such as 2020, 2034 and 2067, yielded flecks of charcoal and rare burnt flint fragments. The scarcity of pottery within these fills and the total lack of faunal remains make it difficult to assign a function to these features. However, it may be suggested that the smaller, regular, cuts may be the remains of storage or rubbish pits while the large irregular examples were gravel extraction pits (Bradley 1980), or perhaps simply cattle wallows.

Post-enclosure features (Fig. 2)
A linear feature, 2002/2033, running east-west, cut the enclosure ditch in both Areas A and B. Excavated segments revealed the feature to be a steep-sided ditch with a flat base, *c.* 1.0 m wide and up to 0.4 m deep. Few finds were collected from its fills and the pottery is likely to be residual anyway. It was interpreted as a probable field boundary ditch of Roman date, essentially on morphological grounds.

Unphased features (Fig. 2)
Only two features remain unphased because of the absence of finds or lack of any stratigraphic relationship. These are two roughly square features, 2007 and 2144, which were found directly either side of the enclosure entrance in Area A.

Each comprised a narrow gully with a U-shaped profile. The smaller, 2007, measured *c.* 2.3 m square and was some 0.10 m to 0.15 m deep. Excavation revealed the bases of three small circular cuts in the base of this square gully. Though obscured by the similar fill of a natural feature into which it was cut traces of a possible fourth post hole were also discerned in the north-eastern corner. The feature was filled with a uniform yellow-brown silty loam, with flint pebbles and rare charcoal flecks, which also filled the four post holes.

Feature 2144 was more substantial, measuring 3.7 m by 2.8 m and 0.4 m deep, though without post holes within it. The gully was again obscured due to the similarity of its fill to that of a natural feature into which it was cut.

It is likely that they are related to one another but it is not possible to determine their function or their date in relation to the enclosure.

The Finds

Prehistoric Pottery
by N. Brown
The excavation produced a total of 1933 sherds weighing 17.84 kg: 902 sherds (7.97 kg) were recovered from the enclosure ditch, the remainder from other features. With the exception of a few Grooved-Ware sherds from features (2004, 2008, 2010) outside the enclosure entrance, the pottery is of Late Bronze Age character. The pottery has been recorded using a system devised for prehistoric pottery in Essex (details in Archive). Fabrics are defined by type, size and density of inclusions, fabrics present are:-

		% Sherd Count	% Weight
A.	Flint, S,2, well sorted.	5	3
B.	Flint, S-M,2.	7	4
C.	Flint, S-M with occasional L,2.	31	22
D.	Flint, S-L,2 poorly sorted.	31	60
E.	Flint and sand, S-M,2.	4	5
L.	Quartz sometimes with sand, S-L,2.	1	1
M.	Grog.	1	1
P.	Largely temperless.	1	1
V.	Flint, S-M,1.	1	1
Z.	Unclassifiable.	18	2

Size of inclusions S = less than 1 mm diameter
M = 1-2 mm diameter
L = more than 2 mm diameter

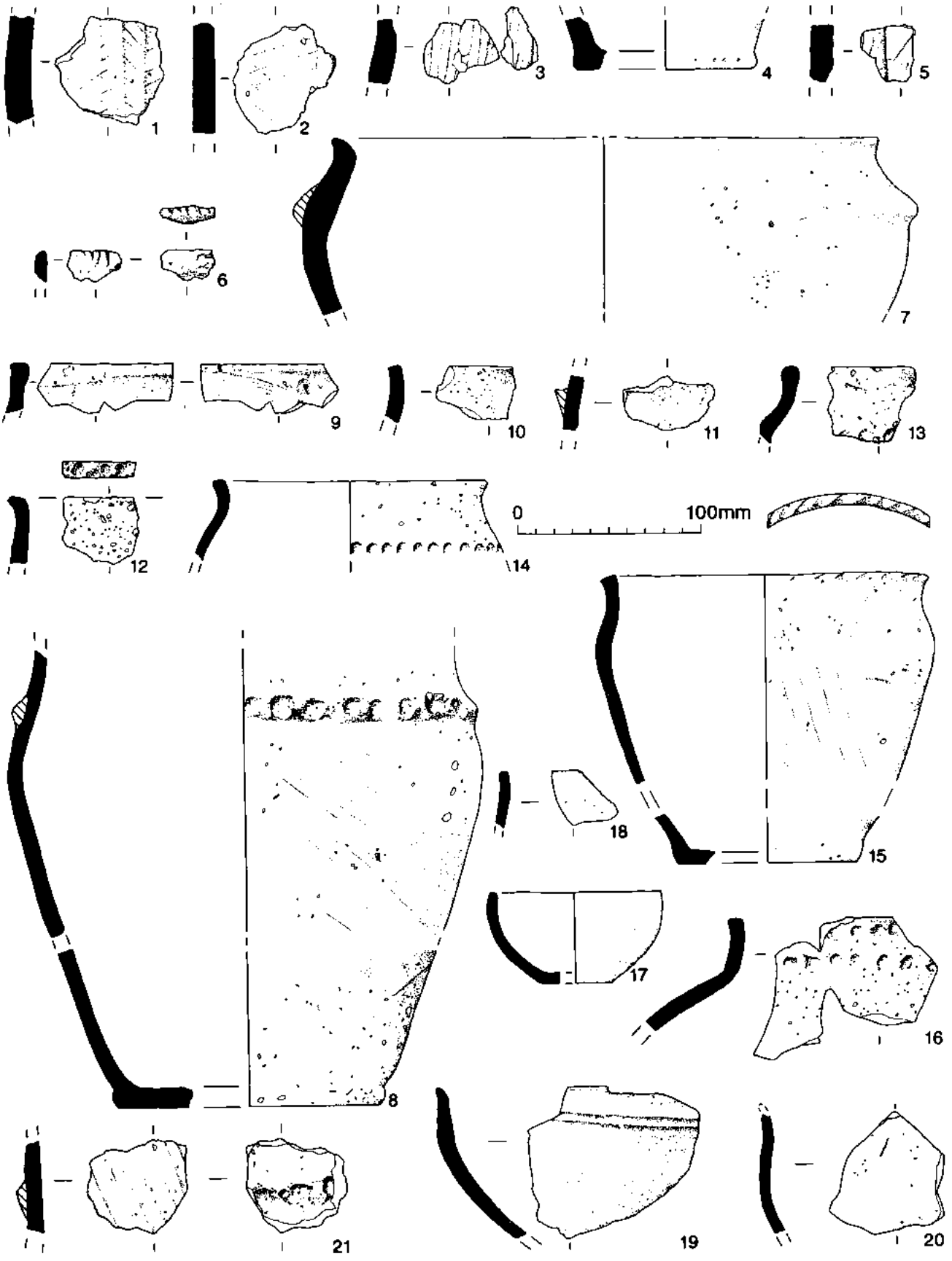


Fig. 7 Windmill Field, Broomfield. Prehistoric pottery.

Density of inclusions 1 = less than 6 per cm^2
2 = 6-10 per cm^2
3 = more than 10 per cm^2

Where possible sherds have been ascribed to the five vessel classes used by Barrett (1980) to characterise Late Bronze Age pottery. Some sherds can also be assigned to a more specific form. Forms present in the Windmill Field assemblage are:-

A. Jar, round bodied with short upright or flared rim.
E. Jar, slack shouldered with upright or slightly everted rim.
H. Bowl, round bodied open.
N. Jar, angular shoulder upright rim.
S. Jar, bipartite.

Catalogue of illustrated sherds

Fig.	No.	Seg or Feat/Ctx	Class	Form	Comments	Fabric
7	1	2008/019	-	-	Triple band of vertical cordons with finely incised lines between.	M
7	2	2008/019	-	-	Part of single vertical cordon surviving with incised lines between it and the scar left by a second vertical cordon.	M
7	3	2008/019	-	-	Part of single vertical cordon survives. Finely incised lines.	M
7	4	2008/019	-	-	Part of flat base.	M
7	5	2010/023	-	-	Part of single vertical cordon. Incised lines. Burnt residue on interior.	M
7	6	2010/023	-	-	Rim, abraded exterior partly abraded interior. Fingernail impressions on top of rim, and surviving part of slight internal bevel.	M
7	7	1001/4005	I	S	Applied cordon set high on vessel giving collar-like appearance. Smoothed surface. Traces of black deposit (?sooting) on exterior. Traces of wiping below shoulder. Interior of rim abraded. Patch of abrasion on exterior at shoulder.	B
7	8	1001/1020	I	?A	Applied finger-impressed neck cordon, partly flaked off. Traces of black deposit (?sooting) on exterior. 'Grass' wiped surfaces. Base, probably from same vessel, dense flint temper on bottom. Faint row of finger impressions where base joined to wall of pot.	B
7	9	1002/003	I	3	Smoothed surface partly abraded. Interior of rim thickened by an applied strip of clay. Faint finger impression on exterior below rim, as result of rim formation.	E
7	10	1003/040	II	?A	Smoothed partly abraded surfaces.	B
7	11	1003/040	?II	-	Stump of lug on exterior, smoothed partly abraded surfaces.	B
7	12	1003/040	I	-	Finger impressions on top of rim. Abraded.	D
7	13	1003/040	I	?N	Faint finger impressions on shoulder.	D
7	14	1003/040	I	E	Finger impressions on shoulder, abraded.	C
7	15	1003/040	I	E	'Cabled' decoration on top of rim.	C
7	16	1004/049	I	A	Row of finger impressions at neck and faint finger impressions below rim. Abraded exterior.	D
7	17	1008/179	V	H	Smoothed surfaces spalled.	A
7	18	1009/127	IV	-	Smoothed surfaces abraded.	E
7	19	2027/053	IV	H	Smoothed surfaces abraded, grooved lines above shoulder.	A
7	20	2037/117	IV	H	Smoothed surfaces, partly abraded.	A
7	21	2037/091	I	-	Applied finger-impressed cordon, finger wiping on interior.	D
8	22	2037/091	I	?A	Plain, moulded rim.	D
8	23	2037/091	I	-	Broad shallow finger impressions below rim.	D
8	24	2039/065	II	A	Smoothed surfaces, partly abraded.	C
8	25	2040/066	V	H	Abraded.	B
8	26	2040/066	I	-	Marked internal groove below rim.	C
8	27	2048/120	-	A	Very abraded.	C
8	28	2048/121	I	?S	Slight 'pinch' marks on exterior as a result of vessel formation.	D
8	29	2048/120	-	-	Fragment of small dish or lid.	D
8	30	2088/119	I	A	Traces of wiping on exterior.	D
8	31	2088/119	V	4	Smoothed surfaces.	B
8	32	2061/89	V	4	Lower part of exterior abraded, possibly through use.	B
8	33	2061/89	III	H	Possibly burnt or overfired.	C
8	34	2061/89	I	-	Applied finger-impressed cordon, 'cabling' on rim. Faint finger impressions on exterior below rim.	D
9	35	2061/89	-	A	Surfaces missing, burnt or overfired.	D

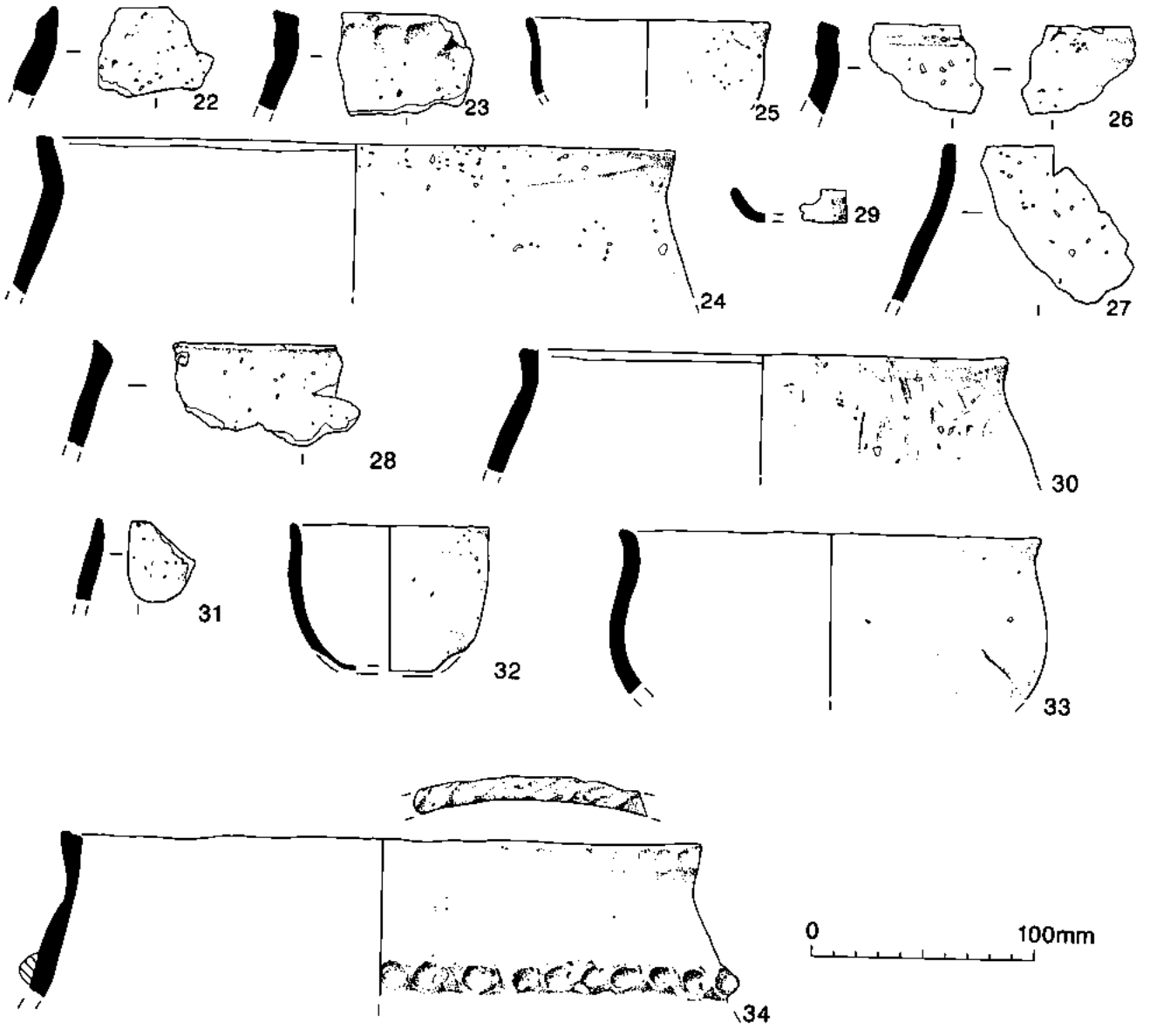


Fig. 8 Windmill Field, Broomfield. Prehistoric pottery.

Fig. No.		Seg or Feat/Ctx	Class	Form	Comments	Fabric
9	36	2061/89	II	A	Smoothed surfaces, exterior surface largely missing, ?burnt or overfired.	D
9	37	2037/089	I	-	Centre of base deeply worn away, probably a result of reuse for grinding. Possible cereal grain impression on interior.	

Affinities and Date

The earliest pottery represented is Grooved Ware from pits 2004, 2008 and 2010 outside the enclosure entrance; all the diagnostic sherds are illustrated (Fig. 7, 1-6). Decoration on body sherds consists of applied vertical cordons with fine incised lines (Fig. 7, 1 and 3) or more crudely incised ones (Fig. 7, 2). Part of a flat base (Fig. 7, 4), and a small fragment of rim with fingernail impressions (Fig. 7, 6) were also recovered. The grog-tempered fabrics are typical of Grooved Ware. Triple groupings of vertical cordons (Fig. 7, 1) occur at Durrington Walls (Wainwright and Longworth 1971) and locally at Colchester (Brown 1992, fig. 13). With so few diagnostic sherds there is little point in attempting to attribute the pottery to one of the styles described by Wainwright and Longworth (1971).

The remainder of the pottery is of Late Bronze Age date; the illustrated material represents the full range of form and decoration and comprises 32% (by sherd count) of the diagnostic sherds.

Fine bowls and cups occur in a limited range of round bodied forms, either hemispherical (Fig. 7, 17) or with slight rounded shoulder (Figs 7 and 8; 19,20,25,31,32) and upright (Fig. 8; 31,32) or slightly everted rims (Figs 7 and 8; 19,25,33). Angular forms are absent. One sherd appears to be from a small dish or lid (Fig. 8, 29). Where they survive, surfaces are well smoothed and may originally have been burnished. Decoration is absent except for one example with shallow grooved lines above the shoulder (Fig. 7, 19).

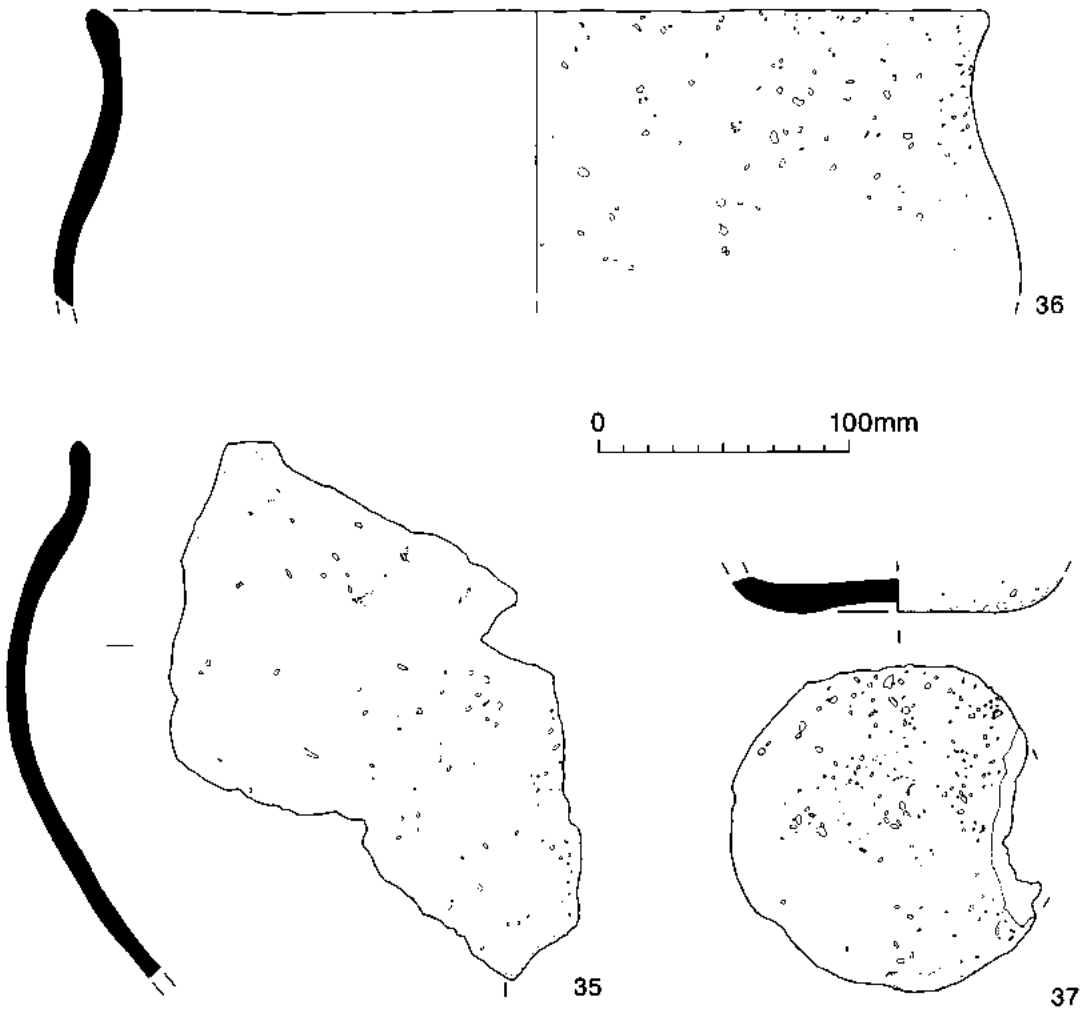


Fig. 9 Windmill Field, Broomfield. Prehistoric pottery.

Fine jars (Figs 7-9; 10,24,36) all appear to be of form A and most are large vessels (Figs 8 and 9; 24,36), though there is one smaller example (Fig. 7, 10). Again, where they survive surfaces are well smoothed and may originally have been burnished. The stump of a lug (Fig. 7, 11), with smoothed, partly abraded surfaces, is probably derived from a fine jar. One jar of bipartite form (Fig. 7, 7) has an applied plain cordon set high at the shoulder. Whilst the applied strip is clearly visible in the break, the cordon has been well smoothed into the vessel wall, giving an even curve from shoulder to rim producing a collar-like effect. Such vessels are not common but the Broomfield pot is reminiscent of an example from Weston Wood, Surrey (Russell 1989, fig. 21, 205).

Only one example of a coarse bowl was recognised, a large part of a round-bodied vessel with slightly everted rim (Fig. 8, 33). Coarse jars are mainly of form A (Figs 7 and 8; 8,16,22,30), together with some shouldered (Fig. 7, 13) or slack-shouldered (Fig. 7; 14,15) examples. Rims are plain or cabled; one sherd from segment 1003 (Fig. 7, 12) has finger impressions on top of the rim. Bodies are normally undecorated; a few examples have applied finger impressed cordons (Figs 7 and 8; 8,21,34). One jar has a row of finger impressions at the neck (Fig. 7, 16). Some vessels from segment 1003 have rows of finger impressions on the shoulder (Fig. 7; 13,14).

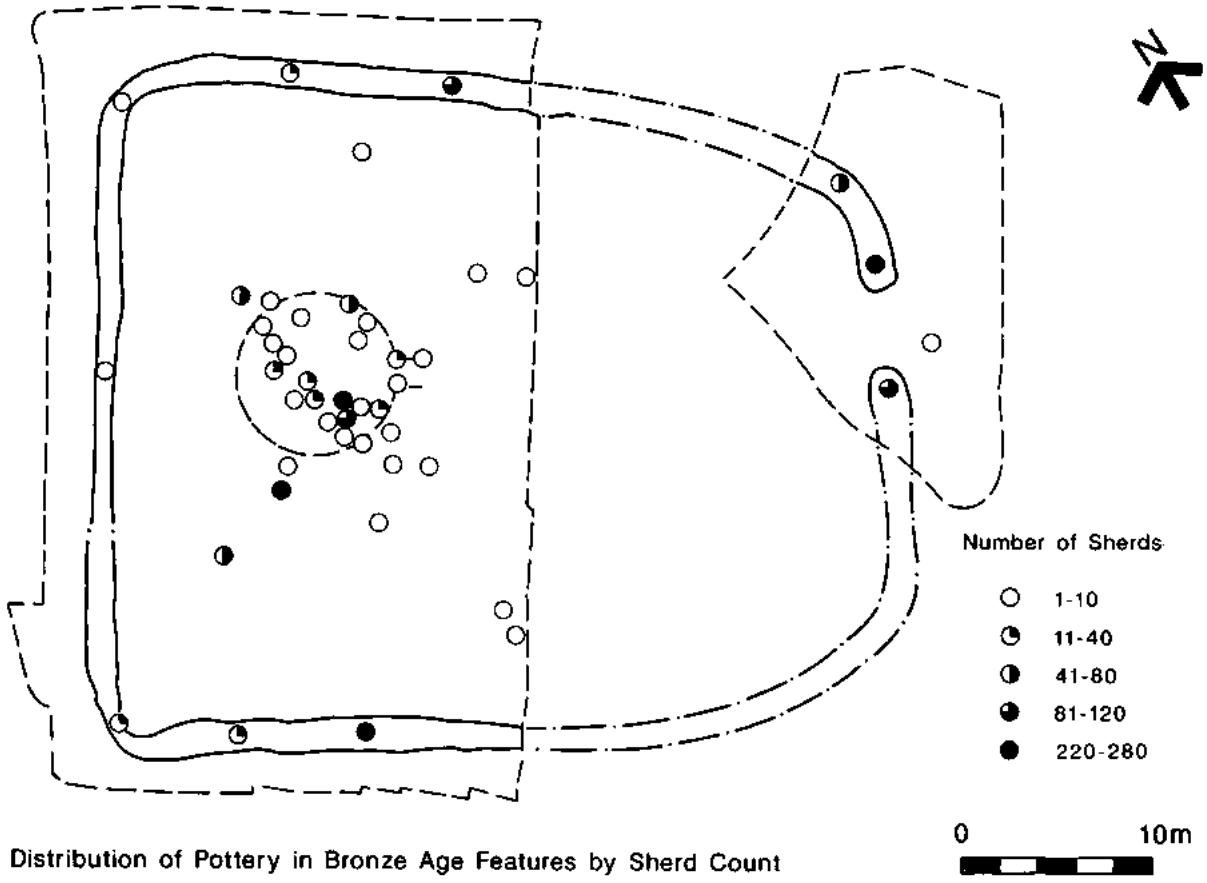
The general absence of decoration and the simple range of forms in the Windmill Field assemblage, may be paralleled locally by material from internal features and lower ditch silts at Springfield Lyons (Brown unpublished), and implies an early date perhaps in the 9th century B.C. The assemblage from ditch segment 1003 is distinctive; jars with finger impressions on shoulder and/or rims, which occur in the material from this segment, are absent from the rest of the site. Such decoration on coarse jars is typical of decorated assemblages characteristic of the end of the Late Bronze Age (Barrett 1980), whilst the pottery from 1003 probably derives from a particular function (below); it is probably also of somewhat later date than the rest of the material from the site.

Manufacture

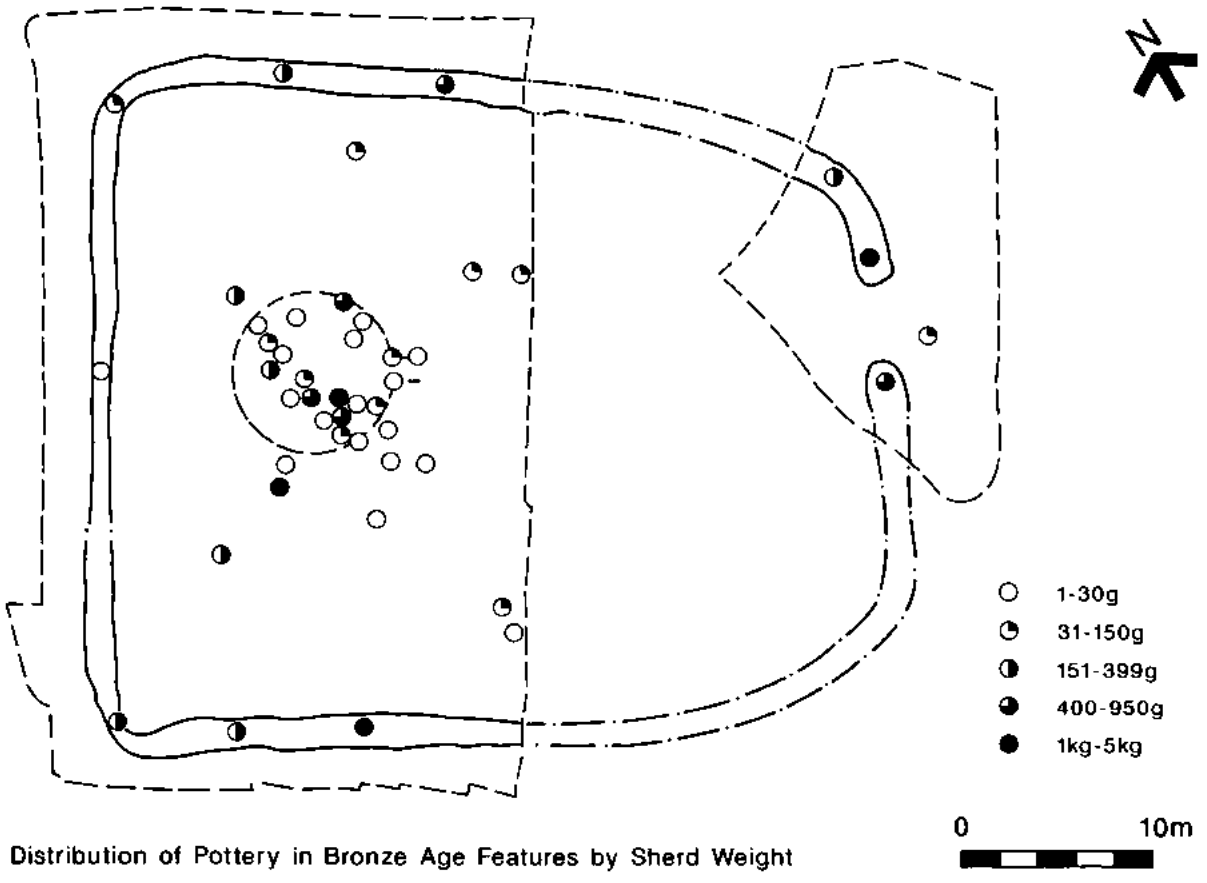
Some of the techniques of manufacture noted in Late Bronze Age assemblages elsewhere (Adkins and Needham 1985; Brown 1988) occur in the Windmill Field assemblage, e.g. occasional visible coil joins, finger or grass wiping of surfaces of coarse vessels, dense temper on the bottom of some bases, and bases joined to pots by pinching, occasionally producing a slight protruding foot. One base has a very deep circular depression worn on the underside (Fig. 9, 37); this does not appear likely to have occurred during usage, but may be the result of reuse of the base for some kind of grinding operation after breakage. Visual inspection of the fabrics reveals nothing which need be of non-local origin.

Distribution

The distribution of pottery around the enclosure ditch (Fig. 10; A,B) shows concentrations in the butt ends of the entrance (segment 1001 and 1002) and on the north and south sides (segments 1003 and



Distribution of Pottery in Bronze Age Features by Sherd Count



Distribution of Pottery in Bronze Age Features by Sherd Weight

Fig. 10 Windmill Field, Broomfield. Distribution of Bronze Age pottery.

1007). The west ditch marking the rear of the enclosure has very little pottery, highly abraded and of small sherd size (Figs 10 and 11; A,C,D). It appears unlikely that this material represents deliberate deposition or formal rubbish disposal, and was probably incidentally incorporated into the ditch fill. The concentrations of pottery in the entrance butt ends comprise quite large (Fig. 11, D) sherds, relatively unabraded (Fig. 11, C). The deposits consist of parts of coarse jars (Fig. 7; 8-9), with some fine ware sherds (Fig. 12, E), which are of relatively large sherd size (Fig. 12, F). These concentrations may be the result of deliberate deposition. Enclosure entrances appear to have been a focus of deposition, exemplified locally at Lofts Farm (Brown 1988) and most strikingly at Springfield Lyons. At the Springfield enclosure, concentrations of ceramics occurred in the main east and west entrances, as did large quantities of clay moulds for bronze casting (Buckley and Hedges 1987).

The pottery from the north enclosure ditch (segment 1007), apart from two small plain rim sherds (not illustrated), consists of body sherds of small sherd size (Fig. 11, D). The pottery from segment 1003 on the south side of the enclosure is more distinctive. As noted above, the decorated jars from this segment may indicate a relatively late date. The assemblage includes a number of thin-walled Class I jars. The vessels are quite small (measurable rim diameter between 140-160mm), and large storage vessels are absent; however, some fine ware vessels are present (Fig. 12; E,F). This may indicate ceramic debris from cooking and eating. The pottery was recovered from a dark charcoal-rich layer with frequent small flecks of fired clay, which may support such an interpretation. Deposits such as that from 1003 appear to be a recurrent feature of Late Bronze Age enclosures. At Lofts Farm, a dark layer produced a large assemblage of decorated pottery both Class IV bowls and Class I jars (Brown 1988). The Springfield Lyons enclosure has a similar deposit, although here the ceramic assemblage is dominated by decorated Class I jars (Brown 1987 and unpublished).

The carbonised plant remains from the Lofts Farm and Springfield Lyons deposits indicate debris from domestic hearths (Murphy 1988 and unpublished). At all three sites, these concentrations of ceramic debris seem to represent the last act of deposition during the occupation of the enclosure, and it has been suggested they may represent part of the process of abandonment (Brown 1988). Enclosure ditches, and other boundary features, appear to have been a focus of deposition for a variety of symbolic purposes throughout prehistory and beyond (Hingley 1990; Wymer and Brown forthcoming).

Those parts of the interior of the enclosure which were examined produced few Bronze Age features, apart from those in and around the roundhouse (Figs 10-12). Therefore, most of the pottery is inevitably derived from the vicinity of the roundhouse. Some of the largest sherds of fine ware were recovered from features within the roundhouse and from the entrance butt ends (Fig. 12, F). The sparse scatter of Bronze Age features, to the north of the roundhouse, the irregular lines of posts, and other features to the south, produced little pottery.

One of the pits (2061) within the roundhouse structure produced the largest quantity of pottery by both sherd count and weight of any excavated feature or ditch segment. The assemblage from this pit (Figs 8 and 9; 32-37) includes cups, fine jars, coarse jars and bowls. Both the fine and coarse jars are of very large size (up to 360mm rim diameter). Many of the sherds show damage through burning, and some are very extensively damaged, reduced to an orange/pink 'brittle' fabric with surfaces flaked off (eg. Fig. 9, 35). Whilst this damage may be the result of a mishap during firing, post-breakage burning seems more likely due to *in situ* burning in the pit. The quantity, large sherd size, broad range of vessel types, and condition of the sherds, are matched by an assemblage of Late Bronze Age pottery from a pit at Rivenhall (Rodwell 1993).

Flint Assemblage

by A. Saville

A total of 433 struck flints was recovered, as well as 236 pieces of burnt flint which are considered in the appendix to this report. The flints were recovered during hand excavation of features after topsoil stripping and without the use of sieving. Features were half-sectioned or otherwise partially excavated, so the assemblage represents only a sample of those flints present in stratified contexts. The unstratified flints result from casual collection from the spoilheap and during machine-stripping. A summary quantification of the assemblage in terms of provenance and typology is given in Table 1. All flints recovered, including small chips and spalls, are included in the totals; 53 flakes weighed less than one gram each. The archive contains a catalogue listing every piece of flint, and also lists of the number and type of flints by context. The numbers given to flints in the text and illustrations are their archive catalogue numbers.

The raw material comprises pebbles from secondary geological deposits such as gravel or boulder clay, with external surfaces mostly rounded and cortical but sometimes formed by corticated fracture planes. One of the illustrated cores (Fig. 13, 122) gives a good indication of the type of pebble flint being exploited.

The largest piece of flint in the assemblage is a burnt lump, maximum dimension 110 mm and weighing 560 grams, but it, like most of the unstruck burnt flints, is of very poor quality material, which was perhaps obtainable nearer to the site than the flint used for knapping. The struck flint is of good quality, occurring in a range of grey shades from very dark, near black, to medium, with occasional lighter grey, grey-brown, and olive-grey pieces, and is normally clear structured but includes flakes from at least one pebble of speckled flint.

The artefacts are mostly in completely fresh condition, though three struck pieces have acquired cortication. These are a flake from feature 2004, a flake from the enclosure ditch (segment 1002), and a core rejuvenation flake from the Romano-British ditch (2033). Over 20 pieces have a mixture of fresh bulbar surface and partly corticated dorsal surface, possibly indicating reuse, but it is usually impossible to tell if the corticated surface is natural or struck.

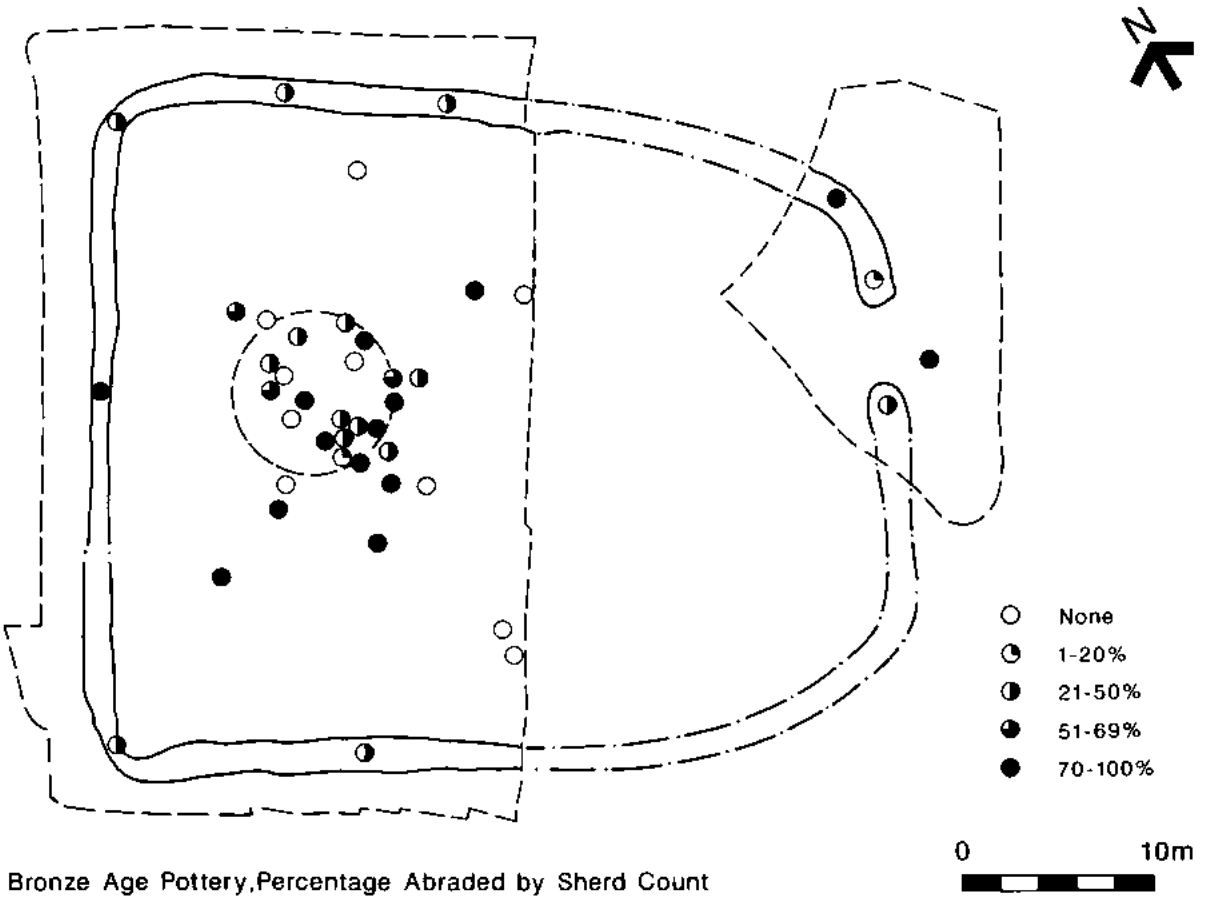
Technology

The assemblage is primarily a flake one, comprised of flakes with plain striking platforms and produced by hard hammer technique. The number of complete flakes over 20 mm in length is too small for any meaningful statistical analysis, but the impression is one of a mixture of technologies from simple to more resolved. Figure 13, 66 is a blade-like thinning flake indicative of skilful reduction, though, like most of the flakes in the assemblage, it has a plain unlipped platform and no dorsal platform-edge abrasion. There are true blades present, as well as flakes with dorsal scars indicative of blade removals, and controlled bladelet removals are indicated by the refitting pieces in Figure 13, 260, 262 and 264. There are few formal tools and retouch tends to be irregular, but these factors may well be relative to the small size of the assemblage. The complete cores are listed in Table 2.

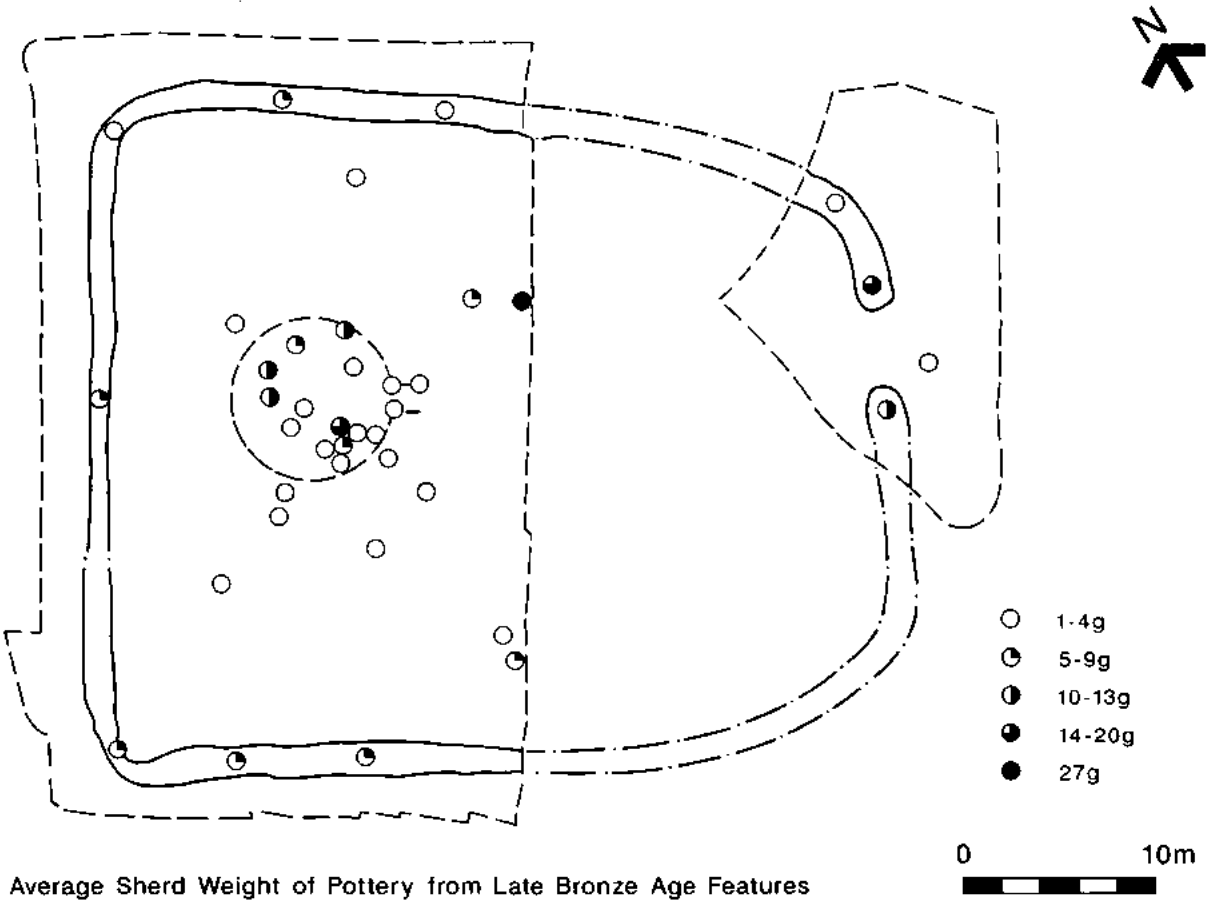
The oddity in Table 2 is the bladelet core (381), though the flint type and the condition of this artefact match the rest of the assemblage. Four of the cores (Fig. 13, 1 and 115; also 124 and 188) could be compared with those described by Martingell (1988) from Kelvedon, producing short, squarish flakes with broad and wide platforms. Here the cores are stratified and match the rest of the assemblage in condition and raw material, so there can be no suggestion of these cores relating to post-medieval gun-flint manufacture. Also illustrated is the very simple bipolar core from the enclosure ditch segment 1003 (Fig. 13, 122).

Typology

As usual, scrapers are the most common tool type, but even so there are only four. They comprise two end scrapers, one of them with very shallow retouch at the distal end of a blank, which appears skewed because of breakage on the upper left side (Fig. 13, 35), the other a damaged end-of-blade example (Fig. 13, 379); an unusual double side scraper, with minimal retouch on a hinged flake (Fig. 13, 191); and a more elaborate, but atypical, side scraper with inverse retouch on a large hinge-fracture flake (Fig. 14, 192). The size and light grey colour of the latter scraper are so unusual within the

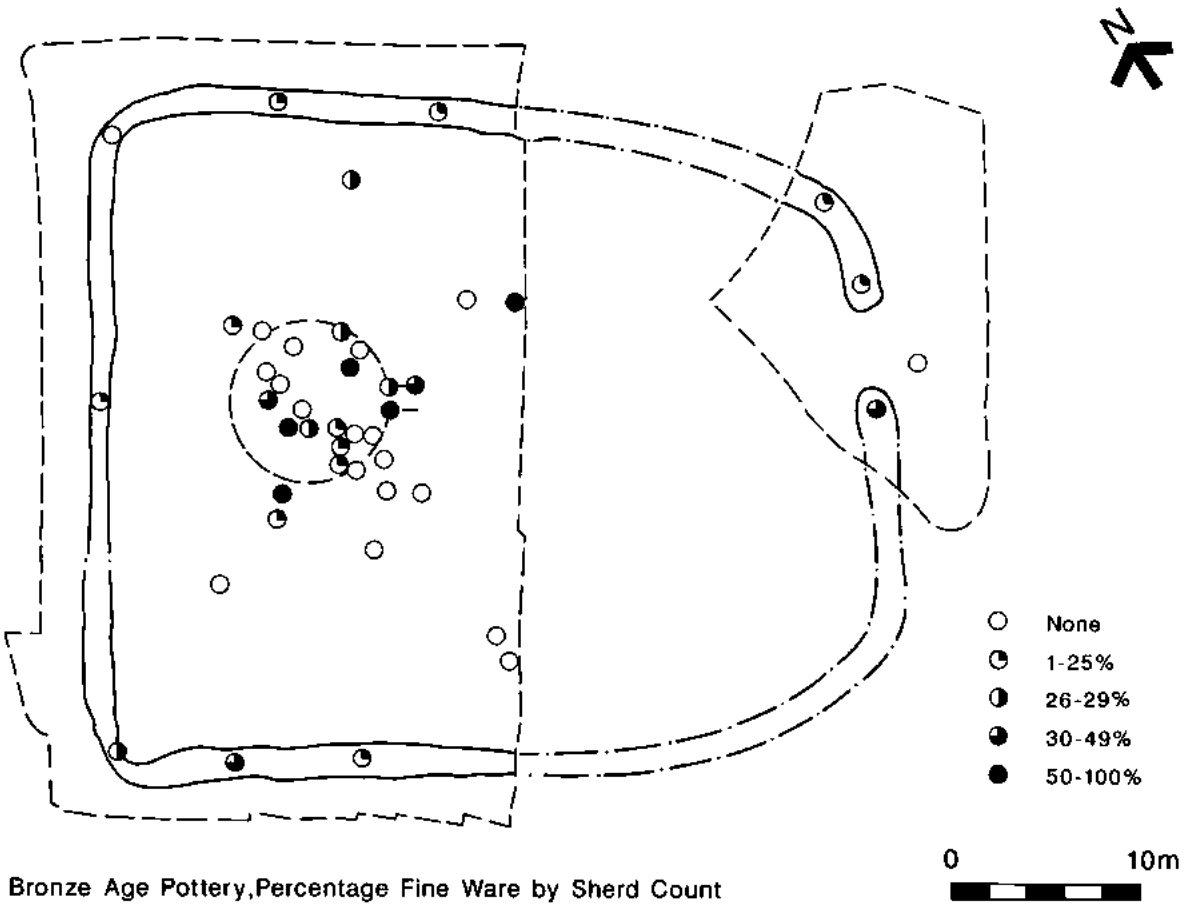


Bronze Age Pottery,Percentage Abraded by Sherd Count



Average Sherd Weight of Pottery from Late Bronze Age Features

Fig. 11 Windmill Field, Broomfield. Distribution of Bronze Age pottery.



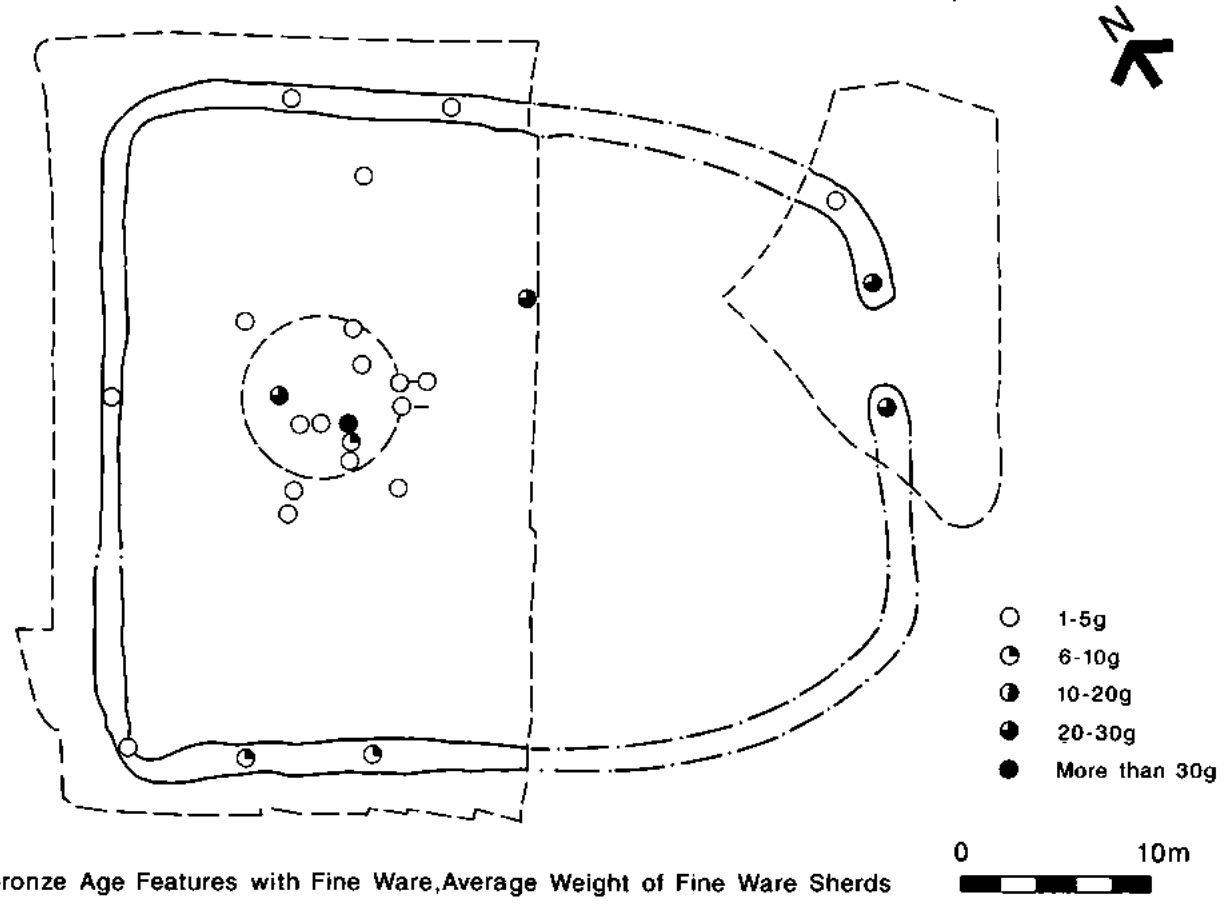


Fig. 12 Windmill Field, Broomfield. Distribution of Bronze Age pottery.

Table 1 Flint assemblage.

	Unretouched flakes	Cores	Core fragments	Scrapers	Piercers	Knife	Edge-trimmed blade	Miscellaneous retouched pieces	Total No.	Wt (g)
Area A										
External features	65	2	1	1	-	-	1	2	72	638.2
Enclosure ditch	35	-	-	-	-	-	-	6	41	320.0
R-B ditch (2002)	2	1	-	-	-	-	-	-	3	25.1
Unstratified	1	-	-	-	-	1	-	2	4	29.1
Area B										
Pre-LBA ditch (2030)	6	-	-	-	-	-	-	-	6	30.8
Enclosure ditch	138	3	6	2	-	-	-	5	154	1228.1
Internal features	76	-	2	-	-	-	-	5	83	628.2
R-B ditch (2033)	7	-	-	-	1	-	-	5	13	119.7
Unstratified	27	1	-	1	1	-	-	12	42	317.3
Areas A and B (unspecified)										
Unstratified	10	-	-	-	-	-	-	5	15	162.5
TOTALS	367	7	9	4	2	1	1	42	433	3499.0

assemblage that an imported, curated tool is probably indicated.

The two piercers are both minimal-retouch types, capitalising on suitable chance projections on broad flakes, one at the distal end, the other at the platform edge.

The knife (Fig. 14, 377) is on a blade, with the cutting edge formed by shallow-angled removals on the right-hand side. The proximal segment of this tool is absent, probably the result of breakage during use.

The edge-trimmed blade (Fig. 14, 65) has the trimming inversely on the right-hand edge and shows probable indications of use on the left edge, where the notch results from more recent damage. The distal tip is absent and was probably a functional part of the tool, since there is retouch on the remaining sides at the break. Another blade (Fig. 14, 335) is a medial segment classified as unretouched but with clear signs of utilisation on the left-hand edge. Utilisation is also apparent on a thin flake with spots of gloss on the left-hand edge (Fig. 14, 230).

The miscellaneous retouched pieces are a mixed bag of mostly broken or damaged pieces, some of which were probably scrapers and piercers. Three have burin-like facets which have probably been used. The illustrated examples are a chunky flake with an inversely bruised edge on the right-hand side (Fig. 14, 25), and a bladelet with retouch on the lower left-hand side and probable utilisation down the unretouched right-hand edge (Fig. 13, 264).

Table 2 Flint cores.

Catalogue no./Area	Context	Type	Max. dimension in mm	Weight in grams
001/A	R-B ditch 2002	B2 flake	49	23.8
058/A	Ext feature 2008	A2 flake	61	68.0
115/A	Ext feature 2018	C (4 Plat) flake	59	59.5
122/B	Encl ditch 1003	B2 flake	54	56.8
124/B	Encl ditch 1003	B2 flake	62	43.5
188/B	Encl ditch 1006	A2 flake	76	72.8
381/B	Unstratified	A2 bladelet	50	54.0

Distribution and refitting

The only obvious concentration of flint finds occurred in enclosure ditch segment 1003, which produced 93 pieces weighing 724.5 grams, equal to about 20% of the total assemblage. This group included two cores and five core fragments; two unretouched flakes refitted to one of the cores, a flake refitted to one of the core fragments, and two separate pairs of other flakes refitted sequentially. The group includes no implements apart from three nondescript miscellaneous retouched pieces.

Other sequential refits were: a pair of flakes from external feature 2004 in Area A; a pair of flakes from enclosure ditch segment 1004 (which also had a pair of non-refitting flakes obviously from the same reduction sequence); two bladelets refitting to a flake from internal feature 2066 (Fig. 13, 260, 262 and 264); and another pair of flakes from the same feature. There was also a pair of sequentially refitting flakes from feature 2010 in Area A, together with five other flakes clearly from the same pebble, though they did not refit.

This kind of refitting is unlikely to occur among residual material. The refitting evidence from excavated contexts indicates that, at least in the case of the specific pieces involved, flint-working was taking place in those parts of the site, probably after the features in question were opened and close enough in time to their use for the flints to be incorporated in their fills.

Ditch segment 1003 is the only context with coincident concentrations of pottery and flint (and also burnt flint: 48 pieces, weighing 792.9 grams). The pottery concentrations in the butt ends of the enclosure ditch (segments 1001 and 1002) are not matched by the

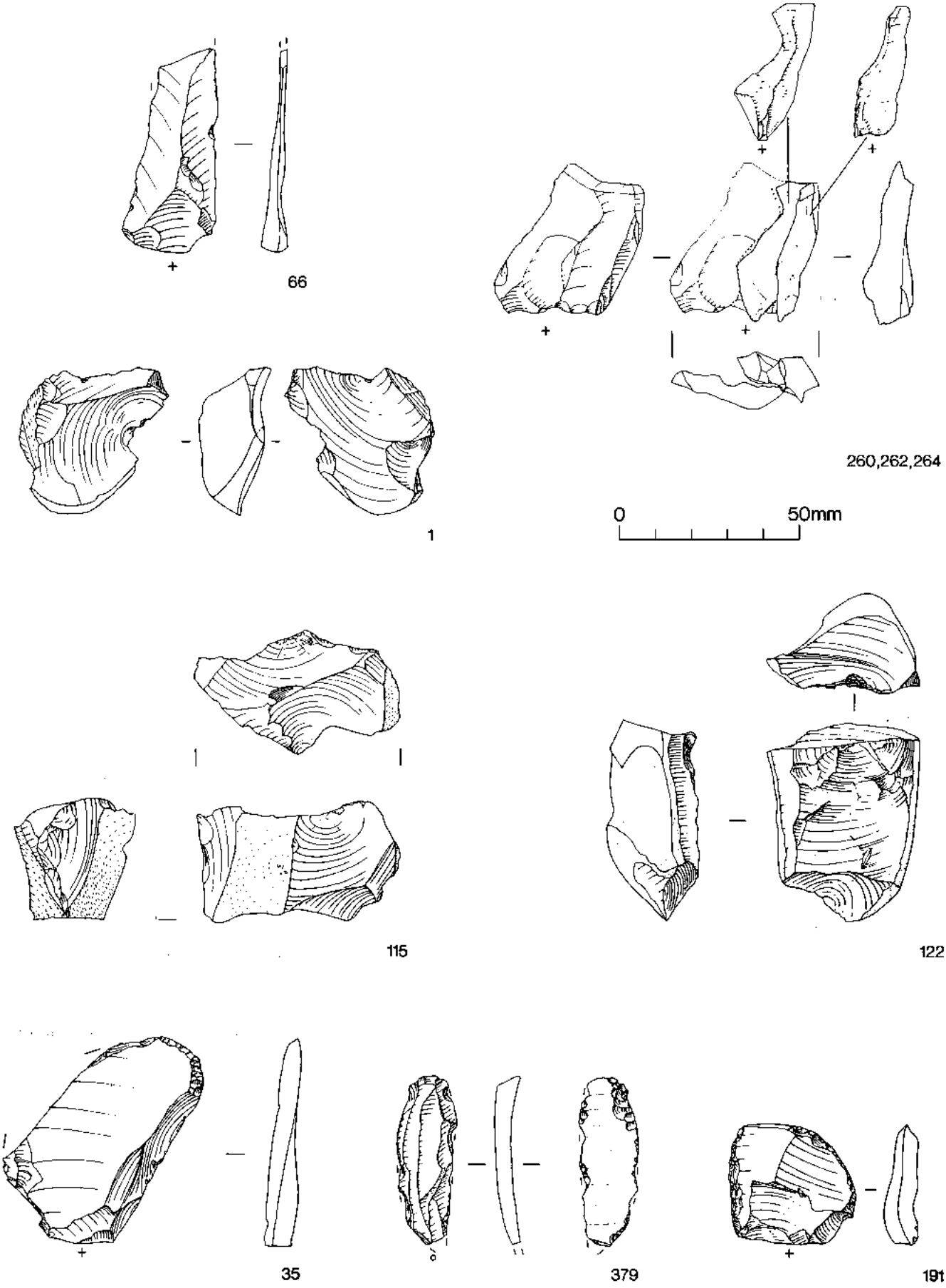


Fig. 13 Windmill Field, Broomfield. Flintwork.

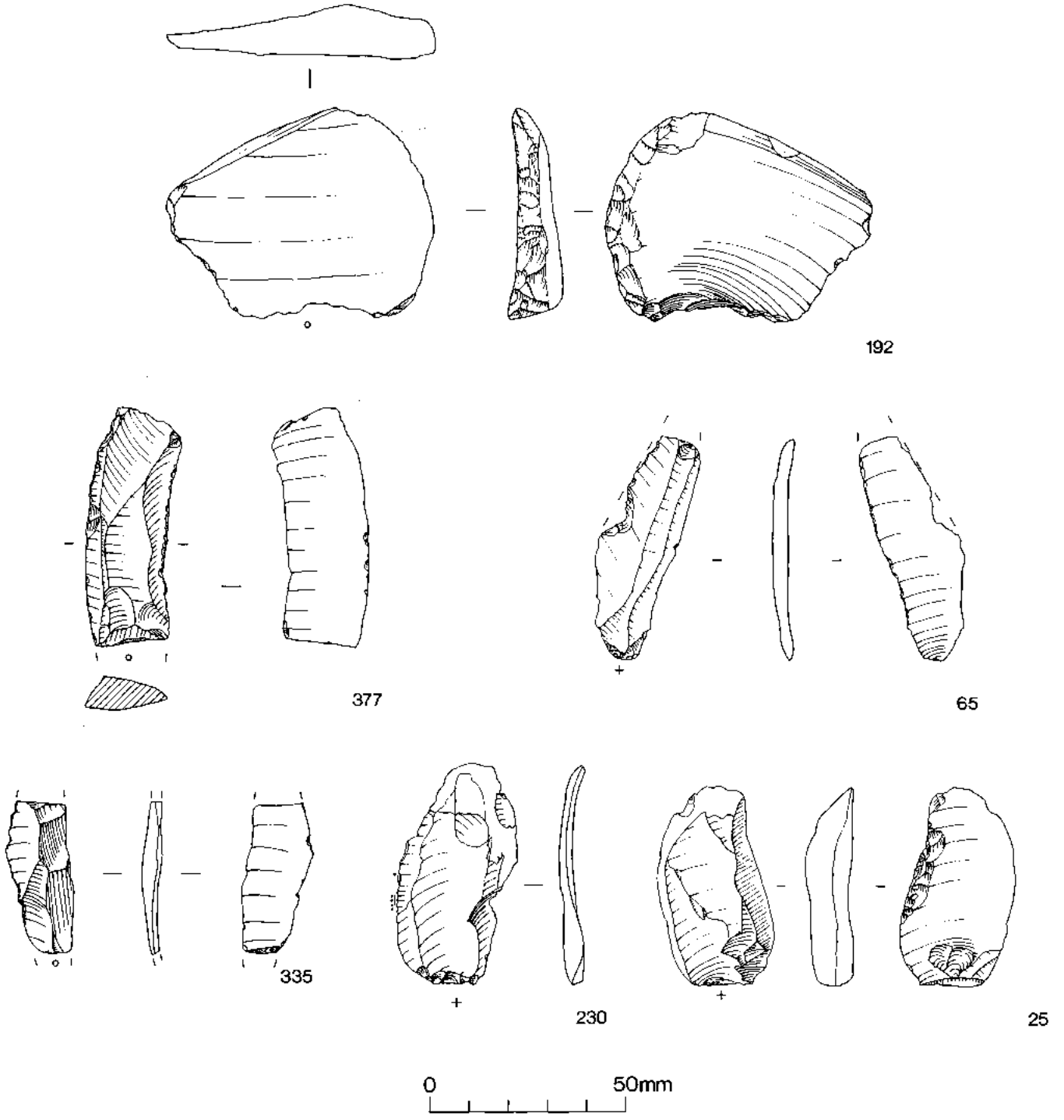


Fig. 14 Windmill Field, Broomfield. Flintwork.

flints (four from 1001; 30 from 1002), while the northern ditch segment (1007) with a pottery concentration produced only two flints (plus 19 burnt pieces, weighing 493.1 grams).

As with the pottery, most of the flints from the interior of the enclosure derived from the features in and around the roundhouse. There were no concentrations of flint in this area, however, and the pit (2061) with the large ceramic assemblage contained only three flint flakes. As Table 1 indicates, no classifiable implements were recovered from inside the enclosure, and the occurrence of flints in the area of the roundhouse is best seen as part of a general site-scatter rather than indicative of any significant patterning.

Discussion

There are no absolutely diagnostic tool types or techniques evident in this assemblage to help in the assessing its cultural affiliation. The only evidence for major time depth is provided by the three flints with corticated surfaces, which are not typologically specific, but which could be of earlier Neolithic date. As explained above, the refitting data, considered together with the general condition of the material, suggests some definite contemporaneity with the features in which the refitting pieces were found. On the basis of stratigraphy and pottery, the features fall into three groups: the Grooved Ware pits (2004, 2008 and 2010); the pre-LBA ditch (2030); and the LBA

enclosure and its internal features. The Grooved Ware pits produced the most "classic" scraper (Fig. 13, 35), the edge-trimmed blade (Fig. 14, 65), and the thinning flake (Fig. 13, 66), all of which would fit more comfortably with a Late Neolithic context than a LBA one.

To say which implements would fit better with a LBA context is more difficult since so much less is known about LBA flintwork, but at face value this would certainly apply to the two scrapers (Figs 13 and 14; 191 and 192), the bruised edge flake (Fig. 14, 25), and the core (Fig. 13, 122) from the enclosure ditch. It would also be appropriate technologically, since there are short, broad flakes with broad and wide platforms, with unabraded platform edges, and with incipient cones of percussion close to the platform edges (cf. Holgate 1988a). An immediate problem is posed by the fresh condition and ostensibly identical character of the raw material of the artefacts from the Grooved Ware and LBA features, which allows for the possibility that all the flints on site could be residual from the Grooved Ware phase. Residuality would probably be helpful in explaining the presence of such pieces as the knife (Fig. 14, 377), the end-of-blade scraper (Fig. 13, 379), and other blade-like artefacts (such as Fig. 14, 230 and 335), but cannot entirely undermine an association between much of the assemblage and the LBA activity.

However, the characterisation of the LBA industry is severely hampered by the small size of the assemblage. This is in part a factor of the excavation strategy, which only sampled the stratified contexts, but in turn must reflect the relatively low intensity of flint manufacture and usage within and adjacent to the enclosure. A similar picture of low-intensity flint exploitation emerged from the unenclosed settlement at Broads Green (Holgate 1988a) and the enclosure at Lofts Farm (Holgate 1988b); no flints could readily be associated with the LBA pottery from Rivenhall (Healey 1993) and further afield many LBA settlement sites appear to lack contemporary flintwork altogether (e.g Longley 1980; O'Connell 1986). Substantial quantities of flint are reported from the LBA enclosure at Springfield Lyons (Buckley and Hedges 1987, 5) but residual contamination from Neolithic and EBA flintwork may complicate assessment of the LBA element.

While there is some consensus of opinion about the general nature of flint use during the Bronze Age (e.g. Ford *et al.* 1984; Healey 1991), knowledge of LBA industries is inadequate and will not be able to advance without detailed case studies of representative post-MBA assemblages (cf. Adkins and Needham 1985, 41). Residuality is always liable, as here, to present a problem even with stratified assemblages, but the need to obtain large samples of flintwork from LBA contexts whenever possible should be a priority. Consideration must, therefore, be given to adjusting the excavation strategy used at LBA enclosures like Windmill Field in order to maximise the recovery of struck flint. In particular, it should be recognised that the practice of only sampling such contexts as pit and enclosure ditch fills is in direct conflict with the requirement of the lithic specialist for assemblages of knapping debris which can be refitted.

Finally, it is of interest to speculate on the date at which flintworking and flint use in this region ceased altogether as a normal part of everyday life. The assemblage from Windmill Field makes it clear that flint still had a definite role in the local domestic economy of the 9th century BC, but this role is likely, as elsewhere, to have completely ceased by the time that metal tools became readily available to the inhabitants of this kind of "low status" settlement (Saville 1981). Thus it will be sites dating to the period *c.* 800-500BC which will hold the key to documenting the final extinction of domestic flintworking traditions.

Appendix: Burnt Flint

The occurrence and quantity of burnt flint is summarised in Table 3. The relatively small amount of burnt flint represents a miscellany rather difficult to evaluate. The totals in Table 3 include 21 pieces still identifiable as struck flint in origin, presumably burnt incidentally. The same may be true for much of the apparently unstruck burnt flint since only a small proportion has the characteristic calcined appearance of a "potboiler", most being simply reddened without being completely crazed. The overall impression, therefore, is that flint has not been intensively used for industrial or domestic heating purposes within the enclosure, incidental incorporation in hearths perhaps accounting for the bulk of the burnt pieces.

Table 3 Burnt flint.

	No.	Wt. in g
Area A		
External features 2004 and 2008	13	41.1
Enclosure ditch	26	221.4
Unstratified	1	9.1
Area B		
Enclosure ditch	84	2062.8
Internal features	109	1735.4
Romano-British ditch	3	25.9
Totals	236	4095.7

Miscellaneous Finds

by H. Major

Baked Clay (Not illustrated)

Most of the baked clay consisted of small, undistinguished fragments, probably 'daub' from structures such as walls or hearths. A total of 61 pieces, weighing only 301g in total, was found.

Five contexts contained pieces of slabs, which were probably perforated, although only one piece had part of a possible perforation surviving. Perforated clay slabs are a common Late Bronze Age artefact in this area, although their purpose is unknown. The fragments from this site shed no further light on their function. Only one fragment, from context 003 had a measurable width of *c.* 100mm.

There was also one very small fragment from a spindle whorl, and a fragment probably deriving from a loomweight of uncertain shape. One sherd, from context 043, is more likely to be Late Iron Age pot than baked clay, despite coming from a Late Bronze Age context.

Saddle Querns

Three fragments of saddle quern were found. There are no definite quern rubbers; these would normally have been made from suitably sized pebbles, and are more difficult to identify with any certainty. There were a number of pebbles recovered which had possible worn areas on them, and which could have been used as rubbers.

It is probable that all three querns were made from erratic boulders found locally, or relatively so. This is quite usual for saddle querns in Essex, although there is a scatter of greensand querns across the county, from sources in Kent or Sussex (see, for example, Buckley 1988).

1. (Fig. 15) Fragment from the edge of a saddle quern in quartzitic sandstone. The grinding surface is polished, and the edge and underside rather rough. The base is scorched (context 006).
2. (Not illustrated) Saddle quern fragment in micaceous quartzitic sandstone. The grinding surface is slightly concave, and is pecked, with areas of polish. The underside is irregular, and has broken along the bedding plane of the stone.
   Max. thickness 44mm (context 116)
3. (Not illustrated) Saddle quern fragment, made from a sarsen boulder. The underside and edge are part of the natural, water-worn surface. The grinding surface is flat, and has been pecked, with polish occurring along the edge.
   Max. thickness 61mm (context 117).

Slag

A small amount of slag was recovered. All the fragments were very similar; of low density, light in colour and very porous. These

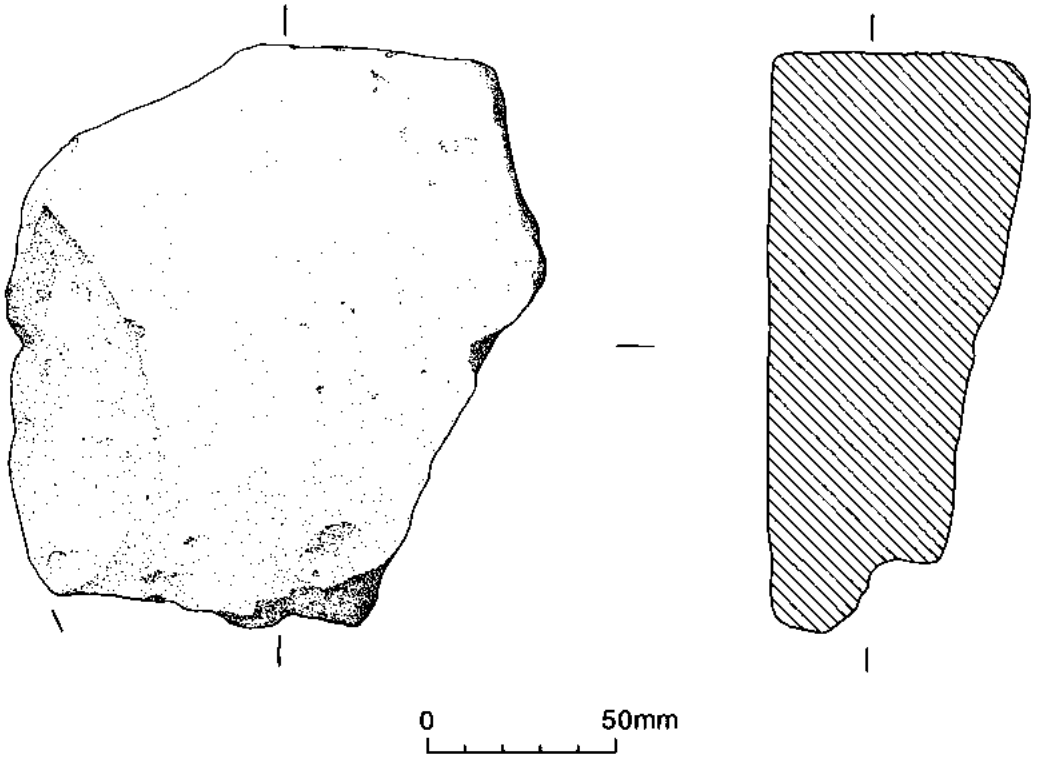


Fig. 15 Windmill Field, Broomfield. Saddle quern.

attributes are typical of non-metallurgical slags. Bachmann (1982, 20) lists a number of possible origins for such material, including vitrified wood ash, vitrified cow dung and burnt haystack. The slag from Windmill Field has not been analysed, and it is therefore not possible to specify its origin.

Plant macrofossils

by P. Murphy

Sampling was concentrated on the Late Bronze Age contexts although one sample was taken from a possible Neolithic pit 2008. This produced a very few charcoal fragments but no other plant remains.

Bulk samples

The samples were sieved and floated by the excavator using a 500 micron mesh sieve. The dried flots were sorted under binocular microscope at low power. The plant remains identified are listed below. Modern contaminants in the form of fibrous roots, uncarbonised seeds and stem fragments and invertebrate remains were present in all samples. Thirty-four samples contained fragments of heavily burnt, porous 'cokey' material and/or fragments of black material with a glassy appearance. It is possible that some of this material may be the remains of severely burnt and distorted cereals or seeds, but further identification was not possible. Sample 77 contained fragments of a pale, porous, apparently vitrified material (also recovered from the residue), possible a silicaceous residue from burnt grass or straw. Nine samples contained no trace of carbonised material.

The dried residues were sieved through a 2 mm mesh sieve and sorted. Remains were sparse and included possible flint flakes, a very few fragments of burnt bone and fragments of burnt or vitrified material.

Plant Remains

Cereal and other plant remains were extremely sparse and generally very poorly preserved, having been heavily distorted during carbonisation and subsequently coated with silt.

Grains of *Hordeum* sp. (barley) and *Triticum* sp. (wheat) and glume base of *Triticum* sp. were recovered from 17 samples but at very low densities. The *Hordeum* sp. grains retained no surface detail and were too distorted to identify further. The *Triticum* sp. grains all appeared to be of a long, narrow form and are, therefore, probably *T.dicoccum/spelta* (emmer/spelt). The single glume base (sample 54) was very poorly preserved, but was very narrow at the base and is probably of *T.dicoccum.*

Carbonised weed seeds were found in 29 samples and all were of common segetal species. Of particular interest was a single seed of *Anthemis cotula* (stinking mayweed) (sample 80), a weed of heavy clay soils and not noted before the Iron Age (Grieg 1991, 306).

Charcoal was present in the majority of samples but at very low densities, with the exception of sample 8 which contained a large volume of small (less than 5 mm), often abraded fragments.

Because of the low density of carbonised remains and the poor state of preservation, no firm conclusions about the nature of the site can be reached. With the exception of *Anthemis cotula*, the crop weeds are specific to light soils. Other taxa, for example woodland species, are present and gathered food plants for example *Corylus avellana* (hazel), *Prunus* sp. (plum) and *Malva* sp. (apple), which are present in small quantities at contemporary sites, for example Lofts Farm, Essex (Murphy 1988) were absent, although this may be the result of poor preservation due to apparent intensive combustion.

Discussion

The excavation identified four periods of activity: pre-enclosure in the Neolithic and early to middle Bronze Age, occupation of the Late Bronze Age settlement itself and post-enclosure activity in the Roman.

The Neolithic pits outside the later enclosure entrance and the earlier Bronze Age ditch, 2030, certainly indicate some degree of land use prior to its occupation in the Late Bronze Age. The presence of such features is interesting, especially as similar pits containing grooved ware pottery were found during the excavation of the Great Baddow Bronze Age enclosure (Brown and Lavender 1994). However, it is difficult to assess just how intensive this was given the small sample uncovered by the excavation. The Neolithic pits may be seen to be part of a seasonal settlement extending further to the east while the ditch signifies the probable division and cultivation of the land by a settled Early or Middle Bronze Age community in the vicinity.

The Late Bronze Age settlement seems to have been a simple enclosure perhaps only occupied for a few generations. The pottery collected from the various recuts of the ditch all appears to date from the ninth century BC and the relatively simple sequence of the deposition of material within the original cut and its later recuts seem to support this. Their fills appear to be principally derived from both the erosion of the sides and from the slumping of an internal bank. The apparent lack of any revetment would make the rapid disintegration of an upcast bank quite possible. The pottery collected from these slumped deposits is likely to be residual and may have been cleaned out of a ditch cut and slid back in on a number of occasions. However, more significant are the individual dumps of carbon-rich rubbish which have been deposited down the inside edge of the ditch. While the artifacts within these deposits are likely to be *in situ* and so may be used to date the episodes of deposition within individual cuts, they still give an approximate date of *c.* 800BC, further evidence of rapid filling of the successive ditch cuts and relatively short lifespan of the settlement. This may also be indicated by the remains of the hut circle, as only one phase of construction is apparent from the post-hole plan.

While the excavation of the enclosure interior has revealed that it contained a round house placed toward the back, with its doorway aligned on the entrance, it is possible that further structures exist in the unexcavated third of the enclosure between Areas A and B. Remains of what have been interpreted as ancillary buildings have been found within other enclosures of this date in the Chelmer Valley/Blackwater estuary; a rectangular structure was excavated at Lofts Farm (Brown 1988) and a number of smaller circular structures at Springfield Lyons (Buckley and Hedges 1987), in addition to the main hut circles.

From what has been excavated of the enclosure interior, it appears that Structure 1 was the major building and the focus of domestic activity within the farmstead. With a diameter of 8.0 m, the ground surface of the hut interior must have been in the region of *c.* 50 sq m. The relatively small capacity of this apparent dwelling would indicate that the enclosure was a Late Bronze Age small-holding operated by a single family unit.

Determining the function of the settlement is critical to considering its significance within the Bronze Age settlement of the Chelmer Valley. As can be seen from the analysis of the hut circle and artifacts collected from its vicinity and from the ditch fills, there was domestic activity on the site. But it is important to go beyond this view of the settlement as a homestead and to try to identify its importance as a workplace; a centre of localised land management. The division of the enclosure interior by the establishment of fencelines, and the apparent placement of the dwelling towards the back to facilitate this, would suggest stock management.

The limited evidence provided by one spindle whorl fragment and one loom weight fragment suggests that there was some dependence upon sheep. Whether cattle too were herded cannot be determined on the evidence available. The complete absence of surviving animal bone is a severe handicap here.

From his excavations at Mucking North Ring, Bond has suggested that the establishment of discrete areas within the enclosure, with the access into them controlled at the main entrance, may have related to stock movement on a seasonal or shorter term basis (Bond 1988, 52). At Broomfield, by comparison, the fencelines could not be traced across the whole of the enclosure. From the evidence available, it seems that the interior can indeed be seen to be deliberately divided into areas of differing activities. It may be argued that these were diverse and that the economy of the settlement cannot be assigned solely to either pastoral or arable farming, but rather to a mixture of both. As indicated by the fencelines, livestock may well have been lodged in pens or corrals on the south side, while the relative proliferation of pit features to the north suggests non-pastoral activity.

What this 'non-pastoral activity' comprised is difficult to determine, for the pits and scoops did not yield diagnostic evidence on excavation. It is possible that they represent the storage of agricultural produce. The discovery of discarded fragments of saddle querns attests to at least the small-scale processing of grain. This diversification may also suggest the independence of the settlement, rather than its inclusion in a network of interdependence within the Chelmer Valley.

Bond suggests that the lack of 'exotic' material at North Ring (Bond 1988, 52) may be indicative of such independence. Evidence of on-site flint working, together with the absence of metallic artifacts and non-local material, perhaps with the exception of the essential domestic items of querns, would appear to

support this. In conclusion, the Broomfield enclosure may be seen to have been a short-lived rural settlement, the occupants of which combined both pastoralism, perhaps herding cattle, and agrarianism under conditions of a subsistence economy.

Whatever the nature and function of the enclosure, its occupation was relatively short-lived. The rapid silting of the ditches and very limited date-range of pottery attest to this. The single linear ditch 2002/2033 clearly indicates that by the Late Iron Age or Roman periods, the settlement had disappeared from the landscape and its site reverted to fields.

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The finds and archive will be deposited in the Chelmsford and Essex Museum, Accession No. 1991.338.

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Early Iron Age settlement at Southend: excavations at Fox Hall Farm, 1993

by J. Ecclestone

Excavations carried out in advance of a proposed leisure development revealed part of a settlement of Early Iron Age date, as well as evidence of Late Bronze Age, Roman and Saxon activity. The settlement is comparable to the contemporary sites of North Shoebury and Great Wakering.

Introduction

Initial investigations at Fox Hall took place in February 1992 in the form of an evaluation by fieldwalking and metal detector survey of land proposed for development (Figs 1 and 2). Seventy-seven hectares of arable land intended for a golf course and leisure park were surveyed, and a site of later prehistoric date was identified at TQ 906 880 by a dense scatter of burnt flint. There was also a sparse distribution of worked flint across the whole area, which coincided in part with the area of burnt flint (Ecclestone 1992).

In this location, in December 1992, a watching brief was maintained over an area of *c.* 5000m^2, affected by ground works required for the construction of a green. Topsoil was removed by machine, beneath which archaeological deposits were revealed. At this point, full excavation was recommended. This was carried out by Essex County Council Field Archaeology Group under the direction of the author, in February 1993. This excavation and the subsequent post-excavation work was funded by the Norman Garon Trust. The archive and finds will be deposited in Southend Museum.

Site Background

The drift geology in this area consists of a series of gravel terraces on the northern bank of the river Thames, above which lie brickearth deposits of varying thickness. Fox Hall lies at *c.* 16m OD on the Barling terrace, on the edge of a plateau which drops down gently to the east. The Thames lies 3km (1.9 miles) to the south and the estuarine flats of Foulness are 5km (3.1 miles) to the east. The brickearth is light, fertile and freely draining, and well suited to arable cultivation (Allen and Sturdy 1980).

Late Bronze Age and Early Iron Age settlement is well attested in the area (Fig. 1). Extensive archaeological remains have been revealed during brickearth extraction in the close vicinity of Fox Hall, including the multiperiod sites at North Shoebury and Great Wakering, sited 3 km (1.86 miles) and 3.6 km (2.23 miles) from Fox Hall respectively (Wymer and Brown

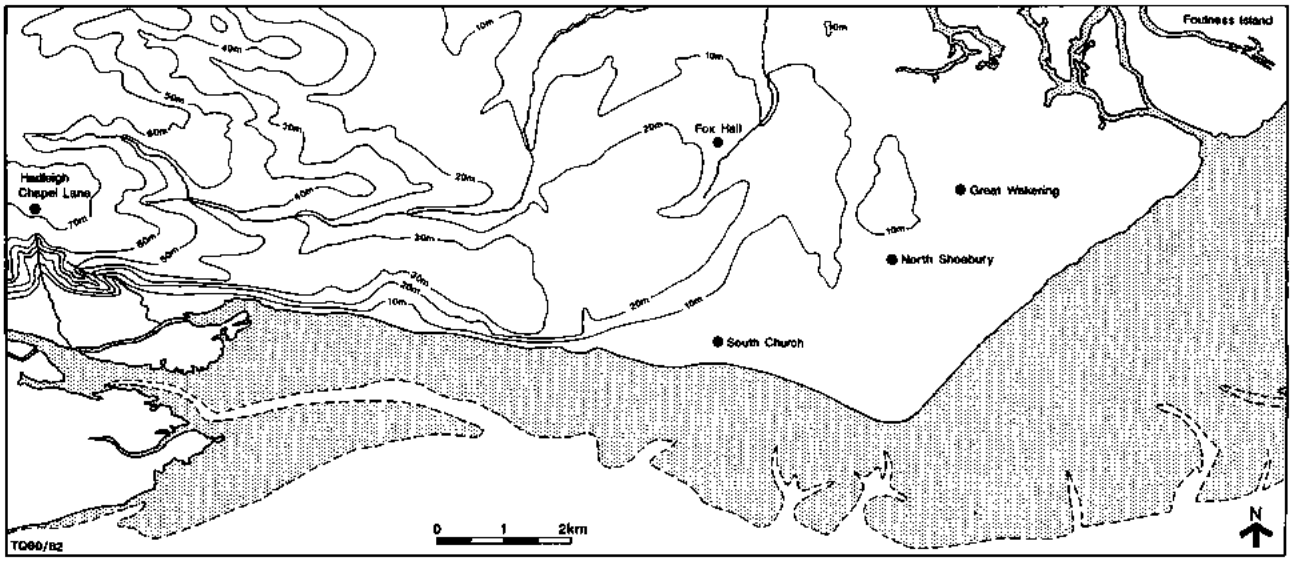


Fig. 1 Fox Hall. General site location.

forthcoming; Crowe 1984). Spreads of Late Bronze Age material have also been identified in the Southchurch area during similar processes, and a section of Early Iron Age ditched enclosure was located at Hadleigh during a watching brief (Brown 1987a).

Excavation (Figs 2-4)

An area 50 x 60m was machined down to the top of archaeological deposits. These consisted of a soil horizon (26), containing scattered small sherds of later prehistoric pottery, and 37 features (visible within 26), most of which were located in the north-west quadrant of the site (i.e. corresponding to structure 1 and nearby features).

The machined surface was cleaned by hand, after which time restrictions determined the application of different strategies to various areas of the site. In area A (Figs 3 and 4), visible features were excavated at this level, without the removal of 26. In Area B (Figs 3 and 4), 26 was removed by machine to reveal many features beneath, cut into the subsoil. These were then excavated at this level. The southern half of the site, Area C, where no features were identified, was not excavated further, on the assumption that features beneath this layer were not at risk from development (Figs 3 and 4).

Layer 26 was a variable matrix of greyish brown silt-clay-loam. It appears that it was a late-occupation or post-occupation deposit, which masked most features (especially in the east where it accumulated to greater depth: above 0.15m as compared with 0.07m to the west of the site). The level of disturbance on the site was high, with troughs made by modern subsoiling present to a depth of *c.* 0.15m below layer 26. This disturbance may to some extent explain the differential visibility of some features through the layer, especially linear features which were only partially visible, for instance the ends of 1154 and 1159.

Phasing

Although the site seems to have been occupied for a considerable length of time (as seen by residual pottery in layer 26, and in several features dating to the later Bronze Age, Roman and Saxon periods), it was difficult to establish phases of activity clearly. Many features lacked dating evidence, or contained pottery of indeterminate prehistoric date, and as there was little intercutting of features, useful stratigraphic relationships were few. The level of contamination of some fills due to plough and animal disturbance is likely to be high, and it is probable that by the same agents several shallow features have been destroyed, thereby giving an unrepresentative distribution of features.

Occupation is divided into 4 phases, on the basis of pottery, with early Iron Age features being the most significant. Several structures are assigned to this phase.

Pre-Early Iron Age

A substantial ditch was recognised in the north-east corner of Area B (1170 in Fig. 4); it measured 2.0m wide and 0.6m deep. It was, however, very indistinct on the surface and could only be followed for a short distance. It contained many fills, including bands of light grey silty clay, yellowish-brown silty clay and a brownish-yellow clay. Its function is unclear, and the small segment excavated contained no finds. It is assigned to this earliest phase on the basis of being cut by features containing a little Late Bronze Age/Early Iron Age pottery (see the pottery report, below, for the difficulties in characterising sherds of this general date range).

Attention should also be drawn to the provisional dating of much of the flint assemblage to the Late Bronze Age (see below), although this does not help to identify any more pre-Early Iron Age features unambiguously. A concentration of flintwork was, however, noted in context 26 over the area of structure 3 in Area B.

Early Iron Age

The bulk of the excavated features belonged to this phase, including three structures. These latter are described first, followed by other features belonging to this phase.

Structure 1 (Figs 4 and 5)

In the centre of Area A lay a circular structure, comprising two lengths of shallow gully (1016 and 1018). The diameter of the circle formed by the two gullies is 10.5m; the northern gully however is slighter than the southern. If interpreted as drip gullies, then the disparity of dimensions would suggest that they reflected a differential requirement; for instance, that they were sited in response to differential drainage of the soil, or that they reflect a possible bias of the roof. Within the feature, there were three post holes (1004, 1025 and 1026 in Fig. 5) substantial enough to be considered as evidence of structural timbers, though more may have been masked by layer 26.

To the east was a cluster of smaller post holes and a feature (1010 in Fig. 5), which may have been a hearth. This was sub-circular and measured 0.9m wide and 0.1m deep. It contained a layer of dense charcoal which was covered by a sandy loam with occasional burnt flints. Its location close to the structure to the west may be unrelated, but it is possible that the structure had a shelter attached for the hearth as suggested by the smaller post holes in this area.

Structure 2 (Figs 4 and 6)

Just west of centre in Area B lay a square four (or five) post structure measuring 2.25 by 2.25m. At the corners were four large post holes (1092, 1112, 1116 and 1123),

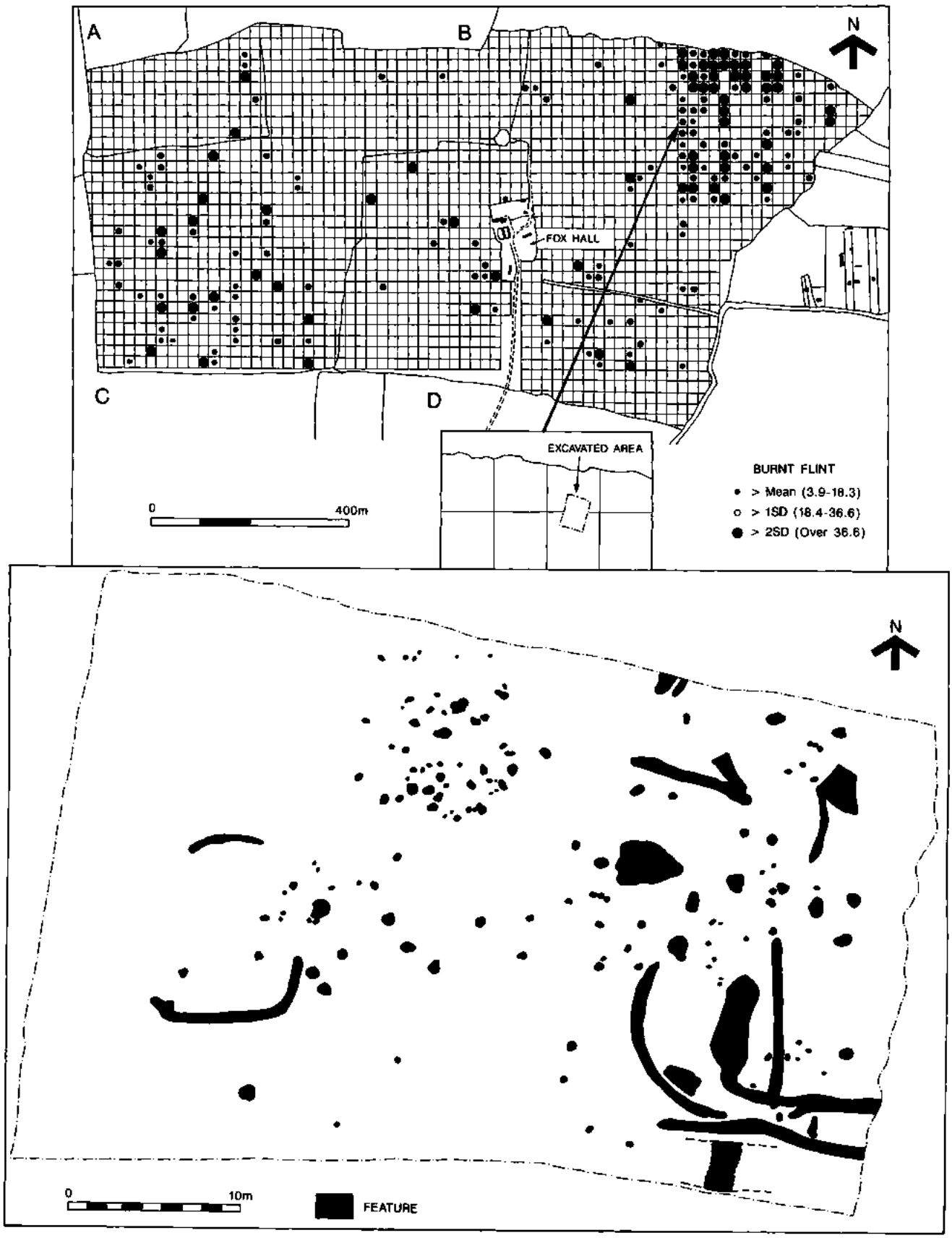


Fig. 2 Fox Hall. Detailed site location, showing fieldwalked area and plot, plus plan of the excavated features, corresponding to Areas A and B only (refer to Fig. 3). Note that only the area directly threatened by golf-course construction was investigated.

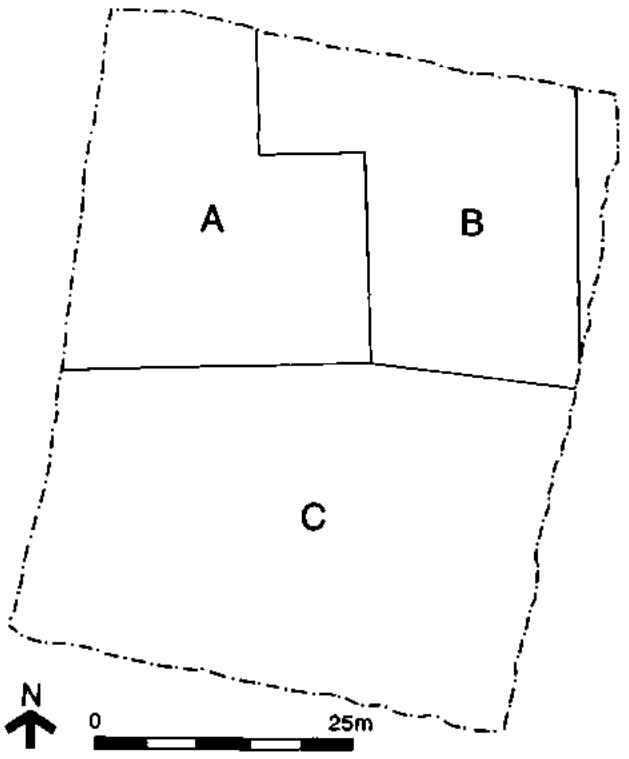


Fig. 3 Fox Hall.
Plan showing different areas of excavation strategy. In Area A, topsoil only was removed, and features visible at that level investigated. In Area B, topsoil and cover loam 26 were removed, to reveal features cut into subsoil. In Area C, topsoil was removed, but no further work was carried out.

with fairly similar deep and narrow profiles, and a similarly large post hole set slightly to the south-east of centre (1113). The dating of these post holes is tentative, because of the small and abraded nature of the pottery, but the sherds from each fill were of the same fabric, and have been dated to the Early Iron Age.

Structure 3 (Figs 4 and 7, upper)
In the north-west of Area B was a dense mass of post holes, from among which a rectangular structure (1099, 1100, 1106, 1079, 1080, 1086, 1102, 1034, 1062) has been identified by comparing the dimensions of the post holes, with depth as the deciding factor. The results showed distinct groups of dimensions, with one group, a cluster of shallower post holes, forming a rectangular outline, with several internal post holes. However, dating evidence is sparse with only two of the external post holes containing pottery. Although this pottery belongs to the Early Iron Age, it is barely enough to provide a reliable date for the structure, which measured 2.7 x 4.9m, though it may extend further to the north-west (refer to Fig.7, upper).

Other Prehistoric Features (Fig. 4)
Short stretches of curved gullies were a common feature of this site and also occur in similar form at North Shoebury and Great Wakering. Whilst they could be interpreted as being structural, comparable with structure 1 in Area A, they were slightly wider and deeper than those interpreted as drip gullies, and the dimensions of projected circles are larger, between 11 and about 16m.

Gully 1137 was 6.5m long, 0.70m wide and 0.25m deep. It occurred on the outside of a row of post holes (1147, 1148 and 1143) which respected the gully's orientation. This implies an associated structure, an interpretation supported by the presence of burnt clay in all gully segments. Segment 1137 contained a larger than average assemblage of Early Iron Age pottery.

Gully 1118, just south of the centre of Area B, was the longest stretch of curved gully, measuring 12m long, between 0.3-0.8m wide and 0.14 and 0.18m deep. The fill contained occasional burnt flints, charcoal and rare pottery. There is no further indication of its function, and it does not appear to enclose any features. It may be best seen, along with the gullies to the east, as part of a system of trackways or enclosures.

To the south-west of gully 1118 was a curvilinear feature comprising four substantial post holes (1179, 1175, 1172, 1162). This curve is similar to that of gully 1118, and may have had a similar function.

At the southern edge of Area B, a ditch (1180), running north-south, was located. This measured 2.52m wide and 0.99m deep. It contained two deep fills; primarily a mixed yellow brown and grey brown layer of silty clay, below a more homogeneous greyish-brown silty clay.

Ditch 1180 produced a number of small, generally undiagnostic sherds which have been dated on the strength of their fabrics to the Early Iron Age.

Roman
Only one feature could be positively identified as Roman. This was a small pit, 1124, in the centre of Area B. 86% of the Roman pottery assemblage came from this pit, which dated to the early to mid-first century AD.

The second feature containing Roman pottery was gully 1018 (part of structure 1, above), and its presence is taken to be intrusive.

There was also a small scatter of residual Roman pottery in layer 26.

Saxon (Figs 4 and 7)
Of the six contexts which yielded Saxon pottery, four were associated with a large feature in the middle of

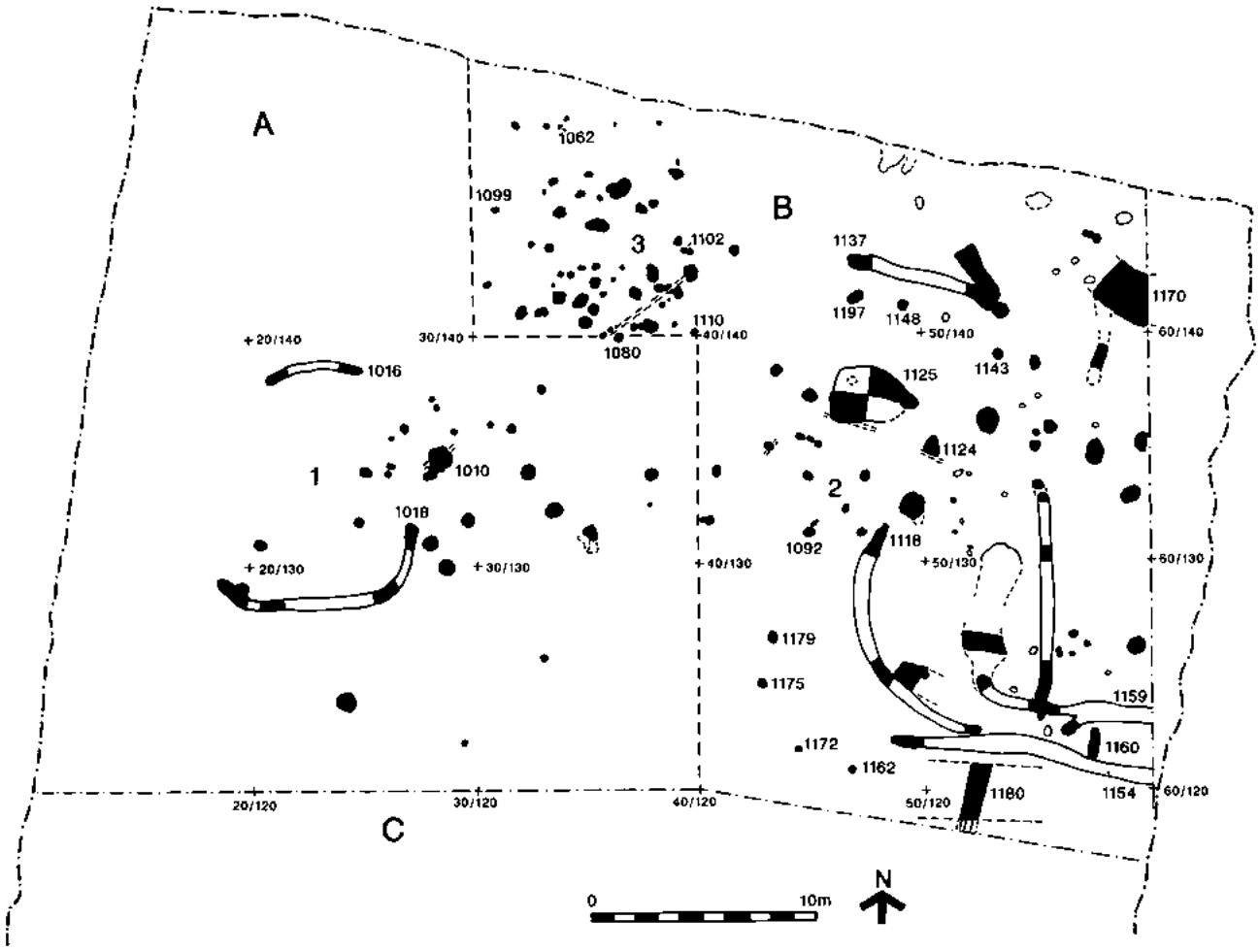


Fig. 4 Fox Hall. Detailed site plan; black areas show excavated segments.

Area B, 1125. Measuring 3.6m x 2.6m and up to 0.15m deep, 1125 was only located after the removal of layer 26. It is typical of sunken-floored buildings (SFB's) of Saxon date, with associated post holes at either end and in the north-west quadrant. Although Early Iron Age pottery was found in the single fill of the main feature, this was clearly residual as the rest of the pottery was Saxon. Also in this fill were flintwork, daub, slag, bone from cattle, horse, sheep/goat and pig and red deer antler.

At the east end of 1125 was a circular feature (1139), measuring 0.65m wide and 0.12m deep. This had a mixed fill, with a high percentage of burnt clay and occasional charcoal flecks. Although they did not form any coherent structure and were mixed with the clayey matrix, many of the fragments had smoothed surfaces. The feature was interpreted as a hearth, although the burnt clay may be the remains of an oven structure rather than a hearth floor. Because of its location against one edge of the SFB it is unlikely that it was contemporary. No pottery was removed from its fill, but stratigraphically it would appear to be of a later date.

The two other features containing Saxon pottery were gully segment 1018 (part of structure 1, above) and post hole 1110 (at the junction of Areas A and B). Both contexts produced two small sherds which were likely to be intrusive, although their location is worth noting to help suggest the further spread of features.

Saxon pottery was also found scattered in layer 26, immediately to the east of 1125, and to the north-west. That to the east could be explained by the dragging action of the plough, as the gentle slope to the east may have encouraged the movement of sherds in this direction. However, the pottery to the north-west may indicate more features in this area.

Finds Reports

Prehistoric Pottery

by N. Brown

The relatively small excavated area produced a substantial quantity of pottery (2424 sherds, 15.07 kg). A large part of this assemblage (1050 sherds weighing 4.48 kg) was derived from layer 26, which lay

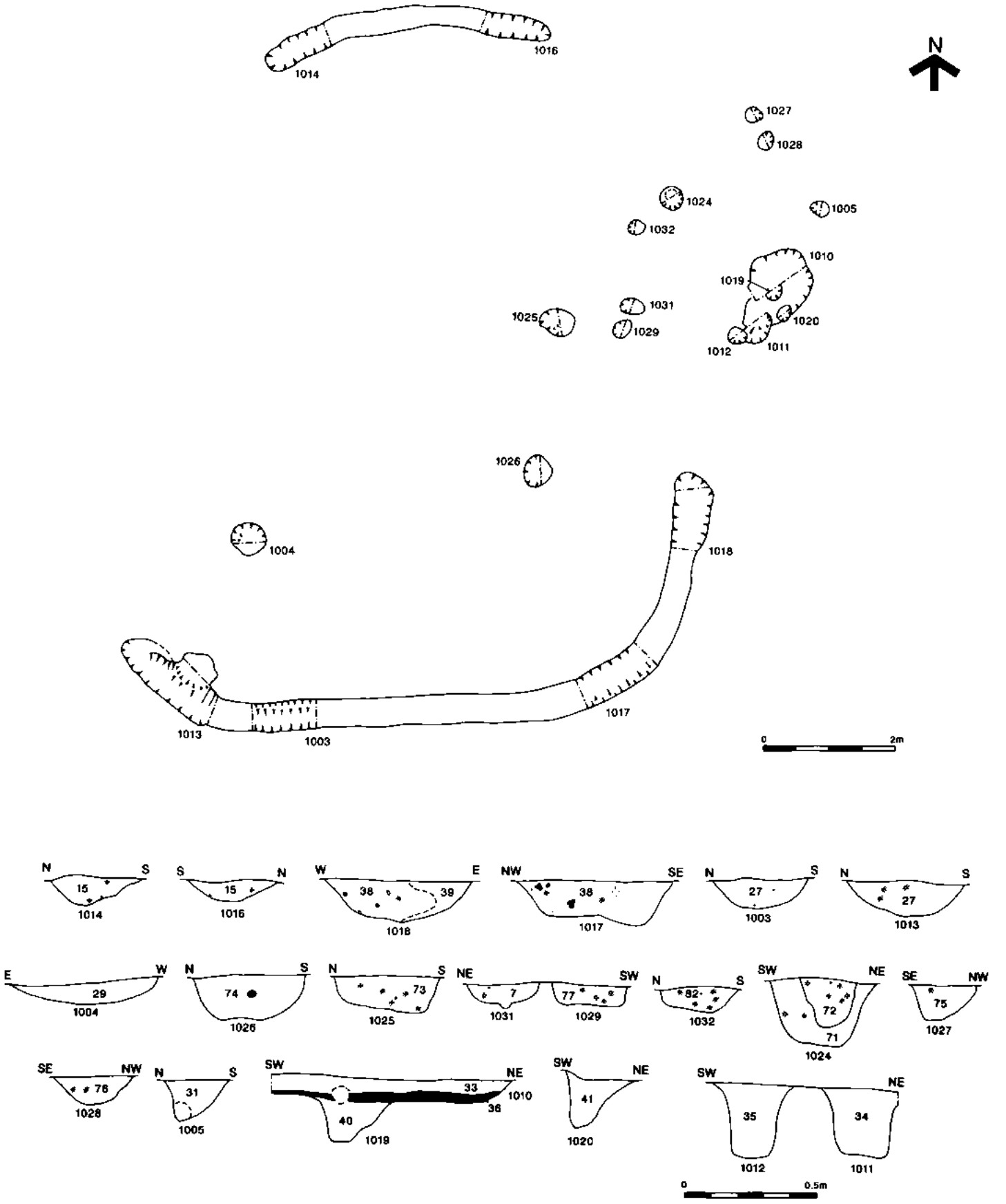


Fig. 5 Fox Hall. Structure 1; plan and sections.

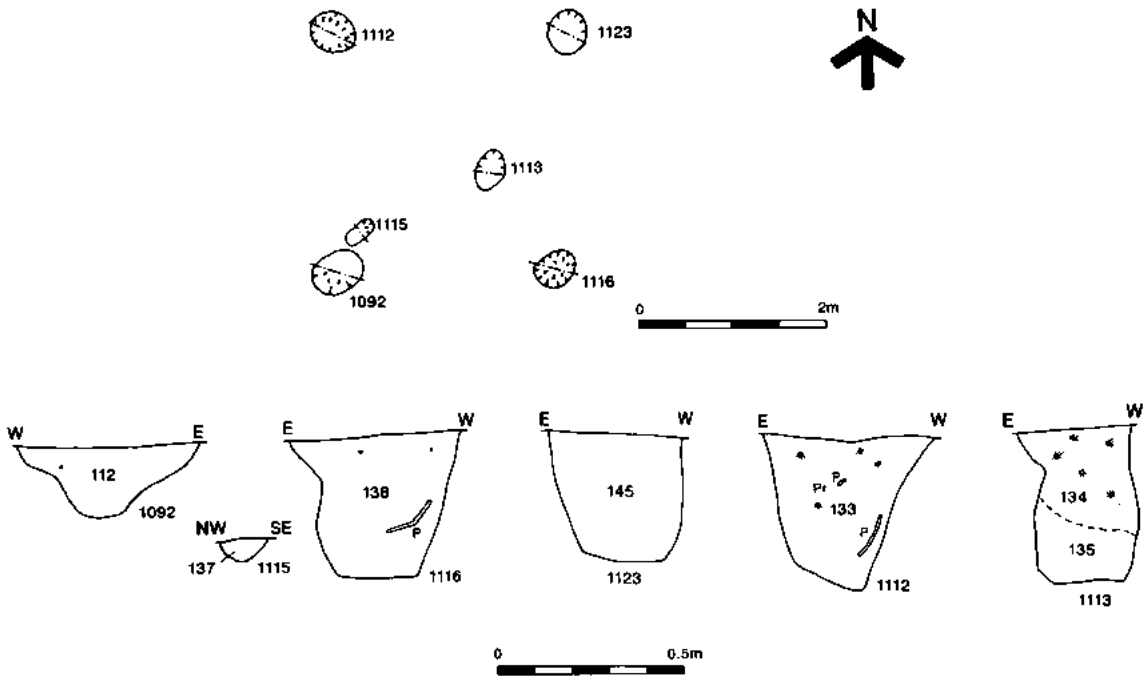


Fig. 6 Fox Hall. Structure 2; plan and sections.

immediately beneath the topsoil. This material was generally of smaller sherd size (average wt 4g) than that from the subsoil features (average wt 8g).

The pottery has been recorded using the standard system for Essex prehistoric ceramics (details in archive).

Fabrics present are:-

Size of inclusions
S = less than 1 mm diameter
M = 1-2 mm diameter
L = more than 2 mm diameter

Density of inclusions
1 = less than 6 per cm^2
2 = 6-10 per cm^2
3 = more than 10 per cm^2

Fabric		% Sherd count	% Weight
A	Flint, S2 well sorted	1	
B	Flint, S-M 2	7	7
C	Flint, S-M with occasional L 2	16	16
D	Flint, S-L 2 poorly sorted	6	15
E	Flint and sand, S-M 2	2	2
F	Sand, S-M 2-3 with addition of occasional L flint		1
G	Sand, S 3		
H	Sand, S 2	2	1
I	Sand, S-M 2-3	1	1
J	Sand, S 2 with veg. voids particularly on surfaces	2	2
N	Vegetable temper	2	2
P	Largely temperless	1	1
R	Shell	33	37
W	Flint S-L, with some sand and veg. voids	4	10
Z	Unclassifiable	22	4

Little of the material could be attributed to a specific vessel form; identifiable forms included:-

A. Jar, round-shouldered with short upright or flared rim.
C. Jar, bipartite round or slightly angular shoulder.
D. Jar, round or slightly angular shoulder with concave neck and erected, flared or upright rim.
H. Bowl, open, round bodied.
N. Jar, tripartite angular shoulder, upright rim.

The illustrated pottery represents the full range of variation and comprises 27% of the diagnostic sherds.

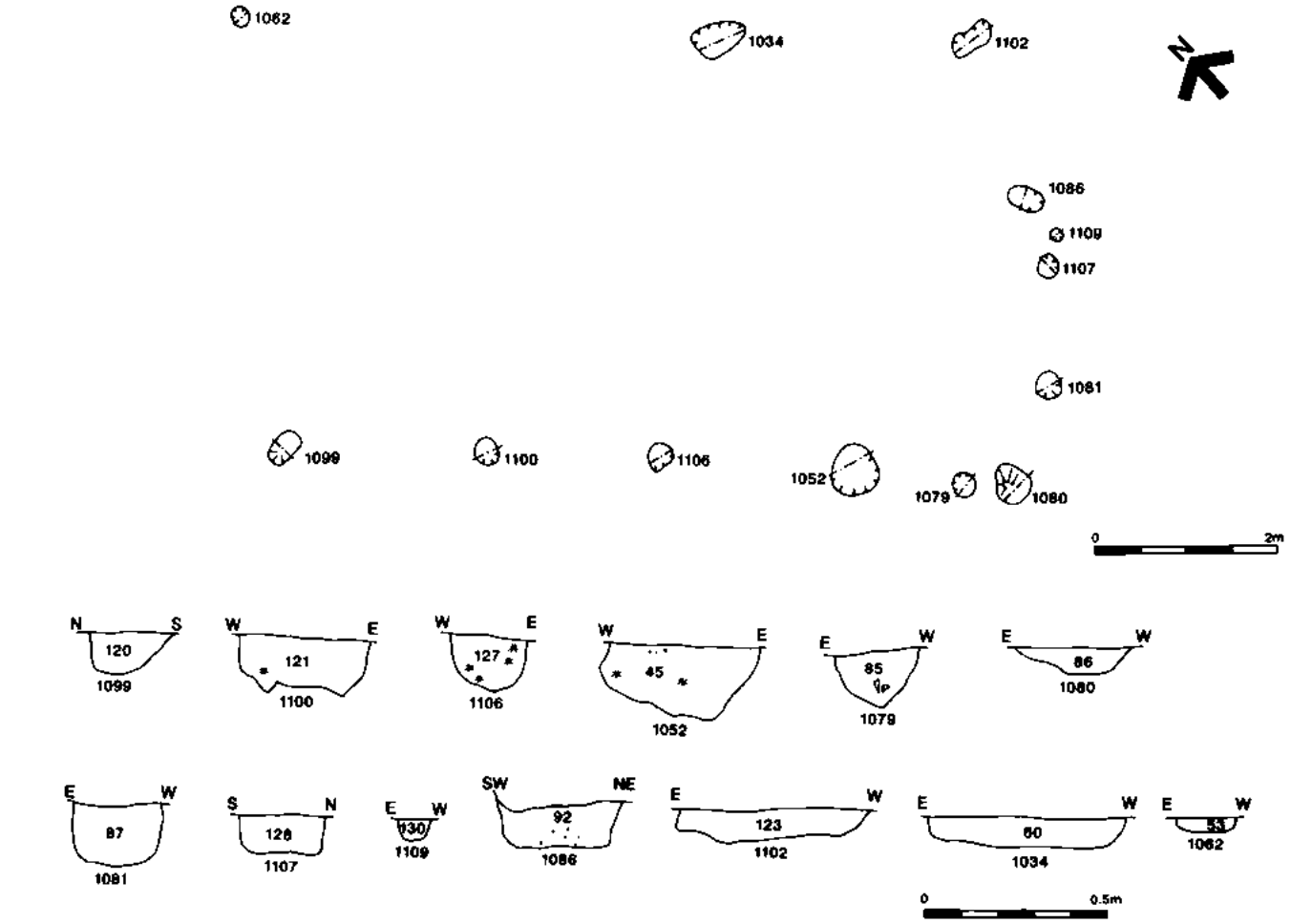
Date and Affinities

Dating of the assemblage is problematic; initial scanning suggested a Late Bronze Age and Early Iron Age date. However, closer study suggests the assemblage is largely of Early Iron Age date.

Late Bronze Age assemblages tend to be dominated by flint-tempered fabrics, Early Iron Age pottery showing a much more diverse range of fabrics (Brown 1988). In south-east Essex, shell-tempered pottery is a frequent component of Early Iron Age assemblages (Brown 1987) and is the dominant fabric amongst the Early Iron Age pottery from North Shoebury (Brown forthcoming). The diverse range of fabrics in the Fox Hall assemblage, with a high proportion of shell-tempered pottery, would therefore indicate an Early Iron Age date.

It is possible that Late Bronze Age material is present on the site; certain forms could well be of Late Bronze Age date eg. Fig. 8;1-4, although they are not especially diagnostic. A few features contain only flint or flint and sand-tempered pottery, although the quantities (8 sherds or less, with the exception of F1149, 17 sherds), makes the absence of other fabrics of doubtful significance. The presence of some even earlier pottery cannot be entirely discounted since one rim (Fig. 8;1) might be of Neolithic date.

There is a small quantity of Saxon pottery from the site, and this is also a potential source of confusion, since the sandy and shelly



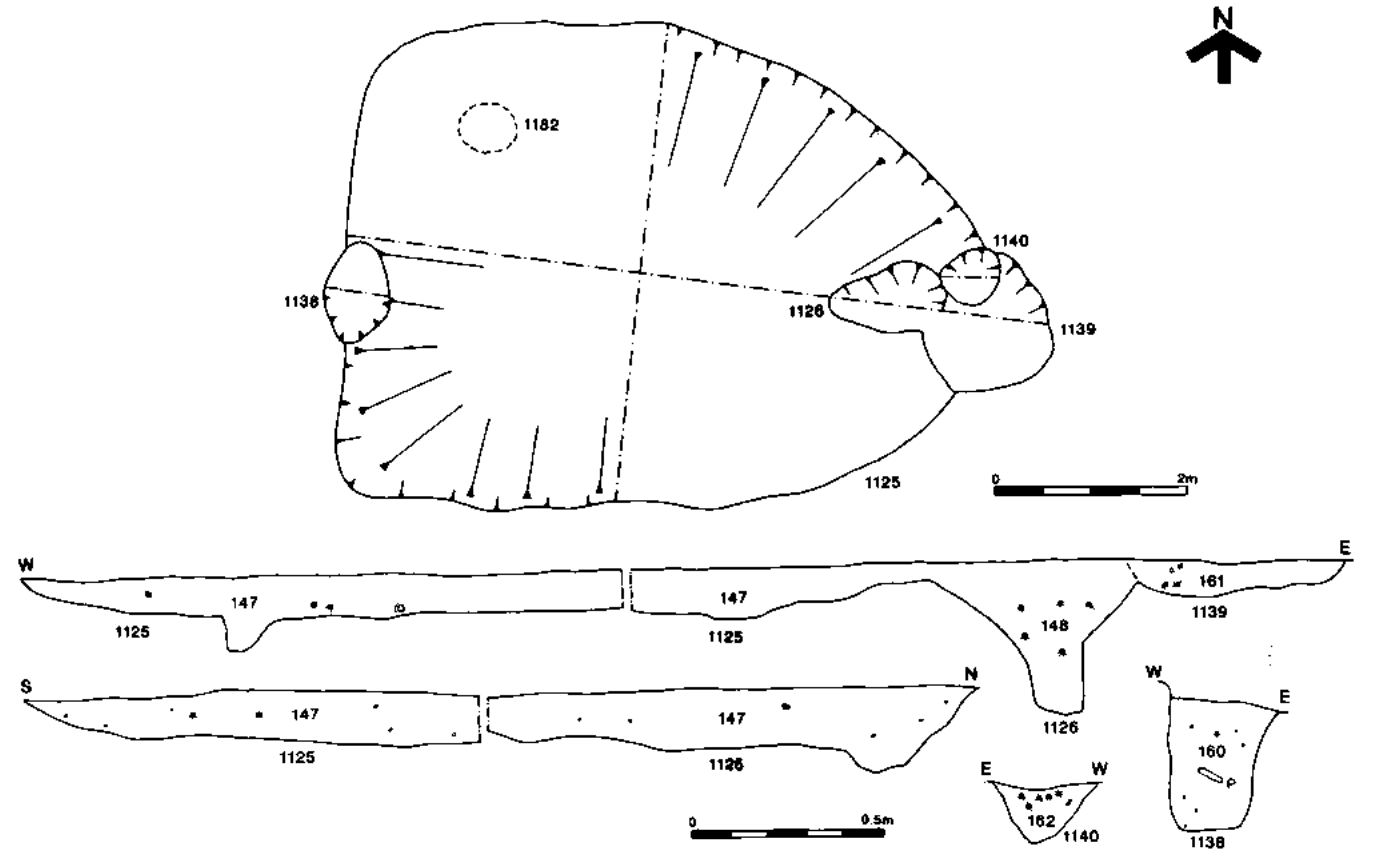


Fig. 7 Fox Hall. Above: Structure 3; plan and sections. Below: Sunken-featured building, context 1125; plan and sections.

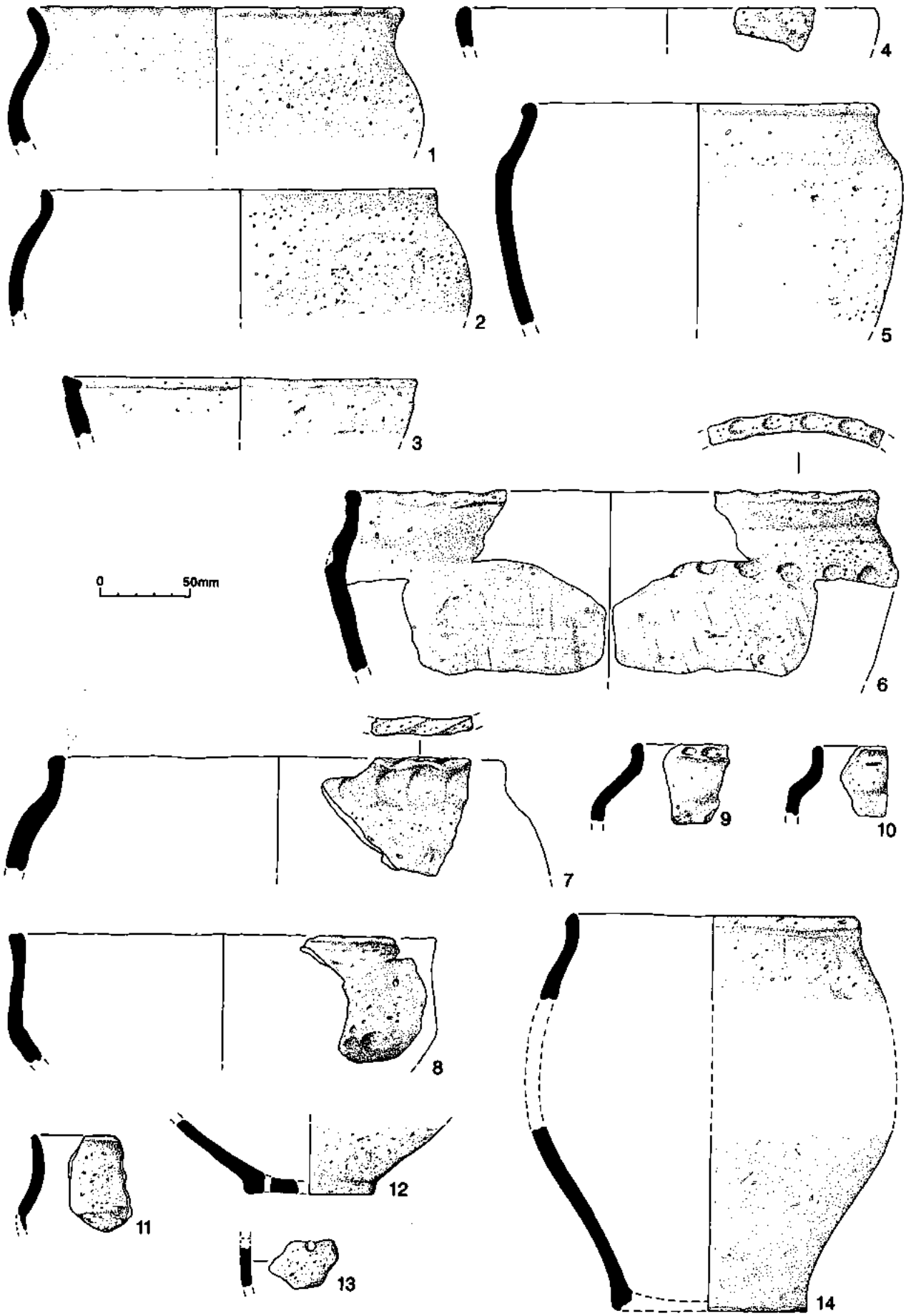


Fig. 8 Fox Hall. Prehistoric pottery.

Iron Age fabrics are hard to distinguish from Saxon sherds. Most of the diagnostic sherds are clearly Iron Age (eg. Fig. 8;5-7, 18, 19), although in some cases (eg. Fig. 9;20) forms easily paralleled amongst local Early Iron Age pottery (eg. North Shoebury, Brown forthcoming), could equally be of Saxon date.

Whilst the majority of the pottery is likely to be of Early Iron Age date, even within this period, all of the material need not be contemporary. The pottery from F1096 contains jar forms which can be widely paralleled in Late Bronze Age/Early Iron Age transitional assemblages (eg. Clark and Fell 1953, figs 11 and 12; Springfield Lyons upper ditch silts, Brown 1987b and unpublished). Moreover the range of flint (22% sherd count, 38% sherd wt), flint and sand (35% sherd count, 40% by wt) and relatively little shell-tempered pottery (30% by sherd count, 11% by wt, remainder unclassifiable) from F1096, is comparable to the assemblage from a ditch at Hadleigh (Brown 1987a), for which a date within the earliest phase of the Early Iron Age has been suggested (ie. 8th/7th century BC). The dominance of shell temper, and presence of footring/pedestal bases in the remainder of the material from Fox Hall may indicate a later date ie. 6th/5th possibly even 4th century BC (Barrett 1978; Brown 1992). Some forms are reminiscent of Middle Iron Age pots (eg. Fig. 8;14), and this might also indicate a relatively late date within the Early Iron Age.

Finally the presence of so much pottery in layer 26 and at the subsoil/topsoil interface is a forceful reminder of the problems of residuality. Any feature cut through these layers into the subsoil would almost inevitably incorporate earlier pottery into its fill.

Function

The assemblage contains a range of fine jars and bowls (eg. Fig. 8; 2,14,17,20), suitable for eating and drinking, together with coarser storage/cooking pots (eg. Fig. 8;3,5,6,19), typical of a domestic assemblage. The largest storage vessels represented at such sites as North Shoebury (Brown forthcoming), Stansted (Brown unpublished) and Asheldham Camp (Brown 1991, fig. 11, No. 15) are not present at Fox Hall.

One base and lower wall sherd (not illustrated, layer 26) has a burnished interior. Burnishing of the inside of pots occasionally occurs on open vessels with internal decoration, where the interior was clearly meant to be visible (Brown forthcoming). It also occurs on vessels where the interior would not normally be seen (eg. amongst the Late Bronze Age assemblage from Springfield Lyons [Brown unpublished]), and may be intended to reduce porosity in a pot used for liquids.

The perforated base (Fig. 8;12) may be paralleled by Early Iron Age examples from Stansted (Brown unpublished). Such bases are common on Late Iron Age jars (although the perforations are often post-firing), and a number of examples were recovered from the Late Iron Age settlement at North Shoebury (Thompson forthcoming). Such vessels are generally described as 'cheese strainers'.

Distribution

There is a fairly even spread of pottery within the mainly small subsoil features (details in archive), which mostly produced 10 sherds or less. It appears likely that this material may have been incidentally incorporated into the feature fills. Some features produced rather more material (eg. F1027, 1050, 1196) possibly indicating rubbish disposal, the most notable being F1050 which, despite being a small feature, not completely excavated, yielded over 200 sherds. Some of the segments of linear features (e.g. 1018, 1137) also produced relatively large assemblages.

Pottery from layer 26 was plotted by 10 sq.m over the centre and north-east of the site (details in archive), without showing any obvious correlations with subsoil features. The ceramics from the subsoil/topsoil interface were also plotted by 10 m^2 over the western part of the site (details in archive). By far the largest quantity (nearly 200 sherds) came from grid square 30/130, where excavation revealed few subsoil features, which together only yielded a total of 38 sherds.

Catalogue of illustrated sherds (Figs 8 and 9)

No	Context	Description/ Comments	Fabric	Form
1	F1004,29	Smoothed surface, partly abraded. The top and interior of the rim carry faint traces of very light furrowing or ripple burnish, which may indicate a Neolithic date. However, the abrasion makes confident identification of the decorative effect difficult, and the vessel form would be unusual and more appropriate to a later date.	B	
2	F1014,15	Upright rim of round-bodied jar; abraded.	C	?A
3	F1007,28	Roughly T-shaped rim of coarse, open bowl; scar of coil join shows on lower break.	C	H
4	F1118,140	Flattened rim of open bowl.	B	
5	F1096,117	Beaded rim of coarse jar; patch of heavy abrasion on exterior below shoulder. Rim joined to body as separate strip of clay.	W	C
6	F1096,117	Finger-impressed rim and shoulder. Vertical wipe marks on interior and exterior below shoulder. Rim joined to body as separate strip of clay.	D	D
7	F1049,3	Cable-decorated rim of coarse jar. Abraded. Faint finger impressions on neck as result of vessel formation.	R	
8	F1033,52	Rim and shoulder of coarse jar; finger impressions on shoulder and exterior of rim. Abraded.	C	A
9	F1033,52	Rim and shoulder of coarse jar; abraded. Faint cable decoration on rim. Fabric has dense sand and large voids left by ?dissolved shell. Finger-impressed shoulder.	?R	
10	F1033,52	Abraded, flattened rim.	X	
11	F1050,22	Rim and shoulder of angular bowl; abraded.	R	
12	F1050,22	Base with pre-firing perforation; abraded.	R	
13	F1050,22	Sherd with pre-firing perforation, smoothed exterior, abraded interior.	A	

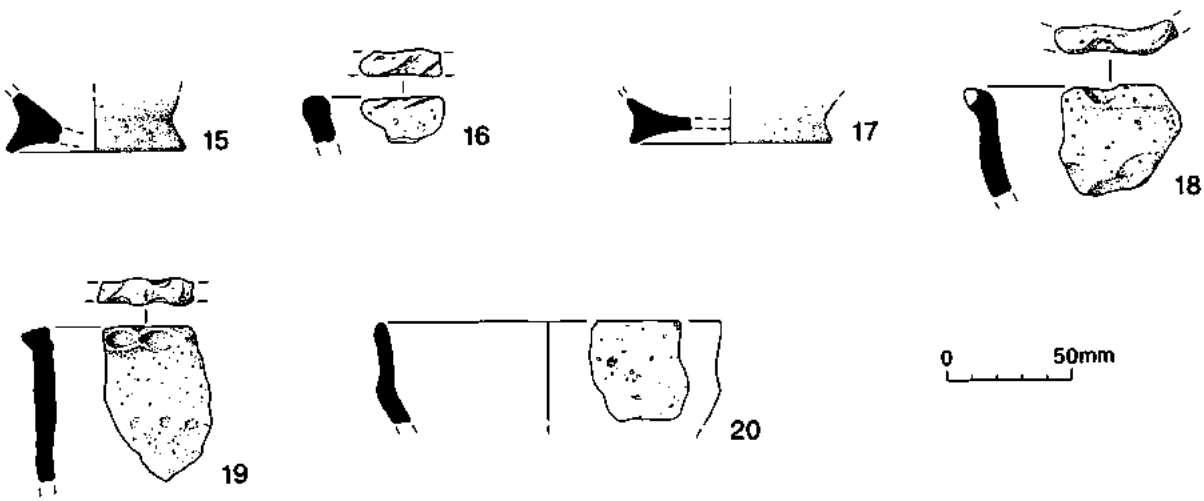


Fig. 9 Fox Hall. Prehistoric pottery.

14	F1137,159	Large part of base and rim of jar; smoothed surfaces, partly abraded. Slight traces of sooting/black deposit on interior of rim and neck. Fabric has some vegetable voids on surfaces.	C	N
15	30/140	Pedestal base; abraded.	R	
16	30/140	Cable decoration on rim.	R	
17	40/130,26	Foot-ring base.	P	
18	30/130,26	Rim of coarse jar; finger impressions on top and exterior of rim and shoulder	R	
19	50/130,26	Rim of coarse jar; cable decoration on top of rim; finger impressions on exterior of rim. Finger marks on interior are result of vessel formation.	E	
20	50/140,26	Rounded rim of ?angular bowl; lower break shows scar of coil join.	R	

[NB Context information for nos 15-20 relates to the 10 metre square in which the sherds were found; refer to grid in Fig. 4].

Saxon Pottery

by Susan Tyler

A total of 575g of Early Saxon pottery was recovered, as follows:

Sunken-floored building:
- Scoop 1125; Fill 147: 81g
- Scoop 1125; Fill 209: 60g
- Post hole 1138; Fill 160: 54g
- Post hole 1182; Fill 210: 228g
- Gully segment 1018; Fill 21: 27g
- Post hole 1110; Fill 131: 21g

Of these contexts, four belong to a scoop with associated post holes, interpreted as a sunken-floored building, and produced a total of 423g of Saxon pottery, *c.* 80% of the total amount recovered from the site. This reinforces the excavator's interpretation. The other two features produced only a small amount of Early Saxon pottery which could be intrusive.

The fabrics

These fall into seven main groups:

1. Vegetable tempered.
2. Quartz sand tempered.
3. Tempered with roughly equal quantities of Quartz sand and vegetable matter.
4. Tempered with quartz sand and grog.
5. Fabric containing quartz sand, possibly occurring naturally in the clay rather than added as a tempering agent, and fossiliferous chalk.
6. Fabric with vegetable temper and fossiliferous chalk.
7. Fabric containing quartz sand and some crushed shell.

Table to show division of assemblage into fabrics.

Fabric	Weight (g)
1	145
2	104
3	193
4	19
5	76
6	13
7	25

The most common fabric is fabric 3 which has both quartz sand and vegetable temper; fabrics 1 and 2 occur in almost equal quantities and fabrics 4, 5, 6 and 7 occur in small amounts.

It has been demonstrated at the Anglo-Saxon settlement at Mucking that there is a marked increase in the use of grass tempering in the sixth and seventh centuries (Hamerow 1993, 31) and the predominance of vegetable tempered wares at Fox Hall suggests a sixth-century date for the assemblage, although the wide range of fabrics including some with grog and shell mitigates against a seventh-century date.

Surface treatment and decoration

Two vessels (not illustrated) had finger-rusticated surfaces, but in one example it is so crudely executed it could be unintentional.

Forms

Most of the diagnostic sherds are small and so little can be said regarding their form except that they have everted, or slightly everted

rims with flattened (Cat. Nos 1;4) or rounded profiles (Cat. Nos 2;3). Part of the profile of one vessel can be reconstructed (Cat. No 5); it is a small jar with flaring, rounded rim and sagging base and is decorated with shallowly incised, concentric lines. It is not closely datable, but a sixth-century date is probably most acceptable.

Conclusions
A small assemblage of Early Saxon pottery most probably dating to the sixth century.

Catalogue of Illustrated Pottery (Fig. 10)
Diagnostic pieces are described below and illustrated.

Definitions of terms used:

Size of temper
small: particles less than 1mm diam,
medium: particles 1-2mm diam,
large: particles greater than 2mm diam.

Density of temper
sparse: less than 5 per sq cm
common: 6-10 per sq cm
abundant: more than 10 per sq cm

N.B. Throughout the report particles of vegetable temper can be assumed to be large unless otherwise specified.

Fig. 10;1. Cooking pot rim. Slightly everted, slightly flattened. Hard reduced fabric, dark grey throughout, with common small quartz sand and fossiliferous crushed shell and chalk. Outer smoothed; inner part burnished. Wt. 18g. Context 1110; Fill 131.

Fig. 10;2. Jar rim. Small, thin-walled vessel with everted rounded rim. Medium hard reduced fabric, surfaces buff, inner dark grey. Abundant small quartz sand. Wt 9g. Context 1125: fill 209.

Fig. 10;3. Rim. Slightly everted, rounded. Hard reduced fabric with common quartz sand. Dark grey throughout. Surfaces smoothed. Wt 2g. Context 1125; Fill 209.

Fig. 10;4. Rim. Thickened, flattened. Hard sandy reduced fabric with abundant small to medium quartz sand. Abraded. Wt.3g. Context 1125; Fill 209.

Fig. 10;5. Jar. Rim and base sherds from a small jar. Flaring, rounded rim; sagging base. Medium hard fabric with common vegetable temper and medium small and sparse large quartz sand. Reduced dark grey ware. Shallowly incised concentric lines on outer surface. Inner smoothed. Wt. 52g. Context 1182; Fill 210.

Lithics
by L. Austin

The assemblage
This consisted of 94 worked flints. The features and deposits from which flint artefacts were recovered include contexts 25 and 26 which spread across the whole of the excavated area, plus a number of negative subsoil features including stake holes, post holes, pits, gullies and ditches.

56 complete flakes and flake/blades
13 broken flakes and flake/blades
6 spalls
10 cores
7 retouched flakes
1 scraper
1 hammerstone

Raw material
Most of the raw material comprises grey and grey-brown mottled flint cobbles, the cortex of which is mainly thin and worn. None of the cobbles or nodules used appear to have been particularly large and are likely to have been obtained from local gravel deposits. Thirty-four pieces had some remaining cortex. The majority of the flint is of a reasonable quality with only a few flaws and internal frost fractures. Four pieces showed signs of rolling and abrasion while another two had some slight patination; these may be residual. The rest of the assemblage was in good condition.

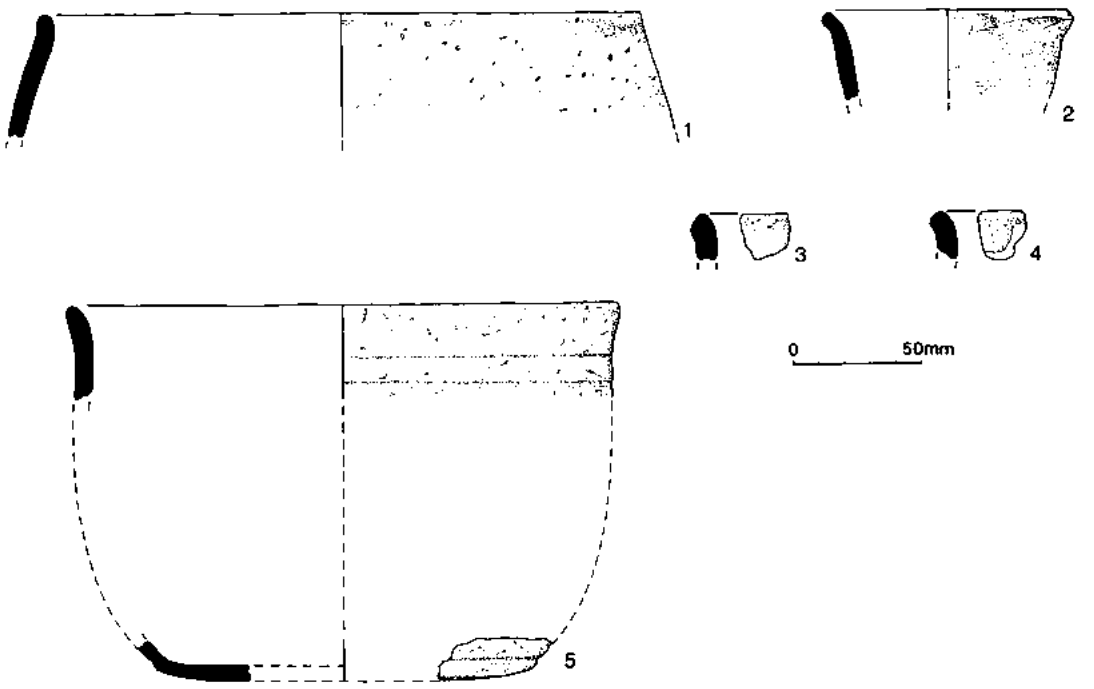


Fig. 10 Fox Hall. Saxon pottery.

Technology
None of the pieces which have surviving butts have been produced using a soft hammer. They are all the result of hard-hammer percussion. The majority of the flakes have broad butts with 46 being either cortical or plain. Although there are a small number of blades in the assemblage, all these and the flakes appear to have been produced in a non-structured way. The core-reduction strategy was to take a cobble/nodule, select a suitable surface for use as a striking platform, then remove a flake by hitting the edge with a hard hammer. Frequent incipient cones are also evident on flake butts as well as actual and potential platforms on cores. These indicate points where percussion has taken place but no flake was produced. One complete and two fragments of flint cobbles used as hammerstones have also been recovered indicating that working of flint may have taken place on site. None of the areas excavated produced quantities of micro-debitage which would more definitely indicate locations of knapping. Only one typologically identifiable tool was recovered, a scraper; however there were eight other retouched flakes. The retouch on these pieces does not appear to be solely to modify the working edge but in some cases appears to be in order to produce a more easy to handle tool, rounding off or flattening protrusions, indicating that these pieces were probably produced to be used in the hand.

A similar core-reduction strategy has been noted by Holgate (1988) associated with Lofts Farm Late Bronze Age enclosure in Essex.

Distribution
Over half of the material was recovered from discrete negative features (53 pieces). There was no particular area of the site which had a greater concentration of features containing flint and none of the features had particularly larger quantities than any other. However the majority of those pieces recovered from contexts 25 and 26 do show a concentration directly above and to the east and south of the mass of post holes located in Area B.

Discussion
The distribution of flint material within context 26 indicates that the main area of discard, and possibly use and production of flint artefacts, appear to be associated with only one structure in the north part of the site and the area immediately to the south and east of it, although this spread may be the result of post-depositional movement. This may indicate that the other structures identified from post holes and gullies were associated with little or no flint production or use. The possible later date of these structures may indicate that there was a decline in the use of flint from the initial occupation of the site to its later abandonment.

Although there is little direct evidence of the use of bronze on the site, the low concentration of debitage as well as the lack of specific flint tool types may indicate a reliance on metal tools. Work by Ford *et al.* (1984) has demonstrated that the range of specific flint tool types being produced at Bronze Age sites can be used to indicate the accessibility of metal where other evidence of metal use may not be represented in the archaeological record. They have noted that a progressive loss of control over the raw material and a drastic reduction in the range of implement types are the two main characteristics of Metal Age lithics industries, with the reduced production of regular implements appearing to have been offset by a greater reliance on expedient tools.

Miscellaneous Finds
by H. Major

Iron
Eight iron objects were found, of which three were from the topsoil, and probably modern. The other five were nails, or probable nail shafts, three of which came from contexts dated from the Late Bronze Age to Middle Iron Age. It is most likely that they are intrusive in these contexts.

Fig. 11 Fox Hall. Fragment of shale bangle.

Shale (Fig. 11)
Fragment of a shale bangle with a plain, slightly oval section, 7x6mm; internal diam. *c* 60mm. Context 23.

This context may be as early as the Late Bronze Age (though see reservations about the reliability of such dating in the pot report, above). Shale is an uncommon find prior to the late Iron Age in south-east England. This fragment, and another from Canny Hill, Sheering (unpublished), are the only two pieces from Essex of possible LBA/EIA date.

Saddle Quern (Not illustrated)
Context 200 contained three chips of greensand, probably from the edge of a saddle quern. Greensand saddle querns have been identified from seven other sites in Essex, all on or close to the coast, from Mucking to Heybridge. It seems likely that there was a fairly intensive trade in Greensand saddle querns from the Late Bronze Age onwards, as nearly a fifth of the saddle querns known from Essex are in Greensand. Despite the lack of stone in the county, Greensand may have been the only imported stone used for saddle querns in Essex; most querns are in sarsen, sandstone or other stones found as erratic boulders in the county.

The Greensand at this site was identified by Dr. C. Ingle as coming from Kent. In most cases, the provenance of the stone (which could be Lincolnshire rather than Kent or Sussex) has not been established, but the few examined have been from the Folkestone Beds.

Other Stone
1. Flattened spherical pebble. This appears to have been deliberately shaped; the original cortex survives only on the top and bottom. It was possibly intended as a pounder, although there is now sign of crushing on the surface caused by use. Diam. 57mm, ht. 44mm, 262g. Context 30/130-26
2. Polished, rounded pebble, possibly utilised as a rubbing stone. 64g. Context 131
3. Slabby fragment of very soft, grey, fossiliferous limestone, with a rounded edge and eroded surfaces. Possibly utilised. 17g. Context 179

Brick and tile
A few pieces of Roman and later brick and tile were recovered. They were mainly from the topsoil, but included two small, intrusive fragments from earlier features.

Baked Clay
Triangular Loomweights (Not illustrated) There were thirteen definite or probable fragments from triangular loomweights, none very complete. They were in fine fabrics, with sand or sparse vegetable temper. Where perforations were present, they were 9mm to 15mm in diameter. The original thickness could be reconstructed in three cases, as 86mm, 50mm and 42mm.

Other Baked Clay
A total of 306 fragments was found, weighing 1728g. Most were in a soft, fine fabric, with sparse sand temper, variable in colour, but mostly reddish-orange. There are no wattle impressions, and although it is likely that much of the group represents accidentally

fired daub, some fragments may be from loomweights or other objects.

The largest amount from a single context was from 161, where it may represent the remains of a hearth.

Faunal Remains

by O. Bedwin

A total of 100 fragments of bone and teeth were identified, deriving from 40 contexts. (269 fragments could not be identified.)

The condition of the assemblage was generally poor. Most fragments were small and abraded, implying a considerable degree of residuality. The only exception to this was the material from context 156, one of the fills of pit 1134, which contained 21 large, unworn fragments of *Cervus elaphus* (red deer) antler and five large fragments of *Bos* (cow). However, no context contained a substantial assemblage of large, unabraded bone.

Species represented were:

Species	No. of Fragments
Ovis	34
Bos	33
C. elaphus	25
Sus	4
Equus	4

The assemblage is too small to provide conclusions about economy or diet, and in any case the local soil conditions were such that survival of fragments is likely to have been biased towards the larger species.

The only finding of note was the presence of 25 *C. elaphus* fragments (all antler), from three different contexts.

1134 (fill 156): 21 fragments, unworn and unworked, dated by pottery to the Late Bronze Age-Early Iron Age.

1000 (fill 1): three fragments, very worn, dated by pottery to the Late Bronze Age-Early Iron Age.

1125 (Fill 209): one fragment, dated by pottery to the Saxon period. This fragment was pared along its length and had knife marks at either end, but does not appear to have been put to any other use.

Environmental Material

by V. Fryer

Fifteen samples were taken from the fills of pits, gullies, post-holes, ditches and possible hearths. Seeds, fruits, charred cereal grains and chaff were all recovered at low densities. Species identified include *Triticum dicoccum* (emmer), *Triticum spelta* (spelt), *Hordeum vulgare* (six-row barley), *Avena* (oat), *Rumex* (dock), *Chenopodium album* (fat hen), *Atriplex* (orache), *Plantago lanceolata* (rib-wort plantain), *Vicia/Lathyrus* (vetch), *Carex* (sedge), *Polygonum aviculare* (knot-grass), *Tripleurospermum maritimum* (scentless mayweed) and *Anthemis cotula* (stinking mayweed).

Because the carbonised cereals and seeds/fruits are present at such low densities, it is not possible to pinpoint specific activities within the area of the site, but the assemblage appears to be consistent with the general deposition of rubbish. The presence of sedge fruits in feature 1160 may indicate that this feature was damp or periodically waterlogged.

Discussion

Prehistoric

The association of the settlement with the burnt flint concentration is noteworthy. Concentrations of burnt flint found in plough soil are interpreted as ploughed-out burnt mounds which, despite a general dearth of dating evidence, are dated by associated features and some C14 dates, to a 1000-year date range spanning the Early, Middle and Late Bronze Ages. Despite the predominantly Early Iron Age dates from the site it is possible that some of the pottery does belong to the Late Bronze Age (see pot report, above). The flintwork too may be of this period. Whether this was related to the burnt mound is unknown: the direct relationship of burnt flint mounds or scatters with settlements has not been established, nor is it evident in any such site in Essex. However it would require a presence of some longevity to allow for the construction/amassing of the burnt mound.

The area excavated is only part of an occupation of unknown size: as no definite boundaries were identified it is likely that archaeological features extend in all directions. It was not possible to form any conclusions about the distribution of activities within the site as no obvious distinctions were apparent: partial excavation of any site however such conclusions may misleading. On morphological grounds, however, the gullies in the south-east corner of the site may be interpreted as having had an agricultural function, either as stock corrals or field boundaries. This implies that the excavation may have revealed the periphery of settlement activity, and shows the close association of agricultural activities. Similar curved gullies at North Shoebury have been interpreted as byres or barns, rather than huts (Wymer and Brown forthcoming) and a similar interpretation here would be appropriate.

Evidence for subsistence activities is minimal, but a few points can be made. Bone and shell preservation was poor, unlike that at North Shoebury, but a range of faunal remains from large animals were found, including *Ovis* (sheep/goat), *Bos* (cow), *Equus* (horse), *Sus* (pig) and antler from *Cervus elaphus* (red deer), the most common being *Ovis* and *Bos*. The antler implies that hunting was still a part of the food acquiring activities, albeit a minor one.

The proximity to the salt marshes would offer plentiful grazing for animals: this was its most common use during the medieval period. Other marsh products used were reeds for thatching or floor coverings, and marine molluscs for consumption (Murphy 1991). No evidence of these activities exists at Fox Hall, but it is to be expected that the natural environment was exploited to the full.

Weaving is evidenced at Fox Hall by several fragments of loomweight. (At nearby North Shoebury and Great Wakering, evidence for this craft was provided by spindle whorls and bone weaving combs.) Although

the faunal remains show 34% of ovi-caprids, the total sample was not large enough to be statistically reliable, and in any case much of the material may have been residual. However, the presence of artefacts associated with weaving, and the locally conducive environment would suggest that ovi-caprids may have played an important part in the economy of the site, although probably not to the exclusion of other species.

Evidence for cereal cultivation is likewise sparse but emmer, spelt, barley and oats were all in evidence with emmer being the predominant variety. All of these cereals are known on other early Iron Age sites in Essex: the soil in this area is fertile and light and would have been rewarding to cultivate. The four-post structure (Fig. 6) is a common type and is generally interpreted as a granary. This would indicate a level of reliance upon their own cultivated crops. A similar structure is seen at North Shoebury (Wymer and Brown forthcoming).

Contact with neighbouring settlements is likely to have been high due to their proximity and shared resources. On-site production of pottery was not in evidence at Fox Hall, but was clearly taking place at North Shoebury and Great Wakering: possible kilns were identified at the former and a 'potter's workshop' at the latter, which included raw and fired clay, and objects interpreted as stands for the finishing of pottery. All three sites were dominated by shell-tempered wares in similar forms and so the exchange of influences, resources or pottery must have been taking place.

A link has been made between cereal cultivation on the higher ground and the salt producing activities carried out closer to the sea. These sites, known as red hills, are mostly dated by associated pottery to a date range between the Late Bronze Age and the Early Roman period. It appears (Murphy 1991) that crop-cleaning waste was taken from arable farming sites to the red hills, and used as temper in the construction of salt evaporating heaths and containers.

Long distance trade is shown by the presence of fragments of a Greensand saddle quern, probably from Kent, and also, more remarkably, by the fragment of shale bangle; objects of this material are not common in Essex.

Saxon

Although the evidence was limited, the sunken-floored building is supported by the earlier find (during the 1992 fieldwalking) of a large unabraded sherd of 6th to 7th-century date 20m to the north-west of the excavation. This appeared to be newly disturbed from a feature, and so gives an indication of the location of further Saxon activity.

The sunken-floored building revealed a wide range of faunal remains including *Ovis*, *Bos*, *Equus*, *Sus* and *Cervus elaphus*. *Ovis* and *Bos* were the most common varieties identified. The fragment of red deer antler was pared along its length, with knife marks at either end, but did not appear to have been put to any further use. These finds indicate a domestic function to the building, the faunal remains representing food debris, an interpretation supported by caryopses of spelt from the fill of 1125, along with fragments of an indeterminate cereal.

Apparently isolated Saxon sunken-floored buildings are not without precedent; excavations at Barringtons Farm, Orsett have shown that sunken-floored building distribution can be very sparse, with a small number of widely scattered buildings occurring, rather than a densely clustered group (Milton 1987). It is worth noting however, that some sunken-floored buildings and associated features may have been ploughed away.

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Analytical field survey at two Essex 'hillforts': South Weald Camp and Langdon Hills

by Raphael M.J. Isserlin

Analytical survey of two earthworks revealed lengthy sequences of discontinuous land-use. Bronze Age activity, revealed by discovery of pottery at Langdon Hills, cannot be related to any of the surviving earthwork features. At South Weald Camp, an entrance into the feeble univallate hillfort (thought to be of Late Iron Age date) was identified. Both sites yielded evidence of medieval activity in the form of woodland boundary banks and/or deer-park pales.

Introduction

This report refers to a pair of earthworks, Langdon Hills, near Basildon, and South Weald Camp, near Brentwood, usually considered to be hilltop or promontory fortifications (Fig. 1). Such sites are rare in Essex. Their importance is not merely local: the construction of defences at both these sites (and at a string of others) has been considered as a reaction to maritime-based attack (Drury 1980, 47). However, no detailed survey plan of either earthwork has been published, and no full excavation published at either, until the report on the excavations at South Weald Camp in this volume. The dating of activity at Langdon Hills depends on unstratified pottery, formerly considered Iron Age, but now reassigned to the Bronze Age (Couchman 1980, 42; Brown and Buckley 1985). Analytical field survey, undertaken by Essex County Council Archaeology Section Field Archaeology Group (on behalf of the landowners, Essex County Council Recreational Land Management Section) is a valuable first step in improving our knowledge. Contour and interpretative hachure surveys are published here together with basic accounts of site sequences (which rely on detail from these and documentary evidence).

Method

Total station surveys were undertaken in January-February 1993 at both sites, using a Zeiss Elta 5 Theodolite, and a PenMaster 386L/20 computer with PenMap Strata Software. The author was asked to see the project through to completion in November 1994. Aerial photographs were also inspected in November 1994 (briefly). At each site, stations provided slightly overlapping survey coverage with the next, in a closed traverse. Earthwork features and points of detail visible from each station were identified by the archaeologist and input by the surveyor directly onto the machine, with no manual 'booking'. The defences and the interior were surveyed, and a window of *c.* 20 m around the defences.

Many lines of sight were blocked by dense woodland and by brambles (*Rubus fruticosus* aggregate), growing up to two metres above head-height near quarries or fences. As fieldwork started in late winter/spring, little surface detail was obscured by bracken (*Pteridium aquilinum*), though as spring progressed, rapid growth hindered recognition. The various recognisable details were stored as a series of 'layers' (corresponding to the tops and bottoms of banks, ditches, quarries, natural slopes, etc.). The reliability of the graphic record is important since it is from this statement that a series of testable propositions can be generated. After production of contour plans in November 1994, hachure plans were produced.

The sites

South Weald Camp

'*By the south-west side of Weald-Hall Park, there is a Camp, inclosing about seven acres. It is circular, and single-ditched, and is thought to have been a Roman Summer Camp, or* Castra Exploratorum'

(Morant 1763, p. 117)

Description

South Weald Camp (NGR TQ 579 946) is a feeble sub-circular univallate fortification of 7 acres (*c.* 2.8 hectares) which lies at 93-101m (305-332 feet) above O.D. on a small hillock (ECC SMR PRN 531; HBMC SAM Essex 106). Visibility is today good to the west, east and south, but poor to the north due to recent afforestation. The road from Pilgrim's Hatch to South Weald (Sandpit Lane) runs north-south through the site. The source of a tributary of the Weald Brook lies 150 metres north-west of the site.

The smaller, westernmost portion is wooded and owned by Essex County Council Country Parks and is now publicly accessible. Ancient hornbeam pollards grow on the west slope of the hillock. More modern secondary woodland is indicated by the sycamore (*Acer pseudoplatanus*) and silver birch (*Betula pendula*) which

Fig. 1 South Weald Camp and Langdon Hills: Site locations.

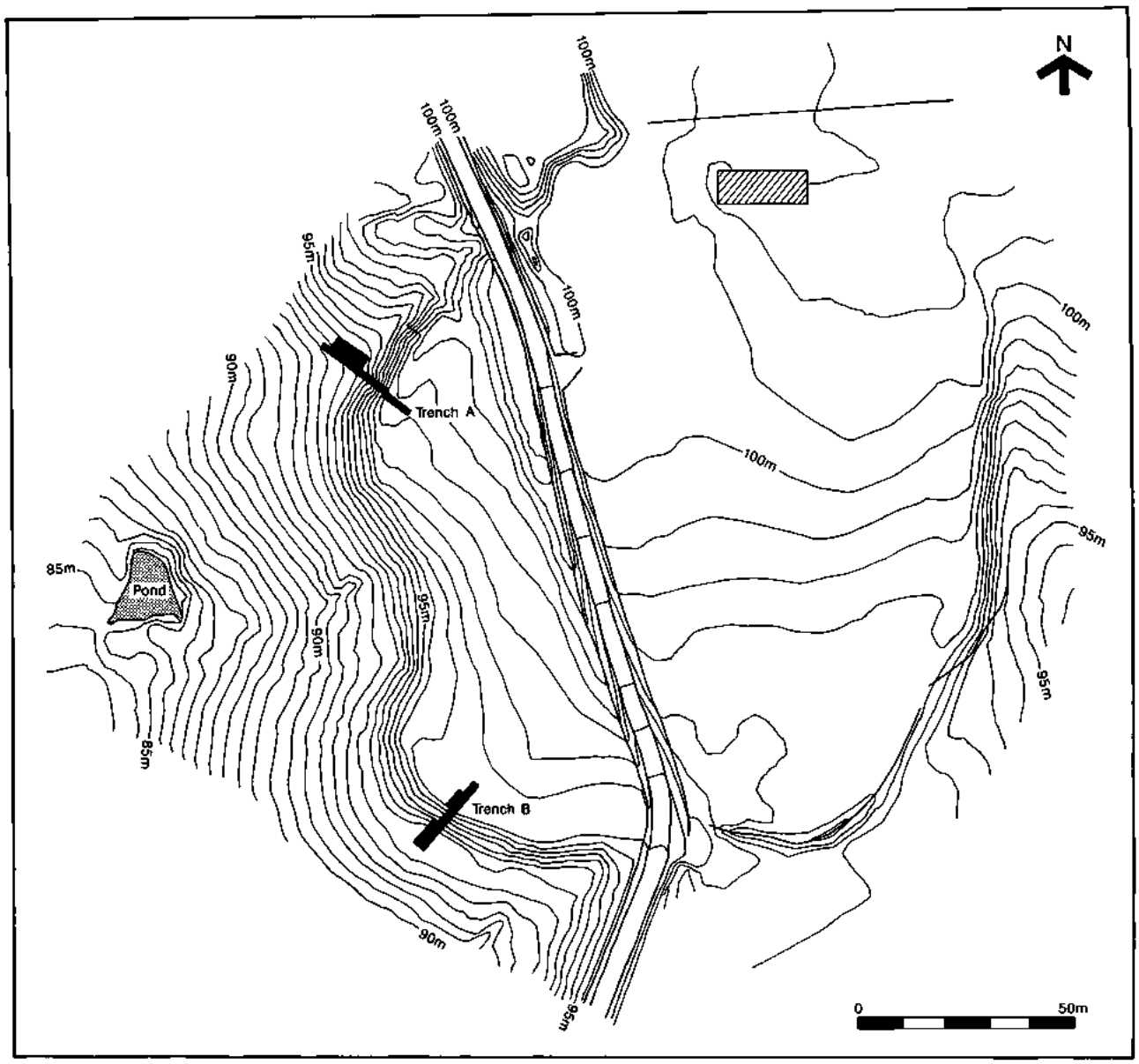

Fig. 2 South Weald Camp: Contour Survey. Trenches A and B are the 1990 excavations (see Medlycott *et al.*, this volume, pp. 53-64).

grow on the slopes and top of the mound, and the specimen pine (sp. *Pinus*) at its centre. The fragmentary earthworks are traversed by a series of tracks and bridleways, set in mature parkland. It was used as a training-ground during WWII.

The larger, easternmost portion survives less well. On this side of the road, the land surrounding the eastern ramparts is in separate ownership. The hillfort interior is now levelled and occupied by South Weald Cricket Club, and was dug up as allotments during WWII. The surrounding area is deep-ploughed arable land. Most of the hillfort defensive ditch has been destroyed here, and no outworks are visible. Here, the northern defences in the area of the cricket club were not visible. A series of mature oak trees (*Quercus* sp.) stand on top of the eastern ramparts. To the south a portion of counter-scarp within the interior was unploughed, but saplings have been recently planted here as a 'conservation' measure, in the sole surviving area of rampart counter-scarp and ground surface east of Sandpit Lane. The subsoil is sand. The earthwork was surveyed over 70 years ago by the R.C.H.M. The earliest known excavation (that of 1990) is reported elsewhere in this volume (Medlycott *et al.*, pp. 53-64).

Landscape sequence

Four periods of earthworks reflecting discontinuous episodes of land-use can be identified, though none are prime examples of their type (Table 1). The verdict of poor earthwork-survival rendered 70 years ago

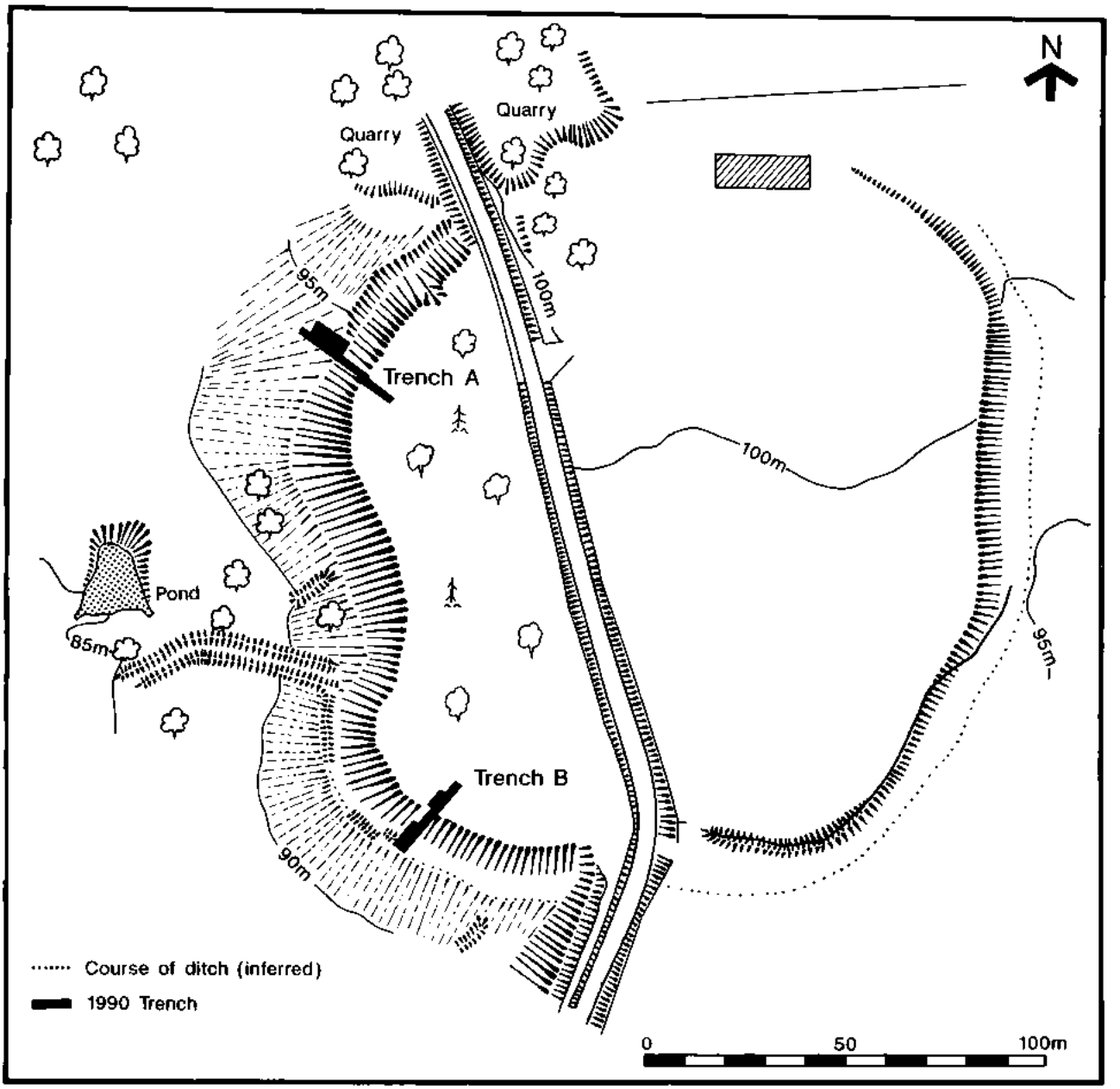

Fig. 3 South Weald Camp: Hachure interpretation. Trenches A and B are the 1990 excavations (see Medlycott *et al.*, this volume, pp. 53-64).

(RCHM 1921, 218) is over-pessimistic. It did not identify any entrance, and doubted the existence of a ditch-system. Evidence for both of these is presented here. This exercise emphasises the need for resurvey.

Table 1 South Weald Camp, Essex: landscape sequence.

Period	Activity	Century	Authorities
1	Hillfort	1st BC-1st AD	Medlycott *et al.* this volume, pp. 53-64
2	Woodland	10th-14th	VCH 1983
3	Parkland, Quarry	17th-18th	VCH 1983
4	Military	WWII+	VCH 1983

Period 1: Construction of hillfort
(1st century B.C. - 1st century A.D.)

Limited excavation has shown only a single facet of prehistoric fortification, and survey likewise suggests but a single episode of earthwork-construction. Because of later activity, it is not possible to state whether the fortifications were continuous; they survive very poorly. Where it survives best, west of Sandpit Lane, a hillock rises 4-5 metres above the surrounding terrain, and at the south-west of the monument, at its steepest the gradient is approximately 1 in 2 (50%).

The defences consist of a steep scarp slope fortified by a bank and ditch, of which limited portions are visible today. At the north-west of the monument,

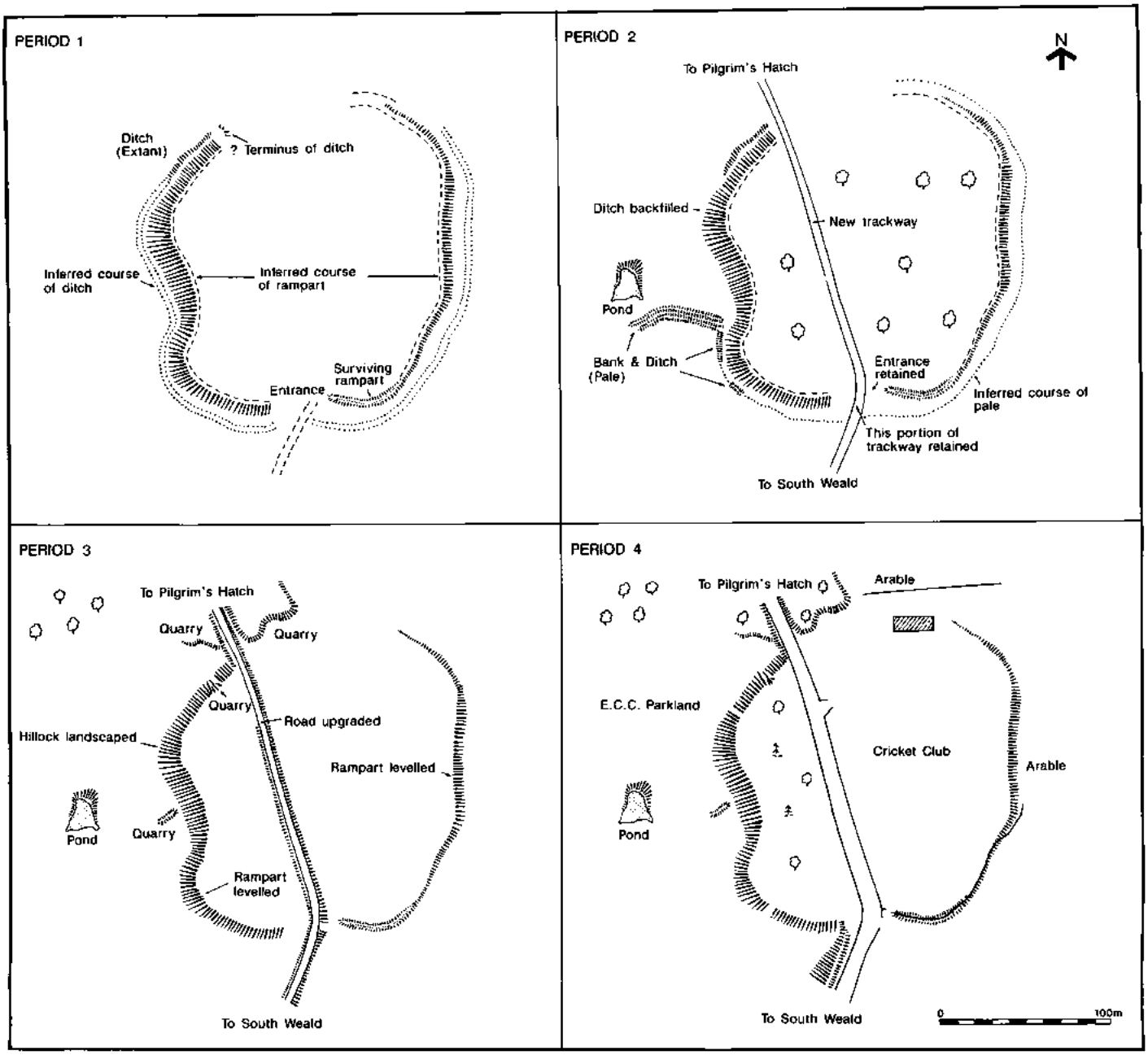

Fig. 4 South Weald Camp: Phasing.

hollowing a few metres behind the top of the hillock may suggest the presence of a poorly-preserved rampart with its counter-scarp standing 0.5 metres above the surface of the hillock. Here too, at the base of the hillock, portions of ditch survive, and the maximum width from the lip of the ditch to the base of the hillock is 6 metres wide[1]. Traces of this are apparent to the east and south-east of the hillock as slight depressions in the surface of the ploughsoil. Neither hillock nor defences survive at the north of the monument, though aerial photography (the 1960 vertical survey) suggests that more of the northern defences survived than now.

One entrance survives at the south of the monument, where it is flanked by a small portion of inturned eastern rampart. Here the rampart stands to a height of 1.5-2 metres above the surrounding ground, exhibiting both scarp and counter-scarp. Sandpit Lane leads up to this entrance-way and then kinks precisely where it is located, to turn north-west.

Despite modern levelling, the interior of the hillfort slopes north-east/south-west, the highest ground being some 5 metres above the lowest. There are no indications of internal divisions or earthworks such as hut-platforms. However, a very slight linear hollowing may suggest the survival of a former internal roadway leading from the southern entrance up to the highest ground,

dividing the interior into two approximately equal halves. The contours follow the projected course of Sandpit Lane as it leads into the southern entrance. Any northern entrance has been obscured by later activity.

With the Roman period comes an episode of discontinuity in the earthwork evidence. Excavation suggests this gap is more apparent than real, for Roman pottery is known from the site (Medlycott *et al.*, this volume). The site is unlikely to have had any military activity (of the sort that Morant envisaged), though this does occur in 1st century A.D. hilltop sites in the west of Britain. Other religious uses are perhaps more likely for an Essex hilltop site in the Roman period (as known at Harlow (France and Gobel 1985), conjectured by Stukeley at nearby Navestock (Anon. 1894, 215) and indeed also known in Suffolk. However, by the late Saxon Period, if not before, the site had reverted to woodland (see below).

Period 2: Woodland and deer-park (10th-14th centuries)

Place-name evidence, together with the physical evidence revealed by this survey, suggests that the site was rough pannage, transformed into a medieval deer-park. By the 12th century the regrowth of secondary woodland means that it would have been afforested for some time.

Charters first refer to the general area as **weald** (forest-land) (*Welde*, 1062; *Welda*, 1062; Mawer and Stenton 1935, 136), presumably pannage. Indeed, the site is one of a cluster of such names in the region (Gelling 1984, 226). A generation later, Domesday gives the first statement of land-use: woodland to support 240 pigs, at South Weald within Chafford Hundred (Domesday 8, 9; 32, 29) — some (all?) at this site? Much of the area then lay in the possession of Waltham Abbey. In the late 12th century, the monument is specified for the first time, presumably because recognised as a valuable resource in its own right. Charters refer to the site as a **burh** (wide earthwork) and to a brook (**broc**) south of it (*Sideburn(e)broc*, 1198; *Sideburgbroc*, 1223: Mawer and Stenton 1935, 136). This clearly pertains to the hillock which is likely to have been enclosed only at about this stage. Nationally, most deer-parks (part of a system of forestry) are 12th-century, though there are two pre-Conquest examples in Essex (Rackham 1986, 123). In Essex, the heyday of emparkment was from *c.* 1250-1330 A.D. (Rackham 1980, 105).

In the 13th century, the site lay within the forest of Essex, and was crossed by roads, one of these (presumably) being Sandpit Lane. Components of the forest system, gates or *hatches*, led the roads out of the forest, and some were maintained until 1737 (VCH 1983, 84; ERO D/DTw M29). The nearest gate, and the immediate destination of Sandpit Lane, is Pilgrim's *Hatch*, first recorded in 1483 as *Pylgremeshacch* (VCH 1983, 77; Mawer & Stenton 1935, 137) north of the survey area. There the course of Sandpit Lane is relatively straight, almost north-south.

In the absence of more detailed documentary evidence, dating the road within the survey-area can only be relative. As the road approaches the monument it dog-legs, and its course actually cuts across the northern defences. This indicates that here it is later than the hillfort. As discussed earlier, its southern approach may reuse an earlier portion of roadway, and the sector across the monument may have been diverted. Except for its northern extremity, where it is banked up, the entire course of the road within the monument is set within a cutting, some 1.5 metres deep.

A water-filled triangular pond lies west of the monument — slight projections at its corners may imply that it was used as a decoy-pond at some date (depth unknown). West of the monument, and 10 metres south of the pond is an angular bank-and-ditch, some 47 metres long. The ditch is 1.0 metres wide and 0.30 metres deep; it is flanked by two banks, 0.3 metres high and 1.0 metres broad with a rounded profile, surmounted by a hedge. The eastern terminus of this stretch of earthwork stops just short of the base of the hillock. The bank kinks to avoid the pond (implying that the pond was dug before the bank-and-ditch) and is aligned west towards a well-preserved sub-circular earthwork, another 75 metres or so distant (not surveyed). Much of this course is not visible as a surface contour and has been eroded by later activity. It continues to the south at the base of the hillock, skirting (and so postdating) it, for a total of 45 metres, broken in one portion, but probably enclosed the entire southern portion of the hillock. A ditch recorded in section along its presumed course confirms this (Medlycott *et al.*, this volume).

Deer-parks are integrated systems of livestock-management, with woodland for cover and grass for grazing, as well as a source of water, and secure fencing. At South Weald these requirements were fulfilled. The (wooded) hillock on which deer could browse and rut, its southern part embraced by a (now fragmentary) earthwork continuing further west as the angular bank-and-ditch, and terminating in a circular livestock-pound. This would have contained a hedge round the base of the southern portion of the earthwork. The animals would have been unable to surmount the hedge if it was over 3 metres high, but would have had access to the pond north of the bank-and-ditch for their water-supply (partly shaded by the hedge). They would thus have been contained. As well as woodland in which to browse, deer require pasture for grazing; significantly, there is no ridge-and-furrow around the hillock, suggesting the presence of meadows.

Period 3: Parkland and Quarrying (16th/18th century-1939)

The hillock is composed of sand and gravel (overlying London Clay), and, as the name Sandpit Lane suggests, this was quarried. Traces of quarrying are

visible at the west of the hillock (only partly surveyed). One larger quarry at least 4 metres deep was dug into the north-western defences and is now partly infilled; an embankment for the northern portion of Sandpit Lane divides this quarry into two. This quarry may have extended further east, removing portions of the northern defences, the poor survival of which was already noted earlier this century (RCHM 1921, 218). Their date is unclear; they may relate to extraction of metalling for road-improvement, and banking-up of the road. Elsewhere, a cutting was made in the top of the hillock, up to 1.5 metres deep. Such roadworks are typical of turnpike improvements (Taylor 1994, 168) and could have taken place either as a result of this or enlargement of the estate, but in either case, in the 18th-19th centuries.

The area surrounding the hillock was given over to parkland serving Weald Hall 2 kilometres to the south-west, and some portions of the grounds were laid out by the 16th century. In the 18th century, reshaping of a hillock east of the house was proposed, and its slopes were to be made more regular. Work on the grounds was started in 1738, and continued at least until 1752 (VCH 1983, 81 ERO D/DTw P1). The remains of the hillfort were presumably altered at the same time. This explains the lack of prehistoric ramparts over much of the monument: almost all evidence for these was removed by landscape gardening. Excavation in 1990 confirms the evidence for deliberate levelling of the defences (Medlycott *et al.*, this volume, pp. 53-64). The wildlife in the parkland was prolific in rabbits and pheasant (a day's shooting netted a bag of 1,502 head in 1904: VCH. 1907, 585) for which the area would have provided a particularly favourable environment. It was used as a deer park until WWII (VCH 1983, 81).

Period 4: World War II and after (1939/1945-present day)
During WWII, the parkland west of Sandpit Lane was used as a vehicle assembly-point for the D-Day invasions (VCH 1983, 81). It was also a military training-ground, and tanks were run up the slope of the hillock (inf. ECC Park Ranger). Such activity eroded the ramparts even further. From 1954 until 1968 the monument was replanted (VCH 1983, 81 and personal observation). Land east of the road was ploughed for the first time for allotments in the Dig for Victory campaign to obviate wartime food shortages. Subsequently the area was levelled and converted into a cricket-pitch (inf. South Weald Cricket Club).

Langdon Hills

Description (Figs 5 and 6)
Langdon Hills (NGR TQ 677 861) is the site of a putative promontory fortification which lies at 105-115 metres (319-350 feet) above Ordnance Datum (ECC SMR PRN 5173). Visibility is today good to the north, and spectacularly so to the south and east with views of the Thames Estuary, and over into Kent. It is poor to the west due to recent building and afforestation. The site is wooded, and is set in mature parkland ('The Park'), owned by Essex County Council Country Parks. Bluebells (*Hyacinthus endymion* (*non-scriptus*)) carpet the whole of the survey area, extending beyond its eastern limits. They shunned areas of visibly modern erosion, but did not concentrate in recognisable patches which might indicate discrete archaeological phenomena. This shade-loving plant is sometimes held to indicate woodland of a certain antiquity, and may imply relatively little surface disturbance (tree-root damage is a different matter). An area to the east, Coombe Wood, is semi-natural Ancient Woodland, so this may be relevant. A mature example of hazel (sp. *Corylus contorta*) was observed, and other secondary woodland is indicated by the presence of sycamore (*Acer pseudoplatanus*) and silver birch (*Betula pendula*). About 4000 square metres (36990 square feet) were surveyed, the area being bounded to the south and east by a public footpath, to the north by a private dwelling, and to the west by South Hill (the B1007 road from Langdon Hills to Horndon-on-the-Hill). A series of ponds (some recent) lie south of the survey-area.

Landscape sequence (Fig. 7)
Three periods reflecting discontinuous episodes of land-use can be identified (Table 2). Because the prehistoric period is not positively identifiable through field-survey (the results from which technique this article reports) but only through finds of pottery, it is referred to as Period 0. Field-work reported here indicates that the 'hillfort' interpretation of the site is open to query. Further evidence from excavation may alter this situation.

Table 2 Langdon Hills, Essex: landscape periods.

Period	Activity	Date	Authority
0	?Hillfort	Bronze Age	Buckley & Brown 1985
1	Woodland	Medieval	ECC 1983, 37
2A-C	Quarrying	Post Med	ECC 1983, 19-20

Period 0: Hilltop settlement (Bronze Age)
The chief feature of the survey-area is a promontory which rises up to 40 metres above the surrounding terrain, affording, in theory, excellent natural defences. It is this fact, together with the recovery of prehistoric pottery, that has led to the suggestion that a hillfort existed here. Indeed, the place-name Langdon [Laindon] means *long hill* (Mawer and Stenton 1935, 162). It is one of six South Essex sites with the **dun** place-name element (Gelling 1978, 122). The root ***dunos** regularly indicates *defences* (Rivet and Smith

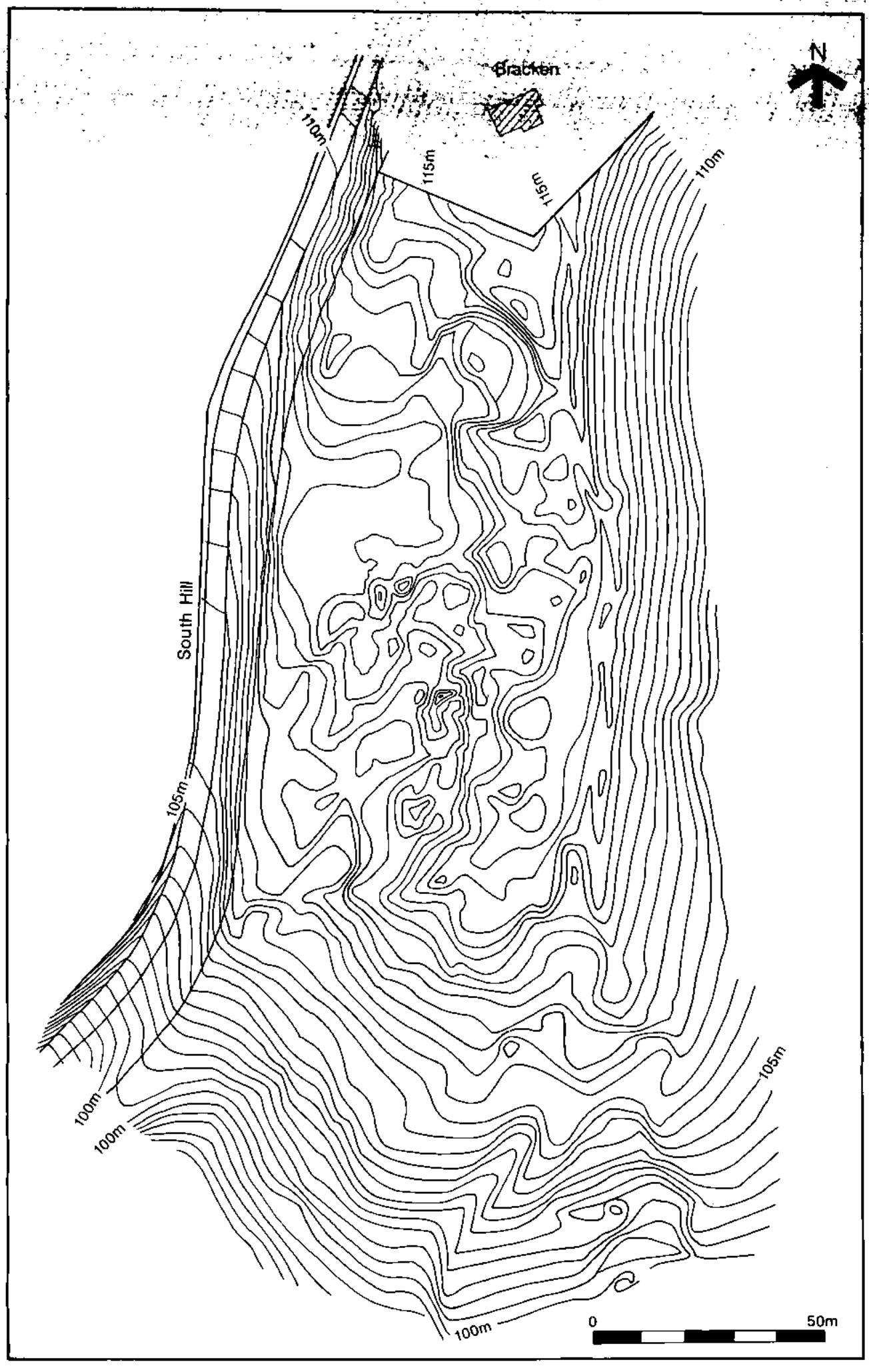

Fig. 5 Langdon Hills: Contour Survey.

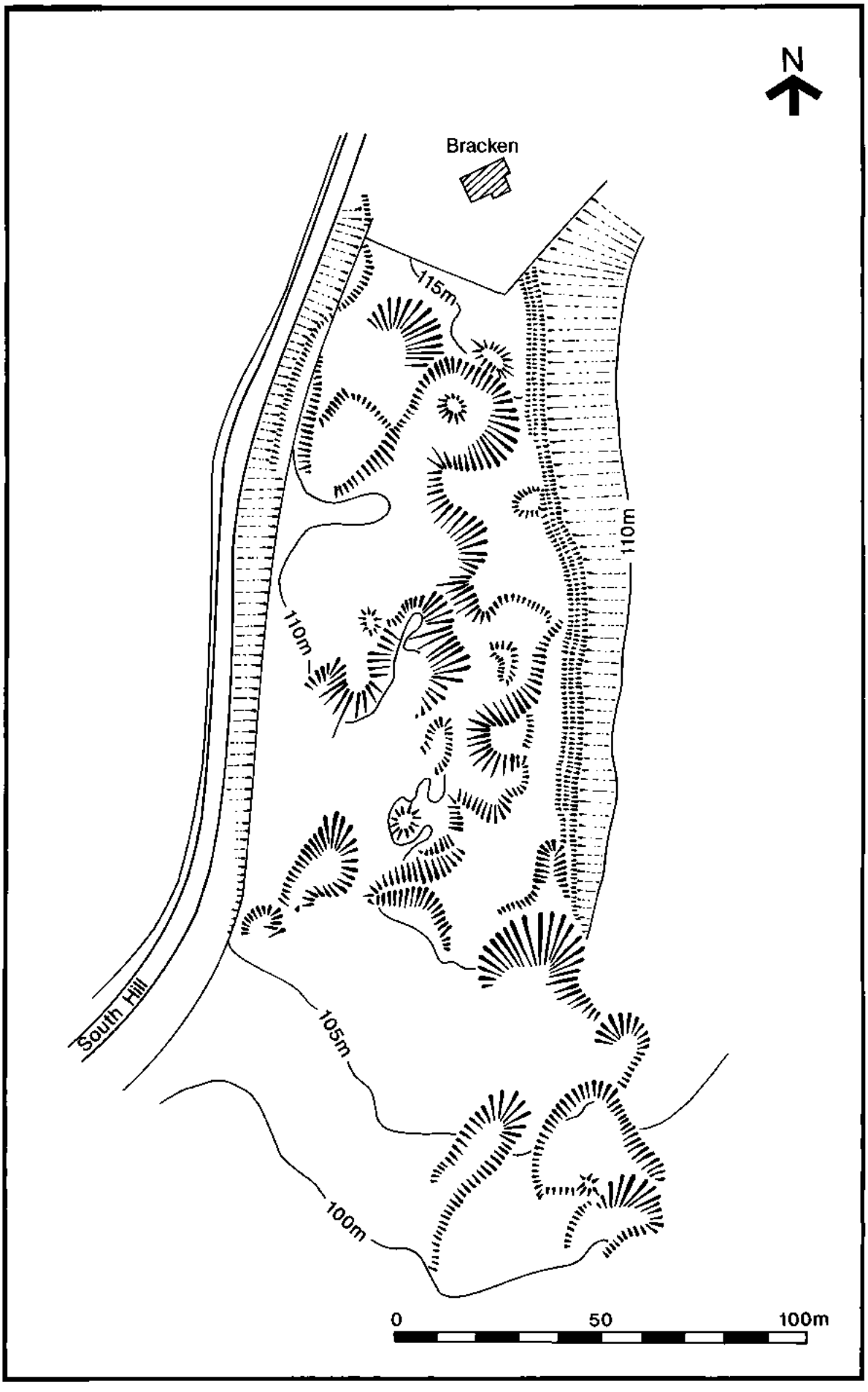

Fig. 6 Langdon Hills: Hachure interpretation.

1979, 275) and is often conferred upon a '*pre-English settlement in recognition of its characteristic* [hilltop] *situation*' (Gelling 1984, 142). The chronology of this element (mostly used before A.D. 800) may strengthen the case for the earthworks being prehistoric.

At the west of the monument, at its steepest the gradient of this natural ridge is approximately 1 in 2 (50%). Any ditch would be unnecessary here — traces are certainly not visible today. Nor is any rampart (unless there was a palisade directly at the top of the slope) — a crucial feature, though a very slight ridge less than 0.25 metres high is visible east of the modern fenceline, at the top of the slope.

To the east of the survey-area the natural scarp slope is more gentle but still quite appreciable at 1 in 3 (33%). At the top of the slope, a bank and an external ditch with a rounded U-shape profile can be identified. The bank is no more than 1.0 metre wide, and approximately 0.75 metres high; and the ditch is also no more than 1.0 metre wide and 1.0 metre deep. One entrance has been eroded into the bank to the north of the survey-area. Because of later activity, it is not possible to state whether the bank and ditch continued as a single system of earthworks, encircling the hilltop. If they were prehistoric, the bank and ditch may have had a defensive function, augmenting the natural defences which the promontory affords (hillforts on the South Downs have similar profiles: O. Bedwin, *pers. comm.*). However, the bank and ditch may belong to a later period of activity and serve a rather different purpose (see Period 1).

The interior of the survey-area slopes down from east to west, the highest ground being some 10 metres above the lowest. The area was much cut about by later quarrying (Period 2), which exposed and partly eroded deposits yielding prehistoric pottery (Hoares 1971; Buckley and Hedges 1976; Brown and Buckley 1985). This gave the hill-top its present shape and removed any internal divisions or earthworks such as hut-platforms. No archaeological trenches could be located in 1993. In the absence of positive proof for major defences, this site could have been either a hillfort or a hilltop settlement, destroyed by quarrying. It is not possible to distinguish between these possibilities on current evidence.

Period 1: Woodland (Anglo-Saxon - Medieval)

Another context is quite possible however, for Domesday records one hide [120 acres] of woodland (and 10 pigs) at Langdon (Domesday 24, 2: Barstable Hundred). So by the late Saxon Period at the latest, the area had reverted to woodland, and this may have been formally managed as coppiced woodland. In the Middle Ages a bank with an external ditch enclosing coppiced woodland would have been an effective means of keeping deer. The rounded profile of the bank and ditch at the east of the survey-area (described in Period 0) may suggest that relatively little erosion and silting has taken place. For these reasons, it is suggested that these features are as likely to be medieval woodland-bank and ditch as prehistoric defensive features. Elsewhere in the area at Coombe Wood (NGR TQ 681 863), woodland earthworks probably predate 1797 (ECC 1983, 37). They consist of a bank with external ditch (like this one) and they may be a part of a related system. Only excavation can settle this matter, if at all.

Period 2: Quarrying (Post-medieval)

The hill consists of gravel overlying clay; the former was quarried piecemeal. Horseshoe-shaped pits were dug to extract the gravel; many intercut one another, suggesting that this was not a continuous operation. Three stages can be identified by crude stratigraphy and the alignment of features (or groups of features).

In Period 2A, a quarry cut the southernmost portion of the woodland bank, and one or two vestiges of quarries can be seen elsewhere in the area west of it, cut away by subsequent activity. This earliest activity might be linked to highway repairs, noted in 1585 (ERO Q/SR92/38) and 1618 (ERO Q/S Ba4/1).

In Period 2B, the development of a continuous quarry-face can be seen (presumably starting off as a central face), clearly progressing from west to east, into the hillside. As quarrying has also been thought to post-date the Goldsmith Estate Map of 1797, which shows neither these workings, nor those on the wood opposite (now called Gravel Hill Wood: ECC 1983, 19-20 & fig. 14), this could be the phase in question.

In Period 2C, the southern portion was dug away by a series of intercutting pits, though outlying northern and central areas are also visible, rejuvenating these faces. In this last stage, a half-dug quarry to the southwest of the group shows the means by which a quarry was worked. A narrow shaft-like trench would be dug, and the sides subsequently broadened. This particular example was abandoned before this took place, though the northernmost quarry shows the process brought to its conclusion.

The relationship between these workings and the brick and tile workings further south (illustrated on the Goldsmiths Estate Map of 1797, and obsolete by 1833; ECC 1983, 19-20) is unclear. Possibly these gravel-workings fulfilled the role of trial pits for the brickworks in a projected (but abortive) expansion. Some may be even more recent, but a rapid search of the Essex Record Office reveals no explicit reference to quarrying.

The means of removal of the material in the first two stages differed from those in the last. It would have been impossible to transport the gravel from above the quarry-face, to the east, on either occasion, and dangerous to shift the material directly down the west face of the hill, to South Street (a 45° slope). Instead, a shallow narrow linear cutting at the north end of the quarry area, sloping gently northwards, may imply a

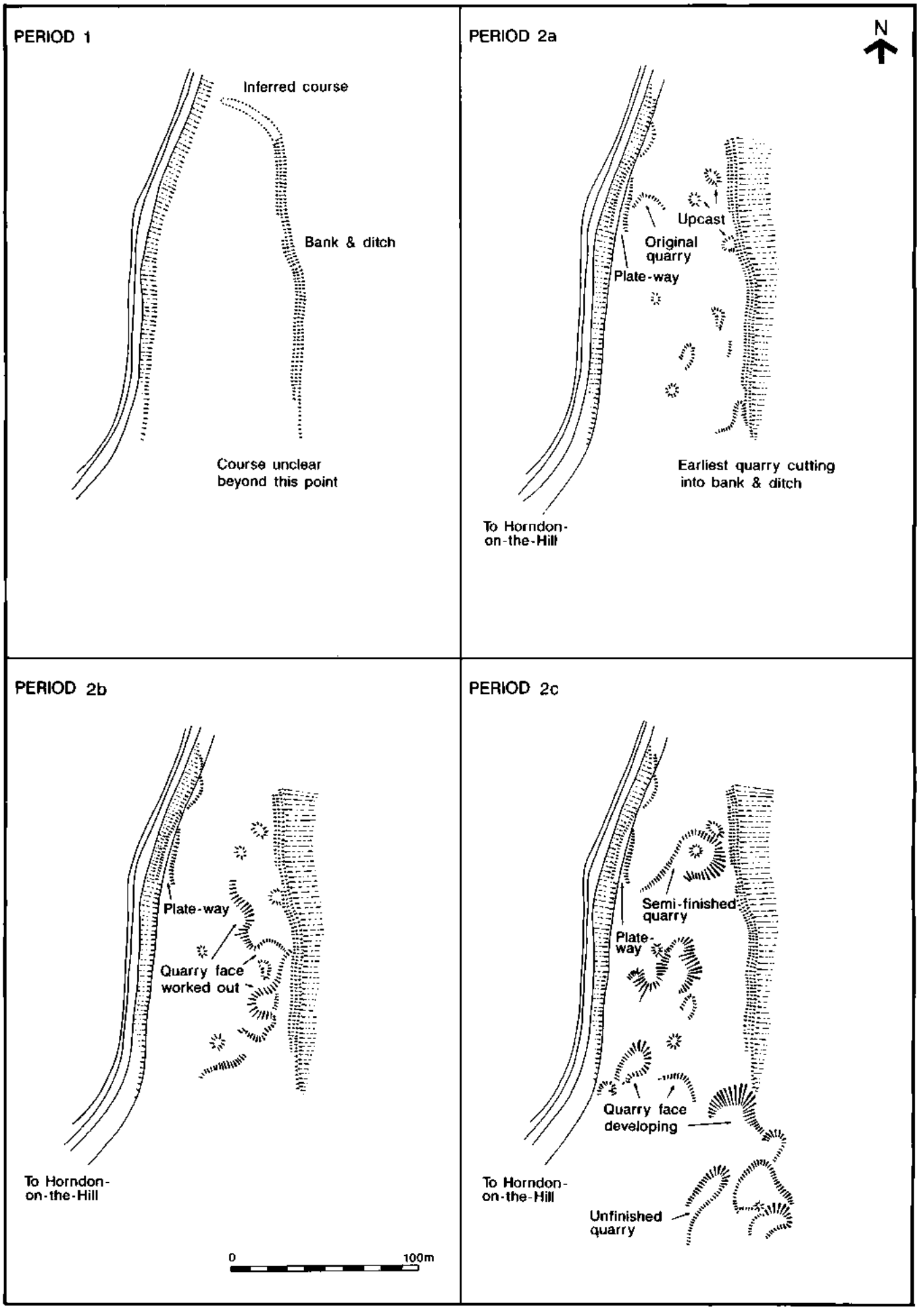

Fig. 7 Langdon Hills: Phasing.

wagon- or plate-way. This would have been terraced into the hillside, joining up with South Street. In Period 2C, removal of material would have been easier, transported downhill to the south. A pathway runs nearby.

Conclusions

At the most basic level, this exercise has shown the need for detailed survey (or resurvey) of earthwork sites to demonstrate levels of monument-survival. Sites which were thought to survive badly (South Weald) have in fact yielded more evidence than expected; conversely, sites for which somewhat optimistic claims have been made (Langdon Hills) cannot support them on the evidence now available. This was the primary purpose of the survey, to examine the sites as hillforts, and some claims made for these sites must be viewed against these results.

A chain of Essex hillforts against seaborne attack was claimed on the basis of little or no published chronological or topographical evidence (Drury 1980, 7). Such a system presupposes good, contemporaneous, defences, and a demonstrable threat. Langdon Hills cannot be shown unequivocally to have been such a hillfort — and at South Weald Camp the surviving rampart and ditches (even taking the results of excavation into account: Medlycott *et al.*, this volume) are hardly impressive. These sites do not constitute proper *hillforts* by comparison with other sites in Southern England (Morris and Buckley 1978 for an Essex overview). But they do fall within that lesser class of hilltop site which in Essex is termed *camp* (Sealey, forthcoming) and is also present in Suffolk (Martin 1993). Moreover the dates of the finds recovered by excavation and surface-collection differ by millennia, so synchronicity cannot be demonstrated either. So, are these two sites weak links in a chain of defences, or weak links in an argument which relies on the (dated and disputed) concept of invasion?

While this work has shown our answers are not so clear-cut as once thought, it has also shown that it is possible to analyse earthworks, to periodise them, and to relate these successive periods to documentary evidence. In other words, they can be treated as elements within a changing landscape. The most immediate import is that physical evidence for woodland and parkland management is now beginning to emerge; and also for extractive industries. These results should aid conservation and interpretation of known monuments and potential archaeological sites within these areas of parkland, as well as present hypotheses for future fieldwork.

Acknowledgements

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Footnote

1 Excavation reveals that the ditch was 3.4 metres wide and up to 1.4 metres deep, with steep sides and a 1.5 metre wide flat base (Bedwin and Godbold 1991/Medlycott *et al.*, this volume). The surveyed portions of the ditch may therefore be wider due to weathering-back of the ditch lip.

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South Weald Camp — a probable late Iron Age hill fort: excavations 1990

by Maria Medlycott, Owen Bedwin and Steve Godbold

Two trenches were excavated across the defences of South Weald Camp, a small, univallate hill fort. The original rampart and ditch have been provisionally dated to the late Iron Age, on the basis of small amounts of pottery, as have a number of post holes within the interior of the fort and a possible timber revetment behind the rampart. In the medieval period, the ditch was re-cut and some deliberate dumping of material took place within the fort, changes probably associated with the construction of a deer-park. In the post-medieval/modern period the ditch was again re-cut. Considerable disturbance also occurred along and behind the rampart, when the hill fort was used as a military training ground in the Second World War.

Introduction

South Weald Camp (TQ 579 946) is a sub-circular univallate hill fort (ESMR 0531, SAM Essex 106), enclosing 2.8 ha. (Fig. 1). The defences consist of a feeble rampart and steep scarp slope, with traces of an external ditch. In the medieval period the fort was incorporated into South Weald deer-park. It was remodelled in the eighteenth century as an ornamental landscape feature, again within parkland. It was also used as a source of sand and gravel in the post-medieval period. During the Second World War the site was used as a military training ground and allotments, both of these phases of activity causing extensive damage to the surviving earthworks.

A road runs roughly north-south through the earthwork, dividing it unequally, with about a third to the west and two-thirds to the east. The western part lies in Weald Country Park, now in the ownership of the county council; the remainder, to the east, is owned by South Weald Cricket Club (Fig. 1).

In 1975 a gas main was laid across the eastern portion of the site, but no structures or finds were reported. In 1990 a small research excavation was undertaken on the western portion of the earthwork (i.e. the area belonging to the county council), with the aim of dating the construction of the hill fort. The excavation was under the general direction of Owen Bedwin, with day-to-day supervision by Steve Godbold. Post-excavation work and the writing of this report was by Maria Medlycott. This project was funded by Essex County Council. Scheduled Monument Consent was granted by the Department of the Environment.

Three years after the excavation, a detailed contour survey of the earthwork and its immediate environs was undertaken as part of a separate project aimed at assessing the archaeological potential of the Essex Country Parks. This identified 4 main periods of activity, broadly in agreement with the evidence derived from the excavation (Isserlin, this volume, 40-52).

Geology and topography

The subsoil consists of sand and gravel, with patches of silty sand, overlying London Clay. The site lies at 93-101m OD. The immediate topography consists of a natural sand and gravel plateau, which forms the interior of the fort, with a steep scarp edge, at the foot of which the fort ditch was dug. A tributary of the Weald Brook rises 150m to the north-west of the site. Visibility is good to the east, west and south; the northern view is currently obscured by trees.

Excavation

Two trenches were excavated (A and B), sectioning the univallate defences in the north-west and south-west quadrants (Fig. 1). The western part of the earthwork is now largely covered in birch and bramble, and the location of the trenches was largely determined by the extensive tree cover which permitted access to the defences in very few places. The stepped edges of the trenches also partly reflected the need to avoid tree trunks. All excavation was by hand; removal of topsoil (a dark, silty loam of variable depth) immediately revealed archaeological features, though some (see below) were very recent.

Trench A

This was 26m long and 1m wide, expanded to 2m wide at its eastern end and over the ditch area (Fig. 2). It lay on a south-east/north-west axis.

The natural subsoil at the eastern end, making up the plateau, was sand and gravel. At the western end the natural consisted of layers of silty sand.

The natural was cut by a steep-sided flat-bottomed ditch (48) lying along the base of the scarp. The ditch was 3.5m wide and 1m deep. Its lowest fills (91, 89 and 123) were composed of very dark silts. These most likely formed under waterlogged conditions, shortly

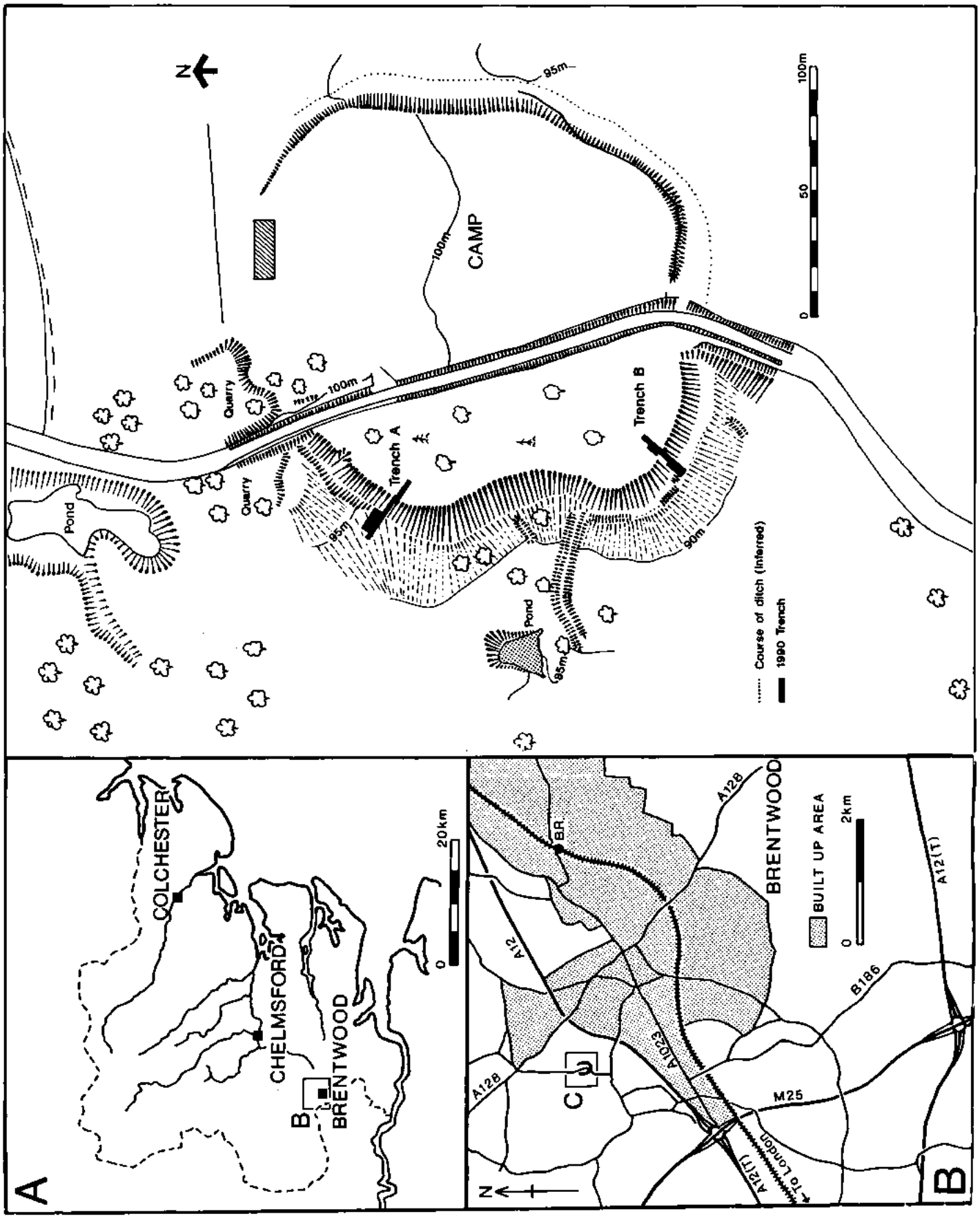


Fig. 1
South
Weald
Camp.
Site
location.

after the ditch was dug. The later fills were coarser in texture and appear to have formed from the slumping of the material from the sides and the rampart, with intermittent silting. No finds were recovered from this feature.

The upcast from ditch 48 was probably used to form a bank or rampart along the lip of the scarp. In section, the rampart presented a complex sequence of rather similar sandy layers. At the edge of the slope, contexts 129, 128 and 127/82 (Fig. 2) seem to have formed the core of the rampart. Behind these was a series of layers deposited at a slightly steeper angle, i.e. 76, 55 and 56. These latter contained small amounts of late Iron Age pottery, providing the main dating evidence for the construction of the rampart. The slightly steeper angle may reflect the presence of some kind of revetment at the back of the rampart (for which there is far more convincing evidence in trench B [below]). An alternative interpretation is that these are simply weathering layers slowly accumulating behind the rampart. The total remaining height of the prehistoric rampart layers as seen in the section is 0.60m.

The back of the rampart was cut by F51, a wide, shallow and irregular feature (Fig. 2; late Iron Age phase plan and section HJ). Its lowest 2 layers (contexts 95 and 96, not seen in section HJ) both contained abundant charcoal and a little late Iron Age or ?Roman pottery. Interpretation is not straightforward. In terms of position, it is broadly comparable with the probable revetment slot seen in trench B (below), but the profile is, of course, totally different. It could perhaps derive from demolition of a wooden revetment, rather than construction, but it must be said that had such a clear slot not appeared in trench B, this interpretation of 51 would not have been sought. Layer 82 was cut by a shallow feature (87), visible as a semicircle at the edge of the baulk (Fig. 2, plan). F31 was a post hole (0.40m diam. by 0.21m deep), containing a post-pipe. F33 was probably also a post hole (0.40m diam. by 0.16m). These were sited on the northern side of the trench, on the plateau side of F51, and were undated.

The ditch was re-cut (86), 1.90m wide and 0.60-0.90m deep, with steep sides. This re-cut contained three sherds of badly abraded pottery or fired clay. If it is pottery, it is probably late Iron Age in date, and may indicate a late Iron Age re-cut. Alternatively, because this ceramic material is so dubious, it is hard to be sure of a firm date, and the re-cut might then be reassigned to the 10th-12th centuries AD, the date of the first re-cut in trench B (cut 245), although the profile of cut 86 is rather more V-shaped than that of 245.

The next re-cut was F47, well off the line of the original ditch (Fig. 2, section); this was a small, gently sloping cut (0.50m deep) at the foot of the scarp. Ditch 47 was in turn cut by ditch 61, more on the line of the original ditch. 61 was steep-sided and flat-bottomed, approximately 1.10m wide and 0.50m deep. It contained nine fills; the lowest two (60 and 65) appear to have formed through natural silting and erosion. The remainder of the fills appear to have resulted from deliberate back-filling. They contained modern material.

At the eastern end of the trench, on top of the plateau, there was a series of 11 linear cuts (4-25), which ran approximately parallel to each other across the trench. They ranged from 0.25-0.10m wide and 0.10-0.05m deep. They are thought to date to the Second World War use of the site, and were probably formed by vehicle tracks. Behind the gullies, and sectioned by the eastern baulk are two shallow subrectangular cuts (40 and 42); these may have been shallow post holes or pits. They both contain Late Iron Age pottery, but stratigraphically they must be at least post-medieval in date and possibly modern.

Trench B

This was 23m long and 1m wide, widening to 2m wide over the rampart and ditch areas (Fig. 3). It lay on a north-west/south-east axis. The natural consisted of bands of silty sand and silty-sandy clay.

The earliest feature was a large ditch (276), 3.4m wide and 1.5m deep, running parallel to the edge of the scarp. This was steep-sided with a step near the base which dropped into a narrow V-shaped cut. The three lowest fills (270, 266 and 256) were very silty and probably formed under waterlogged conditions. Embedded in these was a 0.50m long piece of unworked wood (269). The upper fills (230, 255 and 261), probably derived from eroded material from the rampart. This feature contained no datable material.

The rampart consisted of dumped sandy layers, 280, 291, 279, 275, 272 and 240; these were undated. Below the lowest layer was a small lens of very charcoally, sandy silt, containing no finds (289 in Fig. 3, section), which may be the truncated remains of a pre-rampart old land surface.

Running directly behind the rampart was a linear slot (268), the bottom fill (267) of which consisted of charcoal, burnt clay and burnt stones. This feature is interpreted as being the putative revetment slot. F274 was a steep-sided oval-shaped post hole. F263 was an irregular oval cut, 0.12m deep. F258, 251 and 244 were three post holes which ran along the southern edge of the trench, at right-angles to the rampart. A second row of post holes (242, 252, 253 and 254) ran parallel to the rampart. These were set in a shallow slot, and all contained the same fill (246) indicating that the posts were all removed at the same time.

Some time between the tenth to twelfth centuries AD, the ditch was re-cut (245), forming a broad shallow ditch, 2.06m wide and 0.60m deep. Also dating to this period is F243, which is partially visible in the north-eastern corner of the trench. It contained a large quantity of charcoal and showed signs that it had been burnt *in situ*. The lower fill (248) contained Late Iron

TRENCH A

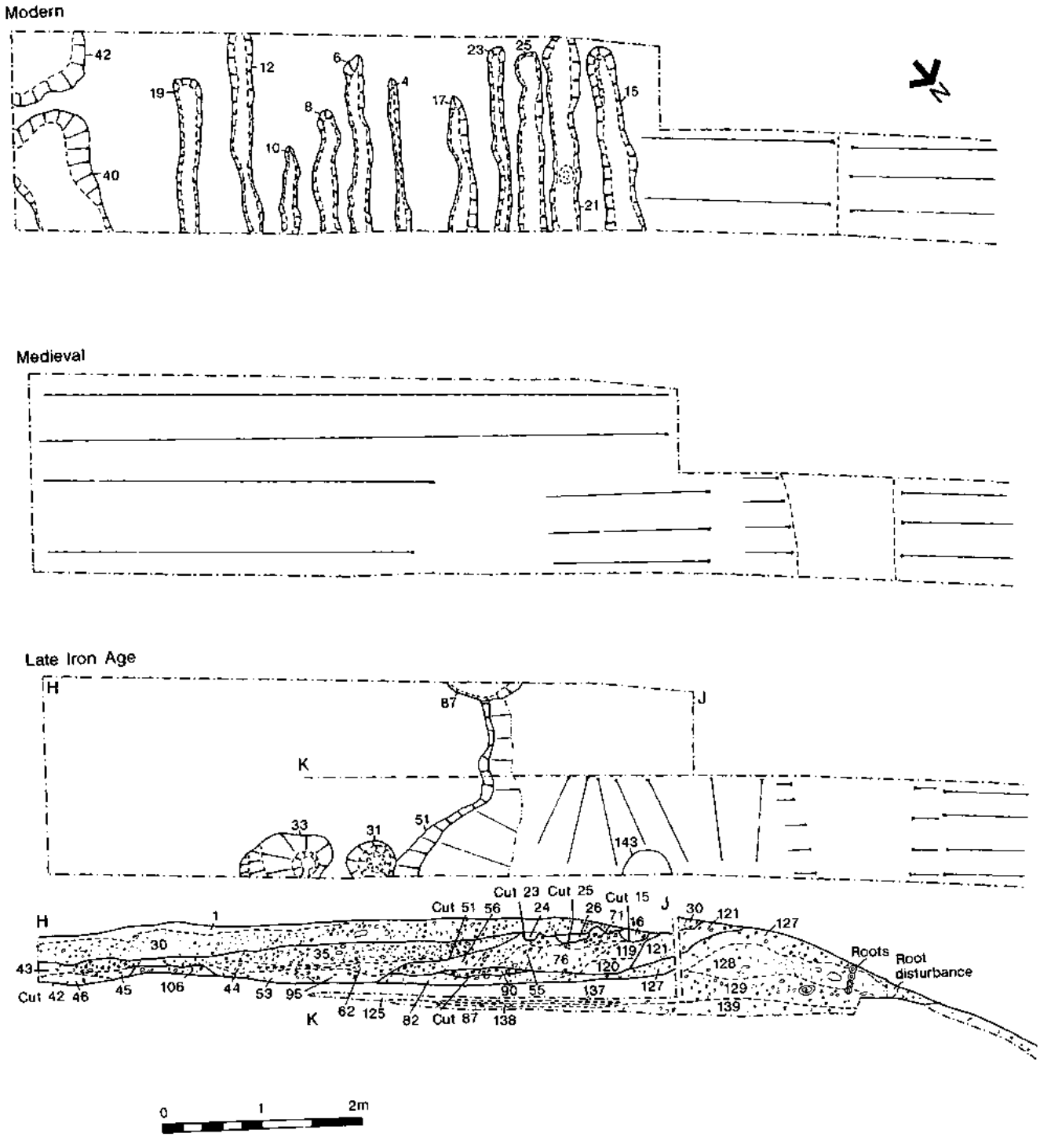
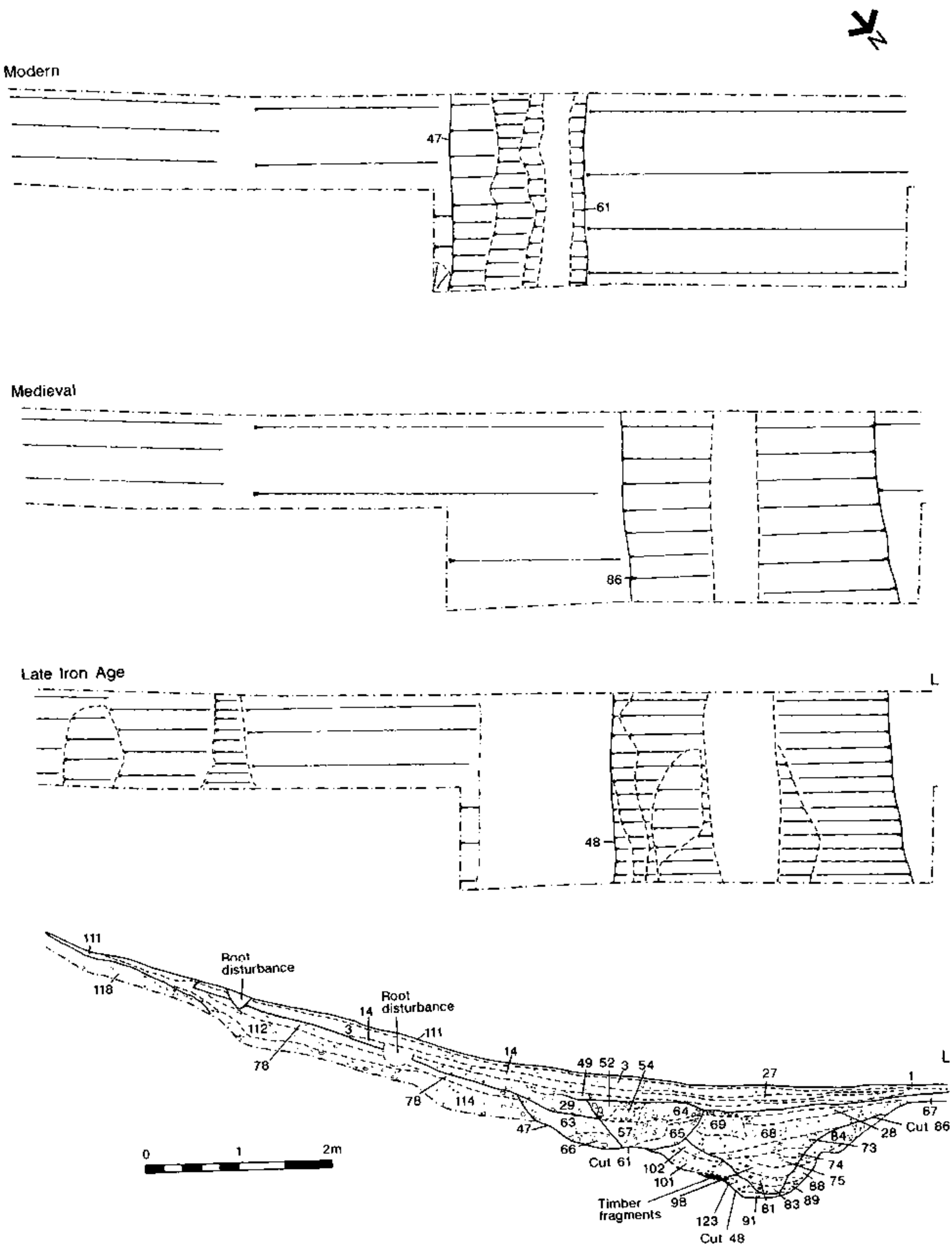


Fig. 2 South Weald Camp. Trench A, this page and facing; plans and sections. The phased plans and section follow on across the page fold.

TRENCH A


N
Modern
47
61
Medieval
86
Late Iron Age
L
48
111
118
Root disturbance
112
78
14
3
Root disturbance
111
14
78
114
49 52 3 54
27
1
L
29
63
47
66
57
64
65
69
68
67
28
Cut 86
84
73
Cut 61
102
101
74
75
88
89
83
81
91
123
98
Timber fragments
Cut 48
0
1
2m

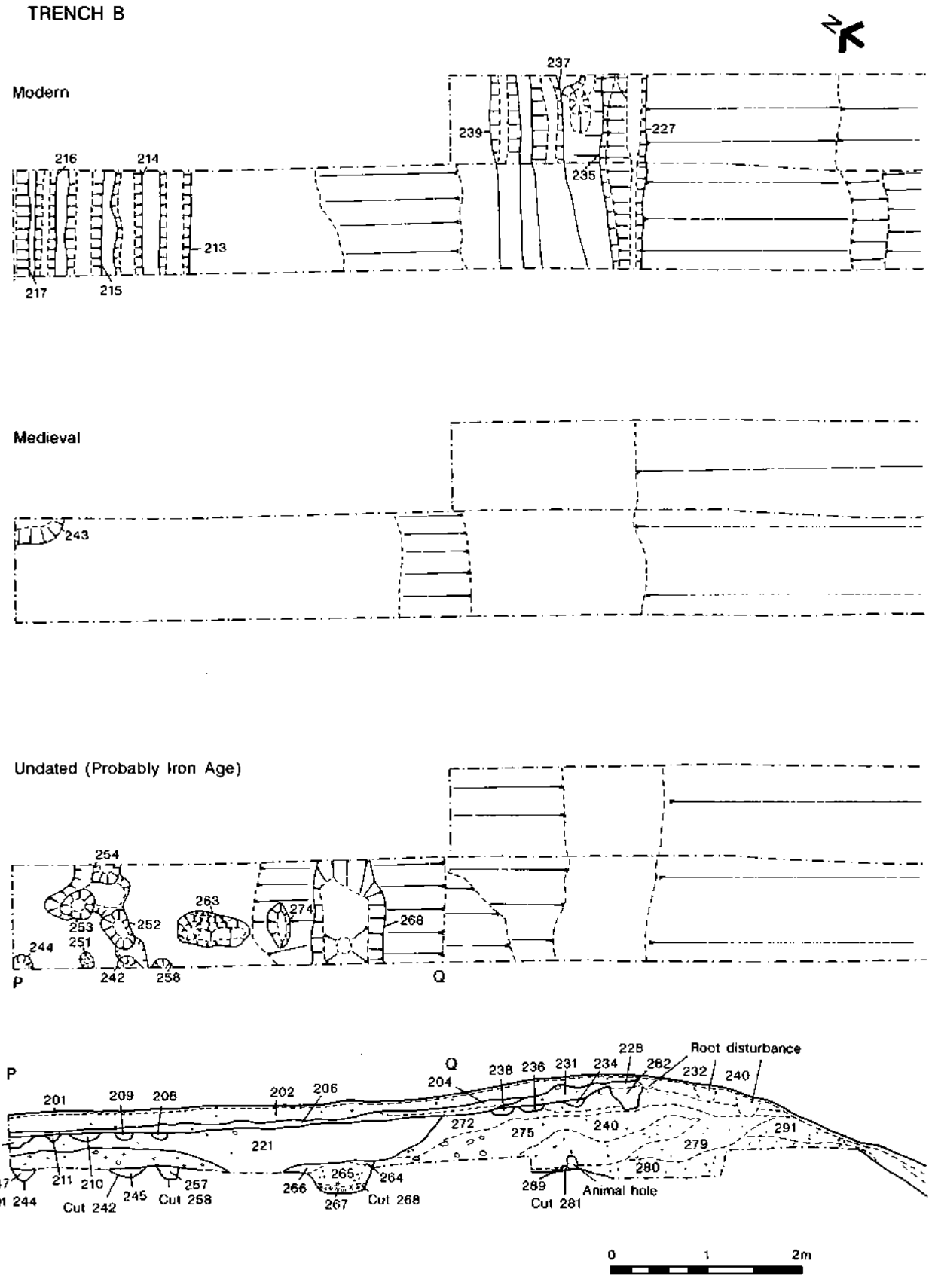
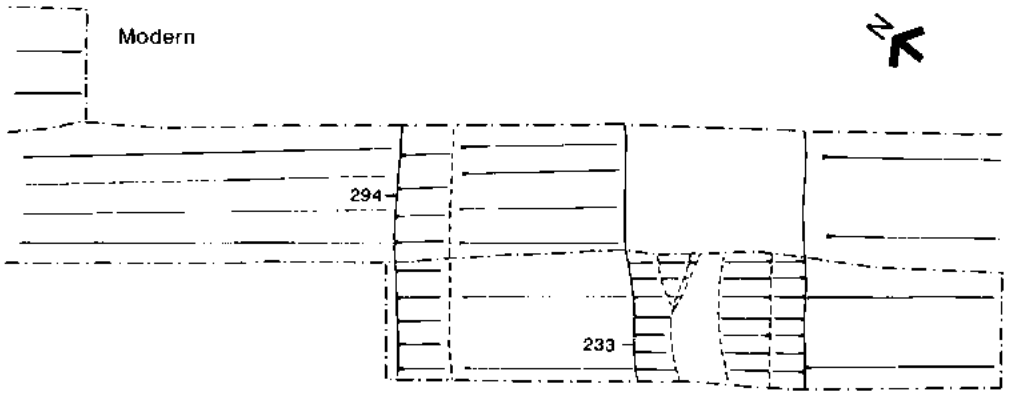
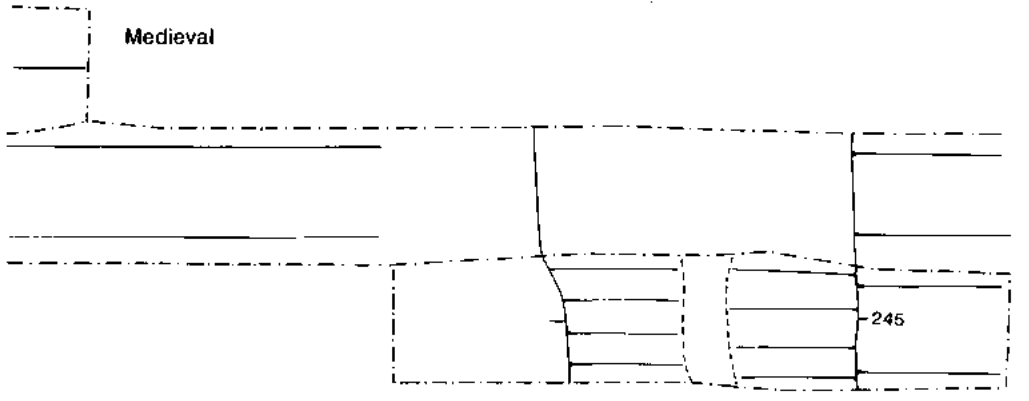
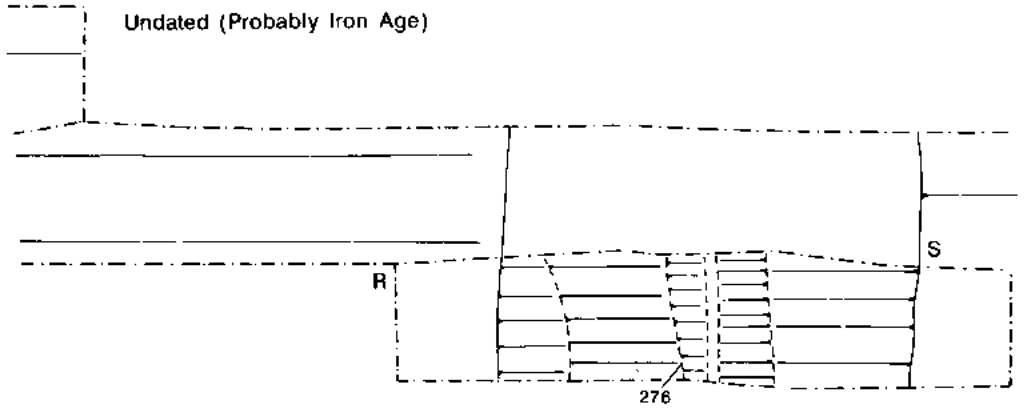


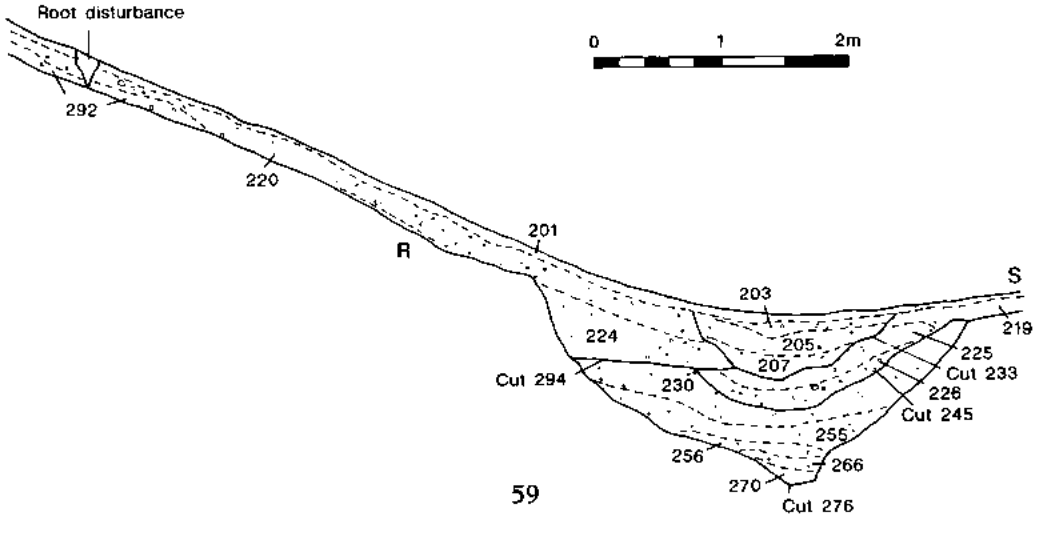
Fig. 3 South Weald Camp. Trench B, this page and facing; plans and sections.
The phased plans and section follow on across the page fold.

TRENCH B


Modern
N
294
233


Medieval
245


Undated (Probably Iron Age)
R
S
276


Root disturbance
0
1
2m
292
220
R
201
S
203
219
224
205
225
207
Cut 233
Cut 294
230
226
Cut 245
255
256
266
270
Cut 276

Age pottery, but the upper fill (247) contained one sherd of shell-tempered ware. Over this lay two layers (241 and 221); these appear to have been deliberately dumped, in order to raise the level of the interior of the fort. Layer 221 contained only Late Iron Age pottery, but stratigraphically it must be at least medieval in date. It is possible that layer 221 and hence the pottery derive from the re-cutting of the original ditch.

In the post-medieval/modern period ditch, 245 was cut by 294 (1.50m wide by 0.50m deep), containing two layers of deposited hillwash. This in turn was cut by 233 (1.60m wide by 0.50m deep), a re-cut of the original ditch. 233 was modern in date, and was probably cut during the Second World War use of the site.

Also dating to the Second World War period were four linear cuts (227, 235, 237 and 239) which ran along the top of the rampart. There were a further five linear cuts (213-217) at the northern end of the trench on the plateau area. These cuts were on average 0.15m wide and 0.07m deep, and were probably caused by the tracks of military vehicles.

Discussion

This is divided into two parts. The first deals with the dating of the sequence of events at South Weald Camp itself, the second with a consideration of this site and other Essex hill forts.

1. Dating sequence

Pre hill-fort activity

The earliest occupation of the area in the prehistoric period appears to have been during the Neolithic or Early Bronze Age period, as indicated by the presence of a few struck flints of that date. However, these flints are residual in later contexts and the nature of this early occupation is unknown.

The construction of the hill-fort

The next phase of activity was dated to the late Iron Age. A ditch, up to 1.5 m deep and 3.5 m wide at the top, was dug at the foot of the scarp slope. The upcast from this was deposited as rampart layers along the rim of the plateau. The current height is *c.* 1m maximum, but it may have been rather higher originally. This corresponds to Isserlin's Period I earthwork (this volume, pp. 40-52).

Dating for this episode is provided by small amounts of late Iron Age pottery in the rampart make-up in trench A. The rampart in trench B could not be dated, neither could the cutting of the original ditch in either trench. There was also a small amount of residual late Iron Age pottery from a number of contexts. It has to be accepted that this dating material is rather scanty, but, in the absence of any earlier pottery, a late Iron Age origin for the earthwork is perhaps more probable than any other.

Behind the rampart in trench B was a well-defined linear cut (268). Its position and profile suggest an interpretation as a slot for a revetment at the rear of the rampart. Presumably, some of the material dug out of this slot could have been used in the rampart too. In trench A, there is no correspondingly similar slot, only a shallow, ill-defined feature (51), which seems in section (Fig. 2) to cut the back of the rampart. This profile might perhaps better reflect the pulling out of a wooden revetment. In terms of dating, 51 provided a few sherds of pottery which, on the basis of fabric, might be either Late Iron Age or early Roman, but context 268 was undated. Both 51 and 268 contained abundant charcoal, suggesting that any revetment might have burnt down, as well as being at least partly dismantled.

In both trenches there were traces of a rather attenuated old land surface beneath the rampart. In trench A this consisted of a series of thin sandy layers containing some charcoal, but nothing datable. In trench B, the old land surface was richer in charcoal (289) but had no datable artefacts.

Also possibly dating to this phase were a number of shallow post holes. These were present in both trenches, and were sited within the area enclosed by the ditch and rampart. It is possible that they represent internal structures, but the trench is too narrow for any interpretative plan to be undertaken.

Medieval period

The earthwork appears to have been largely abandoned until the medieval period, when the ditch was re-cut. In trench A, this corresponds to the profile of 86 (which was effectively undated, though containing 3 small fragments of badly-fired clay, only doubtfully classed as pottery), and in trench B to the profile of 245. The lowest 2 fills of this re-cut contained pottery dated to the tenth to twelfth centuries AD, as did the fire-pit 243, also in trench B. It is possible that the levelling layer 221 also dates to this phase, and derives from the upcast from the ditch. This re-cut is most plausibly linked to the construction of a medieval deer park, into which the late Iron Age earthwork was incorporated. This corresponds to Isserlin's Period 2 (this volume, pp. 40-52). There are a few sherds of Mill Green ware dating to the twelfth to fourteenth centuries but no definite features of this date.

Post-medieval

The site was still in use as a deer-park until the outbreak of the Second World War. A few sherds of post-medieval pottery were recovered, possibly associated with the re-modelling of the earthwork and its environs as part of a wider landscaping project centred on Weald Hall, now demolished. This episode would correspond to Isserlin's period 3 (this volume, pp. 40-52), although the evidence from excavation is rather circumstantial.

Modern
The activities associated with the area's use as a Second World War military training ground have had severe impact on the archaeology. The extensive re-cutting of the ditch seen in both trenches and the series of damaging wheel ruts within the interior of the earthwork tell their own story.

The present colonisation of the area by birch is probably also slowly damaging archaeological deposits by root action, and also by the disturbance caused when mature trees are blown down in high winds.

The rather meagre dating evidence supplied by the 1990 excavation has nonetheless provided a basic sequence of events for the earthworks at South Weald Camp. It is encouraging that these can broadly be matched to the 4 periods of activity isolated from the detailed field survey (Isserlin, this volume, 40-52). Only in the case of his Period 3 (post-medieval landscaping) is the excavated evidence inadequate, and this does not weaken the argument made on the basis of the survey.

2. South Weald Camp and other Essex hill forts
Essex hill forts have been relatively little investigated by fieldwork. Only Uphall Camp (in 'historic' Essex, now part of Greater London) has been examined on a large scale, and has been dated to the Middle Iron Age, with plenty of evidence for settlement in the form of numerous round houses (P. Greenwood, pers. comm.). Most of the other hill forts had produced some evidence of dating, although, until the 1990 excavation, South Weald Camp had not.

In general terms, hill-fort construction seems to have occurred over a period of many centuries, with Chipping Hill, Witham, having its origins perhaps as early as the Late Bronze Age (Flook and Bedwin 1993), and now with South Weald Camp being dated to the end of the Iron Age.

The Essex hill forts not only demonstrate a wide range of dates, they are also a very variable group in terms of size and scale. There are large examples like Uphall Camp (19.4 ha; 48 acres) and Wallbury (12.4 ha; 31 acres), contrasting with much smaller earthworks like South Weald Camp (2.8 ha; 7 acres) and Loughton Camp (2.6 ha; 6.5 acres). There is also considerable difference between the substantial defences like those at Chipping Hill, Witham, where the ditch was 8.5 m across and at least 3.3 m deep (Flook and Bedwin 1993), and at the other end of the scale South Weald Camp, where the ditch was 3.5 m across at the top and only 1.5 m deep.

Another point to be made is the number of Essex hill forts which are near to sources of water. Some hill forts, like Wallbury or Chipping Hill, have a river along one edge. Others are adjacent to (or even incorporate) reliable springs, e.g. Asheldham, Ambresbury Banks and Loughton Camp. To this latter group South Weald Camp can probably be added, with an apparently high ground water level just to the west, at the foot of the slope, utilised for the pond in the medieval deer-park (Fig. 1), and perhaps earlier.

The presence of some post holes, possibly contemporary with the earthwork, just inside the rampart at South Weald Camp also recalls the situation at Danbury (Morris and Buckley 1978), where there was a concentration of post holes in a zone just inside the bank. A similar phenomenon was noted at Asheldham (Bedwin 1991). The trenches at South Weald Camp were however too small for any interpretation to be put on these; their dating is in any case not all that secure.

There was some evidence too of the partial survival of a buried soil beneath the rampart at South Weald Camp, in spite of the extensive WWII disturbance. Nevertheless, it did not present the same clear appearance as the buried soils at Asheldham (Bedwin 1991, 19; pl. I) or at Chipping Hill (Flook and Bedwin 1993, fig. 21). Its identification as a buried soil is therefore tentative.

The re-cutting of the ditch at South Weald Camp in the 10th-12th centuries is broadly contemporary with that at Asheldham Camp, but the reason for these re-cuts seem to be totally different. The South Weald re-cut was almost certainly part of the works associated with deer-park construction, whereas at Asheldham it was interpreted as a response to a period of anarchy.

Finds reports

The late Iron Age and Roman pottery
by T.S. Martin
The two trenches (A and B) produced a total of 73 sherds (486g) of Late Iron Age and Roman pottery from 17 contexts. Most were highly abraded undiagnostic bodysherds, making close dating impossible. None of the contexts with late Iron Age and Roman pottery contained later pottery.

The pottery from ECC Field Archaeology Group sites is classified using the typology published by Going (1987; 2-54). His fabric numbers appear after the ECC mnemonic codes. The pottery is quantified by sherd count and weight in grams (g) by fabric.

Fabrics:
The following fabrics were identified (total site quantifications in parenthesis):-
?BUF (31) Unspecified buff wares (1 sherd; 3g)
GRS (47) Sandy Grey ware (1 sherd; 0.5g)
GROG (53) Grog-tempered ware (66 sherds; 342g)

The following fabrics are not in Going:-
AIT (-) Dressel 1b Italian amphora (1 sherd; 129g)
MCW (-) Misc. coarse ware (5 sherds; 6.5g.)

Forms: Few forms could be identified. Those that were comprised the rim of a Dressel 1b amphora, a Grog-tempered jar and two pedestal urn bases (cf. Thompson 1982 Type A). Only two vessels were illustrated.

The illustrated pottery
Fig. 4, no.1 Grog-tempered ware jar with everted rim and zone of oblique finger-nail decoration on the shoulder. Trench A, rampart, context 55.
Fig. 4, no.2 Dressel 1b amphora rim. Trench B, top soil, context 202.

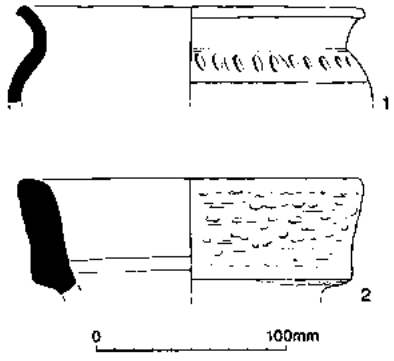


Fig. 4 South Weald Camp. Late Iron Age pottery.

The pottery by trench and context

Trench A (50 sherds; 236g, plus 3 possible sherds; 34g)
Amorphous cut F40 (1 sherd; 0.5g)
Context 41: Misc. pottery: Fabric GRS
A very small sherd that could be intrusive or residual. Insufficient dating evidence.

Amorphous cut F42 (3 sherds; 4g)
Context 46: Misc. pottery: Fabric MCW
A small group consisting of very small undiagnostic bodysherds that could be intrusive or residual. Insufficient dating evidence.

Cut F51 ?Revetment trench (9 sherds; 50g.)
Context 53: Misc. pottery: Jar, pedestal base [Thompson 1982, type A1] (GROG)
Context 97: Misc. pottery: Fabrics ?BUF & GROG
All of the pottery in this group can be dated to the late Iron Age or ?early Roman period. Closer dating is not possible.

Layers above/associated with F51 (5 sherds; 27g)
Context 44: Misc. pottery: Fabric GROG
Context 50: Misc. pottery: Fabric GROG
Context 95: Misc. pottery: Fabric GROG
Context 96: Misc. pottery: Jar with ?flat pedestal urn base — cf. Thompson 1982 type A8 (GROG)
The absence of later finds suggests that the defences may have been constructed or reconstructed in the later Iron Age. None of the pottery is closely datable.

Ditch F86 (?3 sherds; 34g.)
Context 75: Misc. pottery: Fabric ?GROG
Context 83: Misc. pottery: Fabric ?GROG
A small group of very badly abraded pottery or fired-clay. If they are potsherds, they are probably from a Grog-tempered storage jar. A late Iron Age date seems likely.

Rampart layers (32 sherds; 155g)
Context 55: Misc. pottery: Jar-rim, vessel with impressed finger-nail decoration on the shoulder (GROG)
Context 56: Misc. pottery: Fabric GROG
Context 71: Misc. pottery: Fabric GROG
Context 99: Misc. pottery: Fabric MCW
The absence of later finds suggests that the rampart may have been constructed or reconstructed in the later Iron Age. This dating is supported by the dates obtained for the possible revetment and associated contexts. Closer dating is not possible.

Trench B (20 sherds; 214.5g)
Cut of ?post-hole/fire pit F243 (1 sherd ; 0.5g)
Context 248: Misc. pottery: Fabric MCW
A very small sherd that could be intrusive or residual. Insufficient dating evidence.

Pottery from misc. layers
Top-soil (1 sherd; 129g)
Context 202: Misc. pottery: Amphora rim — (AIT) — Dressel 1b type.
Levelling/dump (18 sherds; 85g)
Context 221: Misc. pottery: Fabric GROG rim, fairly abraded — type uncertain and misc. bodysherds.
A small group of residual sherds from a medieval levelling layer raising the hill-fort interior to the level of the ramparts.

Discussion

Little can be said about the assemblage overall other than noting that it is small and very fragmentary, with little in the way of identifiable forms, and appears to belong to the late pre-Roman Iron Age. The paucity of ceramic finds — in keeping with other hill forts, as at Danbury Camp (Morris and Buckley 1978) — makes dating individual features problematical. The only closely datable piece is the Dressel 1b amphora rim (fig. 4, no.2) recovered from the topsoil in Trench B which is unlikely to be later than *c.* 10 BC in date (Sealey 1985, 25).

Trench A produced the bulk of the pottery, although the assemblage is more fragmentary than that recovered from trench B. Four features contained pottery which largely consisted of 'Belgic' Grog-tempered wares. As is frequently the case in Essex, this fabric group formed the bulk of the sites pottery (cf. Thompson 1982, 8). However, two features (40 and 42) are stratigraphically late or modern. It is possible, on the basis of the slender ceramic evidence available, that the rampart was constructed or reconstructed during the late Iron Age and that the possible revetment and its associated layers behind the rampart may also be of this period.

In trench B, where all the pottery was retrieved from just three contexts, only one feature, F243, provided any evidence to suggest a late Iron Age date. However, the single sherd is so small that it could easily be intrusive.

A note on the distribution of Dressel 1 amphorae in Essex
by C.R. Wallace

Italian Dressel 1 amphorae — where identifiable, the Dressel 1b variety — are a feature of late Iron Age assemblages in Essex. In most cases, a single sherd (like the rim from this site) is all that is found: assemblages like those from Camulodunum (Sheepen), Kelvedon, Stansted Airport Catering Site and Elms Farm, Heybridge (not forgetting the rich burials at Colchester (Lexden) and Mount Bures) are the exception.

Gazetteers have been previously published for Essex by Rodwell (1976, 310-20; sixteen sites) and Fitzpatrick (1985, 324-5; adds four more sites). More recent finds from the Stansted Project, Rivenhall, Little Oakley, Brightlingsea and Slough House Farm, Goldhanger can be added. Finds from the south of the modern county have been made on Canvey Island at South Benfleet, Linford and Gun Hill, Tilbury, although the South Weald Camp find is the first in the vicinity.

Medieval pottery
by Helen Walker

Introduction

A very small amount of pottery (28 sherds weighing 86g) was excavated. It has been recorded using Cunningham's typology (Cunningham 1985, 1-4) and is summarised on Table 1.

Pottery from trench B

Trench B is discussed first as this produced the larger amount of pottery. The lower two fills of ditch recut 245 (contexts 225, 226)

Table I Quantification of medieval pottery from South Weald Camp by fabric, feature and sherd count (arranged in stratigraphical order).

Tr.	Context	Feature & relationship	Fabric 12A	13	20	20C	35	40	47	Wt g
A	62	layer below 35	1							7
A	35	layer			4		1			8
B	226	ditch recut 245, below 225	1							7
B	225	ditch recut 245	10							49
B	247	cut 243	1							4
B	232	layer, above 247, below 228		1		1	1			7
B	228	fill of cut 227			4					1
B	206	layer, above 247							1	1
B	201	topsoil					1	1		7

Key to Fabrics:

12A: Shell-tempered ware
13: Early Medieval ware
20: Medieval coarse ware stoneware
20C: Mill Green coarse ware
35: Mill Green fine ware
40: Post-medieval red earthenware
47: White salt-glazed stoneware

produced sherds from a shell-tempered ware cooking pot (Fig. 5, no.1). The vessel has slightly purplish surfaces and a grey core and was tempered with abundant coarsely crushed shell, although most of the shell has been leached out, leaving characteristic lamellate vesicles. The only other inclusions are sparse rust-coloured iron oxides and carbonised material. There are traces of fire-blackening under the rim, indicating it was stood in, or beside, a hearth.

Shell-tempered ware is an early medieval fabric with a date range of 10th to 12th centuries (Drury 1993, 80), although in many areas shelly fabrics continued well into the 13th century (Alan Vince pers. comm.). Later shell-tempered wares (perhaps dating from some time in the 12th century) differ in that they appear to have been built using a turntable which produced well-formed symmetrical vessels with walls of even thickness. The sherds from this vessel however, have an uneven, entirely handmade appearance and a very coarse shell tempering, all of which suggest it belongs to the earlier end of the date range. In addition its thickened everted rim is considered an early type, for example, comparable rims in early medieval fabrics were found belonging to the Norman period of Colchester Castle,

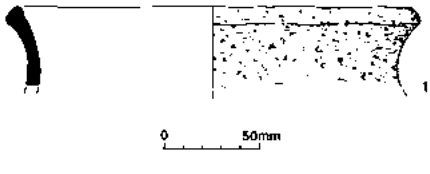


Fig. 5 South Weald Camp. Medieval pottery.

period VII, beginning in 1074 (Cunningham 1982, fig. 26.11,14). The fabric is also comparable to some of the early medieval shell-tempered pottery from Springfield Lyons (Buckley and Hedges 1987), including the fabrics of two of the published cooking-pot rims (Walker 1987, fig. 20.4 and 5), which are dated to the 10th and 11th centuries respectively. The pottery is also comparable to that from another Iron Age hill fort at Asheldham, although there, the Fabric 12A cooking-pot rims are thumbed and the whole assemblage has been dated to the 11th to 12th centuries (Walker 1991, 29-31).

Elsewhere in trench B, a single sherd of shell-tempered ware, with some unleached shell remaining, was found in the upper fill of cut 243 (context 247). Above this, layer 232 produced single, unfeatured sherds of early medieval ware, Mill Green fine ware and Mill Green coarse ware. Early medieval ware is tempered with coarse sands and has a similar date range to shell-tempered ware. Mill Green ware is later, dating from the mid-13th to mid-14th centuries and is described by Pearce *et al.* (1982). It was manufactured at kilns in the area of Mill Green, near Ingatestone, which lies only about 10km north east of South Weald Camp.

Stratigraphically above layer 232, the upper fill of cut 227 (context 228) contained only crumbs of medieval coarse ware, which was produced from the 12th to 14th centuries. Post-medieval pottery was found in layer 206, in the form of a single sherd of white salt-glazed stoneware, made at Staffordshire and other centres from the 1720s to 1770s. Finally the topsoil (context 201) produced a sherd of slip-painted Mill Green ware and an internally glazed post-medieval red earthenware rim, dating anywhere from the 16th century onwards.

Pottery from trench A

A sherd of shell-tempered ware was excavated from layer 62. While layer 35, stratified above, produced a sherd of slip-painted Mill Green ware and small fragments of medieval coarse ware.

Discussion of medieval and later pottery

The most significant find is the early shell-tempered ware, which, on balance, is most likely to be 11th century, although it could be as early as 10th century and a 12th-century date cannot be precluded. It is interesting that 11th/12th-century pottery also occurred at the Iron Age hill fort at Asheldham, where it was postulated that the earthwork was refortified during the period of anarchy in the mid-12th century (Bedwin 1991, 25). This could also be the case here, or it could be related to an earlier conflict, perhaps the Norman conquest. The dearth of pottery belonging to the high medieval and post-medieval periods reflects the fact that the area was open countryside during this time.

Burnt clay

by Hilary Major

The burnt clay was predominantly in a soft, streaky buff and orange fabric, with few inclusions. Context 62 has fragments with possible wattle marks, suggesting that the material derived from structural daub, and it is likely that most of the rest of the assemblage was also "daub".

Worked flint

by Owen Bedwin

The assemblage

There were 26 flakes/blades, 1 core and one very heavily battered lump (?hammerstone), that might originally have been a very rough core. These came from 21 different contexts. Trench A yielded 13 flakes/blades, the core and the lump; trench B yielded 13 flakes/blades.

Raw material

Although the assemblage was small, the flint was highly variable, from good quality, glossy, dark grey flint to heavily mottled mid-grey

or fawn-coloured flint of much poorer quality. In general, the pieces from trench B were reasonably sharp, whereas those from trench A showed considerable wear and erosion.

Technology

In spite of the limited number of pieces, there are differences between the flint from the two trenches. Apart from the signs of battering noted above, the trench A flint was rather cruder, showing haphazard technology, whereas the trench B material was largely from prepared cores, producing small, standardised flakes and/or blades.

Dating

In the absence of specific tool types, and with such a small assemblage, it is hard to provide a precise dating. It is likely that the trench A material may be later prehistoric, and indeed one or two of the pieces may be quite modern, having been accidentally produced when the site was being used for WW2 training exercises. Much, if not all, of the trench B material would not be out of place, on the basis of the technology, in the Neolithic or Early Bronze Age.

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New light on the salt industry and Red Hills of prehistoric and Roman Essex

by P.R. Sealey

A group of Belgic pottery and briquetage from Burnham-on-Crouch, dated c. *AD 1-50, is an inland find of salt-making equipment. Suggestions that inland finds of briquetage represent salt licks for livestock are refuted; such finds need be nothing more than debris from the drying of salt that became damp after production and transport inland. The chronological value of inland finds of briquetage is emphasised, particularly as scientific fieldwork on the Red Hills is not at present being undertaken. Burnham-on-Crouch confirms the 1st century AD* floruit *of Essex salt production in antiquity. Four triangular Iron Age loom weights from Red Hill 147 at Great Wigborough amplify evidence that shows the Essex salt marshes sustained a significant sheep population in later prehistory. Exploration of Red Hill 78 at Langenhoe suggests salt production there was centred on the period* c. *AD 10-70. Four bronze coins of Cunobelinus from the site are the first of Iron Age date from a Red Hill in Essex. After the end of salt production, pottery and coins show a resumption of activity in the 3rd and 4th centuries. This is the first Red Hill at which renewed activity in the Roman period after its abandonment can be demonstrated. Similar finds of late Roman material from other Red Hills are noted. It is suggested that the higher land of the hills served as a refuge for sheep threatened by high tides and that some became permanent bases for the shepherds. This sheep management was geared to wool production for a textile export market. The ditches and banks around some Red Hills may have been connected with this and other livestock management, if not in the late Roman period, then in the Middle Ages.*

This paper publishes discoveries at three sites connected with salt production in antiquity which have been reported to Colchester Museum. It is hoped this evidence will contribute to the renewal of interest in salt production and the Red Hills of prehistoric and Roman Essex fostered by the important survey of the Colchester Archaeological Group (Fawn *et al.* 1990). The numbers given to Red Hills in the text are those of the Colchester Archaeological Group publication.

Burnham-on-Crouch

Late Pre-Roman Iron Age Pottery and Briquetage

Discovery: two groups of late pre-Roman Iron Age (LPRIA) pottery were found at Burnham in the garden of Maple Lodge by M. Wingfield Grogan. The house is centred on TQ 9475 9672, about 15 m above O.D. on level ground where the geology is sand with gravel. In the spring of 1991 the larger of the two groups was retrieved from a hole left by the removal of a tree at the rear of the house. All the pottery was said to have been found in a confined space; briquetage was also present. In the following January a smaller assemblage of pottery and briquetage was found when a narrow trench was dug in front of the house to locate the water main. All the material lay in top soil within 50 cm of the surface. No features were apparent when the site was visited by the writer and this group must also be regarded as unstratified. The finds have been retained by the Grogan family.

Description and quantification of the finds: amalgamation of both groups of pottery gives 164 sherds weighing 1985.98 g and representing a minimum of 35 vessels. The mean sherd weight is 12.1 g. Further details are given in Table 1.

Table 1 Quantification of the 1991 and 1992. Finds at Burnham (weights are in grammes).

	pre-Belgic pottery	Belgic pottery	Briquetage
1991 sherd counts	13	125	20
1991 sherd weight	82.87	1703.92	421.38
1992 sherd counts	3	24	8
1992 sherd weight	27.27	171.92	249.83

Pre-Belgic Pottery

Sixteen sherds representing seven handmade vessels earlier than the main body of the pottery were identified. The mean sherd weight is 6.8 g.

1. A rim in a red fabric (Munsell 10R 5/8) with a light brown (5YR 6/3) wiped surface with flecks of mica. The fabric is fine with sparse poorly-sorted grey and brown quartz grains up to 1 mm across (Fig. 1 no.1). A more specific assessment than later prehistoric and pre-Belgic is not possible.
2. A rim in a fine dark grey (N3) fabric with angular quartz grains up to 1 mm across and sparse red grog (Fig. 1 no.2). Again a more specific assessment than later prehistoric and pre-Belgic is not possible.
3. A base from a foot-ring bowl in a dark grey (10YR

3/1) fabric with a dark brown (5YR 5/4) core. The temper is sparse crushed burnt flint up to 1.5 mm across; poorly-sorted rounded white, grey, red and brown quartz grains up to 1 mm across are more common (Fig. 1 no.3). Foot-rings first appear in Essex along with the pedestal bases inspired by continental pottery of 6th-century BC date and onwards (Barrett 1978,286-7). In flint-tempered fabrics, they last until *c.* 50-25 BC (Drury 1978,54-6 form 13).

4. A body sherd (not illustrated) in a mottled dark brown (2.5YR 5/6) and black fabric with a black core. The temper is fine sand. On the exterior surface is combing reminiscent of a rim from Lofts Farm assigned to the early Neolithic Mildenhall style (Brown 1988, fig. 14 no.5,269).
5. A base and body sherds (not illustrated) in a dark grey (5YR 4/1) fabric with crushed burnt flint and some sand and angular quartz grains. The flint temper is well-sorted and typically 1 mm across. The diameter of the base is 10 cm and the pot could be explained by middle pre-Roman Iron Age (MPRIA) vessels in similar fabrics with flat bases from Little Waltham (Drury 1978, fig. 37 nos F4,F8 and F9, fig. 38 no.F11).
6. A body sherd (not illustrated) in a mottled red (10R 5/6) and brown (10R 5/4) fabric with a black core and sparse quartz grains and some red and light brown grog up to 1 mm across. The exterior surface has vegetable impressions and recalls the MPRIA Fabric G from Little Waltham (*op. cit.*,58).
7. Body sherds (not illustrated) in a fine dark brown (5YR 5/3) fabric with a black core. The temper is sparse rounded and angular white quartz grains extending up to 1.5 mm across, with some black and red grog. Mica is present on the surface.

The Belgic Pottery

The bulk of the pottery found at Burnham is Belgic i.e. wheel-thrown and grog-tempered ware of LPRIA date. Only a composite description of the Belgic fabrics present is given here. Surfaces range from light brown (5YR 6/4) through grey (10R 4/10) to dark grey (N3). Some larger vessels have red (10R 5/6) patches on the surfaces. Flecks of mica are present on many of the exterior surfaces. The cores of vessels are light grey (10R 5/1). Angular black grog is the standard temper but some is brown or red and can take the form of large rounded pellets. Some fabrics include quartz grains or fine sand.

A selection of the vessels present is illustrated: storage jars, lids, and a range of bowl and jar forms are present (Fig. 1 nos 4-22). The presence of four lids (nos 19-22) in a small assemblage such as this is noteworthy.

The mean sherd weight of the Belgic pottery is 12.5 g.

Briquetage

The largest fragment weighs 215.8 g and is the rim of an evaporation vessel (Fig. 2). Its fabric is hard and red (10R 5/8) with no inclusions apparent to the naked eye, other than sparse flecks of mica. Surfaces are light red (10R 6/8) and have an uneven finish. Vegetable tempering is conspicuous with many such impressions on the surface. The use of vegetable tempering in briquetage (as well as the voids in the fabric) enhanced the resistance of the finished product to thermal shock caused by sudden heating or cooling (Morris 1985, 343-4). It is apparent that the vegetable tempering was added with this end in mind because it is also present in LPRIA coin moulds (Freestone 1980,129) and in Roman crucibles (Bayley and Budd 1992,194,196). The outer edge of the more or less flat rim juts up to provide seating for a lid. A fingerprint survives on the inside where the rim was pinched to create this feature. Below the thickened rim the wall is 3 cm thick, more robust than the norm, although walls even 4 cm wide are known (Fawn *et al.* 1990,11). The wall slopes inwards towards the base, an arrangement that would have made it easier to scoop salt out of the vessel (*op. cit.*,20).

The remaining pieces of briquetage have much the same fabric, although vegetable tempering is less in evidence and the surfaces are smoother. Some fragments have rounded edges and are the corners of evaporation tanks; one of the smaller pieces is illustrated (Fig. 3 no.1). Another has an oval aperture which might be explained by the wickerwork impressions sometimes found on the bases of vessels (Fawn *et al.* 1990,11-12). A piece with a sharp edge could be a rim or a corner. Some of the other pieces are more difficult to relate to specific categories of briquetage. One is illustrated (Fig. 3 no.2). Another lump has a vitrified surface where it had been exposed to high temperature. Briquetage from at least three vessels is represented by the assemblage.

Discussion: the discovery at Maple Lodge is not the first Belgic pottery from Burnham. In 1931 several vessels were found 425 m south-east of the findspot in a gravel pit at Hill Farm. The pottery was 1st century AD and included *terra nigra* as well as local versions of other imported Roman wares. Sherds of Belgic pottery from graves were found 250 m east of Maple Lodge in 1936 (Hull 1937,14; Hawkes and Hull 1947,240,248,257-8 form 204, pl. 57 no.115a, pl. 63 no.165; Hull 1963, 61; Thompson 1982,650-2). The area is now covered by housing and an opportunity to elucidate the character of Iron Age activity there may have been lost.

Drury (1978,131,133) showed that Belgic pottery first appeared in Essex *c.* 50-25 BC (at least at Little Waltham). It remained current until the Roman invasion, but within a few generations of AD 43 it had lost its identity in the general stream of Roman coarse pottery. Dating a given assemblage within that period

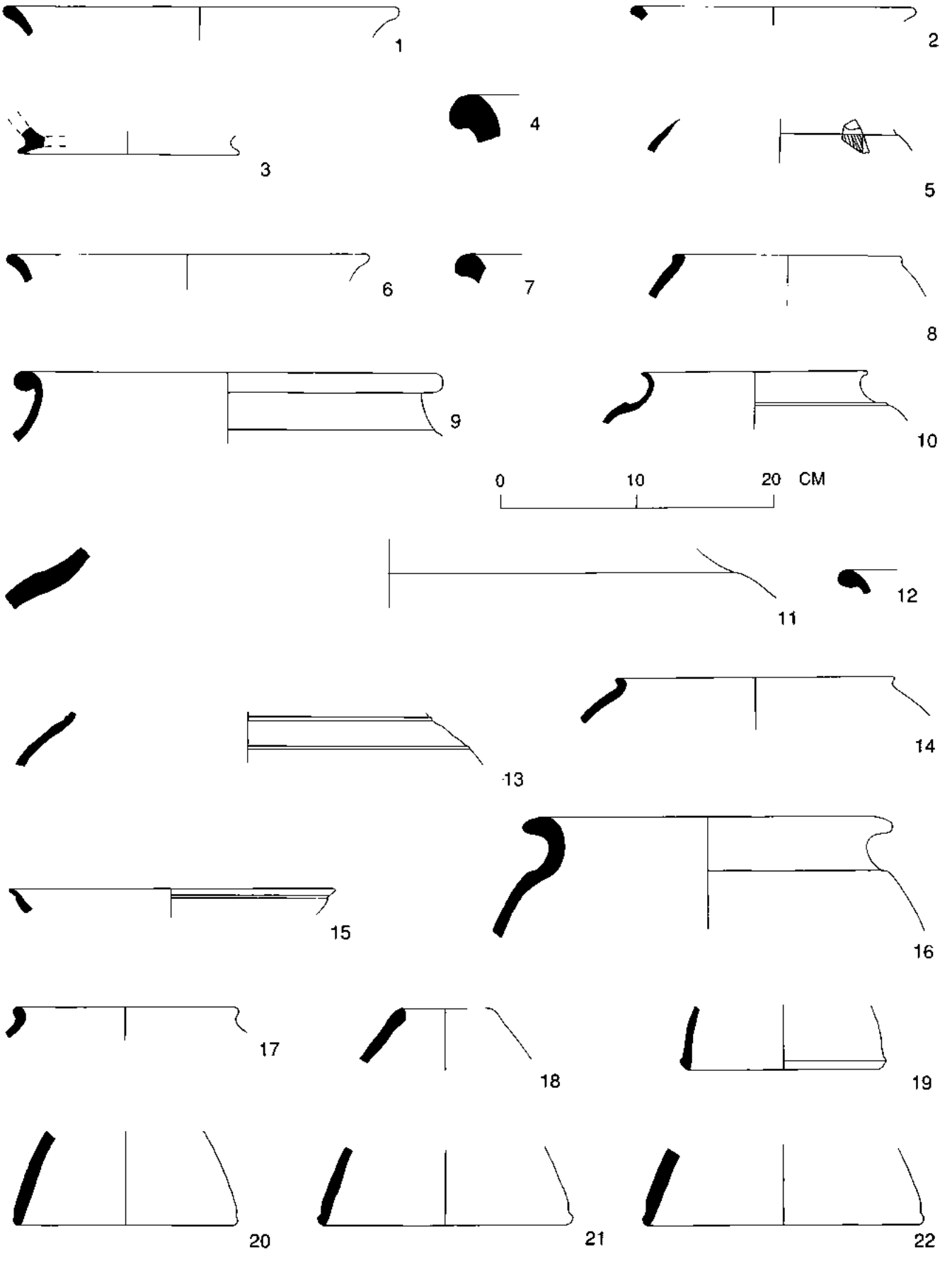

Fig. 1 Pottery from Burnham-on-Crouch. Nos 1-3, pre-Belgic; 4-22, Belgic.

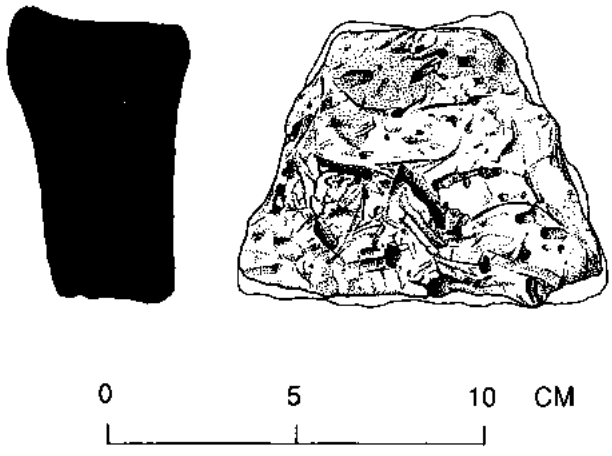

Fig. 2 Rim of briquetage vessel from Burnham-on-Crouch.

is difficult because there are few forms that had a comparatively short lifespan. The most significant vessel at Burnham is *Cam.* 258 (Fig. 1 no.5), an Essex and east Kent form that did not appear until the 1st century AD (Thompson 1982,238-43 type C4). The mean sherd weight of the pre-Belgic pottery is only half that of the Belgic ware — suggesting it is residual — and the group as a whole may be dated *c.* AD 1-50.

The briquetage discovered with the Belgic pottery adds to the interest of the find. Although Maple Lodge is only 1 km from the *modern* coast, it is too high above O.D. to have been the site of a Red Hill. Such mounds are uncommon along the northern bank of the Crouch estuary: the nearest is the undated Red Hill 225, at White House, 1.5 km to the south-east (Fawn *et al.* 1990,62).

In other counties, finds of briquetage remote from the coast are simply treated as relics of the containers in which salt was distributed (Poole 1991b) but in Essex such finds are less easily explained.

Most inland finds of briquetage in the county are fragments of vessels (Hull 1963,30). On the coast their main function was to serve as a receptacle in which brine was evaporated, and there are examples with discoloured internal bands below the rim caused by the process (de Brisay 1978,48, fig. 12; Rodwell 1979, 160). Some vessels may also have been used for the final drying of the salt. The same vessel was not used for both processes in one operation because unless salt crystals are extracted from the boiling solution in the evaporation pan for final drying elsewhere, they become contaminated with unpleasant impurities in the sea water (Fawn *et al.* 1990,20). If the final drying of salt took place in vessels, there is no reason why *some* should not have reached inland sites packed with the dried salt. Misgivings about their fragility overlook the ability of ancient trade to move large and delicate pottery containers over long distances, even filled with heavy contents — as with Roman pottery amphoras (*pace* Barford 1990,79). Nor should it be forgotten that the Iron Age salt industries of Cheshire and Worcestershire traded salt in briquetage jars (Morris 1985; Rees 1986), but it is clear that our vessels were not the regular containers for Essex coastal salt because the quantities found on the Red Hills themselves greatly outnumber inland finds. Most salt was presumably distributed in perishable containers such as sacks and basketry, or in pottery jars.

The most popular explanation for inland finds of briquetage is that it was put out as salt licks for cattle or sheep grazing on pastures deficient in the minerals needed for healthy livestock (Rodwell 1984,35; Thompson and Barford 1987,170; Barford 1990,79 endorsed by Stead and Rigby 1989,52). Much is made of the absence of briquetage from inside

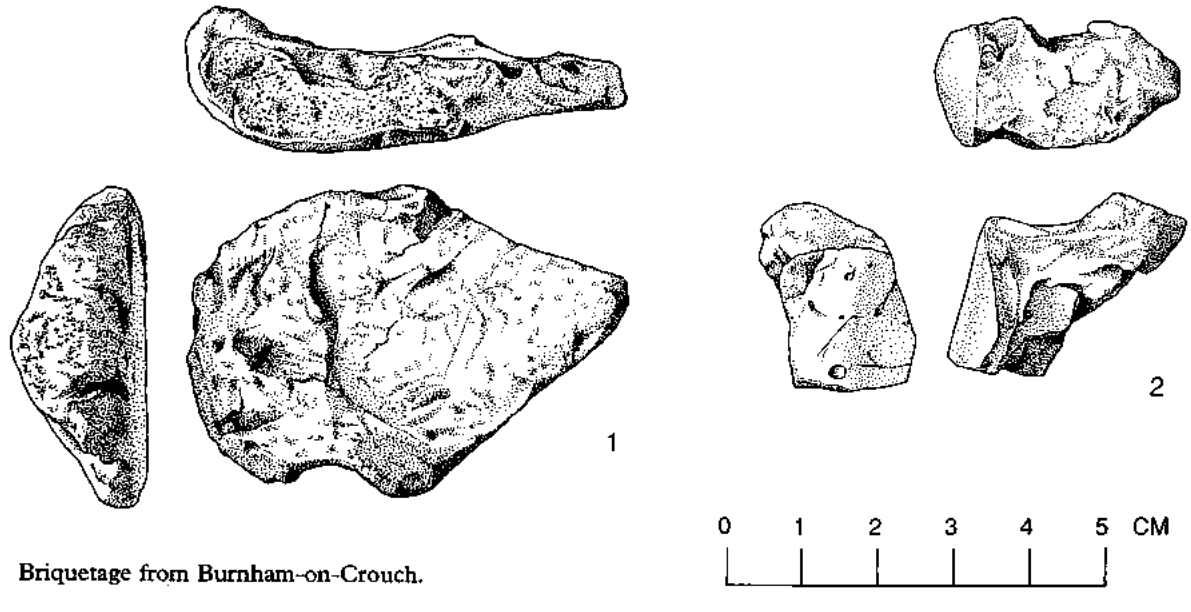

Fig. 3 Briquetage from Burnham-on-Crouch.

the walls of Roman Colchester (Reader 1908,201; Barford 1990,79) and a contrast has been drawn with more rural sites, although should it ever turn up inside the *colonia*, it could — on this view — be explained by environmental evidence that shows some cattle were kept inside the town walls (Murphy 1992, 283).

There are serious difficulties with the salt-lick theory. The first solids to dissolve out in the evaporation vessel would have been substances akin to those that cause hardness in domestic water. Such pan scale is insoluble (Fawn *et al.* 1990,19-20) and it is mistaken to think that briquetage vessels could somehow have become impregnated with salt for livestock to lick. Inland briquetage finds include firebars and pedestals, and it is difficult to see how such ancillary equipment could have become saturated with salt. Bearing in mind the scale of the salt-extraction industry on the Essex coast, it is hard to believe that salt would have been unavailable as licks for livestock, making it unnecessary to transport vessel fragments inland (even if they had been a source of salt). Moreover the character of the sites where briquetage is found inland are not as agrarian as might be supposed. At Grays (for instance), briquetage has been found associated with kiln wasters, and it is improbable that livestock would have been allowed to browse in the immediate vicinity of sites with fragile material of the kind found at a Roman pottery (Rodwell 1984,33-4); the temple at Chelmsford also seems an incongruous setting for livestock (Wickenden 1992,134). Briquetage is usually found with all manner of *domestic* refuse, rather than exclusively in the ditches of field systems where livestock grazed.

The number of inland sites where briquetage has been reported is steadily growing (see the appendix) and their diversity is striking. What links the phenomenon is the modest quantities recovered: we are moving towards a situation where LPRIA and early Roman sites with briquetage are not uncommon but where little is actually recovered from any one site.

Briquetage has now been retrieved from contexts where associated evidence provides hints at a possible solution. At Ardale School it was found with burnt flints and pottery in the gully of a MPRIA round house (Barford 1988). At the Chelmsford temple site, the briquetage came from a zone with features rich in charcoal. Coupled with finds of pedestals, firebars and pinch-props, the evidence of inland briquetage suggests a process involving combustion requiring much the same equipment as that found on the Red Hills themselves. It is unconvincing to see this as somehow part of the salt-extraction process itself (*pace op. cit.*,98) or as the final refining of the product (*pace* Eddy and Turner 1982,26). What we are dealing with may in fact be much simpler, nothing more than the drying of salt that became damp inadvertently after production and transport inland. Activity on the Red Hills must have been seasonal and the briquetage equipment used to dry salt inland may have reached there with the return of the salt-workers to their homes in the autumn, perhaps providing a hint as to the location of the communities that had interests in the salt marshes (Rodwell 1988,81-2).

The need to account for the presence of briquetage on inland sites has distracted attention from the chronological value of such finds. Nor does it help to castigate earlier archaeologists for overlooking this material on inland sites (Rodwell 1979,160). The fact is that the fired-clay found inland — such as loom weights and burnt daub — can be indistinguishable from briquetage if there are no diagnostic morphological features present. Excavation of Red Hills has seldom produced satisfactory evidence for the close dating of salt production and the dearth of recent fieldwork on such sites anyway has made the data from inland sites all the more important. A more determined and positive evaluation of inland briquetage finds could make a significant contribution to our understanding of the chronology of the industry. As none of the red earth deposits that have been explored has produced evidence of activity before the appearance of Belgic pottery, and fieldwork has not yet located Iron Age salt production sites of pre-Belgic date, inland finds of briquetage in pre-Belgic contexts remain our only evidence for salt production in the Iron Age before the emergence of the Red Hill process (Drury and Rodwell 1973,93; Barford 1990,82). It only remains to be pointed out that the Burnham assemblage amplifies the evidence for assigning the *floruit* of salt extraction to the 1st century AD (Jefferies and Barford 1990; Fawn *et al.* 1990,37-9,45-6).

Great Wigborough

Iron Age loom weights and Roman coin from Red Hill 147
Discovery: in October 1906 a Red Hill at Wigborough was dug for rabbits. Briquetage, loom weights, pottery and a Roman coin were discovered. They were acquired by Colchester Museum through the good offices of H. Laver (accession number 1906.1187). In the accession register the provenance of the Red Hill is simply given as Rabbit Hill at Abbot's Hall, Wigborough. The parish was Great Wigborough (now amalgamated with Little Wigborough) and the Red Hill will be number 147 in the Colchester Archaeological Group survey (Fawn *et al.* 1990, map 3,59) because only one is known for the stretch of coast from Marsh Farm at Salcott, east to Marsh Barn.

Description: the four loom weight fragments from the hill represent four different weights. With the exception noted below, the perforations are all straight and wide; two of the weights fractured along these perforations.

1. The fabric is black with fine sand beneath a grey-brown (10R 5/2) surface with abundant vegetable impressions. Weight: 1.035 k. Its surviving perforation narrows internally and may well be blocked with detritus (Fig. 4 no.1).
2. The fabric is red (10R 5/8). There are moderate quantities of angular and rounded grey, white and brown inclusions up to 2.5 mm across. Two rounded pebbles some 12 mm long are present. Weight: 506.4 g (Fig. 4 no.2).
3. The fabric is grey (10R 5/1) with some vegetable impressions on the surface. Fine sand is present and sparse inclusions of red and light brown grog up to 1 mm across. Weight: 309.2 g (Fig. 4 no.3).
4. The fabric is red (10R 5/6) below a grey (5YR 6/2) surface. There are vegetable impressions both on the surface and within the loom weight. The fabric is fine with sparse sand grains up to 0.5 mm across. A rounded pebble some 11 mm long is present. Weight: 214.6 g (Fig. 4 no.4).

The coin from the hill has been identified by M.J. Winter as a *follis* of Galerius (*pace* Fawn *et al.* 1990,59, where it is said to be Gallienus). He tells me it is a product of the Trier mint issued in AD 307 (R. I. C. vol.6 no.697). Written on the original envelope is the

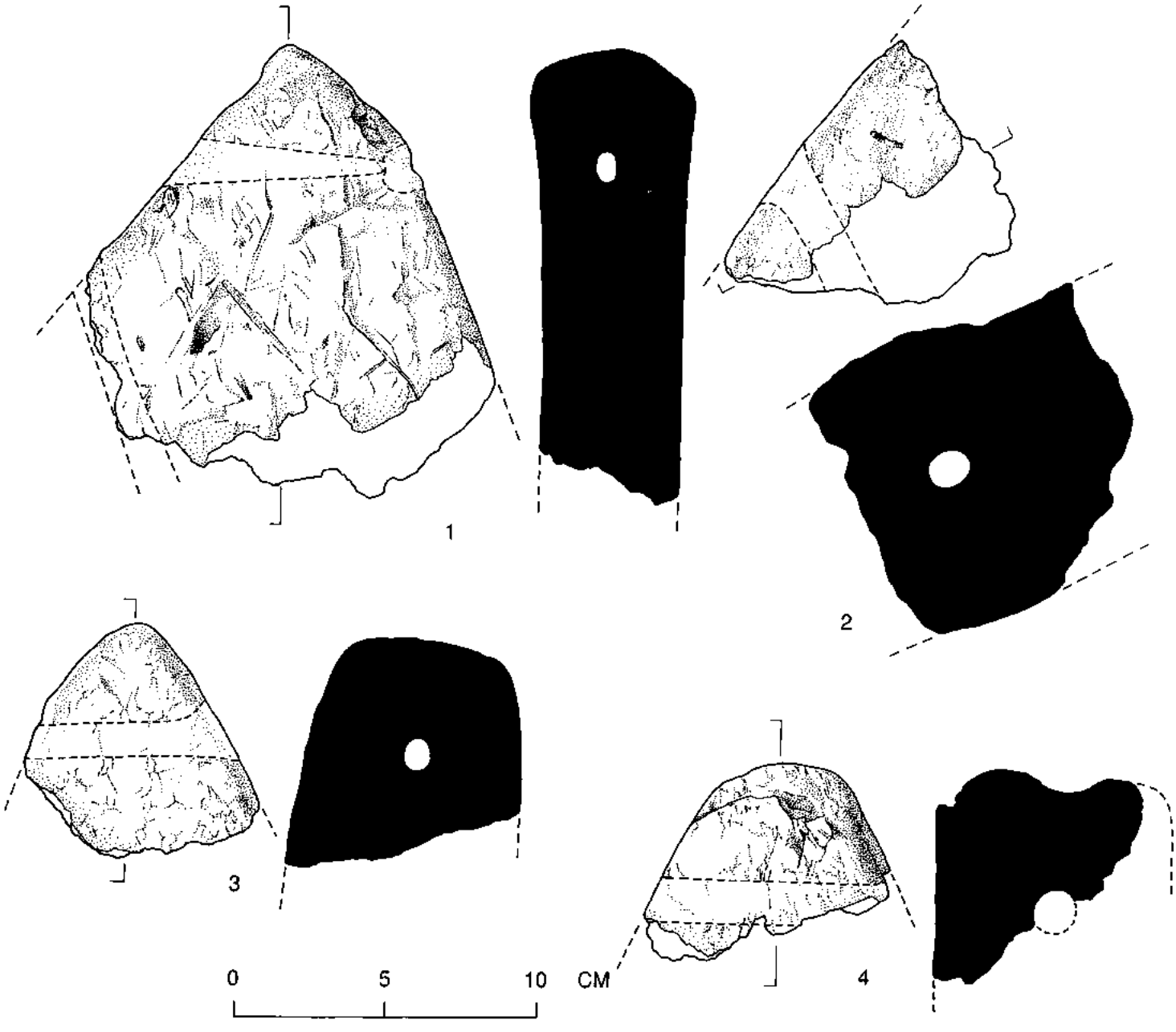

Fig. 4 Triangular Iron Age loom weights from Red Hill 147 at Wigborough.

information that the coin was found on 9th October 1906 at the bottom of the hill when it was dug for rabbits.

Discussion: triangular fired-clay loom weights with perforations through the corners were common throughout the Iron Age, but went out of use shortly after the Roman invasion. There is no perceptible development in shape or size with time, and so the Wigborough examples can be no more closely dated than other specimens.

Reservations about the identification as loom weights are still sometimes expressed, most recently by Poole (1991a,380), who regards many of the perforations as being too small for taking woollen thread and who felt that the regular association at Danebury (Hampshire) with oven daub suggested a role in hearth furniture. It is interesting to note that their presence there, in seemingly ritual contexts on the floors of pits with other fired-clay artefacts, confirms the feeling that the Burnham-on-Crouch deposit was also ceremonial, rather than a mundane rubbish deposit (Couchman 1979,75, fig. 15). The loom weight identification is strengthened by multiple finds such as ours from Wigborough, as well as another Essex site, Moor Hall Farm at Rainham (Greenwood 1982,191; Merriman 1990,45 for photograph). Further afield there is the multiple find from Maiden Castle (Dorset) (Wheeler 1943,294)

The Iron Age loom weights from Red Hill 147 represent an addition to the county list compiled by Major (1983). Although the same level of research has not been carried out in neighbouring counties, it would appear they are more common in Essex than in East Anglia (Wymer 1986,292-3). The distribution map compiled by Major (1983, fig. 7) shows an uneven spread across the county: there is a concentration in the Orsett region at the south, with many of the remainder lying on or near the coast as well, or at the heads of estuaries. The Wigborough — and indeed the Rainham — weights are new finds that reinforce this picture. Just such a distribution is also reflected in Bronze Age loom weights (Barford and Major 1992,118). It would seem that this distribution is not simply indicative of where archaeological investigation has been undertaken. It need not be a coincidence that fired-clay with a plain weave textile impression claimed as Bronze Age has been reported from Shoebury, another site close to the coast (Laver 1910; Henshall 1950,133,159). Most of the loom weight findspots are within easy reach of coastal grazing and (as Barford and Major explain) there is a real possibility that the distribution signals regions of the county where sheep management and textile production were of particular significance. One notes that distribution maps of Bronze and Iron Age loom weights have an uncanny affinity with the location of sheep pasture as reported in the Domesday survey (Darby 1971, fig. 63). No wonder it was suggested that the LPRIA field boundaries at Mucking (a site prolific in triangular loom weights) were connected with sheep farming (Jones and Jones 1975,141-3,145-6).

Otherwise little is known of Red Hill 147. Its eight pottery sherds are described as Belgic and Roman (Fawn *et al.* 1990,59; Jefferies and Barford 1990,77). Occupation of the site before the formation of red earth deposits in the LPRIA could explain the loom weights. The coin of Galerius suggests a renewal of interest in the hill in late antiquity, a phenomenon that may be accounted for by the attractions of such mounds for the sheep sustained by the Essex coastal marshes (see below). The discovery of the coin at the *base* of the mound raises no difficulties because the lighter soil of the Red Hills attracted rabbits (Anonymous 1904, 244) and their burrows have damaged the stratigraphy and dislocated finds.

Langenhoe

Finds from Red Hill 78

Discovery: two of the Iron Age coins (Mack 246 and 250) reported here were found by an anonymous metal detector *c.* 1988. The rest of the material was discovered by M.R. Vosper when he undertook a metal detector search of the Red Hill centred on TM 029 167. With the exception of the fourth Iron Age coin (Mack 260), which was found in September 1992, the finds were made in October and November 1991. At present the field is under grain, and plough action in an east-west direction has dislodged red earth and finds from the hill. In 1991 a trench dug by the farmer 100 m south of the Red Hill in a corner of the field produced "thousands of oyster shells" in a crushed and fragmentary state. The Red Hill itself lies on the London Clay near its junction with the coastal alluvium. The site was first reported by Reader (1908, fig.1,174), who designated it Langenhoe V.
M.R. Vosper has retained the finds.

Description and Quantification of the Finds: the Langenhoe finds are described in chronological order.

Late Bronze Age/Early pre-Roman Iron Age Pottery

Six sherds weighing 117.63 g and representing a minimum of four vessels are present. The mean sherd weight is 19.6 g. The fabric is tempered with ill-sorted inclusions of crushed burnt flint up to 3 mm across, with some sand. Typically these handmade coarse ware vessels range from black through to shades of light brown (5YR 6/3 and 5YR 6/6). An unillustrated body sherd has vertical wipe marks; another has a protruding base (Fig. 5 no.1), formed when the wall and base were joined. Both features are typical of LBA pottery (Brown 1988,269-70) but are also found on some EPRIA vessels. Another vessel is apparently represented by a lid (an anomaly for the period) in a

light red (10R 6/8) fabric (Fig. 5 no.2). A flint-tempered lid from Heybridge has been tentatively assigned to the EPRIA Darmsden-Linton pottery style (Brown 1987, fig. 15 no.21).

Briquetage

N.R. Brown suggests briquetage is represented by part of the junction of the base and wall from a circular pan, with a base diameter of 20 cm and a wall 11 mm thick. The base juts out beyond the wall to give a frilled finish (Fig. 5 no.3). The hard and fine fabric is light red (10R 6/8) with abundant traces of vegetable tempering; vegetable impressions are also present on the exterior. The fabric has the internal voids or air pockets typical of briquetage. On the exterior wall are occasional grains of crushed burnt flint 1 mm across and soft white circular inclusions (shell or chalk ?) up to 2 mm across. Parts of the surface (including fractures) have the grey (5YR 7/1) skin sometimes found on briquetage and which is said to have been caused by salt (Drury and Rodwell 1973,74 no.26; Rodwell 1988,81).

Pans similar to those from Langenhoe are more common in the south of the county (Rodwell 1966, 23, fig. 8 nos 33-4; 1979,147-9). A close parallel is provided by a base at Gun Hill, from a ditch said to have produced LBA and EPRIA pottery (Drury and Rodwell 1973, fig. 13 no.26,74,104). Circular pans from north-east Essex are usually larger (Fawn *et al.* 1990,11).

Late Pre-Roman Iron Age Pottery

Nine sherds of Belgic pottery weighing 115.55 g and representing a minimum of six vessels are present. The

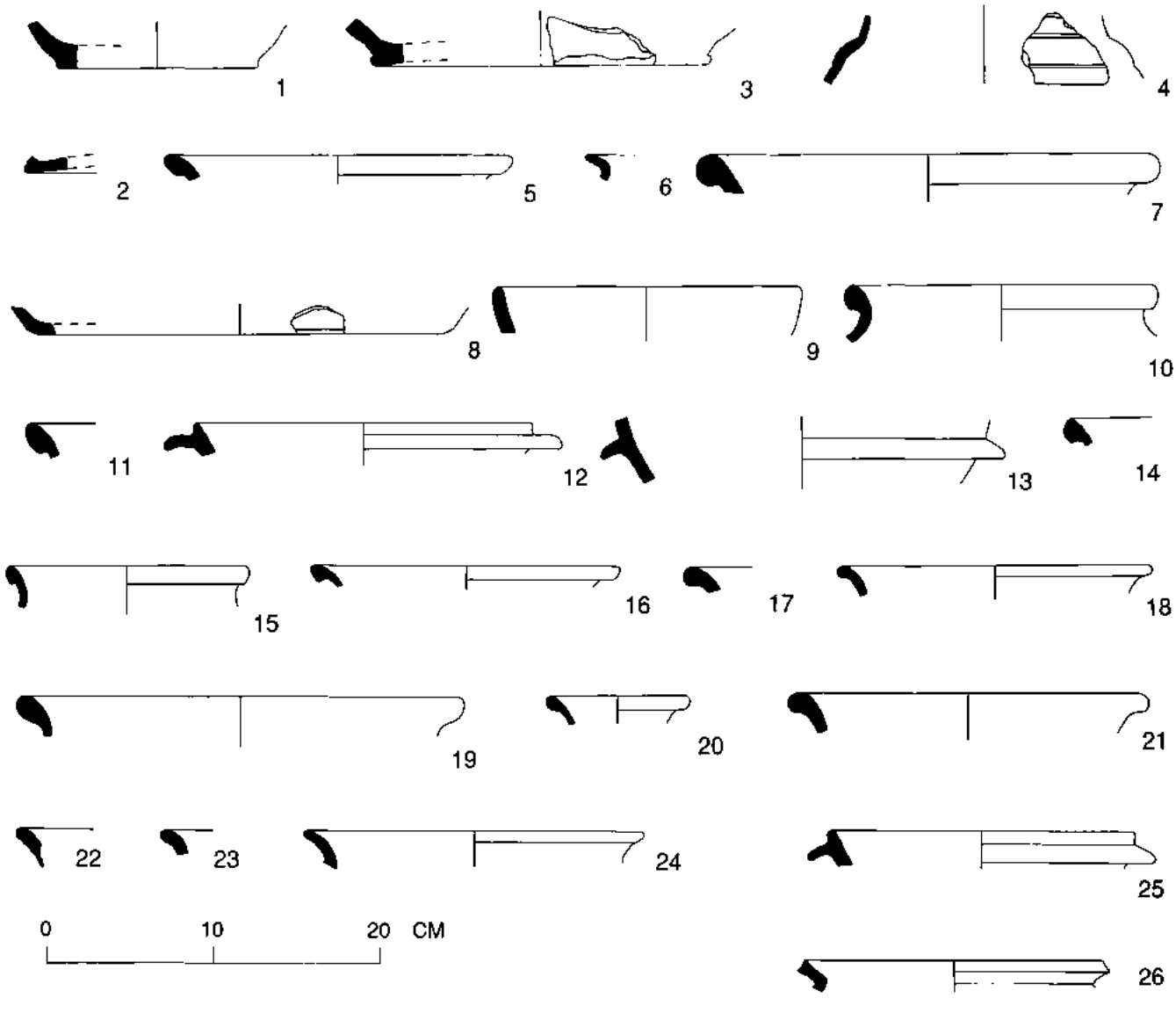

Fig. 5 Pottery and briquetage from Red Hill 78 at Langenhoe. Nos 1-2, LBA/EPRIA pottery; 3, LPRIA briquetage pan; 4-5, Belgic pottery; 6-25, Roman pottery; 26, Roman or medieval.

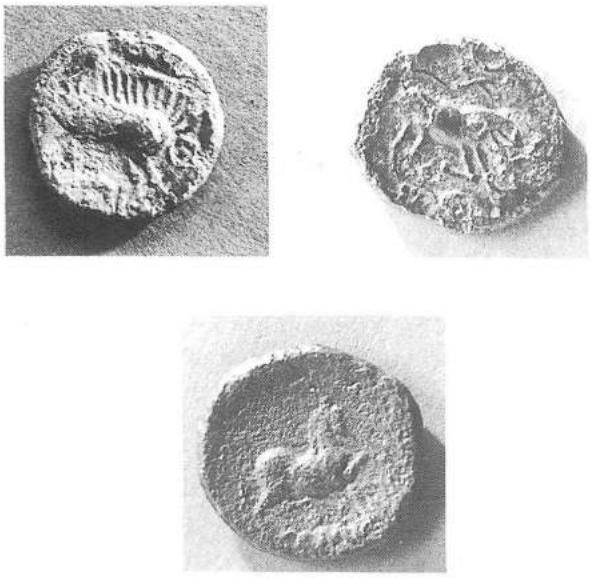

Plate 1 Bronze coins of Cunobelinus from Red Hill 78 at Langenhoe. Top left: reverse of Mack 223; top right: reverse of Mack 246; bottom: reverse of Mack 250. Scale: enlarged x 2.

mean sherd weight is 12.8 g. The illustrated vessels are a cordoned jar and a rim (Fig. 5 nos 4-5). A storage jar is represented by an unillustrated wall sherd.

Iron Age Coins

1. AE. Mack 223 (Mack 1975,88 no.223, pl. 14) = van Arsdell 1963-1 (van Arsdell 1989,403 no.1963-1, pl. 50). Weight 1.18 g. Diameter 13 mm. Obverse: corroded beyond recognition, save for a suggestion of the nose of the portrait. Reverse: boar to left with an exaggerated crest and a pellet-in-ring at the hind-quarters. Reverse legend: CVN. Condition: corroded (Pl.1 top left for reverse).
2. AE. Mack 246 (Mack 1975,91 no.246, pl. 15) = van Arsdell 2095-1 (van Arsdell 1989,422 no.2095-1, pl. 54). Weight 1.30 g. Diameter 15 mm. Obverse: corroded and pitted beyond recognition. Reverse: butting bull to right. Reverse legend: only TA survives here of the TASC on other specimens. Condition: corroded (Pl. 1 top right for reverse).
3. AE. Mack 250 (Mack 1975,92 no.250, pl. 15) = van Arsdell 2101-1 (van Arsdell 1989,423-4 no.2101-1, pl. 54). Weight 2.25 g. Diameter 16 mm. Obverse: corroded beyond recognition. Reverse: prancing horse to right. Reverse legend: CAMV. Condition: corroded (Pl. 1 bottom for reverse).
4. AE. Mack 260 (Mack 1975,94 no.260,pl.16) = van Arsdell 2109-1 (van Arsdell 1989,425-6 no.2109-1, pl. 54). Weight 1.53 g. Diameter 14 mm. Obverse: crouching sphinx to right. Obverse legend: CVNO on the exergual line. Reverse: corroded beyond recognition. Condition: corroded.

All four coins are issues of Cunobelinus. Allen (1944,45) proposed *c.* AD 10 for his accession and it is important to remember that this is an *estimate* (Fitzpatrick 1986,36). The terminal date of the coinage is more securely based because the documentary evidence shows that Cunobelinus was active in AD 39/40 but that he was dead by AD 43 (Suetonius *Gaius* 44.2; Orosius *Historiae adversum Paganos* 7.5; Cassius Dio 60.20.1).The chronological sequence Allen proposed for the bronze coins (on the basis of the Harlow temple finds), has been developed by Fitzpatrick and it emerges that our no.1 is early and the other three are late (Allen 1965,3; Fitzpatrick 1985,51-2,55-6,60).

Brooches

1. The bow of a copper-alloy *Cam.* Type III brooch. Length 53 mm. Weight 6.89 g (Fig. 6 no.1). It has a circular section and there is a hook at the head to secure the external chord. The piece is bent and corroded; little of the original surface survives. *Cam.* Type III brooches include the Colchester brooch as well as its continental prototypes. The Langenhoe bow could have come from either a Colchester or a Simple Gallic type with rod bow form (one of the prototypes). The latter was current from *c.* 25 BC and the Colchester brooch had developed by the start of the 1st century AD. The Colchester type was one of the most popular brooches in south-eastern Britain, enjoying a *floruit* that lasted until Nero. Simple Gallic brooches also remained in vogue in the 1st century AD (Hawkes and Hull 1947,308-10 Type III; Olivier 1988,40; Stead and Rigby 1989,101).
2. The bow and side-wings of a copper-alloy Colchester derivative brooch. Length 24 mm; width

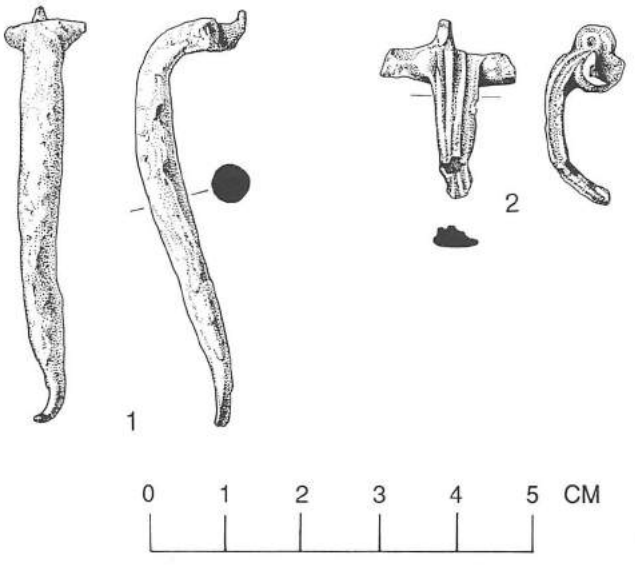

Fig. 6 Brooches from Red Hill 78 at Langenhoe. No.1, Cam. Type III; No.2, Colchester derivative Type B.

18 mm. Weight 2.74 g (Fig. 6 no.2). The underside of the bow is flat; the upper face has a central crest with flanking cavetto mouldings. Both side-wings are semi-cylindrical. At the head are two lugs whose perforations are obscured by corrosion. Parts of the edges have been completely removed by corrosion and the end of the bow is bent. Brooches of this size should be regarded as miniatures. Colchester derivatives developed from the true Colchester brooch and have been divided into two main categories. Ours is type B which has cavetto mouldings on the bow and was current *c.* AD 50-70 (Crummy 1983, 12 Type 92/Colchester B; Hawkes and Hull 1947, 310-11 Type IV; Olivier 1988,45-6).

Roman Pottery
by C.J. Going

The Roman pottery was quantified by P.R. Sealey. It consists of 52 small and abraded sherds weighing 572.45 g and representing a minimum of 25 vessels. Nineteen of the sherds are rims. The mean sherd weight is 11 g. Further details are given in Tables 2-3.

Table 2 Fabric Analysis of the Roman Pottery by Sherd Count.

fabric	sherd count
Sandy Grey Ware	47
Black Burnished 1	3
Mayen Ware	1
Nene Valley (?) Colour Coated Ware	1

Table 3 Analysis of the Roman Pottery by Minimum Vessel Count.

fabric	vessel count
Sandy Grey Wares	21
Black Burnished 1	2
Mayen Ware	1
Nene Valley (?) Colour Coated Ware	1

The Illustrated Pottery

Form citations are to Going (1987,13-54), unless specified otherwise.

Sandy Grey Wares

Fig. 5 no.6 Going type G9 2, dated *c.* 125/30-160/70.

Fig. 5 no.7 Going type G22 1, dated late 1st (?) to 3rd century.

Fig. 5 no.8 A base sherd of Going type B2 1, dated mid 2nd to early/mid 3rd century.

Fig. 5 no.9 Going type B1 3, dated *c.* 125/30 to 4th century.

Fig. 5 no.10 *Cam.* 268a, dated 2nd to 4th century (Hull 1958, fig. 119,285).

Fig. 5 no.11 *Cam.* 268b (*op cit.*, fig. 119,285) = Going type G25 1, dated 2nd century to *c.* 325/50.

Fig. 5 no.12 Going type B6, dated *c.* 260/80 to 4th century.

Fig. 5 no.13 A variant Going type C8, dated 2nd to 4th century.

Fig. 5 nos 14-16 A version of *Cam.* 277a which Hull said "may belong to the period of inhumations", i.e. the 3rd/4th centuries (*ibid.*, fig. 119,285).

The remaining illustrated sandy grey ware sherds are not amenable to close chronological diagnosis (Fig. 5 nos 17-23).

Black Burnished 1

Fig. 5 no.24 A mid 2nd to early 3rd century jar (Gillam 1976, fig. 1 nos 3 and 6,63).

Fig. 5 no.25 A late 3rd to mid 4th century flanged bowl (*op. cit.*, fig. 4 nos 46-9,72).

The Unillustrated Pottery

1. A Mayen ware body sherd 8 mm thick with a stepped interior wall comes from one of the more robust bowls or dishes illustrated by Fulford and Bird (1975, fig. 1 nos 6-7,9-10). Mayen ware was exported to Britain from the early 3rd century AD (Richardson 1986,109), with most examples coming from 4th century contexts. Its presence on a Red Hill adds a new category of site to those from which it has already been reported. Langenhoe reinforces the Thames estuary bias in the distribution (Fulford and Bird 1975,171,179, fig. 3) and lends weight to the Thames-Rhine axis identified by Fulford (1989,197) in the trade of late Roman Britain.
2. A Nene Valley (?) colour-coated body sherd has a single external horizontal line and might represent the base of a beaker (Howe *et al.* 1981,18, fig. 4 no.42 dated mid 3rd century). At Chelmsford this ware is not present until well into the 3rd century.

The Date of the Roman Pottery

The assemblage contains nothing datable with confidence to the 1st century and little — save for a jar of Going type G9 2 — of the 2nd century AD. Most of the datable material belongs to the mid to late Roman era.

Other Pottery

A rim sherd weighing 7.95 g in sandy grey ware with a rough surface (Fig. 5 no.26) has confounded the experts: C.J. Going suggests it is medieval, but J.P. Cotter is reluctant to endorse this and suggests it is Roman. Although (J.P.C. tells me) the rim form is found in some late Anglo-Saxon wares, the Langenhoe fabric and finish are quite distinct from Thetford-type ware.

Roman Coins

by Martin J. Winter

A total of 31 Roman coins was recovered. They are all corroded and some are fragmentary. On the basis of this evidence (which is too small to allow any statistical analysis), there is nothing to suggest occupation of the site in the 1st and 2nd centuries. The dupondius of Antoninus Pius and the illegible sestertius are both much worn (nos 2 and 26). Activity would appear to have begun about the mid 3rd century and to have come to an end possibly in the last decade of the 4th century AD.

1. Antoninus Pius: rev. illegible.
2-6. Barbarous Radiates: obv. Victorinus x 1; obv. Victorinus, reverse PAX x 1; ; obv. Tetricus, rev. PAX x 1; rev. illegible x 2.
7-8. Carausius: R.I.C. vol.7 101 x 1; rev. PAX x 1.
9. Allectus: rev. VIRTUS AUG x 1.
10. Constantine I: R.I.C. vol.7 Trier 546.
11-12. Urbs Roma: L.R.B.C. 65 and 190.
13-14. Constantinopolis: L.R.B.C. 185 and 191.
15-18. House of Constantine: rev. illegible x 1; copy of L.R.B.C. 107 x 3.
19. Constans: L.R.B.C. 630.
20-21. Constantius II: L.R.B.C. 189; FEL TEMP REPARATIO x 1.
22. Magnentius: L.R.B.C. 58.
23. Valentinian I: L.R.B.C. 1327.
24. Valens: L.R.B.C. 492.
25. Gratian: rev. GLORIA NOVI SAECULI.
26-31. Illegible Roman: 1/2nd century x 1; 4th century x 5.

Abbreviations

L.R.B.C. Hill, P.V. and Kent, J.P.C. 1960, "Bronze coinage of the house of Constantine, A.D. 324-346". In R.A.G. Carson *et al. Late Roman Bronze Coinage A.D. 324-498*, 4-39. London

R.I.C. Mattingly, H. *et al.* (eds), *The Roman Imperial Coinage* (1923-1981), London

An Interpretation of the Langenhoe Finds: the earliest material is the LBA/EPRIA pottery. Excavations at Lofts Farm have shown that LBA sites could take advantage of damp pasture near the coast: there a farmstead relied on grain brought to the site from elsewhere, and presumably concentrated instead on livestock husbandry (Brown 1988,294-5). Similar activity at Langenhoe would explain the early pottery. The relatively high mean sherd weight suggests the pottery *may* have been in use in the immediate vicinity (Bradley and Fulford 1980,91-2; Bradley *et al.* 1980,249; Brown 1988, fig. 18).

There are at least 17 Red Hills in Langenhoe parish (Fawn *et al.* 1990,56-7), their survival owing not a little to Mersea Island, which has protected them from marine erosion (Eddy and Turner 1982,26). Only three have been excavated. Each produced pottery described by Reader as "late-Celtic". His illustrations show that the ware in question was Belgic (for the most part), with some 1st century BC material from the pit beneath Red Hill 89 (Reader 1908,28-9; Drury 1978,131-3; Rodwell 1979,154; Thompson 1982,754-5; Jefferies and Barford 1990,36). A few sherds from the same hill suggest an overlap with the conquest period (Thompson 1982,755) but there is nothing that need be as late as *c.* AD 70-100 (*pace* Jefferies and Barford 1990,73-4). Although Reader did not excavate Red Hill 78, he said that it was prolific in "the same pottery and briquetage as that in the other mounds explored" (Reader 1908, fig. 1,174). It was presumably therefore in operation in the LPRIA and one may allocate to this phase the Iron Age pottery, brooch and coins. The other (pre-Flavian) brooch hints that salt production did not end until the early Roman period and one may suggest the life of the Red Hill was centred on *c.* AD 10-70.

Haselgrove (1987,355 no.209) raised the possibility that the Iron Age coins from Great Wakering came from a Red Hill, but the nearest hill to the findspot of the potin and bronze coins reported by Allen (1961,204,230) is some 950 m distant (Fawn *et al.* 1990,64 no.263). Nor can a gold stater of Dubnovellaunus (Haselgrove 1989,34), found 3.25 km to the north-west of Red Hill 263, be related to salt extraction. Indeed few Iron Age coins in the county come from salt marsh country (Rodwell 1981,43). The Langenhoe coins are in fact the first of Iron Age date that can be reliably assigned to a Red Hill and they are therefore of some interest and importance.

Coinage was used as a medium of exchange throughout the Roman world, in both town and country (Howgego 1992,16-22) even though this was an incidental and inadvertent outcome of its existence, and not the result of policy by the issuers (Crawford 1970,41-5). Although the function of the gold and silver coins struck by the Celts tended to be confined to social transactions such as ransoms and dowries (Allen 1976), there is a real possibility that their bronze and potin coins eventually assumed a role in exchange comparable to that of low-value coinage in the Roman world. It was suggested to me by P.M. Barford that the presence of four bronze coins on a site like Langenhoe (devoted exclusively to an industrial process) raises the intriguing prospect that they had been used for the purchase of salt there, and that bronze coins had indeed begun to acquire a role in exchange in Britain before the Roman invasion. Their discovery at Langenhoe certainly does nothing to bolster the suggestion made by Bradley (1992,43-4) that salt cakes in LPRIA and Roman Britain could themselves serve as currency.

The other finds from Langenhoe are the 3rd and 4th-century coins and pottery. There is insufficient in

the current Langenhoe material to bridge the gap between the pre-Flavian brooch and this later material: after its abandonment in the early Roman period, the site remained deserted until late antiquity.

Stratigraphical proof of activity on the Red Hills after the cessation of salt production is still only forthcoming from Canvey Island. There Roman pottery overlay burnt earth at Red Hill 273 (Linder 1940,152), and on hill 278, Rodwell (1966,21) demonstrated occupation from the 2nd to 4th centuries, linked with a nearby masonry building. But the demonstration of Roman occupation of the Leigh Beck Red Hills after the end of salt production must await the final excavation report (Fawn *et al.* 1990,71). On the Essex mainland, Reader (1910,76) was confident that his enigmatic flues from Red Hill 176 at Goldhanger were Roman installations post-dating the formation of the hill, but scrutiny of his report does not allow a unanimous endorsement (*op. cit.*,24). It is clear therefore that the Langenhoe finds are important evidence for occupation of a Red Hill after the end of salt production and the *first* evidence for renewed activity on a hill in antiquity after a period of abandonment.

The survey of Red Hills by the Colchester Archaeological Group has established that their operation was in recession by the end of the 1st century AD. This decline continued in the following century and it may be doubted if any hills remained in production much — if at all — after *c.* AD 200 (Jefferies and Barford 1990; Fawn *et al.* 1990,37-9,45-6). The dearth of finds of inland briquetage with late Roman associations confirms this picture (Barford 1990). Finds like Langenhoe suggest that at least some of the later Roman pottery from the Red Hills evaluated by Jefferies and Barford may have had no direct connection with salt production, and this might allow an adjustment downwards of the dates proposed for the termination of salt extraction.

Research by C.R. Wallace (1995) indicates the extent to which late Roman pottery is present on the Red Hills flanking the northern shores of the Blackwater estuary. Pottery of mid 3rd to 4th-century date is known on five hills from the Strood overlooking Mersea Island, to Goldhanger in the west. To this group should be added Red Hill 147 at Great Wigborough which produced the AD 307 coin described above. The Langenhoe finds reported here belong to the same group of sites and represent an eastern extension of the phenomenon first recognised as a result of the Hullbridge Survey Project undertaken by the Essex County Council Archaeology Section (see Table 4). The Oxfordshire red colour-coated ware reported in Table 4 did not reach Essex until *c.* AD 360 (Going 1984,48-9; 1987,3) and it is clear that these seemingly remote and ill-favoured mounds were a focus of activity at a time when parts of even the prestigious walled city of Colchester were becoming derelict (Crummy 1984,19; 1992,18-20,33). It is not immediately obvious what kind of activity can have attracted people to the forgotten mounds of the Red Hills after the end of salt production, or how one is to account for the discrepancy between the fortunes of these hills and that of a *colonia* like Colchester. One wonders too why a farmyard and field system at Rainham — flanked on the south by the Thames marshes — should show an intensification of activity from the late 3rd through until the early 5th century AD (Greenwood 1982,185,193).

Table 4 Red Hills with Late Roman Pottery from the Northern Shores of the Blackwater Estuary.

Red Hill	Pottery	Reference
101	Nene Valley self-coloured ware bowl, and other flanged bowls. 4th century	Hull 1944,22; 1963,152
168	Red colour-coated bowl, resembles Going 1987 form C8. Later 3rd/4th century	Wallace 1995, Blackwater site 11
175	Red-slipped mortarium, resembles Going 1987 form D12.2. *c.* AD 360-400+. 4th century	Wallace 1995, Blackwater site 23
184	Oxfordshire red colour-coated ware. *c.* AD 360 +	de Brisay 1973,29-30 no.22; Jefferies and Barford 1990,76
293	Nene Valley mortarium, Going 1987, form D14.1. *c.* AD 250-350	Wallace 1995, Blackwater site 13

(Data provided by C.R. Wallace)

A solution is suggested by the important part played by sheep on the Essex marshes in the medieval economy: the Domesday survey suggests a sheep population there of as many as 18,000 — with 600 at Langenhoe alone (Round 1903,369-74; Darby 1971, 241-4,257-8; 1977,157-9,164-6; Ward 1987,100-3). Grazing on the damp grassland along the coast was practised because the pastures were able to withstand summer droughts better than those inland. Moreover the salt of the marshes reduced the incidence of footrot and liverfluke among the sheep (Scarfe 1942,452; Applebaum 1972,63). This line of thought invites consideration of their role in the economy of later Roman Britain.

Overseas exports of woollen goods from late Roman Britain are known from their inclusion in the AD 301 price edict issued by Diocletian. The gift of a garment called a *tossia Britannica* from an early 3rd-century governor of Britain to a resident of Gaul gives another glimpse of the trade (Collingwood 1937,106 citing *Edictum de Pretiis* 19.36; Frere 1987,273-4 citing C.I.L. vol.13 no.3162). A panegyric of AD 310 speaks of an "innumerable multitude of gentle beasts... laden with fleeces" on the island (Wild 1970,9 citing *Pan.*

Constantino Aug. 7.9: *pecorum mitium innumerabilis multitudo... onusta velleribus*).

The distribution of iron woolcombs in Roman Britain concentrates in the south-east, from the London region through Essex into East Anglia. Such artefacts indicate the production of quality cloth, as opposed to the standard woollen textiles made throughout the province (Manning 1966; 1972a; Wild 1982,117-9) and so it is in these eastern counties that the flocks behind the texile export trade should be located. It is significant that two of the combs come from the Worlington (Suffolk) hoard, buried in the late 3rd or 4th century, at the very time when textile exports are attested in the documentary sources (Manning 1972b,237 for the date). Subsequent woolcomb finds pointed out to me by C.J. Going include three Essex sites: one comes from a *c.* AD 190-240 feature at Great Dunmow (Wickenden 1988,56 no.14) and the second from a context dated *c.* AD 90-110 at Chelmsford (Wickenden 1992,80-2,133). A third — from Harlow — is unpublished. The massive cropping shears from the 4th-century hoard at Great Chesterford are testimony to the same industry (Hull 1963,84, pl. 9a right; Wild 1970,83-4, pl. 12a; Manning 1972b,235-6). C.J. Going drew my attention to the baling needle from the same site (Manning 1988,15 no.93). It is difficult to avoid the conclusion that the Essex salt marshes supported a large sheep population in late antiquity, not only by analogy with medieval practice but also to complement this artefactual evidence from Essex and neighbouring counties (Dunnett 1975,122).

But it should be borne in mind that not all the coastal and estuarine farmland in the county participated in the late Roman sheep management postulated here: at Mucking, the 4th-century landscape may have had the appearance of *agri deserti* and by the end of the century much of it may have reverted to scrub (Going 1993,21). Similar neglect of the landscape is attested in Goldhanger, at Chigborough Farm, where a field ditch choked with silt was cut by a late Roman grave (Waughman 1989,16-17).

The attractions for the shepherd of the higher and drier land of the abandoned Red Hills were explained by H. Wilmer, who described the sheep of Edwardian Mersea Island taking refuge on these mounds to escape high tides (Reader 1908,189). It had even been suggested this was why the Red Hills were constructed in the first place (Anonymous 1904,244). In his description of Canvey Island, Camden (1610,441) said it was

> *so low, that oftentimes it is quite overflowne, all save hillocks cast up, upon which the sheepe have a place of safe refuge.*

These pockets of higher ground on the island must have been Red Hills (Cole 1887; Linder 1941,49). Cracknell (1959,10) says the perils of spring tides for the large sheep population on the island exercised the minds of shepherds in Anglo-Saxon times as well, but this seems to be a projection backwards of later evidence without independent authority. Perhaps too the dairy sheds mentioned by Camden where the milk for sheep cheeses was collected were sited on the Red Hills. Such livestock management would account for finds of medieval pottery on the Canvey Island Red Hills (Linder 1940,152,160). Nor are these the only Red Hills in Essex with medieval pottery (Jefferies and Barford 1990,74,77-8). Smith (1918,51) also appreciated how Red Hills might have offered sanctuary to livestock threatened by incursions of the sea *after* the end of salt production. Such was the threat of high tides for sheep (Ward 1987,103) that timber or hurdle tracks were constructed to allow their escape to higher ground in the Middle Ages, if not in prehistory as well (Brown 1988,295 citing Wilkinson 1987,31). Among the better preserved of these trackways was the causeway that plied its way across a marsh just inland of the modern coastline at Southchurch (Francis 1930; 1931: K.L. Crowe and N.R. Brown tell me that the associated pottery is medieval).

Reader (1908,180) was impressed by the banks and ditches that surrounded some of the Goldhanger and Langenhoe Red Hills. Stratigraphical evidence shows they were cut after the formation of the mounds (Fawn *et al.* 1990,33) and a late Roman date cannot be precluded. But at least one of the ditches may have been medieval, to judge by the sherd from the ditch cut around Red Hill 70 at Langenhoe (Reader 1908, fig. 7 no.10,193). One could do worse than endorse Smith (1918,51), who suggested these earthworks (whatever their date) may have been connected with livestock management.

One knows that the Red Hills lay near the high tide line in late antiquity because the Holocene Stage V marine regression did not begin until *c.* AD 350 (Wilkinson and Murphy 1986,182-3,190,192). We can now appreciate the attraction of Red Hills for the sheep of late Roman Essex: they were still close enough to the high tide line to serve as refuges when innundations threatened. The part they played in livestock management may have encouraged the construction of the banks and ditches that surrounded some of them. Sporadic finds of late Roman material from the Red Hills can now be understood as relics connected with sheep management that supported a textile industry which attracted the attention of the wider Roman world: this allows us to write a whole new chapter in the agrarian history of the county.

Appendix: Finds of Briquetage from Inland Sites in Essex

This appendix is intended to supplement the data compiled by Rodwell (1979,172) and Barford (1990).

Asheldham Camp: the rim of a vessel was present in trench A context 13, a pit behind the bank of the camp. Its associations included 77 flint-tempered EPRIA sherds, including a rim and lug handle (Bedwin 1991,16-18; Brown 1991, fig. 11 nos 4-5). Flintwork and daub were also present. The vessel is not mentioned in the report and the context 13 finds are published as context 12. N.R. Brown

agrees that this could be briquetage. Present location: Colchester Museum, accession number 1990.92.

Billericay: briquetage came from three contexts on the Secondary School site at this Romano-British small town. It was present in a ditch filled at the start of the Roman period with (mainly) LPRIA material. Briquetage was also associated with late 3rd/4th-century AD Hadham ware in A/112. Another late context was provided by B/86, a 4th century layer that accumulated before *c.* AD 360 in a well (Major 1990,42; Rudling 1990,22,26-7, fig. 8 no.22 for the Hadham ware). Present location: Essex County Council Archaeology Section pending transfer to Chelmsford Museum.

Goldhanger: briquetage has been reported from a Roman field system at Chigborough Farm (Waughman 1989,16). H.J. Major tells me the material includes firebars. Present location: Essex County Council Archaeology Section.

Orsett: a firebar "very much like salting briquetage" was present in ditch F10, which cut the two innermost ditches of this triple-ditched enclosure at the "Cock" site. Associated pottery is LPRIA. It seems reasonable to regard this as briquetage, rather than as kiln furniture connected with Roman pottery manufacture there at a later date (Rodwell 1975,32 no.3; endorsed as briquetage by de Brisay 1978, 42). Present location: Colchester Museum, no accession number.

Rainham: there are sixteen sherds of a briquetage vessel in the innermost ditch of the triple-ditched enclosure at Moor Hall Farm (Greenwood 1982 for the site). The context is RMHF 77/B1 F23; associated pottery is LPRIA. Another fragment of a vessel came from the top of the well fill. The context is RMHF 79/060/821. Present location: Passmore Edwards Museum, accession number ACRA/022. I am most grateful to Dr P.A. Greenwood for making the finds available for study in advance of their publication.

Woodham Walter: to the published briquetage from the site (Rodwell 1987,30) should be added part of a vessel from AF1 V 3 in the ditch of the sub-rectangular MPRIA enclosure. The wide range of associated pottery (ranging from flint-tempered LBA or EPRIA sherds to Roman sandy grey ware) shows the context had been disturbed. Present location: Chelmsford Museum, accession number 1976.201.

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Roman Coggeshall II; excavations at 'The Lawns', 1989-93

by Raphael M.J. Isserlin

with contributions by L. Austin, B. Dickinson, H. Major, T.S. Martin, W.J. Rodwell, H. Walker, and D. Williams

Small-scale rescue excavation due south of St. Peter's church located a short length of a robbed masonry structure, and parts of a timber structure, all belonging to the Roman period. These features are provisionally identified as part of a complex corresponding to the Roman building known from antiquarian records. A high proportion of box-flue tiles associated with the robbed masonry structure suggests the presence of a bath-house.

The evidence for a large Roman ditched enclosure in Coggeshall is reassessed. It is suggested that a more plausible interpretation of the various alignments of ditch is that these represent a droveway, contemporary paddock and field boundaries, and a stretch of roadside ditch on the northern side of Stane Street.

Activity in the early and middle Saxon periods is indicated by some 5th-7th century pottery. Portions of a post-medieval structure fronting onto Church Street were also found.

Introduction (Fig. 1)

This report presents the results of two small excavations and a watching brief, all carried out by E.C.C. Archaeology Section, at 'The Lawns' in Coggeshall (Fig. 1). The first excavation, CG8, consisted of three trenches (A-C) and was directed by C.P. Clarke in 1989. The second excavation, CG11, directed by A. Wade, took place in 1993, and consisted of a single trench of *c.* 250 m^2. The watching brief, also in 1993, undertaken by M. Medlycott (1993) yielded negative results. The findings from these three pieces of fieldwork were subsequently prepared for publication by the author. Site archives and finds are to be stored at Colchester Museums. Sites CG8 and CG11 are Essex Sites and Monuments Record PRNs 14309-11 and 14312-14.[1]

The trenches lay between 60 and 120 metres south of the church of St Peter-ad-Vincula in an area well known for its Roman activity (Clarke 1988, 84, recapitulating Beaumont [1890] and Weever [1631]). The main thoroughfare, East Street, runs through the centre of the town, and is part of Stane Street Roman road. Church Street branches off north-eastwards at approximately 45° from East Street, in the direction of Great Tey.

Investigation took place in the grounds of 'The Lawns', a property on the south side of Church Street. The zone investigated lies therefore in between these two routes, the date of only one of which is certain. CG8 Trench A was laid out parallel to Church Lane in order to ascertain the nature of activity near to the frontage and lay within the area of building debris reported by antiquarians. Trenches B and C and CG11 were designed to provide an insight into activity over the less-disturbed rear of the property and were outside the Roman building debris area. Time permitted only limited portions of features at Site CG11 to be dug, while at CG8 depth restrictions and the wish to minimise ground disturbance across the proposed new building meant that the sequence was investigated only to a depth of 1.0 metres. That complete portions of entire sequences were not excavated may have a bearing on the dating and conclusions.

The Phasing System

The general periodisation employed is that of Clarke (1988, 55) modified in the light of discoveries reported below (Table 1). Phases 1-3 are prehistoric. Phase 4, Roman, is subdivided. Early Roman activity and early 3rd-century activity appear to be lacking. Early and mid Saxon material are fresh discoveries, for which a new phase has been created. Late Saxon material has not been recognised from this site, and so Phase 5.3 is also not discussed. Medieval and post-medieval material is mentioned only briefly — a fuller account (where evidence permits) is available in archive.

Table 1 Coggeshall: Phasing (after Clarke 1988, with amendments).

Phase	Description		
1	Mesolithic		
2	Neolithic/Early Bronze Age		
3	Late Bronze Age/Early Iron Age		
4.1	Mid-Roman	(early 2nd-mid 2nd)	c
4.2	Mid-Roman	(mid 2nd-early 3rd)	e
4.3	Late Roman	(mid 3rd-mid 4th)	n
4.4	Latest Roman	(mid 4th-5th)	t
5.1	Early Saxon	(5th)	u
5.2	Mid Saxon	(7th)	r
6	Medieval	(10th-16th)	i
7	Post-Medieval	(16th-19th)	e
			s

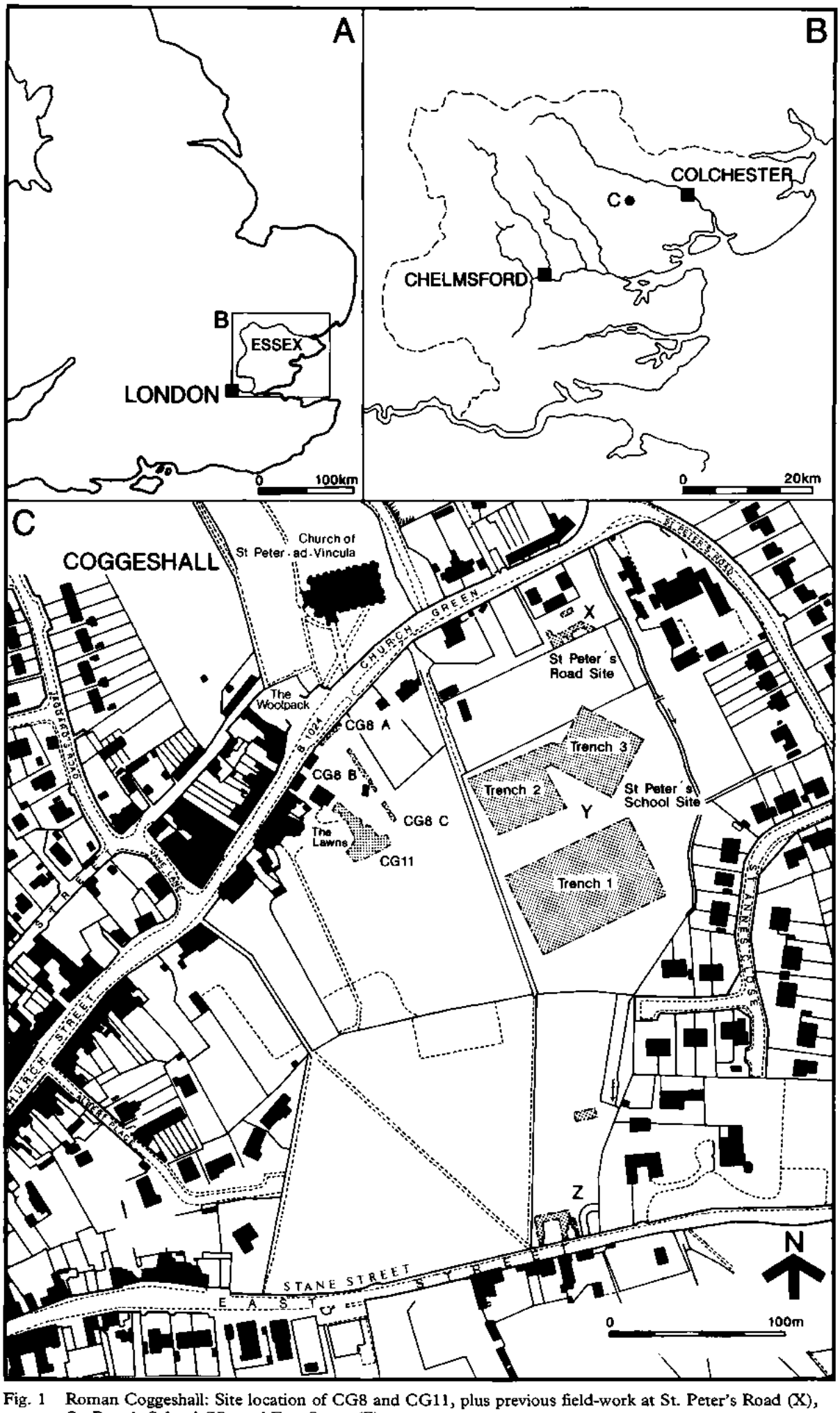


Fig. 1 Roman Coggeshall: Site location of CG8 and CG11, plus previous field-work at St. Peter's Road (X), St. Peter's School (Y), and East Street (Z).

The detailed sequence for CG8 and CG11 is given in Table 2. Each excavated area or trench is described individually, phase by phase, with remarks on dating, and interpretation where this is possible. A final discussion reviews how these excavations advance our understanding of Coggeshall, both in terms of the Roman site, and of the post-Roman settlement. As CG11 yielded more extensive and chronologically earlier structural evidence than CG8, it is considered before the later sequence from CG8, even though that site was excavated several years afterwards.

Table 2 Coggeshall: Concordance of activity on sites CG8 and CG11. (Phase numbers in the left-hand column refer to Table 1.)

PHASE	CG11	CG8		
		Trench A	Trench B	Trench C
2-3	flints (residual in later contexts)			
4.2	Timber buildings erected	------		Pits and ditch dug
4.3-4.4	Pits[1]	[Masonry[2] structure]	Quarrying	
5.1	------	------	------	Ditch back-filled
5.2	------	Ditch and[3] fence	------	Ditch back-filled
6.0	------	------	Pits and slot dug	------
7.0	Garden wall	Stone building robbed	-------	Pits and ditch
7.1		Pits and slot dug		
7.2		Cesspit[4]	Conduit	------
7.3		Path[4]	Path[4]	------

KEY

1 *Possibly Roman, Saxon or medieval, position in sequence suggests, but no hard dating-evidence*
2 *Probably Roman, position in sequence suggests, but no incontrovertible dating-evidence*
3 *Possibly Saxon or medieval, position in sequence suggests, but no incontrovertible dating-evidence*
4 *Precise dating of features uncertain, but existence implied by oblique references in documentary evidence*

THE EXCAVATED SITES

Trench CG11

Phase 4.2 (mid-late 2nd century) (Fig. 2, and Sections 1-5)

A surface was laid down, and at least one timber building was constructed.

A levelling of chalky boulder clay was deposited across the south of the trench (30) and sealed by a similar layer (31). It was not possible to excavate these layers completely. A single structure, based around a courtyard (or two separate structures, linked by an extension) is inferred from two groups of slots: broad (4, 6, 8, 14, 24) aligned north-south and east-west and narrow (12, 26, 45, 10/29) aligned north-south. Both groups cut layer 31. The excavated broad, regular slots had flat bases and were up to 0.21 m deep. Posthole 54 (not excavated) lay to the north of slot 4.

At some stage slot 24 was replaced by slot 6. Slot 10/29 terminated in a sub-circular feature (52). Postholes 47 and 49 were associated with slot 10/29. Layer 27, flinty clay loam, lay due east of slot 10/29. Its western edge was truncated, obscuring any relationship with the slot, though it could have sealed layer 30. Layer 27 contained worked flints, some burnt.

Feature 51, cutting the south side of 52, may be of this (or more likely, a later) phase. The natural subsoil was not exposed.

Dating-evidence

The dating-evidence for this phase is considered along with an overview of material from the whole site, below.

Discussion

Layer 31 could have been a floor or yard surface on top of a general layer of makeup (30). These patches probably once formed a more extensive layer, heavily eroded after it was deposited. Their limits cannot be related to individual features, and in some cases (notably north of slot 45) may have butted up to a vanished surface-built wall.

The broad slots subdivided the southernmost part of the trench into rooms (the slots lie either parallel, or at right angles, to one another). If the building continued as far north as slot 14, then a large area of open ground (courtyard) is implied, separating two wings. Perhaps the narrow slots were an extension to the main wing (building) or a means of linking the two wings (structures) together by means of a corridor 3 metres wide (9 *pedes*). The slots may represent two separate buildings. Clearly the building stood long enough for one timber to have rotted in the ground and to have required replacement.

Phase 4.3-4.4 (later Roman+ (?medieval)) (Fig. 2)

Pits were dug in the centre of the site.

A series of pits was dug in the centre of the site, including 43 and 43A, and 16 (0.44m deep).

Dating-evidence

The dating-evidence for this phase is considered along with an overview of material from the whole site, below.

Discussion

These were probably rubbish or cess pits (the greenish tinge to the fill of pit 16 suggests cessy material). They

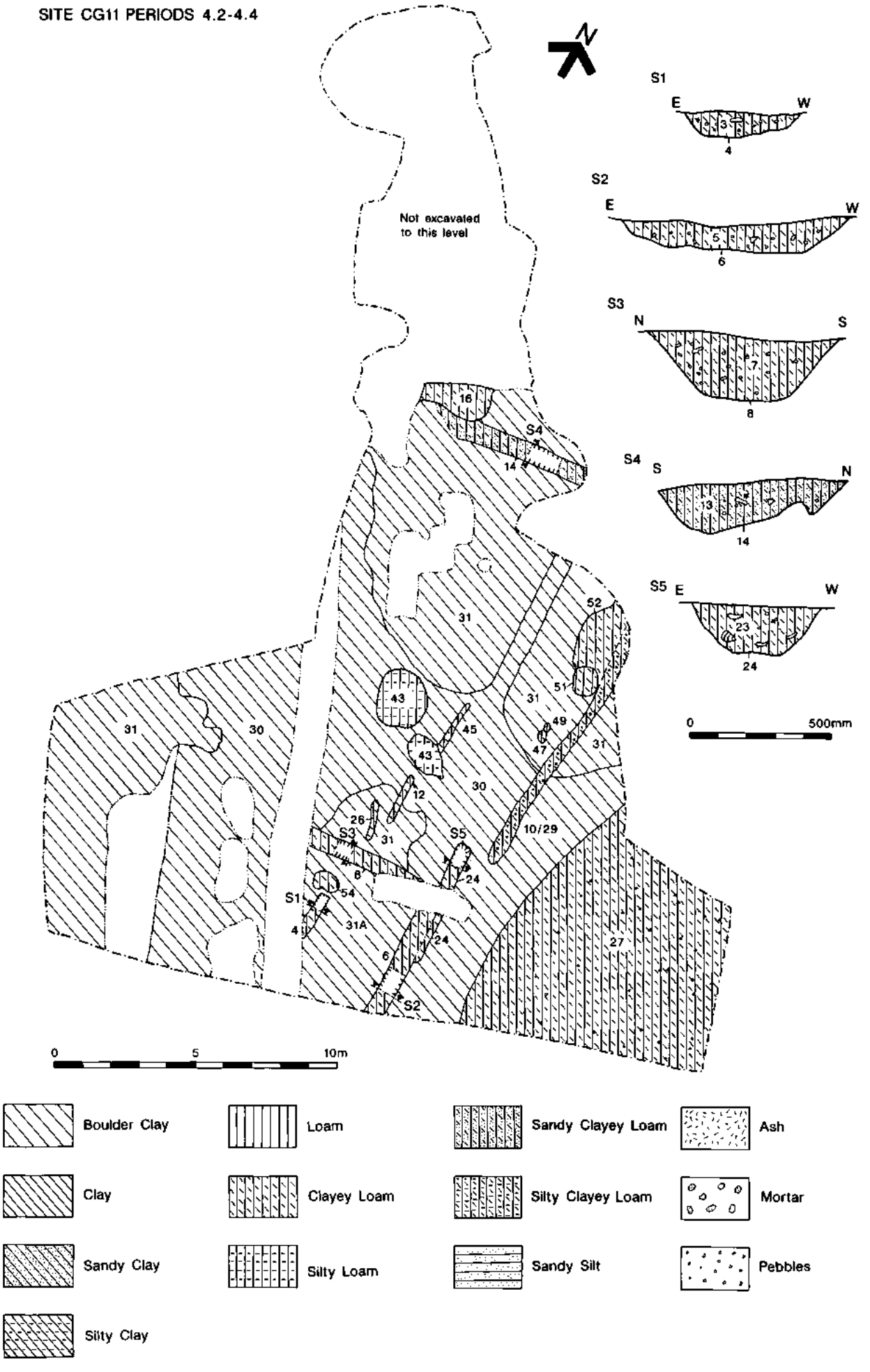


Fig. 2 Roman Coggeshall: Site CG11, Periods 4.2-4.4 (Roman) (and sections 1-5).

indicate a change in land-use as they do not respect the wall-lines, and may post-date the buildings by a considerable period, but the dating evidence is unhelpful.

Phase 7.0 (16th-17th centuries) (Fig. 3)
The site was subdivided by a wall and a ditch. Several pits were dug.
A series of pits was dug, a wall built, and ditches and a drain dug. A dump of clay loam sealed the wall construction-trench, and a slot was cut into it. Further details of this phase are given in the archive report.

Dating-evidence
The earliest feature in the sequence, pit 1 (fill 2) contained clay pipe, and 3 sherds of 16th-17th century Post-Medieval Red Earthenwares. Other features in this phase contained residual Roman material. The wall and ditch are not shown on the O.S. 1st edition (Sheet XXVI.14, 1875).

Discussion
Though they do not appear on any map, the wall and ditch are parallel with features on the modern O.S. map of Coggeshall, which suggests that they may have been demolished before 1875. The distribution of the pits in the south of the site suggests that they were confined to a specific area. The ceramic evidence is insufficient to demonstrate occupation in this period within the excavated areas.

CG8 Trench A

Period 4.3? (?2nd century) (Fig. 4, S.7)
A deposit of clay (106; thickness not known) was laid down, overlying chalky boulder clay 104 and possibly loamy clay 9; at the same time a layer of silty clay (8; see Section 7), was deposited. Cut into the latter was feature 505A (at least 1.12 m deep; aligned north-west/south-east); its south-western edge was slightly irregular. Natural was probably not exposed in this trench.

Dating-evidence
Roman tile, if correctly identified, recovered from the fills of feature 505A, was not retained. No Roman pottery came from this feature. It is therefore not possible to date activity. The 2nd-century date for this primary activity is suggested on the basis of primary activity in Trench C.

Discussion
While feature 505A could have been some sort of drainage-ditch, the nature of its fills suggests that it had not silted up and it is rather too deep for this. Its profile is however regular enough for it to have been a construction-trench. In which case, layers 8 and 9 could have been makeup originally abutting the wall, and subsequently cut by robber-trench 505B. Of two separate horizons observable within fill 146, the lower part may have been the remains of bedding-material for the robbed wall (146A). The rounded upper portions of the feature may reflect the robbing process, more properly considered in Phase 7.1 (as part of feature 505B).

The tile and chalk from 146 would reflect the construction-materials of the robbed wall. This feature shares the alignment of medieval features, but not the alignment of the Roman features on site CG11.

Period 5.2 (4th century+) (Fig. 4)
A linear hollow was dug, aligned south-west/north-east (512; 0.28 m deep). To its north-west, three postholes were dug, cutting the fill of gully 512 where it had spread beyond the edge of the feature. Posthole 502 was 0.15 m deep; posthole 523 was 0.28 m deep; posthole 503 was not excavated. They were aligned roughly parallel to the edge of the former gully.

Dating-evidence
The dating-evidence for this phase is considered along with an overview of material from the whole site, below. In addition to Roman pottery, Roman and later tile came from posthole 502 (fill 108). It cannot be closely dated.

Discussion
The row of three postholes may represent a portion of fence, perpetuating the boundary established by the gully. The postholes were successors to the gully, perhaps assuming one of its functions as a land boundary, perhaps at the rear of a roadside plot. At this stage, wall 505 may still have existed as a stub of masonry or earthwork, and only a limited area been affected by the digging of gully 512.

Phase 7.1 (post-medieval) (Fig. 4)
The wall in trench 505A (which had presumably survived until now as a stub of masonry) was robbed. Robber-trench 505B was dug down to the level of the top of the bedding, removing the footings and the upper portions of trench 505A. It had a rounded lip. Slot 504, which had a flat base, was dug into layer 8, parallel to trench 505B, and may somehow relate to the robbing-process. A layer of reddish-brown silty clay, charcoal and tile (112A) was deposited, and slumped into the fills of feature 505, with an additional portion (112B) consolidating the fills of trench 505B (Section 7; it had a lens of sandy loam, tile and chalk (118)). The north-eastern limits of layer 112 are unclear: perhaps slightly beyond the postholes.

North-east of the building, pits were dug: pit 517 (0.5 m. deep; fills 150, silty chalky boulder clay; 148 clay silt; 147, silt clay; and 125, silt clay); pit 522; and pit 519 (0.5m deep; fills 153, silt clay; silt clay 145; sandy clay 128; and tile 135).

Dating-evidence
The presence of Sandy Orange Ware (Fabric 21; 13th-16th centuries) and Post-Medieval Red Earthenwares

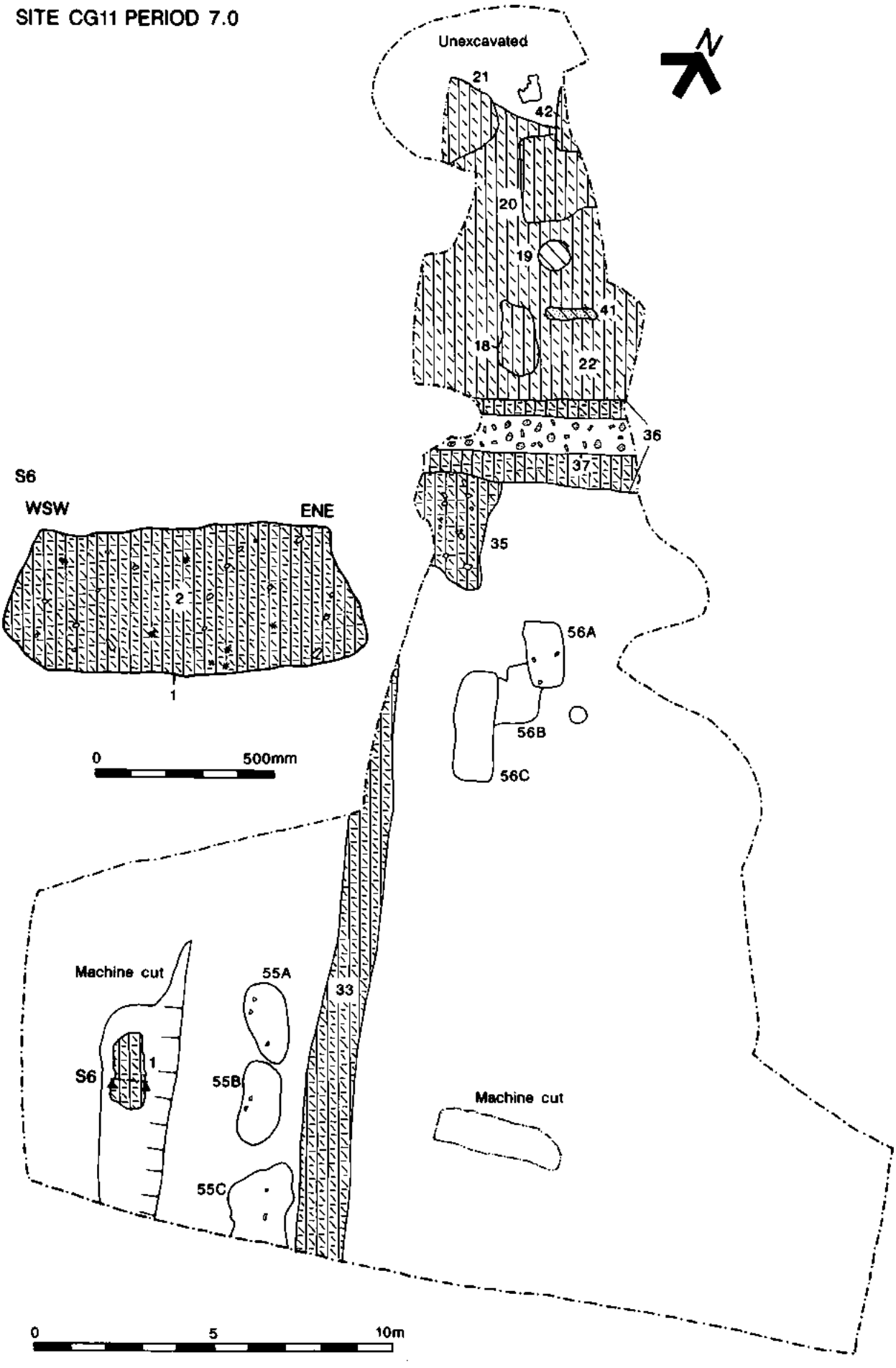


Fig. 3 Roman Coggeshall: Site CG11, Period 7.0 (Post-medieval) (and section 6).

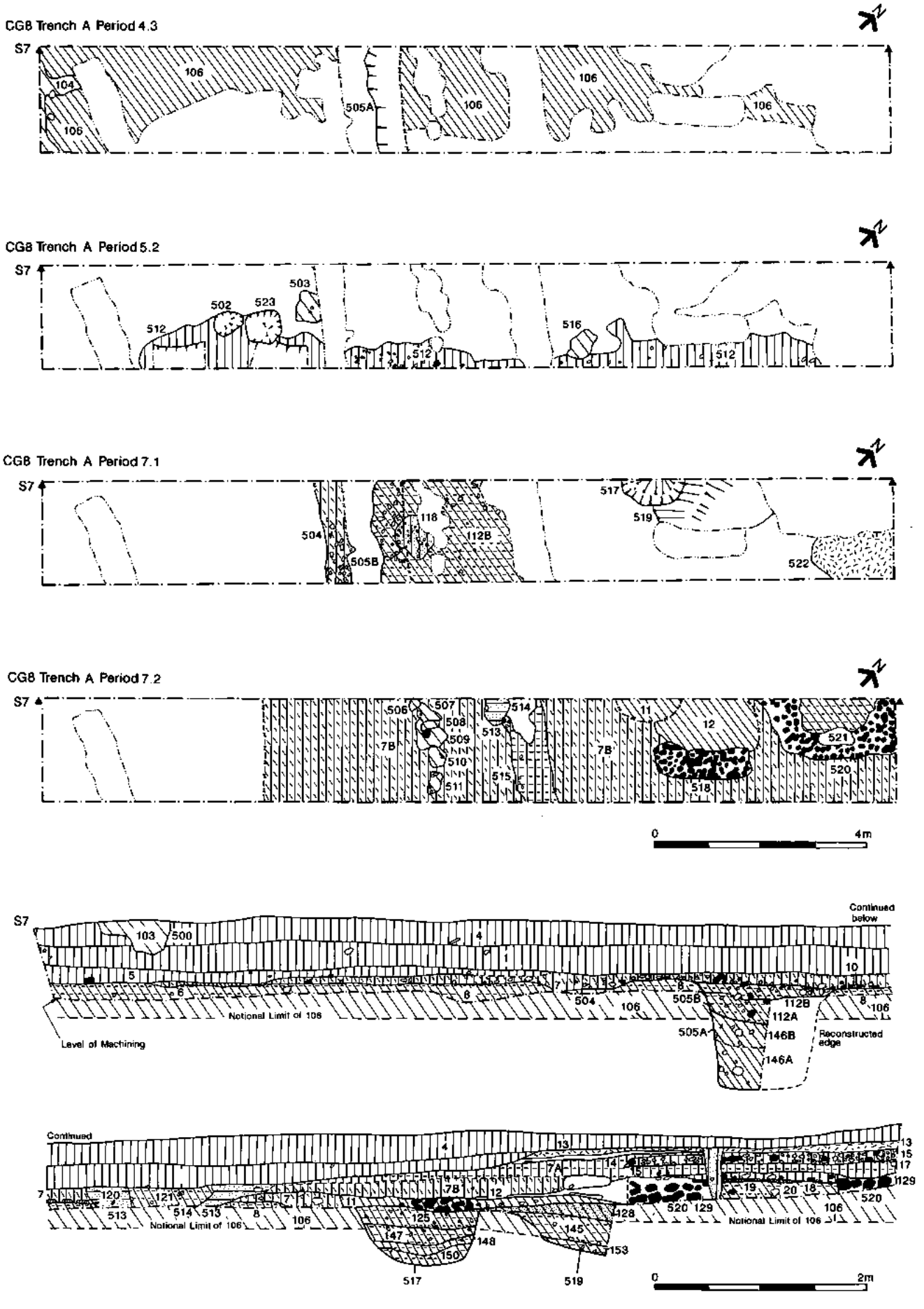


Fig. 4 Roman Coggeshall: Site CG8, Trench A Periods 4.3-7.2 (and section 7) (post-medieval Phase 5 omitted).

(Fabric 40; 15th/16th-19th centuries) in this phase strongly suggests a 16th-century date. In addition, residual medieval and Roman pottery was present.

Discussion
The slot may indicate an open-sided building, with a portion of surfacing. The position of the pits may respect the position of the building, but this cannot be proved given the small area examined.

Phase 7.2 (post-medieval) (Fig. 4)
A series of six postholes was dug, cutting layer 112. From north to south these were: 506; 507; 508; 509; 510; and 511. They may have been dug from the base of layer 7A, and the relationships not recognised at the time of excavation.

To the north-east, the pits of Period 7.1 were capped by chalky clay (11, 12; Fig. 4, S7). A layer of clay loam and building material (7B) was deposited, probably over much of the site, sealing these features, and surrounding the postholes.

Several features cut layer 7B: pit 513; slot/gully 515, and, cutting it, pit 514. Feature 126 was dug into layers 11 and 12. South of the beamslot, the surface was relaid in silty clay and tile (10).

A sub-circular feature was dug (520) and filled with silty clay (20); cinders and tile (19). A hollow (521) was impressed into the surface of layer 19, and loam, stone and tile 18 dumped on top. Slot 518 (0.13 m. deep) and aligned south-west/north-east, was associated.

Dating-evidence
None.

Discussion
Feature 520 may have been a brick-lined cess-pit or well-shaft. The functions of the other features are unclear. A map of 1743 shows a hall-type building parallel to the road at the front of the tenement (ERO D/DU 19/2). As no beamslot or plinth was observed, the building may have been surface-built. The map does not, however show a side-wing or outshot — presumably the Period 5.2 structure was demolished by the time the map was drawn. The row of postholes presumably indicates the establishment of a boundary to replace that formed by the stub of masonry existing as an earthwork.

Phase 7.3 (post-medieval) (Fig. 4, S7)
The building represented by the beamslot of Period 7.1 no longer existed. A layer of silty loam (7A/17) was deposited (Fig. 4, S7). On top of it, gravel and pebbly cinders (not planned) were laid, probably paths. On top of this, loam, layer 1, was deposited, and a gully dug (not shown). A dump of gritty loam was deposited over the whole horizon, 4, following which a gully over 0.75 m deep was dug (500); aligned east-west. Posthole 501 could have been of this phase. Further details of this phase are given in the archive report.

Dating-evidence
None was recovered.

Discussion
This marks a new phase of land-use with the demise of the yard and the deposition of soils and the laying of paths. This would be consistent with a garden. The First Edition O.S. Map depicts an orchard on the site (Sheet XXVI.14, 1875) so the building was clearly no longer in existence by then.

CG8 Trench B

Period 4.4 (4th century A.D.) (Fig. 5)
Several quarries were dug, most notably shallow scoop 530 (0.10 m deep). A layer of silty chalky boulder clay was deposited (3/1002). A pit was dug into the fill of scoop 530 (524; 0.15 m deep).

Discussion
These are probably the edges of a series of quarry or refuse-pits. Activity appears to be confined to one specific area which suggests that the digging of these features may have been a continuing process.

Periods 6/7 (medieval/post-medieval) (Fig. 5)
A layer of clay was deposited over much of the site (171; 175, recorded as a single context). Elsewhere a layer of clay silt was deposited (21). Two pits were dug (527, 0.3 m deep; 528, 0.4 m deep, and also gully, 529 (0.44m deep), filled with clay silt.

Dating-evidence
Post-Medieval Red Earthenwares (Fabric 40; late-15th/16th-centuries) and Frechen Stoneware (Fabric 45D; mid-16th/late-17th centuries) were present in this phase. A late 15th-17th century date can be suggested.

Periods 7.2, 7.3 (not illustrated)
A penannular gully was dug (174; depth not known). It enclosed an area at least 5.5 m in diameter. To its south-west, scoop 525 was dug, at least 50 mm deep, also recorded as 172 (Period 7.2).

A series of tips of clay and ash was deposited. They were covered by loam. A series of hollows was dug (Period 7.3; not excavated). Further details of these periods are given in the archive report.

Dating-evidence
There is little way that activity can be dated; only residual Roman pot was present in Period 7.2; from Period 7.3 came undiagnostic Post-Medieval Red Earthenware (Fabric 40).

Discussion
Gully 174 may be the robber-trench for a conduit, robbed quite soon after it was laid. The Period 7.3 features were perhaps paths and potholes.

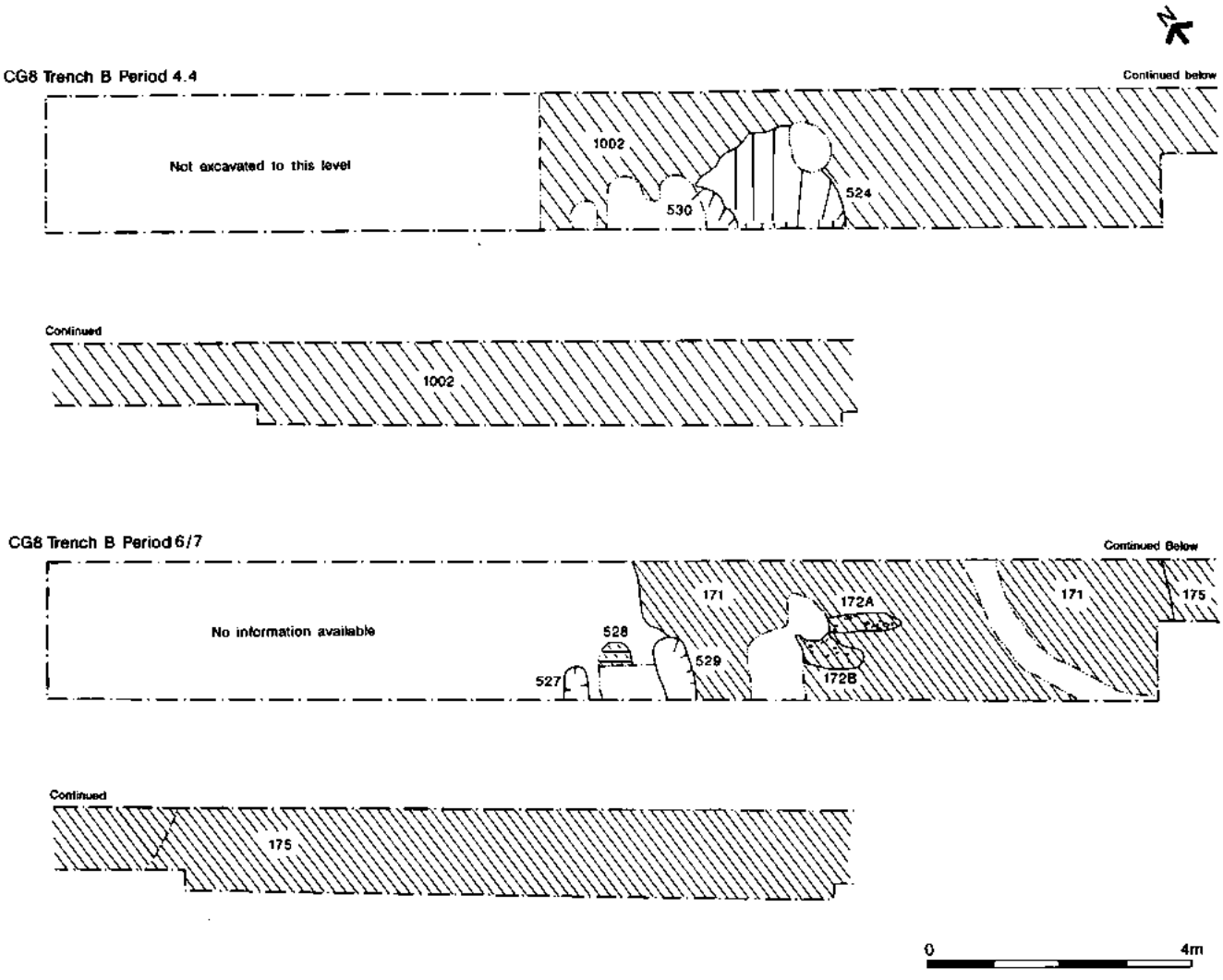


Fig. 5 Roman Coggeshall: Site CG8, Trench B Periods 4.4 and 6-7 (RB, medieval) (post-medieval Periods 7.2 and 7.3 omitted).

CG8 Trench C

Phase 4.2 (Mid-late 2nd century) (Fig. 6)
A flat-bottomed feature, 532, either a slot or gully was dug and filled with chalky pebbly material (152). A sub-square ?pit was dug at the same time (531) and filled with pebbly material 151. Their depths are unknown. Pit 536 was at least 0.2m deep and filled with pebbly dumps (160, 159). At the end of this phase ditch 534 was dug (0.4m deep, aligned east-west).

Discussion
Only a terminal of feature 532 was uncovered so it could have been a large pit rather than a linear feature, as the excavator suggested. Ditch 534 may be the same as a feature encountered in earlier excavations (Clarke 1988, St. Peter's School Site).

Phase 5 (?later Roman-Saxon) (Fig. 6)
Ditch 534 was filled with a series of deposits: pebbly clay 158, pebbly ?clay 156, and clay 155/132, containing pebbles and building-material. It apparently marginally cut the fill of feature 532 of the previous phase or butted up to it. It may indeed have been contemporary with it; the archaeological record is not explicit on this point.

Discussion
The problem is deciding when the ditch was dug. It contained Anglo-Saxon pottery in its later fills, along with Roman pottery. This was clearly deposited as a result of this part of the system falling into disuse, and the material in the primary fill gives no really satisfactory *terminus ante quem*. It is likely that this a continuation of the ditch uncovered on the St Peter's School site, with which it is aligned (Clarke 1988, 55-6).

Phase 7.0 (post-medieval) (not illustrated)
A gully and posthole were dug (not archaeologically excavated). They were sealed by topsoil. A posthole was dug (535/537; fill 157 not described). Further details of this phase are given in the archive report.

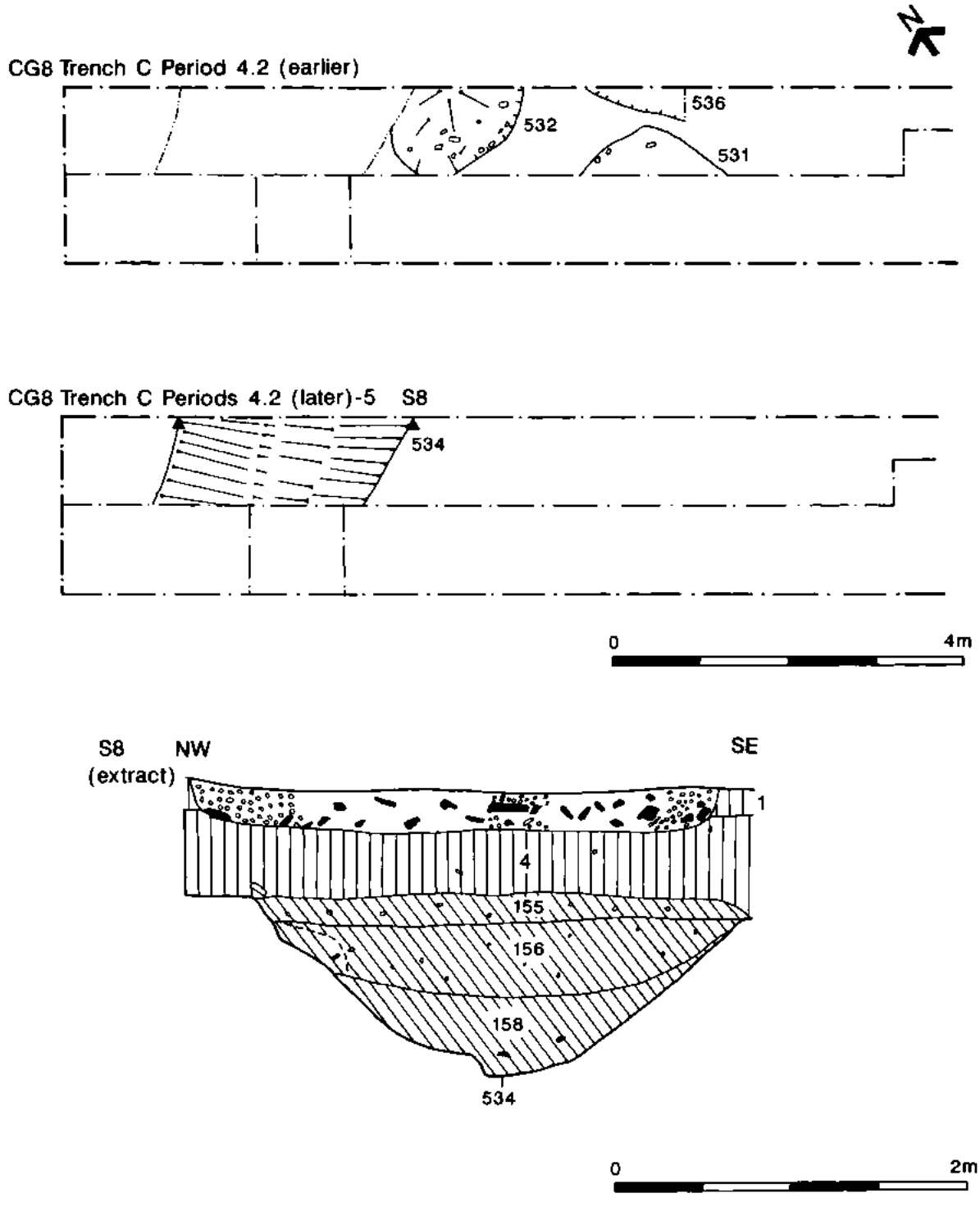


Fig. 6 Roman Coggeshall: Site CG8, Trench C Periods 4.2 and 4.2/5 (RB) and ditch 532 section (extract) (post-medieval Phase 3 omitted).

Dating-evidence
None, although residual Roman pottery came from one of these features.

Discussion
The overlying horizons were machined off. But it is likely that they were together with the contexts of this phase, related to horticultural-type activity.

Dating-evidence
by T.S. Martin

SITE CG8 Trench A
Trench A produced 61 sherds (392.5g) of Roman pottery from nine contexts; none of which are definitely Roman.

Phase 1 (no Roman pottery): ?Roman.

Phase 2 (3 contexts with Roman pottery): ?Roman.

Post-holes F502, F523 and context 100 produced a very small quantity of pottery, none of which can be closely dated and all could conceivably be residual.

Phases 3-5 (*5 contexts with Roman pottery*): Post-medieval.
Pits F517, F519 and the dump/surface 112 provided the largest amount of Roman pottery in Trench A. The only readily datable form, a beaker H20 from F519 is a type that belongs to the mid-late 2nd century. No Roman sherds were recovered from Phase 4 or 5 contexts.

Trench B
Trench B produced 64 sherds (849g) of Roman pottery from six contexts. In contrast with Trenches A and C the bulk of the pottery found came from Roman deposits.

Phase 1 (*3 contexts with Roman pottery*): 4th century A.D.
Pits F524 and F530 had sufficient diagnostic pottery in their fills to propose tentative dating. The latest pottery in F524 is a bodysherd in late 4th century+ Oxfordshire red colour-coat in 134, with the bulk rather earlier, so that the feature is either dated by the late Roman sherd and the feature's relationship with tentatively-dated F530 (which it overlies) or by the 2nd-3rd century pottery in 134.

The small amount of pottery from pit 530 includes a characteristically 4th century form in BB1, the flanged bowl (B6.3), while the presence of Late Black-surfaced ware seems to confirm that this is a Late Roman feature.

Phases 2 and 3 (*3 contexts with Roman pottery*) Medieval/Post-Medieval.
Pits F529 and F528 in phase 2 and scoop F525 in phase 3 produced a small group of largely undiagnostic sherds.

Trench C
Trench C provided 396 Roman sherds, the largest group (5,473.5g) from 11 contexts, as well as the greatest variety of fabrics.

Phase 1 (*4 contexts with Roman pottery*): mid-late 2nd century.
These contexts produced little conclusive dating evidence. The only notable piece in this phase is the Italian wine *amphora* in pit F536. The group from pit F531 contains too few sherds to be certain but is probably 2nd century+. A mid-late 2nd-century date-range can be suggested for hollow F532. There were only four early Roman/Roman sherds between the two fills of ditch F536, including part of the handle of a Campanian Dr 2-4 *amphora*. This piece, a (residual) sherd of ?North Gaulish Neronian-Flavian black eggshell ware from pit F519, and the continuing absence of Late pre-Roman Iron Age pottery, reinforce the previous suggestion that the early settlement at Coggeshall was entirely post-conquest (Clarke 1988, 55).

Phase 2 (*4 contexts with Roman pottery*): ?Later Roman or Saxon.
Ditch F534 produced the largest single group from a feature and represents the whole phase 2 assemblage. Leaving aside the first Saxon evidence from Coggeshall (Early Saxon, probably C7, sherds in fills 132 and 156), the latest pottery is of the late 4th century+, comparable with the Phase 4.4 features on the St Peter's School site (Gurney 1988, 64). Most of the pottery is earlier Roman (2nd/3rd-century: early-mid Antonine CG samian, Colchester colour-coat, Colchester *mortarium* and BB2) and, given the Saxon sherds, all the Late Roman pottery from features in this part of Roman Coggeshall may only provide us with a *t.p.q.*

SITE CG11
Phase 1 (*9 contexts with Roman pottery*): ?mid-late 2nd century.
The timber building slots (4, 6, 8, 10, 12, 14, 24, 26 and 29) each produced small groups of pottery. The latest datable sherds included: slot 8, dish B2/B4; slot 12, dish B4.2; slot 10, jar G45.1; and slot 29 (G24.2). This, and the absence of diagnostically 3rd century forms, suggests that the building was constructed not before *c.* 125/40 at the earliest and probably not later than 200 A.D. At some time, slot 24 was replaced by slot 6, but as this feature contained no diagnostic pottery, it remains undated. Phase 1 contexts account for 53.52% of sherds and 34.80% by weight of all pottery recovered.

Phase 2 (*2 contexts with Roman pottery*): ?4th century.
The fill of pit 1 and the ?dump produced a very small assemblage with no closely datable pieces. The only forms represented are jars (exact forms uncertain).

The Finds

The Flint
by Louise Austin[2]
The CG8 assemblage comprises a total of 81 pieces of worked flint. These include 53 waste flakes, 2 blades, 11 cores and core fragments, 1 core rejuvenation flake, 8 other lumps and fragments and 7 retouched flakes and tools. The tools included one notched flake (**pit F524, fill 133**; Fig. 7.1), one notched flake fragment (**unstratified**; Fig. 7.2), 1 borer (**surface clearance 149**; Fig. 7.3) and one unidentified carefully shaped and retouched tool (**pit F519, fill 149**; Fig. 7.4).

The raw material is a mixture of probably local pebble flint and a smaller quantity of better quality nodular flint.

All the material is residual, but can be divided into three groups based on condition, degree of patination and technology. These groups appear to correspond to three phases of flint production. The four heavily patinated pieces and the 14 moderately patinated pieces are believed likely to date to the Neolithic Period/Mid Bronze Age, while the unpatinated pieces are most probably Mid Bronze Age/Iron Age. None of the retouched flakes and tools are particularly diagnostic, although the borer is most likely Bronze Age. A finely worked and bifacially retouched piece, of an unusual form (Fig. 7.4), is in a very good condition and is believed to relate to be part of the later flintwork assemblage. The skill of production suggests a Bronze Age date.

The CG11 assemblage is of a very similar form to that from CG8. It comprises a total of 95 pieces of worked flint, 65 of which were from specific contexts while 30 were from less well defined areas including some completely unstratified material. A total of 65 waste flakes, 8 blades, 14 cores and core fragments, 1 fragment and 5 retouched flakes (**pit 20**, Fig. 7.5; **pit 1, fill 2**, Fig. 7.6) and tools were recovered. There were no specific tool types within the assemblage, however one core appear to have been modified to form an end scraper (**unstratified**; Fig. 7.7).

All the material was residual and the same three groups of material were recognisable as has been noted for CG8. These include 11 heavily patinated pieces, 43 moderately patinated and 39 unpatinated pieces. A higher proportion of the worked flint which is believed to date to Neolithic/Mid Bronze Age was recovered.

A possible reason for the higher proportion of earlier material may be that this trench is in closer proximity to the site of the original Neolithic/Mid Bronze Age activity where these residual pieces were originally deposited.

The Roman pottery

The Samian
by W.J. Rodwell

CG8, Trench C
Form 37, East Gaulish, late Antonine (**pit F531, fill 151, Phase 1**).

Forms 33 and 37, Central Gaulish, late Antonine (**hollow F532, fill 152, Phase 1**).

Form 38 or form 44, Central Gaulish, Antonine (*with stamp*; see Dickinson, below) (**ditch F534, fill 132, Phase 2**).

Form 37, Central Gaulish, early-mid Antonine (**ditch F534, fill 156, Phase 2**).

Form 33, ?38; ?32; East Gaulish, late 2nd century; forms 33, 31, Central Gaulish, late 2nd century (**surface-clearance 149, post-Roman**).

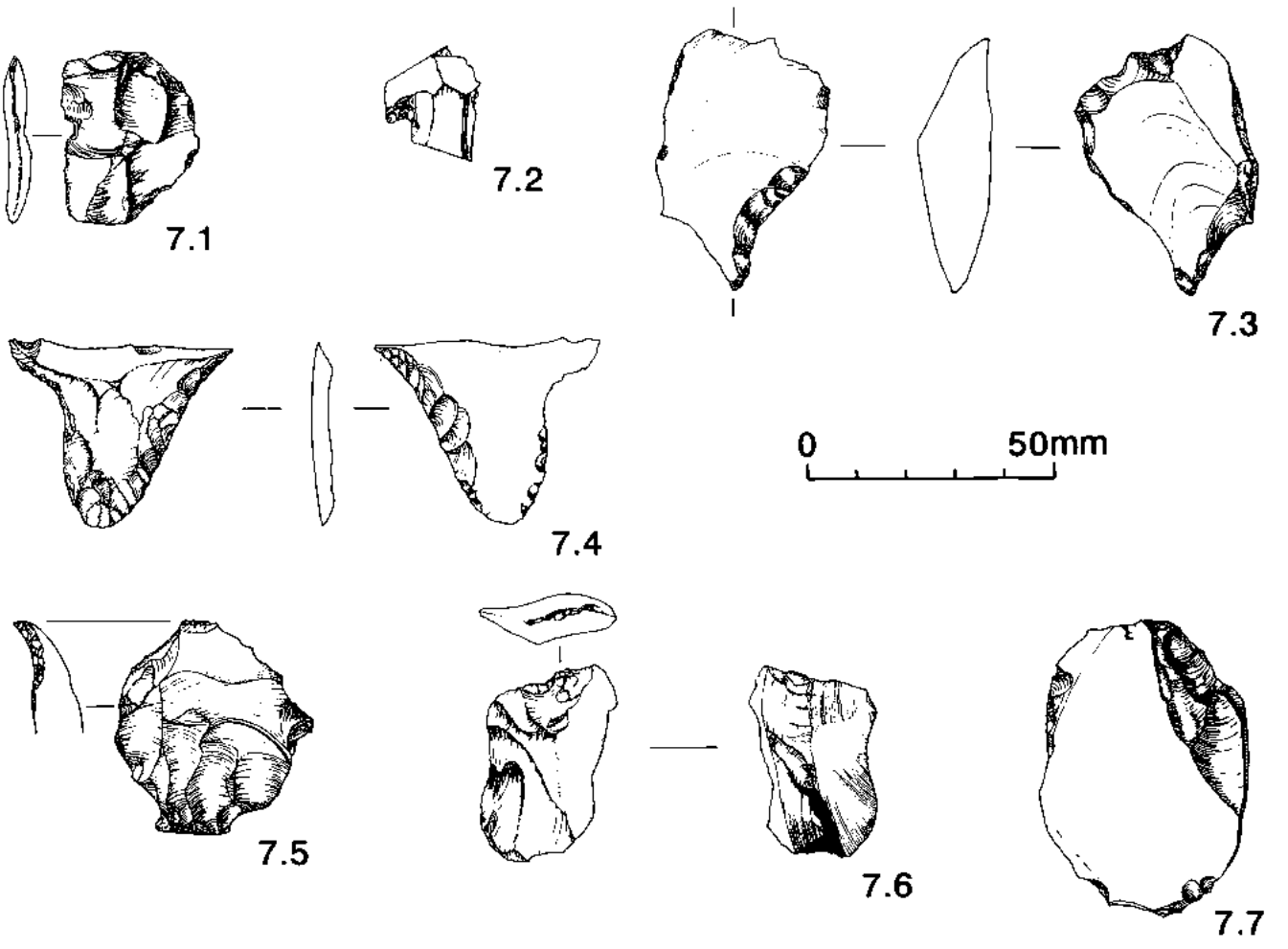


Fig. 7 Coggeshall: the flints.

CG11 (whole area)
Form 18, rim, South Gaulish, Pre-Flavian (*c.* A.D. 55-70) (**slot F10, fill 9, Phase 1**). Small fragment, seemingly of an unusual platter: from the angle between the upper and lower walls, where there is a moulding. Almost certainly classifiable as form 15/31, East Gaulish, Antonine (probably late) (**pit 18, Phase 3**).

Form 36. South Gaulish, Flavian, Form 37; East Gaulish, Late Antonine (or early 3rd century), rim of large bowl with a triple-bordered ovolo (**dump 22, Phase 3**)

Forms 27, 31, 33, 37 (or 38) rim. Central Gaulish, Antonine. The form 31 has the end of a potter's stamp, seemingly part of the letter]M (**unstratified**).

The Stamped Samian
by Brenda Dickinson
Sacero of Lezoux (stamp not attested at the pottery, but assigned there on the evidence of fabric, distribution etc.). Form 38 or 44, stamped [S CE]ROM (die 1a). This stamp occurs both on the dish forms 18/31R and 31R and on the rims of decorated bowls by other potters, including one probably with an ovolo used by Albucius ii and Paternus v (Stanfield and Simpson 1958, pl. 166.10). *c.* A.D. 150-180 (**CG8 Trench C, Phase 2, ditch F534, fill 132**).

The Coarse Wares
by T.S. Martin[3]

Introduction
A total of 932 sherds (10,782.5g) of Roman pottery was recovered; of this only 337 sherds (3,037.5g) came from stratified Roman contexts. The rest was from post-Roman levels or unstratified. All are reported on in greater detail in the Level III/site archive. The pottery was classified using the typology published for Chelmsford (Going 1987, 2-54), and quantified by sherd count and weight by fabric. Analysis was primarily concerned with identifying the variety of fabrics and forms, and providing dating evidence for the site phases. The incidence of fabrics by phase is summarised in Table 3. Quantification of fabrics allows comment to be made concerning assemblage characteristics and the overall quality of the evidence. The assemblage has been compared with the published material from the 1984 excavations (Gurney 1988, 59-64), to see if the same basic trends existed in the ceramic evidence from the new site.

The fabrics
The fabrics identified are listed below (numbers after Going 1987, followed by ECC mnemonic codes; numerals in parenthesis after some entries in this list refer to catalogue items):-

60	(TSG)	Samian
1	(CLC)	Colchester colour-coat
2	(NVC)	Nene Valley colour-coat
3	(ORC)	Oxfordshire colour-coat
4	(HAX)	Hadham oxidised red wares
7	(OCC)	Other colour-coats
8	(RHN)	Central Gaulish Rhenish ware
15	(WCS)	Misc. white- or cream-slipped wares
19	(STV [LE])	'London-Essex' stamped ware (No. 6)
20	(STV [NE])	'North Essex' stamped wares

21	(RED)	Misc. red wares
26	(VRW)	Verulamium Region white ware
27	(CLB)	Colchester buff ware
31	(BUF)	Unspecified buff wares
32	(NKG)	North Kent grey ware
33	(LND)	London-type ware
39	(GRF)	Fine grey wares
40	(BB1)	Black-burnished ware 1 (No. 10)
41	(BB2)	Black-burnished ware 2 (Nos. 1 and 5)
44	(STOR)	Storage jar fabrics (No. 4)
45	(ROM)	Romanising grey wares
47	(GRS)	Sandy grey wares (Nos. 2, 3, 7, 8 & 9)
50	(ESH)	Early shell-tempered wares
51	(LSH)	Late shell-tempered wares
53	(GROG)	Grog-tempered wares
55	(ASS)	South Spanish amphorae (Dressel 20)

Three additional fabrics were identified:-

(**LBS**) Late black-surfaced ware — hybrid of fabrics 34 and 45 that continues into the late period in distinctive forms. In some cases the fabric can be rather coarse and in extreme instances when dealing with particularly small and abraded sherds, may be confused with fabric 47. Its distribution is largely confined to central Essex (C.R. Wallace, *pers. comm.*).

(**EGG [B]**) Black eggshell ware (Greene 1979, 107 and 120-2; Rigby 1991, 77-79).

(**AIT [B/S]**) Dressel 2-4 Italian amphora, black sand fabric (Peacock and Williams 1986; Class 10, 105-6).

Summary of Dating-evidence

None of the stratified groups are large and most are highly fragmentary. Few features are closely datable, but broadly fall into either earlier Roman (largely mid-late 2nd century) or latest Roman (later 4th century). Phase 4.2 features are dated to the Antonine period. Although individually none provided any strong dating evidence, only when the pottery from all the features within the stratigraphic phase is considered does the ceramic evidence suggest a clear date. The latest Roman occupation is even less well dated. It is represented by small groups with a high residual content. Generally most of the pottery was residual in post-Roman contexts except in CG11 where the Phase 4.2 slots provided the bulk of the stratified

Table 3 Coggeshall: Roman pottery fabrics: incidence by phase.

Phase	4.2			4.4			?4			Post-Roman			Unphased			Unstratified		
FABRIC	Sherds	Wt.(g)	%Wt.	Sherds	Wt.(g)	%Wt.	Sherds	Wt.(g)	%Wt.	Sherds	Wt.(g)	%Wt.	Sherds	Wt.(g)	%Wt.	Sherds	Wt.(g)	%Wt.
TSG	5	104	4.81	-	-	-	-	-	-	15	221	3.84	-	-	-	5	68	3.23
CLC	-	-	-	1	1	0.11	-	-	-	10	38	0.66	-	-	-	-	-	-
NVC	-	-	-	-	-	-	-	-	-	9	53	0.92	-	-	-	-	-	-
ORC	-	-	-	1	2	0.22	-	-	-	1	2	0.03	-	-	-	1	14	0.66
HAX	-	-	-	1	2	0.22	-	-	-	2	15	0.26	-	-	-	1	10	0.47
OCC	-	-	-	-	-	-	-	-	-	2	6	0.10	-	-	-	-	-	-
RHN	-	-	-	-	-	-	-	-	-	1	8	0.13	-	-	-	-	-	-
WCS	-	-	-	-	-	-	-	-	-	2	16	0.27	-	-	-	-	-	-
STV [LE]	1	0.5	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STV [NE]	-	-	-	-	-	-	-	-	-	1	4	0.06	-	-	-	-	-	-
RED	1	4	0.18	5	74	8.42	-	-	-	13	79.5	1.38	1	1	20.00	3	37	1.76
VRW	-	-	-	-	-	-	-	-	-	1	19	0.33	-	-	-	1	6	0.28
CLB	26	46	2.12	-	-	-	1	0.5	0.85	11	107	1.86	-	-	-	6	117	5.56
BUF	2	6	0.27	-	-	-	-	-	-	12	42.5	0.74	-	-	-	1	6	0.28
NKG	5	19	0.87	3	164	18.67	-	-	-	-	-	-	-	-	-	2	21	0.99
LND	3	14	0.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GRF	14	72	3.33	7	26	2.96	2	20	34.18	32	289	5.03	1	0.5	10.00	2	12	0.57
BB1	1	16	0.74	4	136	15.48	-	-	-	7	26	0.45	1	0.5	10.00	-	-	-
BB2	5	53	2.45	-	-	-	-	-	-	13	111	1.93	-	-	-	-	-	-
STOR	10	126	5.82	6	121	13.78	-	-	-	33	988	17.21	-	-	-	7	161	7.66
ROM	14	101	4.67	-	-	-	2	13	22.22	2	11	0.19	-	-	-	-	-	-
GRS	185	1058	48.94	38	288	32.80	4	21	35.89	251	2168.5	37.77	1	3	60.00	101	1002	47.69
ESH	-	-	-	-	-	-	-	-	-	1	1	0.01	-	-	-	-	-	-
LSH	-	-	-	-	-	-	-	-	-	3	12	0.20	-	-	-	-	-	-
GROG	1	2	0.09	-	-	-	1	4	6.83	3	38	0.66	-	-	-	-	-	-
ASS	5	465	21.15	1	40	4.55	-	-	-	2	958	16.68	-	-	-	3	711	33.84
LBS	-	-	-	2	22	2.50	-	-	-	26	400	6.96	-	-	-	1	16	0.76
EGG	-	-	-	-	-	-	-	-	-	1	1	0.01	-	-	-	-	-	-
AIT	1	85	3.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	269	2161.5		69	878		10	58.5		456	5740.5		4	5		134	2101	

pottery. In marked contrast, in CG8 Trenches A and C, the pottery was almost entirely from post-Roman levels. The largest group came from ditch F534 (Trench C) which also contained Saxon pottery of 5th- to 6th-century date (see report by S. Tyler below) but provided no diagnostically late 4th-century pottery. This may indicate post-Roman back-filling of a Roman feature that had lain open for some time.

Vessel types

The vessel types illustrated below emphasise the dominance of jars and dishes. Beakers, flagons, bowls, lids, *amphorae* and *mortaria* were all represented, but only in very small quantities. Vessel types have been classified using the system devised for Chelmsford (Going 1987). The catalogue comprises virtually all of the closely datable pieces recovered from Roman contexts.

Catalogue of Roman pottery: descriptions of illustrated vessels

The catalogue is arranged by subphase, and within each subphase by Trench, feature (F) and fill or layer. Each Trench-phase has been assigned, on the basis of the pottery dating, to an overall site sub-phase of Clarke (1988) as modified in this report.

PHASE 4.2 (Fig. 8)

1: Shallow dish with flaring sides and bead rim decorated with densely spaced acute lattice on exterior (**type B2.2**). BB2 (41) *c.* A.D. 125/30 to late 2nd century (**CG8 Trench C, Slot F532, fill 152, Phase 1**).

2: Neckless high-shouldered jar with out-turned pointed rim (**type G3.1**). Sandy grey ware (47). Mid to late 1st century. Residual. (**CG11: Slot F8, fill 7, Phase 1**).

3: Jar with flat cordon and hooked rim, undecorated. Reminiscent of **type G19**. Sandy grey ware (47). Probably late 1st to early 2nd century (**CG11: Slot F8, fill 7, Phase 1**).

4: High-shouldered storage jar with concave neck (**type G45.1**). Fabric 44. 2nd to 3rd century (**CG11: Slot F10, fill 9, Phase 1**).

5: Deep bead-rimmed dish/bowl (**type B4.1**). BB2 (41). Early/mid 2nd to 3rd century (**CG11: Phase 1, F12, context 11**).

6: Bodysherd with ring-stamped decoration (Die is reminiscent of Rodwell's East Anglian Group 4D, Stamp R2.10: Rodwell 1978, 276, fig. 7.19). Probably a bowl form, loosely based on Drag. 30-31. 'London-Essex' stamped ware (19). Flavian to early 2nd century. Residual (**CG11: Slot F26, fill 25, Phase 1**).

7: Oval-bodied jar with slightly undercut rim (**type G24.2**). Sandy grey ware (47). 2nd to 4th centuries (**CG11: Slot F29, context 28, Phase 1**).

PHASE 4.4 (Fig. 8)

8: Deep dish with slightly flaring sides, the rim is delineated by grooving (**type B3.2**). Sandy grey ware (47). 3rd to 4th centuries (**CG8 Trench B: Pit F524, fill 134, Phase 1**).

9: Narrow-necked jar resembling a bottle (**type G40**). Sandy grey ware (47). Probably 4th century (**CG8 Trench B: Pit F524, fill 134, Phase 1**).

10: Flanged dish/bowl (**type B6.3/2**). Undecorated. BB1 (40). c. A.D. 260/70 to 400+ (**CG8 Trench B: Scoop F530, fill 144, Phase 1**).

Discussion of the pottery

Broadly speaking, CG8 (Trenches A-C) and CG11 produced pottery that dates from the later 1st century to the end of the 4th, although pottery belonging to the late 1st to early 2nd century was completely residual (Catalogue Nos. 2, 3 and 6). As with previous work, these excavations have again failed to produce any conclusive ceramic evidence for late pre-Roman Iron Age occupation at Coggeshall (Clarke 1988, 55). Furthermore, exclusively 1st-century pottery is largely absent; the ceramic evidence for occupation in this period is particularly slight, but includes pre-Flavian South Gaulish samian (form 18), black egg-shell ware, Dressel 2-4 amphorae, and a small number of sherds in Early shell-tempered and grog-tempered fabrics.

The earliest dated features, a pit (F531), a hollow (F532) and a ditch (F536) in CG8 Trench C, and a series of slots (F4, F6, F10, F12, F14, F24, F26 and F28) in CG11 contained pottery that was broadly mid-late 2nd century (Catalogue Nos. 1, 4, 5 and 7). Of the features in CG8, hollow F532 is the most securely dated. This produced late Antonine Central Gaulish samian (**forms 33 and 37**) and a dish which is dated *c.* A.D. 125/30 to late 2nd century (**type B2.3**), while pit F531 provided a late Antonine East Gaulish samian bowl (**form 37**). The dating of the slots in CG11 is more problematic. Individually, they provided little in the way of strong dating evidence, but taken collectively the absence of any specifically 3rd-century forms suggests that these belong within the Antonine period (**Phase 4.2**).

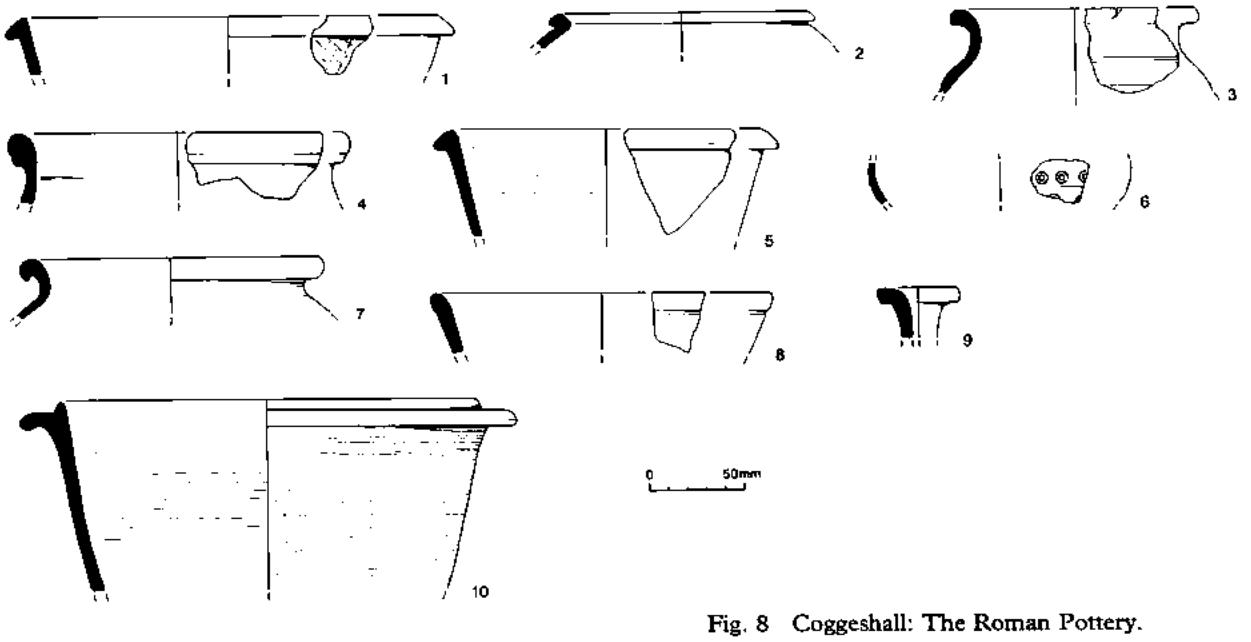


Fig. 8 Coggeshall: The Roman Pottery.

The pottery in this period is from a wide range of sources, although mostly local. Imported fine wares are exclusively Central Gaulish and East Gaulish Samian. The amphorae consisted exclusively of Spanish olive-oil bearing Dressel 20. Although coming from contexts of this period, the Italian Dressel 2-4 is probably residual. Romano-British traded wares included BB1 from ?Dorset, BB2 and grey wares probably derived from north Kent. Colchester also provided its share, principally flagons. However, the bulk of the pottery consisted of sandy grey wares of almost certainly local origin.

The next (and latest) sequence of Roman features again contained little in the way of strong dating evidence, but are probably attributable to **Phase 4.4**. In CG11, a pit (F1) and a dump (Context 27), are stratigraphically later than the slots of **Phase 4.2**. However, none of these contexts produced any readily datable forms, although the presence of Hadham oxidised red ware suggests a considerable gap between this and the preceding phase. This fabric was not widely distributed until after A.D. 270-80, and does not occupy a prominent place in assemblages until the later 4th century (as at Chelmsford: Going 1987, 3). On the St Peter's school site it was absent in contexts prior to the mid to late 4th century (Gurney 1988, 77). In CG8, two pits (F524 and F530) each contained small groups with characteristically late pottery, although F524 also had a discernible residual element. This feature is dated by the presence of a deep dish (**type B3.2**), which is generally associated with groups of the 3rd and 4th centuries (No. 8), and a narrow-necked jar form (**type G40**) resembling a bottle, which is probably 4th century (No. 9). Pit F530 is dated by a characteristically late 3rd to 4th century bead and flanged deep dish (**type B6.3/2**) in BB1 (No. 10), while the presence of Oxfordshire red colour-coat takes the site's chronology firmly into the second half of the 4th century. This feature also contained small quantities of Late Black Surfaced ware which appears for the first time in this Phase. The presence of early Saxon pottery in F534 (report below) possibly suggests continuity of occupation into the 5th and 6th centuries in some form, although this may only provide a *t.p.q.* for the final back-filling of obsolete field ditches. This is the first indication of Saxon occupation at Coggeshall.

Compared with the St. Peter's school site (Gurney 1988), CG8 and CG11 produced a greater diversity of fabrics (29 against the 1988 total of 18), both coarse and fine, but much less pottery. Of the new fabrics, the most significant are BB1, which is present in small quantities from at least the Antonine period; Verulamium Region wares and Central Gaulish Rhenish wares, which are found only in post-Roman contexts; and Colchester colour-coat which appears as residual in **Phase 4.4** contexts. Although the St. Peter's school site produced a greater quantity of pottery (26kg as opposed to 10.7kg), this was derived from a much larger area. When considering the relatively small sizes of each of the recent trenches, they produced a comparatively dense concentration of sherds. It is therefore tempting to postulate that these trenches were located close to the settlement nucleus. However, without firmer evidence, it is only possible to acknowledge that they were simply located in an area of the site that was prone to the accumulation of substantial quantities of discarded pottery.

The ceramic evidence suggests that the principal periods of activity on the two sites were different. On the St. Peter's school site the bulk of the stratified pottery came from late-1st to mid-2nd century contexts (**Phase 4.1**), in marked contrast to CG8 and CG11 where most was derived from Antonine contexts (**Phase 4.2**), while on both sites the 3rd and 4th centuries are relatively poorly represented (**Phases 4.3 and 4.4**). On the basis of pottery-discard, this suggests a pattern of settlement-shift within the 2nd century and occupation on a reduced scale in the later Roman period.

The lack of any substantial groups of the same period from more than one site makes assemblage comparison impossible. For this reason further work is needed to improve the dating evidence and to provide the necessary data from which it will be possible to construct anything more than a very tentative picture of the supply of pottery to Coggeshall.

The Saxon Pottery
by Susan Tyler

Summary
A small amount of Saxon pottery (16 sherds; 198g) was recovered from the excavations. The stratified pottery came from a single feature in CG8 Trench C, backfilled in Phase 5 (**ditch F534, fills 132 and 156**); a further four sherds were unstratified (**surface-cleaning 149**). The most closely datable forms and fabrics present belong to the 5th to early 6th century, although other could be later.

The Fabrics (Table 4)
The fabrics are classified using Cunningham's classification for post-Roman pottery (Cunningham 1985). Fabrics present are:-

Fabric 1A: (*Early Saxon vegetable tempered*). A single sherd (total weight 2g) of this fabric was present.

Fabric 1C: (*Vegetable and sand tempering*). Two sherds (weighing 17g) present.

Fabric 3: (*Saxon sand tempered brickearth*). This represents by far the largest group within the assemblage: a total of eight sherds with a total weight of 126g and contains the only recognisable forms within the assemblage: a carinated bowl of 5th to early 6th century date (Cat. No. 3; Fig. 9) and globular vessels (Cat. Nos 10, 14 and 15; Fig. 9), the latter not closely datable.

Fabric 4A: (*Haematite-tempered ware*). A single sherd of this fabric (weight 2g) is present with incised and combed decoration (Cat. No. 12; Fig. 9).

Fabric 4B: (*?Import; 'Schlickung'-treated*). Four sherds (totalling 51g) have this distinctive surface treatment. The fabric is hard and sandy; three sherds have abundant fossiliferous shell within their matrix. Analysis of the pottery from the early Saxon settlement at Mucking, Essex, has shown a concentration of coarse-slipped pottery in the area of 5th to early 6th century occupation. Hamerow interprets this as indicating a predominantly 5th-century date for this type of surface treatment (Hamerow 1993, 35-7 fig. 22).

Table 4 Coggeshall, CG8: Saxon Pottery Fabrics in assemblage by sherd count and weight.

FABRIC	SHERD COUNT	WEIGHT (g)
1A	1	12
1C	2	17
3	8	126
4A	1	2
4B	4	51
TOTALS	**16**	**198**

Table 5 Coggeshall, CG8: Saxon pottery in F534: Quantification by sherd count and weight.

FABRIC	1A		1C		3		4A		4B	
Fill	Sherds	Wt. (g)	Sherds	Wt. (g)	Sherds	Wt. (g)	Sherds	Wt. (g)	Sherds	Wt. (g)
134	1	2	1	12	3	26	-	-	4	51
156	-	-	-	-	2	27	1	2	-	-
TOTALS	1	2	3	12	5	53	1	2	4	51

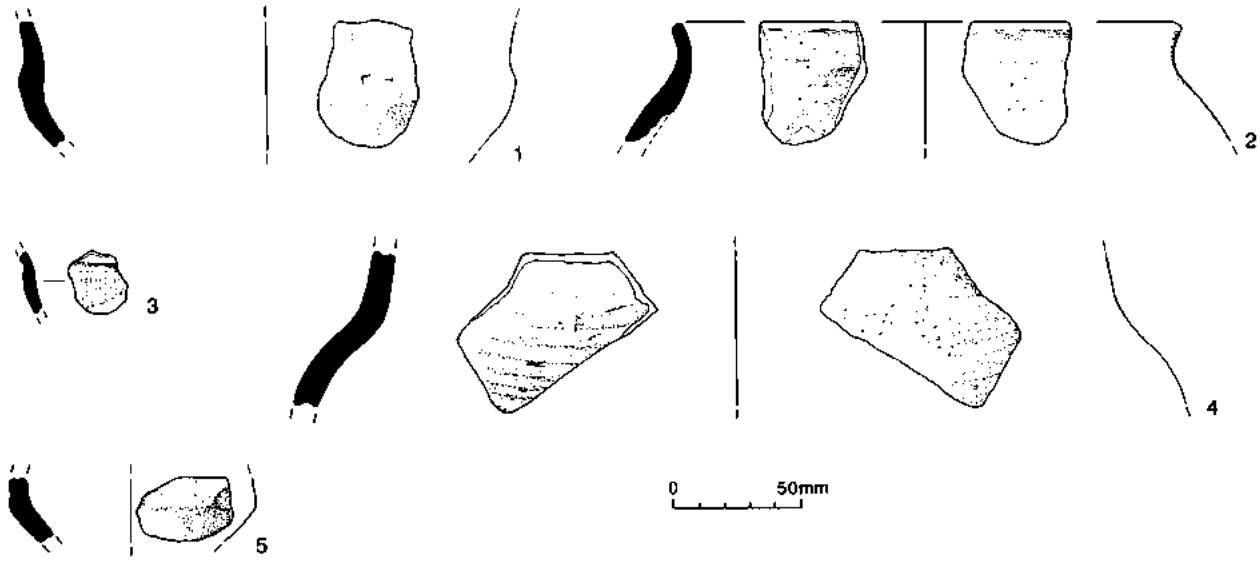


Fig. 9 Coggeshall: the Saxon pottery.

Catalogue of Saxon Pottery (Fig. 9)

1: (not illustrated) Bodysherd. Probably from a small jar. Fabric 1A. Hard dark grey ware with abundant vegetable temper and sparse large quartzite inclusions. Traces of burnish on outer surface. Weight 2g. **(Ditch F534, fill 132)**.

2: (not illustrated) Bodysherd. Fabric 1C. Hard fabric with grey inner and core and reddish-brown outer surface. Abundant medium to large quartz-sand and sparse vegetable temper. Weight 12g. **(Ditch F534, fill 132)**.

3: (Fig. 9.1) Bodysherd from carinated bowl. Ribbed around girth. Traces of burnish on outer surface. Inner partly smoothed. Fabric 3. Hard fabric with abundant small quartz-sand. Surfaces patchy dark grey to brown. Core dark grey. Weight 17g. **(Ditch F534, fill 132)**.

4: (not illustrated) Bodysherd. Fabric 3. Hard dark grey ware with abundant small to medium quartz-sand. Weight 6g. **(Ditch F534, fill 132)**.

5: (not illustrated) Bodysherd. Fabric 3. fairly hard dark grey fabric with abundant small to large quartz-sand. Weight 3g. **(Ditch F534, fill 132)**.

6-8: (not illustrated) Bodysherds (3). Probably from a fairly large storage vessel. Fabric 4B. Hard grey fabric with abundant fossiliferous shell. Outer surface is deliberately roughened by application of a slip containing large quartz-sand particles (*Schlickung*). Weight 49g. **(Ditch F534, fill 132)**.

9: (not illustrated) Bodysherd. Fabric 4B. Fairly hard fabric. Abundant small quartz-sand and sparse vegetable temper. Dark grey ware. Outer surface is deliberately roughened by application of a slip containing large quartz-sand particles (*Schlickung*). Weight 2g. **(Ditch F534, fill 132)**.

10: (Fig. 9.2). Cooking pot rim. Globular. Everted, rounded. Fabric 3. Hard well-fired sandy fabric. Abundant small to medium quartz-sand with sparse large quartzite inclusions. Surfaces dark reddish-brown to reddish-grey with blackening around rim. Core dark reddish-grey. Weight 25g. **(Ditch F534, fill 156)**.

11: (not illustrated) Bodysherd. Fabric 3. Medium hard fabric with abundant small micaceous quartz-sand. Surfaces light reddish-brown. Core dark reddish-brown. Weight 2g. **(Ditch F534, fill 156)**.

12: (Fig. 9.3). Neck-sherd. Incised concentric neckline with vertical combing beneath. Fabric 4A. Medium hard fabric with abundant micaceous quartz-sand and sparse iron oxide. Surfaces light reddish-brown. Grey core. Weight 2g. **(Ditch F534, fill 156)**.

13: (not illustrated) Bodysherd. Fabric 1C. Abraded. Fairly soft fabric with common unsorted quartz-sand and vegetable temper. Inner and core dark grey. Outer reddish-orange. Weight 5g. **(surface clearance 149; unstratified)**.

14: (Fig. 9.4). Neck-sherd from a large globular jar. Fabric 3. Hard fabric with abundant unsorted small to large quartz-sand and felspar. Core dark grey. Surfaces patchy dark grey to reddish-brown. Weight 54g. **(surface clearance 149; unstratified)**.

15: (Fig. 9.5). Base. Flat, rounded. Probably from a globular cooking pot. Fabric 3. Hard dark grey fabric with abundant small to medium quartz-sand. Weight 14g. **(surface clearance 149; unstratified)**.

16: (not illustrated) Bodysherd. Fabric 3. Hard fabric with small to medium quartz-sand. Inner and core dark reddish-brown. Outer orange-brown. Weight 5g. **(surface clearance 149; unstratified)**.

Discussion and conclusions

The fabrics present indicate a date range of *c.* A.D. 400-A.D. 600 for this small group of Saxon pottery. Of the forms present, the globular cooking pots and globular jar (Fig. 9.1) are not closely datable and could belong to the 5th, 6th or 7th centuries; the carinated vessel (Fig. 9.00) is most probably 5th or early 6th century (Hamerow 1993, 42-4). A small group of Saxon pottery with a date range of *c.* A.D. 400-A.D.700 but most likely to be, given the presence of a carinated vessel and coarse-slipped or *Schlickung*-treated sherds, 5th- to early 6th-century date.

The Medieval and post-Medieval Pottery

by H. Walker

The pottery from CG8 and CG11 has been classified using Cunningham's typology (Cunningham 1985, 1-4).

Pottery from CG8

A small amount of pottery, 45 sherds weighing 708g was excavated from CG8 (the fabrics are summarised in Table 6). The material from each Trench is discussed individually.

Pottery from CG8 Trench A

All the pottery excavated from this trench belonged to phase 7.1. The earliest pottery comprised a medieval coarse ware cooking pot rim from layer 112. It has a squared, sloping top above a short upright neck, and corresponds to Cunningham's type H2, a rim-type generally datable to the early to mid-13th century (Drury 1993, 81).

Table 6 Coggeshall: Quantification of medieval and post-medieval pottery from CG8 by feature, fabric and sherd count (R = Roman pottery present).

TRENCH	PHASE	FILL NO.	FEATURE/CONTEXT AND RELATIONSHIP	FABRIC							WEIGHT (g)	
				20	21	40	40A	45C	45D	48D		
A	7.1	112	layer	1	-	9	-	1	-	-	167	R
A	7.1	118	hollow	-	1	4	-	-	-	-	175	
A	7.1	148	pit 517, below 147	-	3	2	-	-	-	-	13	
A	7.1	147	pit 517, below 125	-	1	-	-	-	-	-	23	
A	7.1	125	upper fill of pit 517	-	1	4	-	-	-	-	26	R
A	7.1	128	pit 519	-	-	1	-	-	-	-	14	R
B	6/7	140	gully 529, below 139	-	-	1	-	-	-	-	32	
B	6/7	139	gully 529	-	-	-	-	-	1	-	7	R
B	7.2-3	23	dump	-	-	1	-	-	-	-	10	
B	-	100	unstratified finds	-	-	6	-	-	-	1	120	R
-	-	149	finds group	-	-	6	1	-	-	-	121	R

Key to Fabrics

20 Medieval coarse ware, 12th to 14th century
21 Sandy orange ware, 13th to 16th century
40 Post-medieval red earthenware, late15th/16th to 19th century
40A Metropolitan slipware, 17th to earlier 18th century
45C Raeren stoneware, late 15th to mid-16th century
45D Frechen stoneware, mid-16th to late-17th cennury
48D Ironstone types, early 19th to 20th century

The rest of the pottery in layer 112 belongs to the early post-medieval period, and comprises a collection of post-medieval red earthenware, and a sherd of Raeren stoneware, imported from the German Rhineland during the late-15th to mid-16th century. Some of the post-medieval red earthenware sherds are thick-walled and unglazed with a thick deposit of limescale on the internal surface, and may well be from bunghole cisterns which were common during the 16th century. This therefore fits in with the dating of the Raeren stoneware sherd.

Hollow 118 produced a single sherd of late medieval sandy orange ware and four sherds of post-medieval red earthenware, which includes the scar of a bunghole from a cistern, and the rim of a one-handled jar. This latter form could be 16th century, but could equally well be of a later, perhaps 17th-century date.

Little pottery was excavated from the fills of pit 517, comprising sherds of late medieval sandy orange ware and post-medieval red earthenware. There is no evidence to suggest that the fills were deposited at different times. No forms were found except for a small fragment of unglazed post-medieval red earthenware jug with a plain upright rim, and a thin-walled, curved sherd of post-medieval red earthenware with an all over plain lead glaze which may be from a cup or drinking jug. Both these featured sherds came from upper fill 125, and would be consistent with a 16th-century date.

A second pit, 519, produced a post-medieval red earthenware base (from fill 128). The base is frilled and is probably an imitation of 15th to 16th-century German stonewares.

Pottery from CG8 Trench B

Even less pottery was excavated from Trench B. Fill 140 of gully 529 in Phase 6/7, produced a post-medieval red earthenware fragment from the shoulder of a vessel, perhaps a cistern. It is abraded but shows traces of cream slip-painting on the outside and a thin layer of limescale on the internal surface. Fill 139 above, produced a sherd of Frechen stoneware with a mottled 'tiger ware' salt-glaze which replaced the plain brown glaze during the later-16th century (Hurst *et al.* 1986, 214).

Dump 23 in Phase 7.2-7.3, produced a beaded rim sherd in a rather coarse version of post-medieval red earthenware; it may be from a flowerpot and is of post-medieval or modern origin.

Context 100, the unstratified finds from Trench B, produced sherds of post-medieval red earthenware and a single sherd of modern ironstone showing a transfer-printed willow pattern. The only identifiable post-medieval red earthenware form is a large handle with a central thumb-made groove running along its length, characteristic of large jugs and cisterns.

Other pottery from CG8

Finds group 149 again produced post-medieval red earthenware, but this includes a thickened base from a Metropolitan slipware jar form, showing a single faint line of slip-trailing.

Discussion

The combination of sandy orange ware and post-medieval red earthenware in CG8 Trench A, and the evidence from the sherd of Raeren stoneware and fragments from cisterns make a 16th century date most likely for this pottery. The presence of the sherd of Frechen stoneware in CG8 Trench B may mean that the pottery here is slightly later, certainly it cannot date to before the later 16th century. While the latest datable pottery in finds group 149, is the sherd Metropolitan slipware belonging to the 17th to earlier 18th centuries. Finds of Raeren and Frechen stoneware are common on post-medieval sites and do not suggest high status or links with abroad. There is not enough pottery to suggest occupation during the post-medieval period.

The medieval and post-medieval pottery from CG11

Very little pottery was excavated from CG11, a single, intrusive, unglazed sherd of sandy orange ware was found in the fill of slot 6 (context 5) in Roman phase 4.2. It could be either medieval or late medieval in date.

Three internally glazed sherds of post-medieval red earthenware were excavated from the fill of pit 1 (context 2) from post-medieval

phase 7. There is nothing diagnostic about these sherds and they could date anywhere between the later-16th to 19th centuries. A little more pottery was found unstratified, comprising a single sherd of medieval coarse ware (date range 12th to 14th centuries); two sherds of late medieval sandy orange ware; a sherd of post-medieval red earthenware with an all over internal glaze, and a fragment of modern flowerpot. To conclude; there is not enough pottery present to indicate occupation in either the medieval or post-medieval periods.

The Small Finds

Copper alloy object
by H. Major
A single copper alloy object came from CG8. It was a disc, diam. 31 mm, folded roughly in half, and with no surface detail visible. It is probably post-Roman (**Trench C, surface cleaning 149**).

The Iron
by H. Major
All of the iron came from CG8. It was mostly comprised of nails, a total of 24, of which 10 came from post-Roman contexts, and are not necessarily Roman. There were also three objects, an unidentifiable fragment from Trench A (**pit 519, fill 128, Phase 7.1**), a fragment of a socket from Trench C (**surface clearance 149**), and a probable strap-end from Trench C (**pit 536, fill 159, Phase 4.2**).

The Querns
by H. Major
Fragments of lava quern came from three contexts in CG8. Small pieces of Roman quern came from two features in Trench C: slot 532 (**fill 152, Phase 4.2**), and ditch 534 (**backfilling 156, Phase 5**); the pieces from the latter feature are probably residual. One piece may be post-medieval rather than Roman (**surface cleaning 149**). Small fragments of lava also came from CG11 (**slot 12, fill 11, Phase 4.2**). A fragment of a millstone grit quern came from CG11 (**unstratified**). Although probably Roman in origin, it had been reused (possibly much later) as a whetstone.

The slag
by H. Major
Small amounts of slag were recovered from both CG8 and CG11. The material included both metallurgical (ironworking) and non-metallurgical slag, but the amount of the former was insufficient to suggest metalworking in the immediate vicinity of either site.

A ceramic gaming-counter
by T.S. Martin
A small BB1 sherd from the base of a bowl/dish looks to have been fashioned into a semi-circular disc (**context 143, Trench A: unphased**). Although fragmentary, its shape appears too regular to be accidental. The object, about the size of a thumb-nail, is too small to be an unfinished spindle-whorl. A gaming-counter is the most likely interpretation.

Building Materials
This category is largely represented by brick and tile. There were also a few pieces of undressed septaria from CG11, a stone commonly used as a rough building material, and one possible piece of *opus sectile* (which is described below). All the mortar recovered was from post-Roman contexts, although it could be residual, and there were only two small fragments of possible burnt daub found.

The Decorative Stonework
by D. Williams
A small broken triangular-shaped slab of a coarse white crystalline polished marble in which the surviving sides measure 65mm x 65mm x 40mm and the thickness is 12mm. It has two broken edges and a third which is bevelled, and there are slight traces of mortar adhering to the back. The piece was possibly originally intended as an *opus sectile* rather than a wall veneer, although the remains of a scored line along one of the broken edges, presumably prior to breaking off a section, suggests later reuse. A comparison in the hand-specimen with similar textured white marble suggests that it may have been imported from St Beat in the Haute Pyrenees (**CG8, context 149, surface clearance**, but probably Roman; **not illustrated**).

Roman Brick and Tile
by H. Major
A total of 1031 pieces of brick and tile, weighing 98,573g was examined, of which 153 (11,012g) were post-Roman. Retention of tile from CG8 appears to have been selective, as some contexts were noted as containing tile, but none was kept. The material was recorded on standard E.C.C. *pro formas*, which detailed fabric, the shape of *tegula* flanges and cutaways, and combing patterns on box flue tiles.

Detailed fabric analysis was not undertaken, as the experience of the writer with Roman tile from other sites in Essex suggests that this is not very useful. This is due to the variability of clay deposits in the county, even within a single deposit. Most of the tile was in orange or reddish fabrics, with varying amounts of sand, and sometimes, chalk. It is likely that these tiles were locally made. There were, however, a number of fragments in off-white or buff fabrics, which are likely to be non-local, and may be from a variety of sources. It is not possible to be certain of the source without thin-sectioning the material, but there are a number of possible provenances. 'Gault' tile was being produced at Eccles, in Kent, and Black (1992, 259-60) argues for the light-coloured tiles found at Colchester having come from that area. Without thin-section analysis, it would be unwise to assume the same source for these tiles. It is feasible that some pale tile was being made in Essex, using clays from the north of the county. These clay deposits were exploited during the 19th and early 20th centuries for the production of 'Suffolk White' bricks, but are now largely worked out. There is considerable potential for further analysis of 'gault' tile from Essex, but this is outside the scope of the current report.

None of the contexts contained very large amounts of tile, with only three contexts (all in CG8 Trench C, and one post-Roman) yielding more than 10kg. There was a high degree of residuality, with 50% of the Roman tile (by weight) from CG8 being residual, and 87% from CG11. Overall, the proportions of roof tile to structural tile present may be considered normal for a Roman site with no substantial buildings on it, and the amount of box flue tile present (8% of the Roman tile) may be considered to be slightly above average. When the tile is tabulated by trench (Table 7, below), however, some clear differences between the trenches can be observed.

It has been suggested from other artefactual evidence that Trench A was closest to the hub of Roman activities in the area. The distribution of the tile does not entirely bear this out, as the largest amount, and the largest groups, of tile came from Trench C. However, there is a far higher proportion of box flue tile in Trench A (28%) than in the other trenches. This happens to be the same as the proportion of box flue tile recovered from the bath-house in Chelmsford. It must be borne in mind that we are dealing with a much smaller amount of tile here, giving rise to less reliable statistics,

Table 7 Coggeshall: Tile types: % by trench, excluding post-Roman tile and spall.

Trench	*Tegula*	*Imbrex*	'Brick'	Box flue	GROSS NUMBER
CG8 A	32	24	16	28	85
CG8 B	44	31	15	10	52
CG8 C	41	36	16	7	357
CG11	65	25	8	2	51

and also that the retention of tile at Coggeshall was selective, and likely to be biased in favour of the retention of pieces with distinctive features, such as box flue tile. Despite these caveats, it seems reasonable to suggest that there was a building with a hypocaust system nearby, and possibly closest to Trench A.

Roof tiles There were no large pieces of *imbrex* present, so nothing can be said about the range of forms. Two pieces had mortar on their broken edges, indicating reuse as building material. The *tegulae* were largely unremarkable, and included a number of pieces with incomplete 'signatures', consisting of the standard one or more arcs. None of the tiles had nail-holes. There was, however, one unusual example of a tegula which had no cutaway at the corner.

Box Flue Tiles Fifty-five fragments of box flue tile were examined, the bulk of which were residual in post-Roman contexts, limiting the potential for analysis. None of the tile had cut lattice decoration, but some was combed. The most complete pattern probably had lines down each edge, with one, or more likely, two saltire crosses set down the centre. There were no complete measurements, but a few measurements could be deduced; There were two side widths of *c.* 115 mm and 130 mm, a front width of *c.* 210 mm, and a height greater than 300 mm.

Structural Brick and Floor Tile Only five pieces of 'brick' were over 42 mm thick, suggesting that the majority of the material came from *lydion* and *pedalis* tiles, rather than the thicker *bipedalis*, the latter being most commonly used for hypocaust floors. Only two pieces had 'signatures'; one had at least one arc, and the other had at least two lines. A single *tessera*, made from a box flue tile, came from CG11.

Overall discussion

For the first time in Coggeshall, portions of Roman structures, albeit in small sections, were recovered under controlled conditions — part of a more complex sequence (Table 2). Though they may be part of a villa (as proposed by Clarke: 1988) their precise function remains unknown. Quern-stones and slag from CG8 and CG11 (Major, above) could indicate a villa. A rural bath-house and mosaics could equally well indicate a villa. But they could also imply a shrine-complex (or a *mansio*: Scott 1993, 61) — and at *Caesaromagus*/Chelmsford, slag and quern-fragments are known at the temple and *mansio*. Whatever the function, these timber and (robbed) masonry structures are best appreciated in the context of information which previous work has provided (Clarke 1988; Flook 1988). Taken together, these excavations suggest zones of activity. A tentative revised sequence is as follows:

Pre- and Early Roman (Prehistoric - mid-2nd century)
Neolithic, Bronze Age and some Iron Age flints are present in residual contexts in CG8 and CG11 (Austin, above), thus expanding the position described by Clarke (1988, 81). The continuing absence of even residual Late pre-Roman Iron Age pottery is significant (Martin, above). That no 1st-century/mid 2nd-century buildings have so far been identified may be a result of sampling-opportunities however, as the earliest horizons were not investigated in CG8 and CG11. Nevertheless, two flat-bottomed gullies excavated in previous fieldwork, one curving, yielded Roman pottery (Clarke 1988, 72 and figs 11, 12). One intersected with (was cut by?) a ditch which, it is argued, was the northernmost road-ditch of Stane Street. Though it is not (yet) possible to link the beginnings of formal buildings with the laying-out of the *Camulodunum-Verulamium* (Colchester-St Albans) road in the mid-1st century AD, certain possibilities present themselves.

Meanwhile, we note that at *Caesaromagus* (Chelmsford) a similar sequence obtains: flat-bottomed gullies, cut by the earliest side-ditch of the *Londinium-Camulodunum* (London-Colchester) road, and sealed by its *pavimentum*. These too yielded Roman pottery, and were demonstrably round-houses (Isserlin and Wickenden, forthcoming). If, as at Chelmsford, the Coggeshall gullies represent buildings destroyed by construction of the road, the question of origins remains less open than was once thought. Any Flavian/mid-2nd century settlement remains to be located; that immediately prior to the road may already have been chanced upon and not recognised. In this connexion future work may show the presence reported here (albeit in small quantities) of pre-Flavian samian, black egg-shell ware, Dressel 2-4 amphorae, Early shell-tempered and Grog-tempered fabrics (Martin, above) to be significant.

Mid-Roman (mid 2nd - 3rd century) (Fig. 10)
To the east, previous work revealed what was interpreted as a quadrilateral ditched villa-*enclosure*, aligned north-south, and paddock-ditches, aligned east-west, spaced 10 and 15 metres apart (St Peter's School site, Trench 2). The southern portion of enclosure on the East Street site consisted of two ditches 5 metres apart, the southernmost being overlain by a thin spread of gravel, perhaps the result of quarrying (Clarke 1988, 69-72 and figs 1, 12, 13). The eastern portion consisted of two ditches 10 metres apart, separated by a thin gravel spread (Clarke 1988, 47 and figs 1, 4; Flook 1988, fig. 1). This surface did not survive everywhere; one sondage on the course of the droveway revealed only chalky boulder clay make-up (Medlycott 1993).

Though villa enclosure-ditches are known in Essex from aerial photography (notably at Ulting, and Langford), they are rare (most occur in Oxfordshire: Percival 1976, 102). This particular example of a sub-rectangular enclosure, with its double ditches separated by gravel is unique to the county; by contrast, the polygonal enclosure at Chignall St. James is multi-phase (Priddy and Buckley 1987, 71). Another interpretation may be appropriate.

Instead, it is suggested that the southernmost enclosure-ditch (Clarke 1988, 69) may be the northern *fossa* of Stane Street. Five metres (15 *pedes*) to the north of the road-ditch lay a hedge-gully. The thin wash of gravel sealing the recut of the *fossa* would, by this argument, be washed-out *pavimentum*. Similarly,

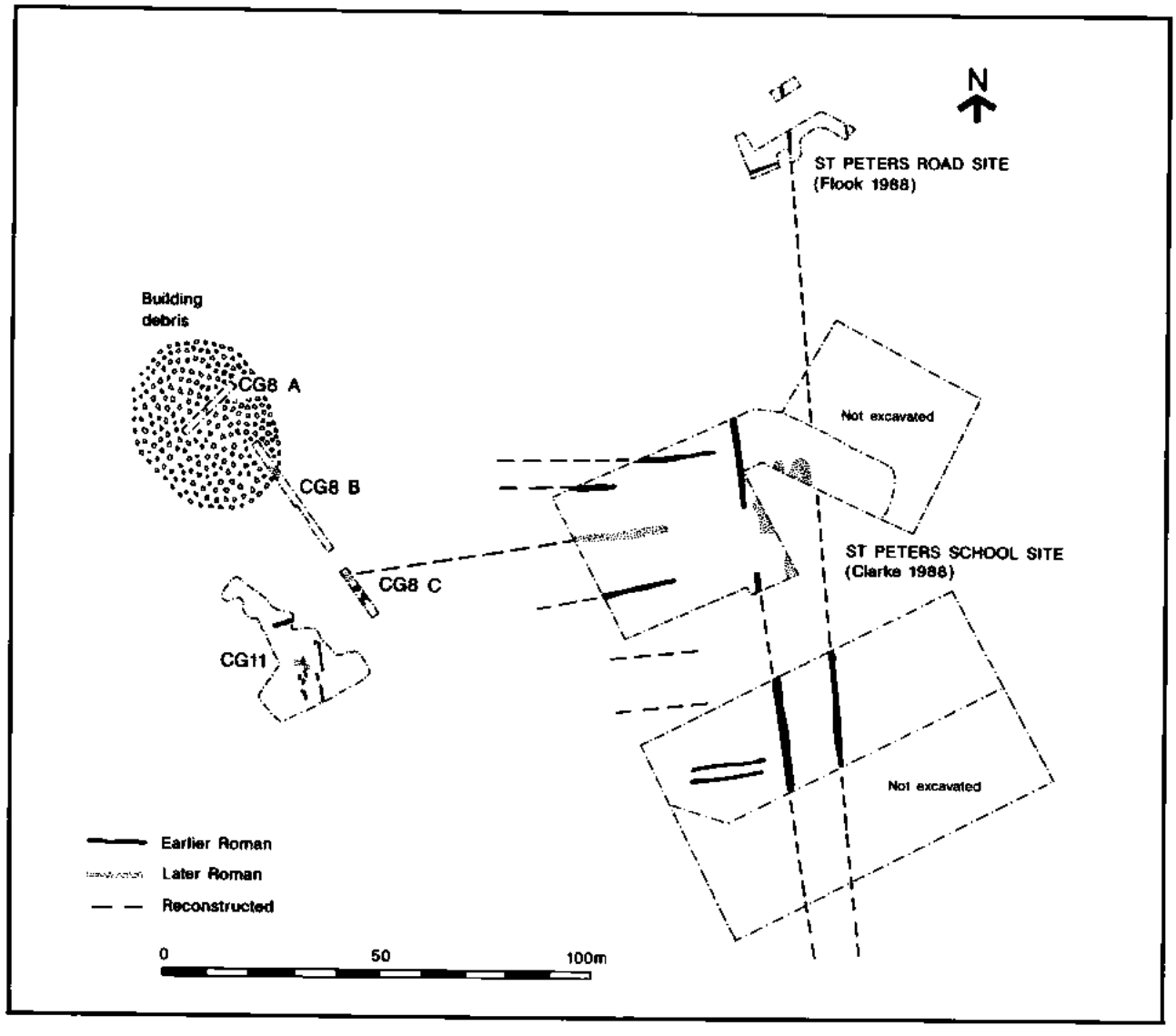


Fig. 10 Roman Coggeshall: Early/late Roman topography from current and previous excavations. The limits of the spread of building debris are still conjectural; earlier Roman activity is shown in solid line, later Roman activity is stippled.

the eastern portions of enclosure may actually be the remains of a metalled droveway, bounded by ditches 30 *pedes* apart (cf. Clarke 1988, 52), leading northwards from Stane Street (the modern East Street — indeed, it meets it at right-angles). This reinterpretation implies an open settlement, and no need for buildings to be packed tightly within a limited area. The early Roman material (including a Vespasianic coin) from the southern 'enclosure' ditch (Clarke 1988, 72) could easily be related to traffic along the Camulodunum-Verulamium Road.

The present fieldwork further west revealed a timber building (Site CG11, Phase 4.2), some 250 metres north of the Roman road. Its corridor was 3 metres (9 *pedes*) wide. No sign of the original paddock system (or of any other structure) was detected near the building. The rectilinear paddocks, droveway and timber building were probably all laid out at the same time, for they were approximately co-aligned and regularly spaced. The ditches were spaced 30 and 45 *pedes* apart. Within the paddock-system, previous work revealed a possible subdivision in the form of a ditch, the fill of which was dated to the 2nd/4th century (St Peter's School Site, Trench 2, feature 55/58). The present fieldwork showed that the ditch continued further west (Site CG8, Trench C, feature 534). This fieldwork also revealed pit-digging in the 2nd-3rd century (Site CG11) north of the building, extending virtually up to modern Church Street (Site CG8, Trench A). Paddocks are a phenomenon increasingly familiar at a number of mid-Essex villas, including Chignall St. James (Clarke, forthcoming), and Great Holt's Farm, Boreham (Germany, this volume, p. 247).

Later Roman (3rd-4th century) (Fig. 10)

Previous fieldwork detected 4th-century quarries, dug into the droveway, signifying the route's demise. In the current fieldwork, 4th-century pits were identified

within the field-system (Site CG8, Trench B, Phase 4.4). Pit-digging implies a discard-zone from a functioning waste-producing centre, part of which is now located. A feature (Site CG8 Trench A Phase 2) may be a robber-trench, implying the presence (in Phase 4.1) of a masonry wall extending towards Church Street (Fig. 4, and Section 7). If so, it is probably Roman, but 3rd-4th century, at the earliest (Church Street appears to be aligned at right-angles to it). It could have been medieval, though this is less likely.

Other signs are furnished by building-materials. The presence of box-flue tile at CG8 (28% of which came from Trench A) and *opus signinum* (in small quantities) suggests that the site of a ?bathhouse is presumably close to hand (Major, above). A triangular portion of *opus sectile* walling was imported from the Haute Pyrenees (Williams, above) — and notable for occurring in a rural context (research by the present author suggests: Isserlin in progress). Clunch limestone is also known. A single *tessera* was also recovered. This should be added to the casual finds of *tesserae* and *tegulae* made to the north-west of CG8 Trench A (in presumably greater numbers) beneath Church Street, extending towards the grounds of The Lawns, and also near the church (Clarke 1988, 84), and in the paddock and droveway gullies at the St Peter's School site (Clarke 1988, 65). If these do indicate a mosaic, it would not be out of place chronologically. In south-east England some villa-mosaics are dated to the 2nd century, but most are 4th-century (Black 1987, 54).

Possibly these structures are different parts of the same complex, built at separate dates on differing alignments. Alternatively they may betoken contraction or a northward shift in settlement, from the mid-2nd/early 3rd-century structure(s) at CG11 to the mid-3rd/early 4th-century structure yielding *tegulae* and *tesserae* at CG8 (the timber building on Site CG11 was not rebuilt in the 3rd-4th centuries). The fleeting overall impression furnished by limited excavation is of a degree of formal layout, and an owner with access to high-status building material.

Post-Roman (5th - 18th centuries) (Fig. 11)

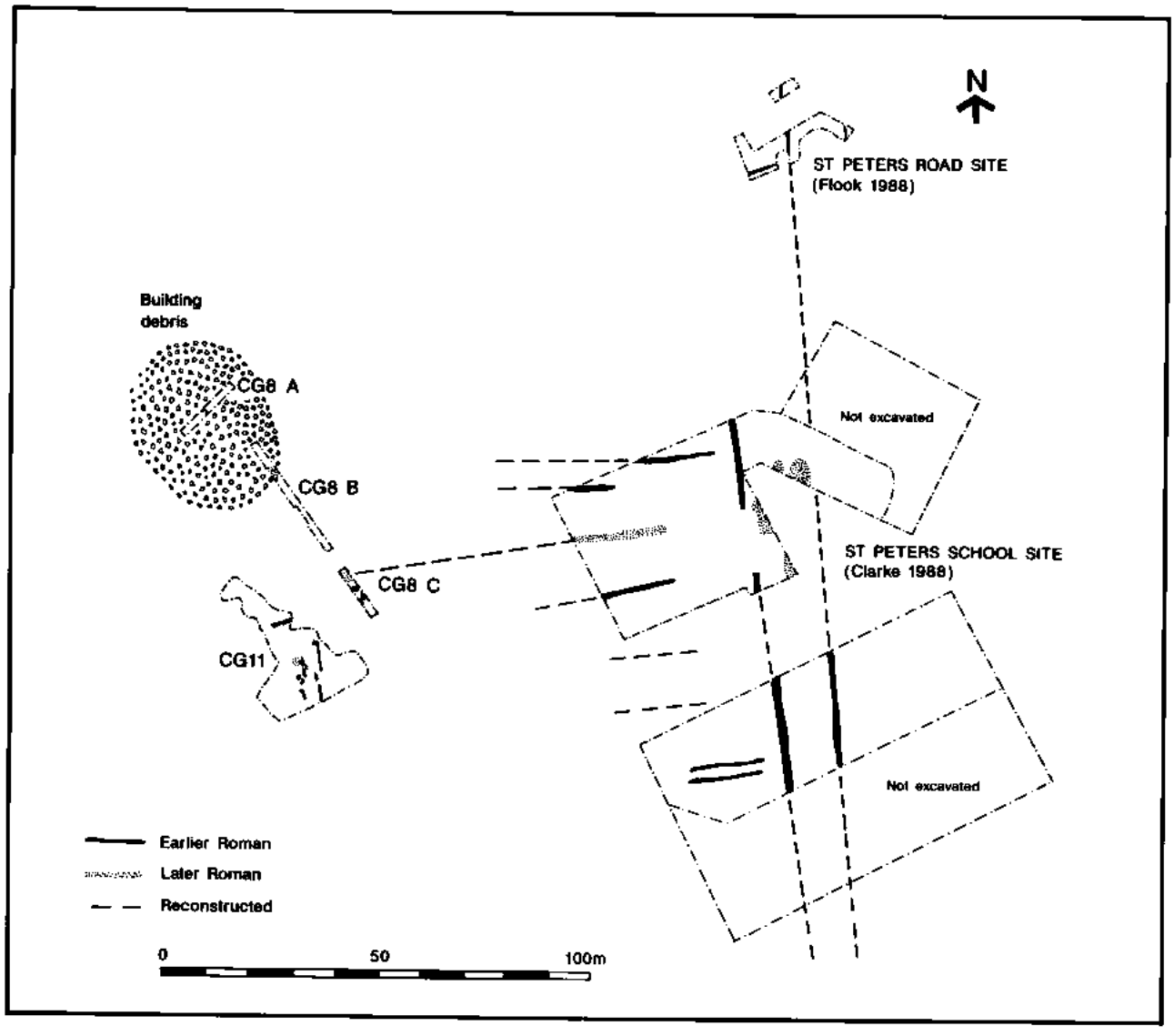
As many post-Roman contexts were not excavated, or were cleared only summarily, a complete account cannot be given. An attempt has been made to reconstruct the entire stratigraphic sequence, little of which can be dated by artefacts or documents (details in archive). Even so, some points are worth making.

A priority must be dating the disuse of the rectilinear Roman paddocks, and the laying-out of Church Street. Church Street, it will be recalled, deviates at approximately 45° from Roman Stane Street, suggesting that the latter probably still functioned. If the metalling and makeup of Church Street really *overlies* the Roman material noted by antiquarians during road-construction (Clarke 1988, 84), then the road must be late- or post-Roman. It is not possible directly to date the robbing of the (Roman) masonry wall in Site CG8 (Trench A, Phase 1 and robbed in Phase 7.0). The road leads to the Church of St Peter-ad-Vincula, nearly opposite Trench A, and it is reasonable to assume that demolition (adaptation?) of the building is bound up with ecclesiastical origins (Morris and Roxan 1980, for modes of transition from villas). The church was founded *c.* 1105 (Clarke 1988, 87). Brick observed by antiquaries in the fabric of local churches was assumed to be reused Roman material, though no robbed masonry building was known. The recent verdict that this was brick produced for Coggeshall Abbey (Ryan and Andrews 1993, 94, 97) should be set against this first trace of a masonry structure, robbed in the medieval period.

The changes possibly began in Phase 5: Early Saxon pottery comes from the final, *tertiary* fills of ditch 534 (Site CG8, Trench C, context 132; Tyler, above). However, as this deposit overlies the *secondary* fills of the same paddock-ditch which produced 7th-century pottery (context 156), the material is residual. The stratigraphically earlier 7th-century pottery indicates that the ditch was *back-filled* in the mid-Saxon period — a classic case of 'reverse stratigraphy'. The date of its *digging* can be suggested as Roman. The 5th-century pottery may have been cleared out from the ditch before being redeposited during backfilling; it certainly indicates activity in the vicinity. The site is also notable for having produced ?imported *Schlickung*-treated wares (Tyler, above).

The layout and early development of the Church Street frontage is poorly dated ceramically and otherwise. At CG8, the ditch parallel to Church Street (Trench A, Phase 2) may be the rear boundary of a plot fronting onto Church Street. Its dating rests on discarded 'Roman' material (but possibly residual). Postholes for a fence (Site CG8, Trench A, Phase 2) do contain Roman material, however. Both ditch and fence are contemporary, but could be late- or post-Roman (Saxon?) at the earliest — or medieval at the latest. South-west of the excavated areas, where Stoneham Street and Church Street join, 13th/14th-century frontage activity is known (Andrews 1987, 94-5).

The structure in Site CG8, Trench A (Phase 7.2) would have faced onto Church Street. This indicates that the frontage was more built up than is now recognised. Its position in the stratigraphic sequence suggests a post-Roman date; artefacts do not help here. The rear outshot is no longer depicted on a map of 1743 (ERO D/DU 19/2), only a hall-type building aligned parallel to the frontage. It is however clear that occupation was more extensive on the south side of Church Street than the cartographic evidence suggests (no building is shown here on the 1st edition Ordnance Survey Map (Sheet XXVI.14, 1875)). By that date areas of the frontage were less



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Previous fieldwork detected 4th-century quarries, dug into the droveway, signifying the route's demise. In the current fieldwork, 4th-century pits were identified

within the field-system (Site CG8, Trench B, Phase 4.4). Pit-digging implies a discard-zone from a functioning waste-producing centre, part of which is now located. A feature (Site CG8 Trench A Phase 2) may be a robber-trench, implying the presence (in Phase 4.1) of a masonry wall extending towards Church Street (Fig. 4, and Section 7). If so, it is probably Roman, but 3rd-4th century, at the earliest (Church Street appears to be aligned at right-angles to it). It could have been medieval, though this is less likely.

Other signs are furnished by building-materials. The presence of box-flue tile at CG8 (28% of which came from Trench A) and *opus signinum* (in small quantities) suggests that the site of a ?bathhouse is presumably close to hand (Major, above). A triangular portion of *opus sectile* walling was imported from the Haute Pyrenees (Williams, above) — and notable for occurring in a rural context (research by the present author suggests: Isserlin in progress). Clunch limestone is also known. A single *tessera* was also recovered. This should be added to the casual finds of *tesserae* and *tegulae* made to the north-west of CG8 Trench A (in presumably greater numbers) beneath Church Street, extending towards the grounds of The Lawns, and also near the church (Clarke 1988, 84), and in the paddock and droveway gullies at the St Peter's School site (Clarke 1988, 65). If these do indicate a mosaic, it would not be out of place chronologically. In south-east England some villa-mosaics are dated to the 2nd century, but most are 4th-century (Black 1987, 54).

Possibly these structures are different parts of the same complex, built at separate dates on differing alignments. Alternatively they may betoken contraction or a northward shift in settlement, from the mid-2nd/early 3rd-century structure(s) at CG11 to the mid-3rd/early 4th-century structure yielding *tegulae* and *tesserae* at CG8 (the timber building on Site CG11 was not rebuilt in the 3rd-4th centuries). The fleeting overall impression furnished by limited excavation is of a degree of formal layout, and an owner with access to high-status building material.

Post-Roman (5th - 18th centuries) (Fig. 11)

As many post-Roman contexts were not excavated, or were cleared only summarily, a complete account cannot be given. An attempt has been made to reconstruct the entire stratigraphic sequence, little of which can be dated by artefacts or documents (details in archive). Even so, some points are worth making.

A priority must be dating the disuse of the rectilinear Roman paddocks, and the laying-out of Church Street. Church Street, it will be recalled, deviates at approximately 45° from Roman Stane Street, suggesting that the latter probably still functioned. If the metalling and makeup of Church Street really *overlies* the Roman material noted by antiquarians during road-construction (Clarke 1988, 84), then the road must be late- or post-Roman. It is not possible directly to date the robbing of the (Roman) masonry wall in Site CG8 (Trench A, Phase 1 and robbed in Phase 7.0). The road leads to the Church of St Peter-ad-Vincula, nearly opposite Trench A, and it is reasonable to assume that demolition (adaptation?) of the building is bound up with ecclesiastical origins (Morris and Roxan 1980, for modes of transition from villas). The church was founded *c.* 1105 (Clarke 1988, 87). Brick observed by antiquaries in the fabric of local churches was assumed to be reused Roman material, though no robbed masonry building was known. The recent verdict that this was brick produced for Coggeshall Abbey (Ryan and Andrews 1993, 94, 97) should be set against this first trace of a masonry structure, robbed in the medieval period.

The changes possibly began in Phase 5: Early Saxon pottery comes from the final, *tertiary* fills of ditch 534 (Site CG8, Trench C, context 132; Tyler, above). However, as this deposit overlies the *secondary* fills of the same paddock-ditch which produced 7th-century pottery (context 156), the material is residual. The stratigraphically earlier 7th-century pottery indicates that the ditch was *back-filled* in the mid-Saxon period — a classic case of 'reverse stratigraphy'. The date of its *digging* can be suggested as Roman. The 5th-century pottery may have been cleared out from the ditch before being redeposited during backfilling; it certainly indicates activity in the vicinity. The site is also notable for having produced ?imported *Schlickung*-treated wares (Tyler, above).

The layout and early development of the Church Street frontage is poorly dated ceramically and otherwise. At CG8, the ditch parallel to Church Street (Trench A, Phase 2) may be the rear boundary of a plot fronting onto Church Street. Its dating rests on discarded 'Roman' material (but possibly residual). Postholes for a fence (Site CG8, Trench A, Phase 2) do contain Roman material, however. Both ditch and fence are contemporary, but could be late- or post-Roman (Saxon?) at the earliest — or medieval at the latest. South-west of the excavated areas, where Stoneham Street and Church Street join, 13th/14th-century frontage activity is known (Andrews 1987, 94-5).

The structure in Site CG8, Trench A (Phase 7.2) would have faced onto Church Street. This indicates that the frontage was more built up than is now recognised. Its position in the stratigraphic sequence suggests a post-Roman date; artefacts do not help here. The rear outshot is no longer depicted on a map of 1743 (ERO D/DU 19/2), only a hall-type building aligned parallel to the frontage. It is however clear that occupation was more extensive on the south side of Church Street than the cartographic evidence suggests (no building is shown here on the 1st edition Ordnance Survey Map (Sheet XXVI.14, 1875)). By that date areas of the frontage were less

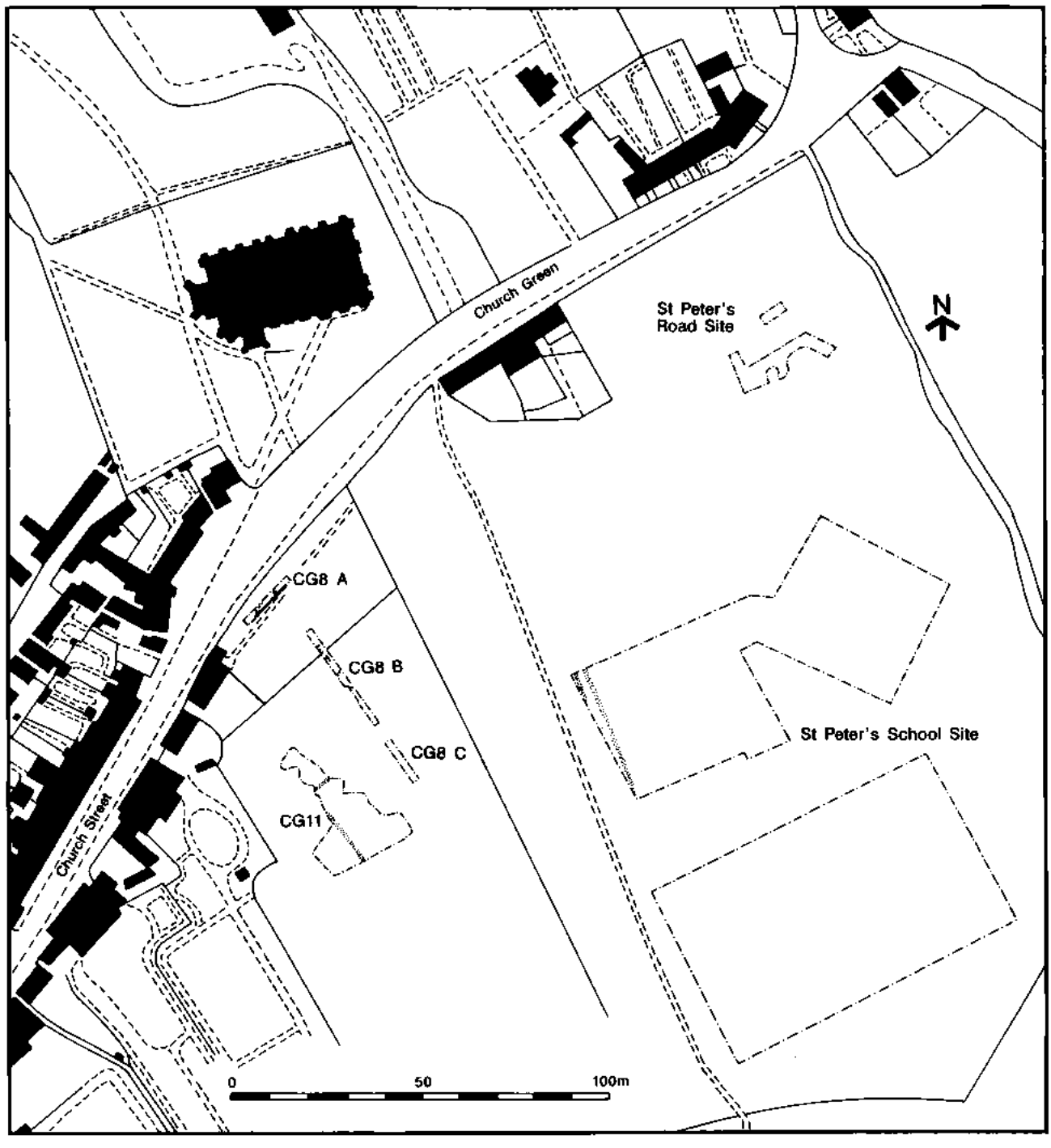

Fig. 11 Coggeshall: Medieval/Post-medieval topography. Buildings and boundaries shown on the 1st edition Ordnance Survey map are in solid line; excavated features are stippled.

settled, the zone of occupation having contracted. Finally, the same lack of chronological certainty applies to the linear features of Site CG11, Phase 5. It is likely that these (and the latest features uncovered on the St Peter's School Site (Trench 2)) relate to the boundaries of 'The Lawns' which fronts onto Church Street. They share the alignments of boundaries depicted on the 1st edition Ordnance Survey Map, but do not appear on it.

Acknowledgements

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Footnotes

1. Note that excavations reported in *Essex Archaeology and History* (1994, 248) as carried out at Coggeshall in 1993 by R.M.J. Isserlin were in fact carried out by A. Wade, and are described in this article (CG11). Neither party was responsible for this slip.
2. Only an overall analysis is published here; a detailed archive account and catalogue by Louise Austin is available in archive.
3. This report was compiled by T.S. Martin, who was solely responsible for the publication account. Spot-dating and analysis for CG8 was carried out by C.R Wallace (archive report). The only additions have been quantification by sherd count and fabric weight in grammes (g). The archive report for CG11 is by T.S. Martin.

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Excavation at 1-5 Sun Street, Waltham Abbey

by N. Brown

with contributions by D.D. Andrews, O. Bedwin, V. Fryer,
A.P. Harris, R. Huggins, H. Major, P. Murphy and P. Ryan

A small excavation to the rear of 1-5 Sun Street in the historic core of Waltham Abbey town revealed part of the ?butt end of a substantial ditch, possibly of 11th-century date. The feature had been cut through a deep soil, subsequently buried, which contained Roman pottery and a bronze brooch, together with occasional Saxon and Early Medieval sherds. After about 0.6m of deposit had accumulated in the ditch, it was backfilled and levelled off. The ditch lay on the predicted line of the "Eldeworth" *enclosure.*

Clay layers were then deposited across the site and cut through by a well and a large cesspit, probably belonging to separate properties. Both these features were backfilled in the late 12th or early 13th century, and there was a good assemblage of 13th-century pottery. A series of layers were then deposited, occasionally cut through by pits and postholes; this sequence culminated in the digging of a large pit which occupied most of the centre of the trench and was backfilled in the early 16th century.

Introduction

The excavation was occasioned by redevelopment of the back yards of 1-5 Sun Street which was due to take place along with refurbishment of the standing timber-framed buildings. Archaeological work carried out elsewhere in the town had identified a possible early enclosure known as the '*Eldeworth*' (Huggins 1988, Clarke *et al.* 1993). The expected line of the enclosure passed through the area available for excavation. The excavation was undertaken in the hope of establishing the presence/absence of the enclosure ditch. The work was funded by Co-op Property Group Southern Region, Epping Forest District Council and Essex County Council.

Excavation

This took place in March and April 1991; a trench 8.5m x 2.6m was laid out to the rear of numbers 3-5 Sun Street (Fig. 1). Between 0.75 and 1m of modern and post-medieval layers were removed by machine. The sides of the trench were then stepped in by 0.3-0.5m. The presence of an unstable circular brick-lined 19th-century well, at the north-west end of the trench, meant that this part of the trench was reduced to a width of 1m (Fig. 3.3) for safety reasons. Excavation then proceeded by hand. A further unstable well (F89, Fig. 3.3), backfilled in the 16th century, was revealed, and this necessitated the abandonment of the western part of the trench, reducing the length to about 5m (Fig. 3.2). Safety reasons also dictated that as excavation progressed, the trench was further stepped in. This took place mainly at the east and west ends, but also to some extent on the north and south sides, and the main north and south sections were also cambered. This process resulted in the bottom of the excavated trench being 4m x 1.9m. The constantly changing shape of the trench can be seen on the phase plans (Figs 2 and 3). In order to assist the reader in understanding the relative locations of the features and deposits, three grid points are marked on all the trench plans.

The sequence of events within the excavated trench is summarised below as 8 periods of activity from the Roman period to the 20th century. The dating relies largely on the pottery evidence. The sequence is presented in a series of phase plans (Figs 2 and 3), Periods 1 and 2 being combined on a single plan as they have so few features and deposits.

Period 1 Roman to Early Medieval

At the eastern end of the trench, a deep buried soil (0.35-0.5m thick; Figs 2.1 and 4) overlay the natural sandy clay. This soil consisted of an upper horizon (171; Fig. 4) of dark grey-brown silty clay loam, separated by a thin stoney layer (192; Fig. 4) from a lower horizon (178; Fig. 4) of olive-grey sandy clay loam. The few finds from the buried soil included a Roman bronze fibula. The pottery was predominantly Roman, with occasional later material including a single Early Saxon sherd and early medieval shell-tempered sherds.

Period 2 Late 11th - Early 12th century

The buried soil was cut by a large ditch (180; Figs 2.1 and 4). The western side of the buried soil lacked the clear, tripartite division described above, and instead appeared as a largely homogeneous layer of dark grey, clay loam (179; Figs 2.1 and 4). This lack of clear structure in the buried soil immediately adjacent to ditch 180, may result from trampling at the edge of the

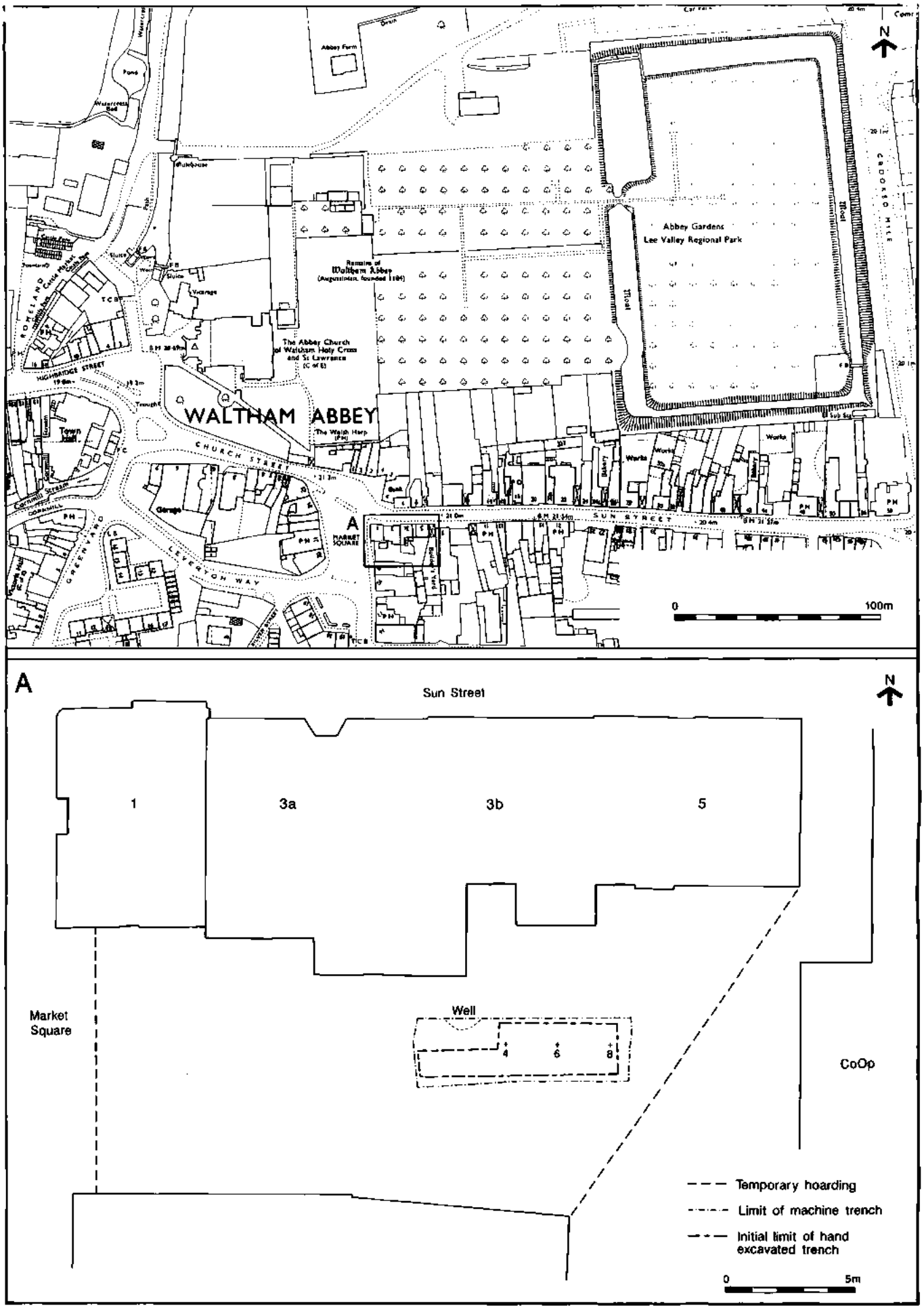

Fig. 1 Location plan. The three grid points shown within the excavated trench occur on each of the phase plans.

ditch, and/or root disturbance caused by vegetation growing along its edge.

Ditch 180 was a substantial feature, about 0.9m deep from the top of the buried soil and up to 2.5m wide, flat based and steep sided. The natural sandy clay at the base of the ditch preserved a number of spade impressions (Fig. 2.1). The fills of the ditch mainly consisted of relatively thin (between 0.04 and 0.14m) silty clay layers (176, 181, 182, 183, 184, 185, 189, 193, 194; Figs 4 and 5). They appear to have accumulated largely by natural processes, but incorporated occasional fragments of bone and pottery. Charcoal was also present, mainly in quite distinct lenses within some of these layers (Fig. 5; 182, 183, 184, 189) which mostly occurred toward the eastern side of the ditch. These silty clay layers were interspersed at the ditch sides by somewhat more substantial deposits (0.10-0.20m deep) mainly of sandy silt clay (187, 188, 190, 196; Fig. 5), which may represent slumping of material dumped at the ditch edges. The ditch appeared to be coming to a butt end, being much narrower in the south section than the north (compare Fig. 4 with Fig. 5). However, it is difficult to be certain since it extended beyond the southern limit of the excavated trench, and much of the south-western side of ditch 180 had been removed by a later feature (cesspit 164 of Period 4; Fig. 4).

Period 3 Mid 12th century

When ditch 180 had largely silted up, it was levelled off with a rubble layer (155; Figs 2.2, 4 and 5) possibly to consolidate the ditch fills. This layer contained large mortar fragments, stone rubble and pieces of Roman tile. A thin layer, 174, which extended across part of the top of the buried soil, included mortar fragments and may have been deposited at the same time as layer 155. A thin clayey deposit, 168, accumulated at the top of 155 on the south side, after which a layer of dark grey silt clay, 161, was laid down across the site, probably as a levelling layer (for convenience this layer is shown on the Period 4 plan, Fig. 2.3).

Period 4 12th century/early 13th century

Following the deposition of 161, a number of features were dug through the layer possibly quite soon after its deposition. These included three postholes, F149, F153 and F159, a shallow lobate pit F166/151, one corner of a large, apparently rectilinear, pit, probably a cesspit, F164; and a sub-circular feature probably a well, F135 (Fig. 2.3).

F149 and F153 were a pair of oval, steep-sided features, probably postholes, with layer 155 exposed in their flat bases. They were separated by about 1m from a more substantial, oval, steep-sided feature F159. These three features appeared to form a fence line running north south across the trench. The gap between F149 and F159 may be indicative of a small gate through the fence.

To the east of the postholes lay a substantial steep-sided, flat-based, sub-circular feature (F135), probably a well, approximately 1m in diameter (Figs 2.3 and 5). The lower fills, 144 (black silt clay) and 143 (black, sandy silt clay), may have accumulated during the use of the well. The upper fills (136, 137, 138, 145), mainly sandy clay loam, contained large fragments of bone and pottery. These deposits may represent deliberate backfilling, after the well had gone out of use. A patch of compacted yellow-brown, sandy clay (133) at the west edge of 135 may be the remains of a clay floor adjacent to the well.

To the west of the possible fence line, the northern part of the trench was occupied by a fairly shallow lobate pit (F151/166; Fig. 2.3), and the southern by a deep steep-sided, flat-based rectangular feature, apparently a cesspit (F164), which appeared to extend well beyond the limits of the trench. The lower silty sand fill (175; Fig. 4) was waterlogged and the loose sandy clay fill above (172; Fig. 5) was partly waterlogged. Both fills contained frequent bone, pot and other debris and appeared to have accumulated whilst the cesspit was in use. A thin, compact, silty, sand layer 173, may have been deposited to seal these lower fills. The upper fills 141, 165, 167 appear to have been deposited to seal and level up the pit when it had gone out of use. The waterlogging of the lower fills meant that the feature was not bottomed.

The lobate pit F151/166 was a shallow, sloping-sided feature of uncertain purpose. The northern lobe was deeper than the southern and exposed the upper surface of layer 155. The southern lobe had a 'flattened' south side, apparently to avoid cutting into cesspit F164 (Fig. 2.3); F151/166 also appears to accommodate F159, indicating these features were contemporary.

Period 5 Late 13th/14th century

Following the backfilling of cesspit 164 and well 135, a deep (up to 0.35m) deposit, 126/130, accumulated. This layer was a very dark grey-brown, mottled yellow-brown, silt clay, with fragments of pot, bone and other domestic debris. At the west end of the trench, an attempt was made to subdivide this layer during excavation, the lower part being given the number 134, largely on the basis of a greater frequency of yellow-brown mottles. However, this distinction was very difficult to trace, except at the extreme western end of the trench and was essentially an arbitrary division (Figs 4 and 5). Despite this, there appear to be some differences in the ceramics from 126 and 134 (pot report, below) and this may indicate that these deposits accumulated over some length of time.

At the western end of the trench, a layer (80) of very dark silt clay with numerous small charcoal inclusions was deposited over 130.

Layers 128, 136 and 146 (Fig. 3.1) appear to have been dumped into the upper fill of well 135, probably to level up a hollow left by slumping of its fills.

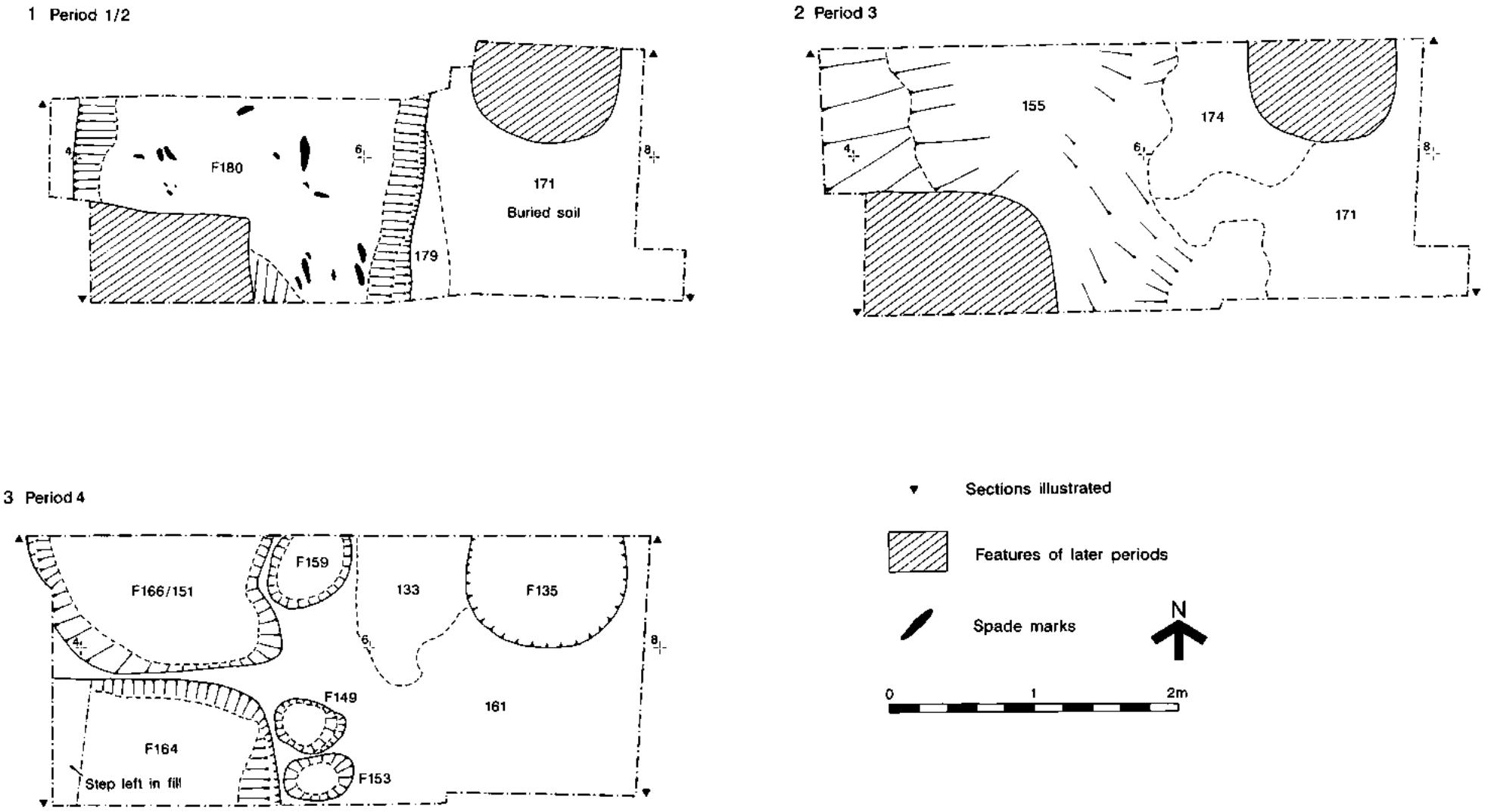

Fig. 2 Plans of Periods 1/2, 3 and 4.

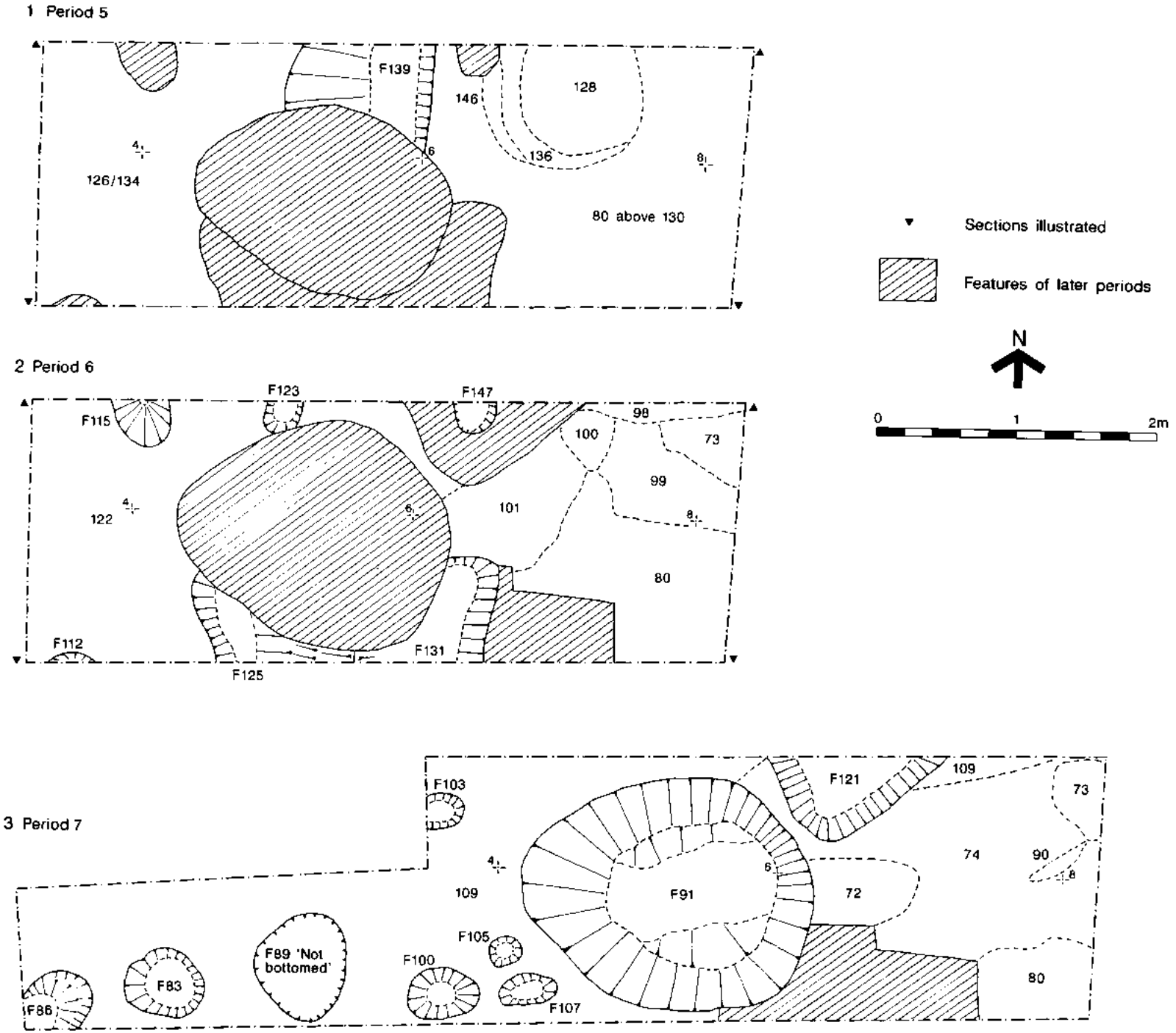

Fig. 3 Plans of Periods 5, 6 and 7.

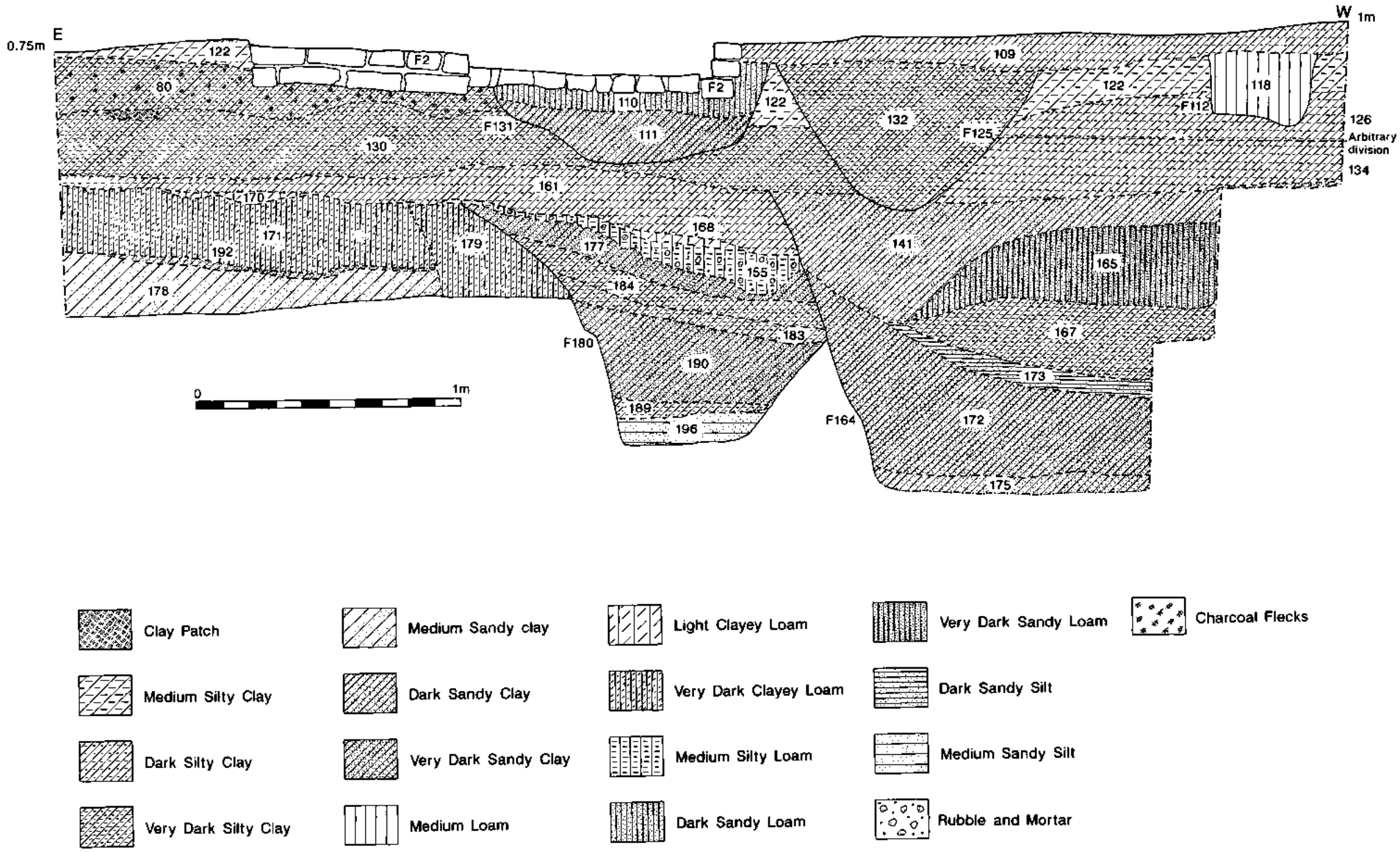

Fig. 4 South section of hand-excavated trench. Figures at east and west ends indicate depth of later deposits removed by machine.

A shallow feature F139 was cut through layer 126/134; its western side sloped gently, whilst the eastern side was much steeper and here 134 just penetrated the top of clay layer 133 (period 3 above) (Fig. 5). It is possible that F159 represents a fence line with posts placed against the steep western edge.

Period 6 14th century

Most of the deposits at the centre of the excavation trench had been removed by a large pit (F91) of Period 7 (Figs 3.2 and 3.3). At the east end, much of the excavated area was covered by a layer (122) of yellow-brown, mottled dark grey silt clay 0.1-0.15m deep. An essentially similar layer (98) was recorded at the east end of the trench. Layer 122 was cut by a number of small postholes (F112, 115, 123,147), and by a shallow pit (F125) of uncertain purpose, much of which had been removed by Pit 91 (Period 7).

In the south-east corner of the trench, layer 80 of Period 5 was exposed. Apparently layer 98 of period 6 had been deposited in part directly onto layer 80. In the extreme south-east corner, all deposits down to layer 80 were removed during machining (Period 7 below). Part of layer 80 had been removed, by a shallow pit, F131, adjacent, and similar to pit F125 (Fig. 3.2). A complex series of small layers and deposits occupied the north-eastern corner of the trench (layers 73, 98, 100, 101; Fig. 3.2) apparently deposited to level up a hollow possibly caused by continued slumping of the fills of well 135 (Period 4).

Period 7 15th/16th century

The west end of the trench was occupied by layer 109 (Figs 3.3, 4 and 5), a dark grey-brown silt clay with frequent pebbles, tile fragments and roots. This layer was cut by a series of features; postholes F83, 103, 105, 107, 100, well 89, and pits 86 and 91 (Fig. 3.3).

The majority of these features (86, 89, 91, 103 and 107) produced pottery dating to the 15th/16th century. Posthole 83 produced sherds of 13th/14th-century pottery; it is probable that this material is residual, since layer 109 contained 16th-century pottery together with earlier medieval sherds. Posthole F105 contained no pottery or other dateable finds. It seems likely that all these features are broadly contemporary.

Well F89 was a near-vertical sided sub-circular feature, whose fill included a considerable quantity of tile, pottery and other artefacts. After about 0.8m had been excavated, the fill began collapsing and excavation of the feature was abandoned for safety reasons.

The fill of pit F91 contained large quantities of domestic debris, bone, tile and pottery, and may be interpreted as a rubbish pit. This pit appears to have been separated from well F89 by a fence line. This consisted of shallow postholes F103, 105 and 107, possibly with a 1m wide entrance gap between F105 and 103 (Fig. 3.3).

The centres of two rather more substantial postholes F83 and 100, were each about 1m from the centre of well F89 (Fig. 3.3). Whilst these two postholes may have related to features beyond the limits of the excavation trench, they appear well placed to have supported a superstructure over the well, and/or winch to haul buckets from the well. The pattern of charcoal and distribution of four nails in F86 suggest that a nailed wooden object may have been burnt *in situ*, but it is uncertain what this may have been and how it related to the other nearby features.

At the east end of the trench a more complex series of layers, 72, 73, 74, and 99 had been deposited, and these were partly removed on the north side by a sloping-sided, flat-based pit F121 and on the south side by the brick-lined base of a 19th-century cesspit (F2, Period 8 below). As stated above, in the extreme south-east corner of the trench the deposits had been machined off to the top of layer 80 (Period 5 above).

Period 8 17th-20th centuries

Approximately 1m of 17th, 18th, 19th and 20th-century deposits were machined off and only a brief record made (details in archive). However, besides the brick-lined circular well noted above, two features are worthy of mention. Both appear to be cesspits backfilled in the mid 19th century. Feature 2 at the east end (Fig. 4) of the trench was rectilinear, brick-lined and with a brick floor.

Most of this feature was machined away but the bottom 0.2m was excavated by hand. Feature 3, at the west end, which was machined away but was visible in section (in archive), again had brick-lined walls but was without a brick floor.

Finds

Prehistoric Pottery

by N. Brown

A single small abraded flint-gritted body sherd, not closely datable within the prehistoric period, was recovered.

Roman Pottery

by C.R. Wallace

A small quantity of pottery was recovered, mostly from the buried soil. The material is not particularly abraded. Where forms and fabrics are given these refer to Going's scheme (1987, 3-54).

The majority of the pottery is of later Roman date (3rd/4th century), including Hadham oxidised ware (fabric 4), and grey ware (fabric 36), Oxfordshire white ware (fabric 25) and Nene Valley colour-coat (fabric 2). Forms present include B5.1, B6 and C8.1. No very late pottery is present such as late shell-tempered ware or Oxfordshire red colour coat. The assemblage is broadly comparable with material from Sewardstone (Huggins, R.M. 1978).

A smaller quantity of early pottery was also present, including samian, Verulamium Region Ware (fabric 26), early shell-tempered ware (fabric 50) and South Gaulish Amphora (fabric 56).

Although small, the assemblage is one of the largest recorded from the area of the medieval town.

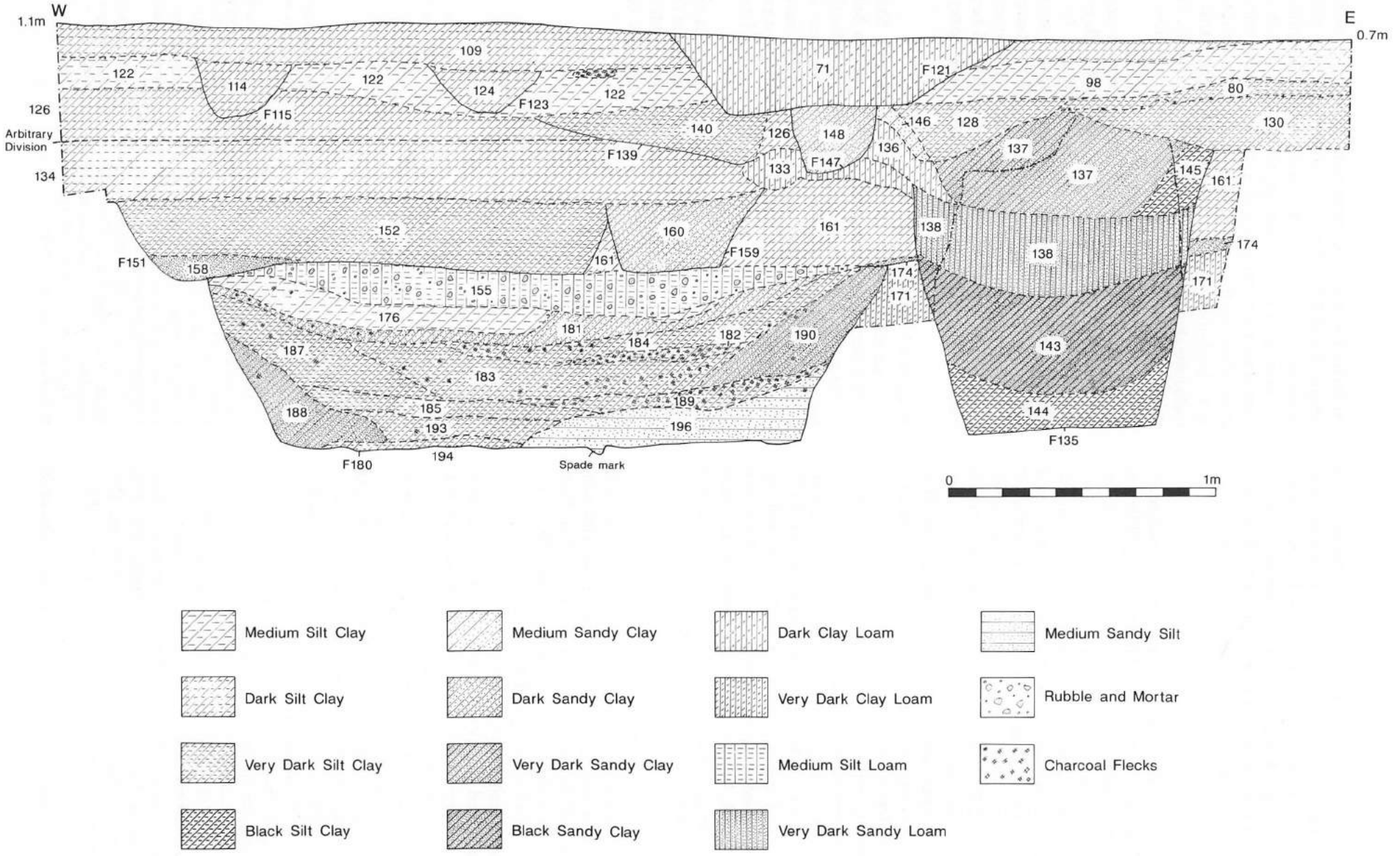

Fig. 5 North section of hand-excavated trench. Figures at east and west ends indicate depth of later deposits removed by machine.

Saxon Pottery
by N. Brown

Two small chaff/grass-tempered sherds from contexts 178 and 196 were recovered. The fabric appears unlikely to be of Middle Iron Age Date. Whilst Middle Iron Age pottery occasionally has such inclusions (Drury 1978; Brown 1991), the fabrics do not have the density of inclusions visible in these two sherds. They are therefore most likely to be of Saxon date (S. Tyler pers. comm.).

Medieval and Post-Medieval Pottery
by Rhona Huggins

Introduction

The pottery from the excavation is similar to that from other sites in Waltham Abbey. The archive contains a full catalogue. Where fabric codes are mentioned, these refer to a fabric series devised for pottery from Waltham Abbey (Huggins, P.J. 1988b, 136).

A few sherds may be of 11th or 12th-century date. The largest medieval groups are early 13th century. Two large groups are illustrated as the number of pit groups of the 13th century in the area is still small (Figs 7 and 8). These 13th-century groups can best be related to the Church Street assemblage west of the Market Square (Clarke *et al.*, 1993). The upper levels of the excavation contained 14th, 15th and early 16th-century pottery (Fig. 6.21-27).

Of particular interest is the rare 'blau-grau' Rhenish ladle in pit 164 (Fig. 7.9), found with large storage jars of coarse sandy greyware and jugs. Well 135 also had similar storage jars and jugs, together with an unusual spout of a shallow vessel (Fig. 8.4). Also present was a redware jug (Fig. 8.6) with applied 'scale' pattern with light brown glaze unusual for this period.

The pottery from the excavated trench suggests continuous occupation of the site from the 11th century. No feature on this site has pottery in any quantity earlier than the 13th century, although considerable amounts of Middle and Late Saxon pottery have been found elsewhere in the Abbey excavations (Huggins, P.J. 1976).

Medieval

The earliest datable forms are the D1 rim from layer 168, Period 3 (Fig. 6.2), a simple D2 rim (not illustrated) from layer 188 (fill of ditch 180), together with a D1 sherd from layer 183 (of ditch 180). The D2 rim (Fig. 6.1), clearly residual in context 98 (Period 6), has the grooved top typical of the Conquest period, broadly contemporary with the foundation *c.* 1060 of the town.

The greatest quantity of pottery was deposited on the site in the early 13th century. Both the cesspit 164 and the well 135 were filled at this time. Both these features contained D2 sherds in the lowest levels with fills dominated by fabric G. Sherds from layer 130, Period 5, immediately above the fills of F164 and 135 were similar in proportion of fabrics. Layer 152, fill of F151, Period 4, contained only 9 sherds, but of these 6 were D2 and 3G, indicating a 12th-century date. Fill 140 of F139, Period 5 (Fig. 6, 7 to 10) contained a larger quantity of sherds with nearly equal proportions of D2 and G, presumably residual since this feature was quite high in the stratigraphy and cut layer 126/134 (above and Fig. 5).

The fill (140) of pit 159 has a more equal proportion of D and G fabrics than 135 or 164 and suggests a late 12th-century date for the pottery.

Layer 134 had 174 sherds, with 44% G fabric and only 2% D2 fabric, similar to the fabric proportions in layer 130, and typical of the late 12th/early 13th century. Layer 126 (Fig. 6, 16 to 20), above 134, had a high proportion of H fabric and highly decorated jug sherds typical of the late 13th/early 14th century. The layer 161 had a very high percentage (66%) of G to 15% D2 compared with layer 130, which had 41% G, 39% H and only 9% D2, suggesting 161 was earlier than 130 as would be anticipated from the stratigraphy (above, and Figs 4 and 5).

The overlying layer 80 had very few D2 or G and large percentages of redwares H and J which become common in the late 13th/14th centuries. The redware cooking-pot rims represented by (Fig. 6.19, 20) are not widely flanged compared to those in the 15th-century level 109 (Fig.6.21, 22). The decorated jugs (Fig. 6.12 to 15) in layer 80 are typical of 14th-century London area jugs.

Post-Medieval

The upper features and layers of the excavated deposits contained pottery of 15th and early 16th-century date (Fig. 6, 21 to 27). Early stoneware loop handles in well 89 and pit 91 suggest these were filled sometime before the Dissolution of the Abbey in 1540.

Layers 109 and 100 contain typical 15th-century pots, and the pit group in 91 has pottery of the first half of the 16th century, including a Raeren stoneware mug common at this period. Jugs and mugs predominate in this group, perhaps debris from an inn?

Upper levels were removed by machine and are only represented by the fill of cesspit 2, the pottery from which can be dated to *c.* 1876-91 (details in archive).

Discussion

The features 180, 164 and 135 demonstrate different patterns of deposition. Ditch F180 contained a few sherds probably incidentally incorporated in the fills. Cesspit F164 seems to have been filled more rapidly than well 135, so that sherds from several pots occur in different levels. Well 135 and cesspit 164 both appear to have been filled in the first half of the 13th century, well 135 slightly later than cesspit 164. The jug (Fig. 7.10) from 164 is an unusually complete example of a local glazed coarse sandy redware jug with brown linear decoration at this early period, and may date from the end of the 12th century. The shelly ware D2 sherds from the lowest level of the pit may be part of an early fill which accumulated during use of the pit, suggesting a 12th-century date for the original digging. The fill contains several distinctively large vessels of coarse sandy greyware with thumbed band decoration, one with the trace of a handle. Such vessels suggest some special storage purpose, perhaps related to the newly established market set up by the priory/abbey at this period. The rare Rhenish ladle (Fig. 7.9) of near stoneware type is the first to be found at Waltham, although examples are known from elsewhere.

The well 135 had two D2 shelly sherds in its lowest fill (144) consistent with a late 12th-century date. A high percentage of grey sandy G fabric in the other fills suggest it was closed in the first half of the 13th century, some sherds fit the over-lying level 130. The very large storage vessel (Fig. 8.8) from the upper level of this well is similar in fabric to sherds in layer 130, and all these sherds had signs of heavy wear inside possibly from brine or internal scouring.

Catalogue of illustrated sherds

Figure 6

Layer 98 (11/12th century)

1. Rim with groove on top, D2 (cf Huggins 1970, fig. 12/36, pre-Cloister context).

Layer 168 (11th century)

2. Rim of small pot with outer edge thumbed, grey with fine shell, D1.

Layer 130 (early 13th century)

3. Complete profile of small cookpot, black sandy ware. Large part of similar vessel also present (not illustrated).
4. Rim (a) and (b, c) body sherds of large storage jar; D2 shelly ware, red surfaces and applied thumbed strips partly pulled off leaving grey surface below. (Similar rim and sherds in well 135).
5. Jug rim.
6. Rod handle of jug stabbed on back, red surfaces, grey core, greenish glaze traces overall. Sherds with white linear decoration and redware sherd with brown glaze were also present (not illustrated).

(Not illus.): 5 D2 rims, 5 G rims.

Context 140, fill of pit 139 (first half 13th century)

7. Rim, red surfaces, D2.
8. Angled rim, shelly D2 red fabric, burnt outside.

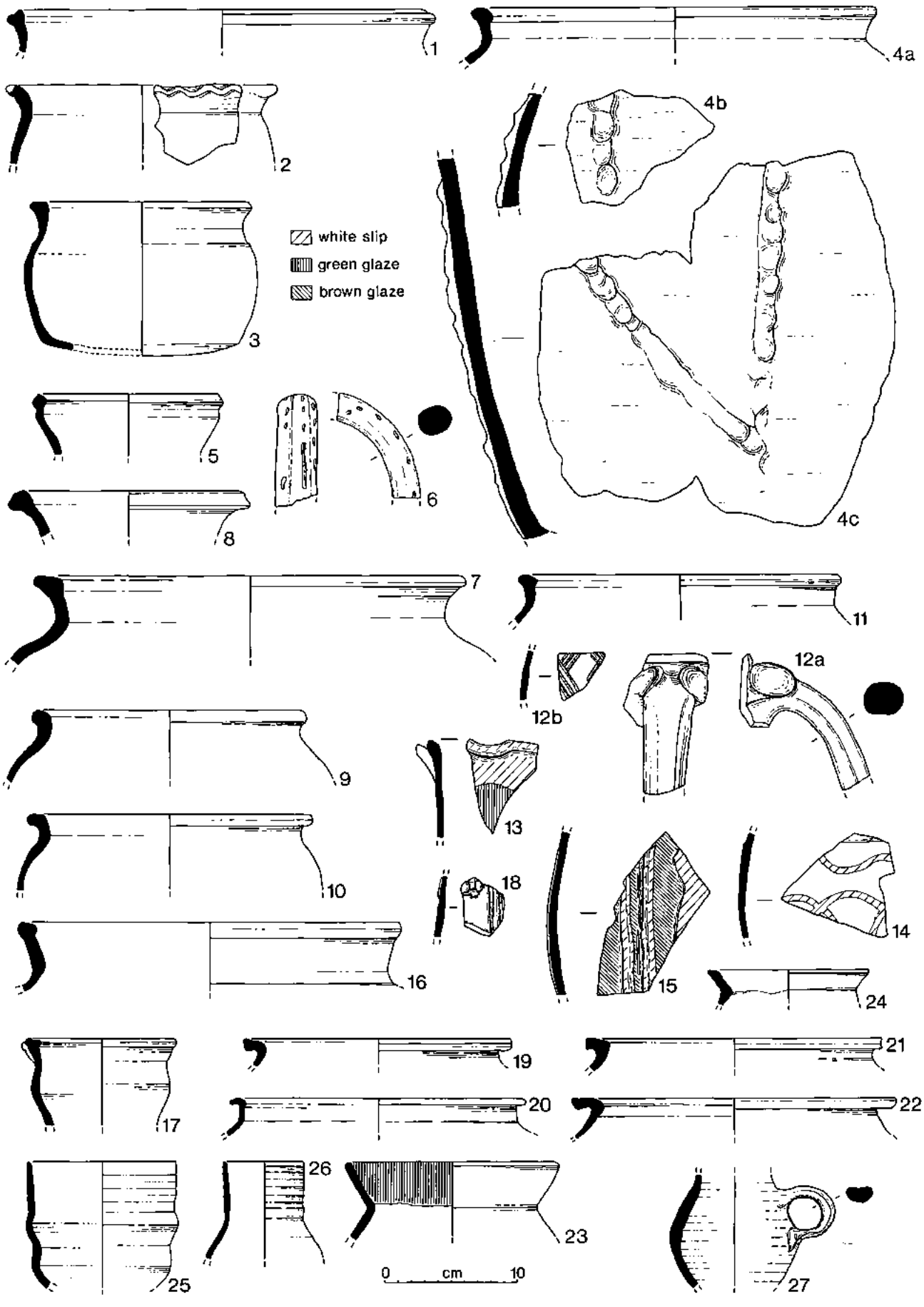

Fig. 6 Medieval and Post-Medieval Pottery.

9. Rim, shell cavities, brown surfaces, D2.
10. Rim, thin-walled pot, red surfaces, D2.

Layer 80 (early 14th century)
11. Rim redware, H. Also (not illus.) 2 worn D2 rims, 13 G rims and sherds with applied thumbed bands; 14 redware H rims like 11.
12a. Jug rim and handle with deep thumbing on both sides of join, yellow/mottled green glaze over white slip overall outside, redware.
12b. Sherd of similar fabric and glaze to 12a with incised decoration.
13. Jug rim with pulled spout, redware, dark green glaze below rim, white slip over upper part of rim and inside.
14. Body sherd of jug, large rounded type, with white trailed slip arcaded pattern on redware, glazed (cf Pearce [1985], fig. 45/149 and Rackham [1972], fig. 87, London/East Anglian).
15. Four large sherds of grey jug, dark brown body under glaze with thick painted greenish-white vertical pattern. (cf Rackham [1972], fig. 86, possibly S. Herts.).

Pottery not illustrated included: 5 jug rims similar to No. 13 (1 unglazed grey, 3 redware, 1 white slipped) 2 jug sherds with dark green glaze, 2 with glaze on slip, 2 with simple boss under dark green glaze and 9 other small glazed sherds. All redware.

Layer 126 (c. 1300)
16. Rim of storage pot, G.
17. Jug rim, grey sandy ware unglazed, pulled spout.
18. Jug sherd, grey fabric, glazed polychrome N. French style decoration of brown flower and stalks on green background. Two sherds of redware jugs with green moulded and incised decoration not illustrated.
19. Flanged rim, redware, grey core, glaze splash on rim H.
20. Flanged rim, redware, grey core, unglazed. H.

Layer 109, (early 16th century)
21/22 Wide flanged rims, redware M.

(Not illus.): Rim of shallow bowl M; bowl base K; jug sherd with white linear pattern and patchy glaze.

Pit 91, fills 92, 93, 95 (early 16th century)
23. Rim of vessel, K, speckled thin green glaze inside rim.
24. Small pipkin rim, dark red fabric.
25. Profile of mug, handle missing, M, dull greenish/brown glaze both sides.

Also present but not illustrated were: Loop handle of Raeren stoneware like 27 below; also base with frilling in redware copying stoneware; large part of jug with complete rim, grooved strap handle and pulled spout, fine greyware with red surface (sherds fit from 49/92/93); two spigotted redware handles; two rims with trace of slip decoration; knob of lid thumbed on edge, brown glaze on top, M; handle of unglazed buffware jug; jug rim, light brown surfaces, speckled dull green glaze and scratched decoration on neck.

Well 89, fill 90 (early 16th century)
26. Mug rim and neck, Raeren stoneware.
27. Mug body and loop handle, Raeren stoneware.

Figure 7
Pit 164 (early 13th century)
1a. Profile of large vessel, coarse sandy grey ware, applied thumbed band below neck.
1b. Body sherd of similar pot with scar of handle pulled away, two tapering applied bands remain supporting handle.
1c. Sherds of similar fabric have divergent applied bands (165 fits 141).
1d. Handle with knife stabbing on back in similar fabric (not illus.): four rims of similar fabric from 167 and 164.
2. Rim of similar fabric to 1; without band, blackened both sides.
3, 4, 5. Rims of D2 fabric.
6. Rim and base, friable grey sandy ware, black surfaces, G.
7, 8. Two rims of four similar small pots, sandy grey ware, blackened outside, G.
9. Rim, part of handle and body of small ladle, Rhenish 'blaugrau' fabric (Dunning 1959, fig 31) 12/13th century.
10. Large part of jug with rod handle, missing neck and rim, very coarse sandy redware, strong wheelmarks inside but horizontal breaks suggest coil method may have been used also. Decorated with five wavy vertical dark brown lines from below neck to girth with brownish-green glaze overall outside. All from lowest level 175. Decoration typical of late 12/early 13th century.
11. (a) Jug rim, (c) neck sherd and (b) base, fine sandy redware, white slip decoration on neck and green glaze outside. Probably same pot.

Figure 8
Well 135, Context 143
1. Large part of cookpot, fine sandy grey, both surfaces black, undecorated, G. Another similar pot in 136.
2. Bowl rim, shelly ware, red surfaces blackened outside, grey core, D2.
3. Upper part of jug with strap handle, grey sandy fabric, red outer surface, ridged neck and collar, glaze overall outside, olive-green on one side, orange/green on other, probably due to position in kiln. Sherd fits from Context 138 J1.

Not illustrated: 3 small rims, one greyware jug like 7 below; one sandy with shell temper and applied thumbed decoration like Fig. 7, 1.

Context 138
4. Spout of vessel, probably bowl, decorated with two thumbed bands, coarse sandy ware with white grits, grey core, like Northolt 'k' (Hurst 1961).
5. Jug rim, collar like 3 above, coarse grey fabric like 4, unglazed, dark grey slip overall. Sherd of same rim in 143 also 137 and 136, some reddening of surface.
6. Jug base and three sherds with applied 'scale' decoration fine redware with light brown glaze overall (cf Pearce *et al.* 1985, fig. 61, 263).

Not illustrated: Two red D2 rims with thumbed decoration, another with shell cavities; five rims coarse sandy ware G, one has bright red inside surface, one brown outside, three black both surfaces (not illustrated).

Context 136
7. Rim with applied thumbed decoration below, coarse grey, 'k' (see 4.).
8. Rim and part of large storage vessel, grey coarse sand temper, black surfaces, very worn inside probably as a result of use, applied thumbed bands below rim and similar body sherds with branching pattern (not illus.). Body sherds of similar pot in 130 fit 141. Also fragment of rod handle similar fabric, black surface.
9. Jug rim with trace of pulled spout, red with grey core, H, unglazed.

Not illustrated: Sherd of similar fabric with white slip linear pattern, brown glazed.
10. Thumbed base in similar fabric to 9.

Brick and tile

by P. Ryan

A full list of the material, by context, is contained in the archive; this report presents the main features of the assemblage.

Roman brick and tile

Roman brick and tile was found in the buried soil, residual in the fills of ditch 180 and throughout contexts of Periods 2-4.

In quite a number of instances the tile was buff or pinkish buff in colour, perhaps an indication that the clay from which it was made contained a proportion of chalk or lime.

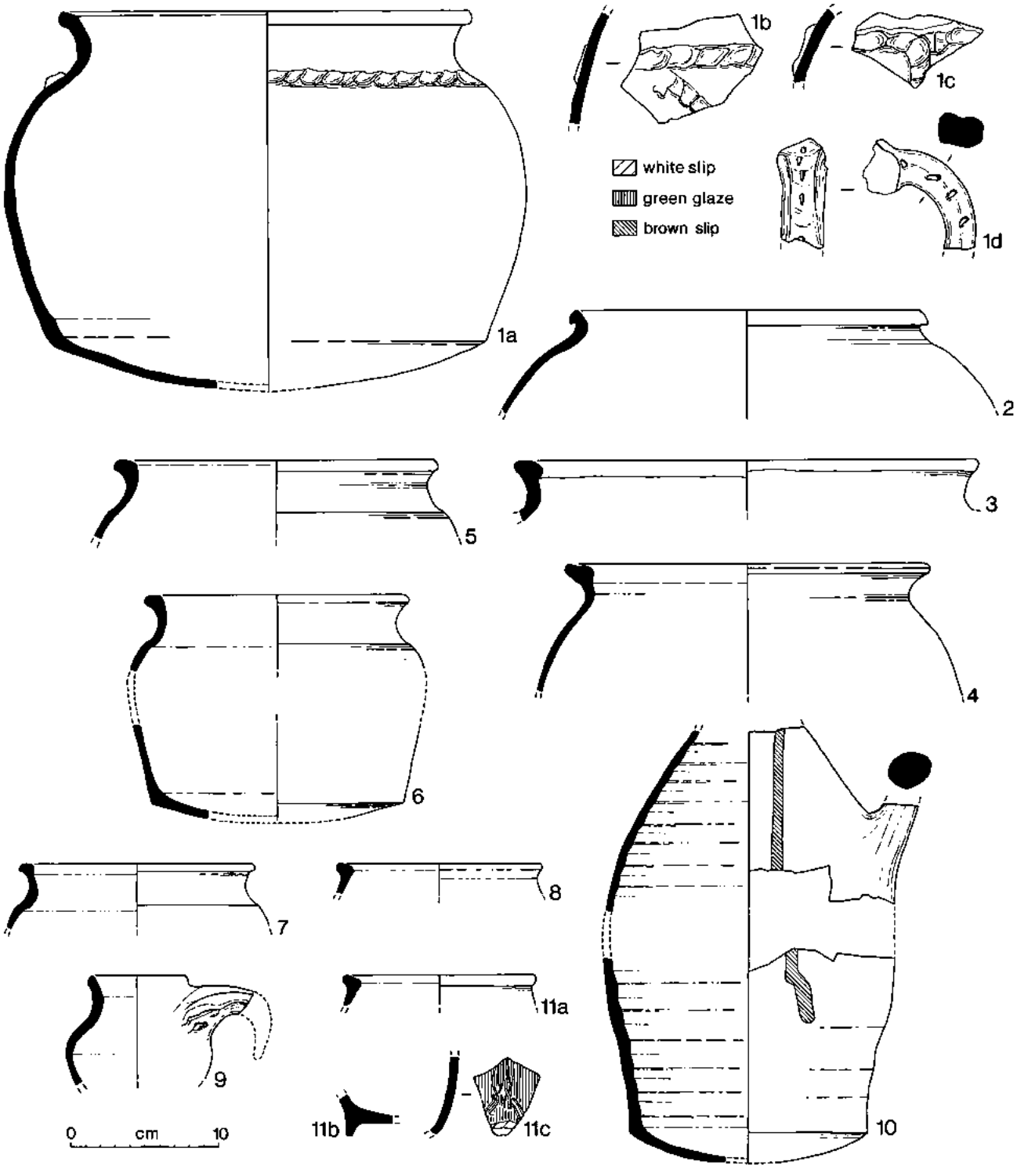

Fig. 7 Medieval Pottery.

Medieval and later

BRICK

Brick occurred in F2, 3, contexts 82, 86, 90, 92 (fills of Period 7 features) and 99, Period 6. Complete bricks were only present in cesspit structures 2 and 3, but elsewhere the fragments were small. However it was possible to identify four distinct types.

18th/early 19th century — 220x105x60; purple; regular; irregular arrises; diagonal pressure mark; slightly creased faces; fairly smooth base. Feature 2.

15th/early 16th century — 235x115x50; orange or red; fairly regular; irregular arrises; creased faces; pitted or rough base with grass marks. Feature 3 and possibly the fragments in context 90, fill of F89.

Medieval 'great brick' — Fragment 55mm thick; with a hole pierced to a depth of at least 40mm. Context 82, fill of F83.

? Medieval or Roman — 54mm thick; oxidised margin; reduced core; rounded lower arris; regular sharp upper arris; made in a mould. Layer 99.

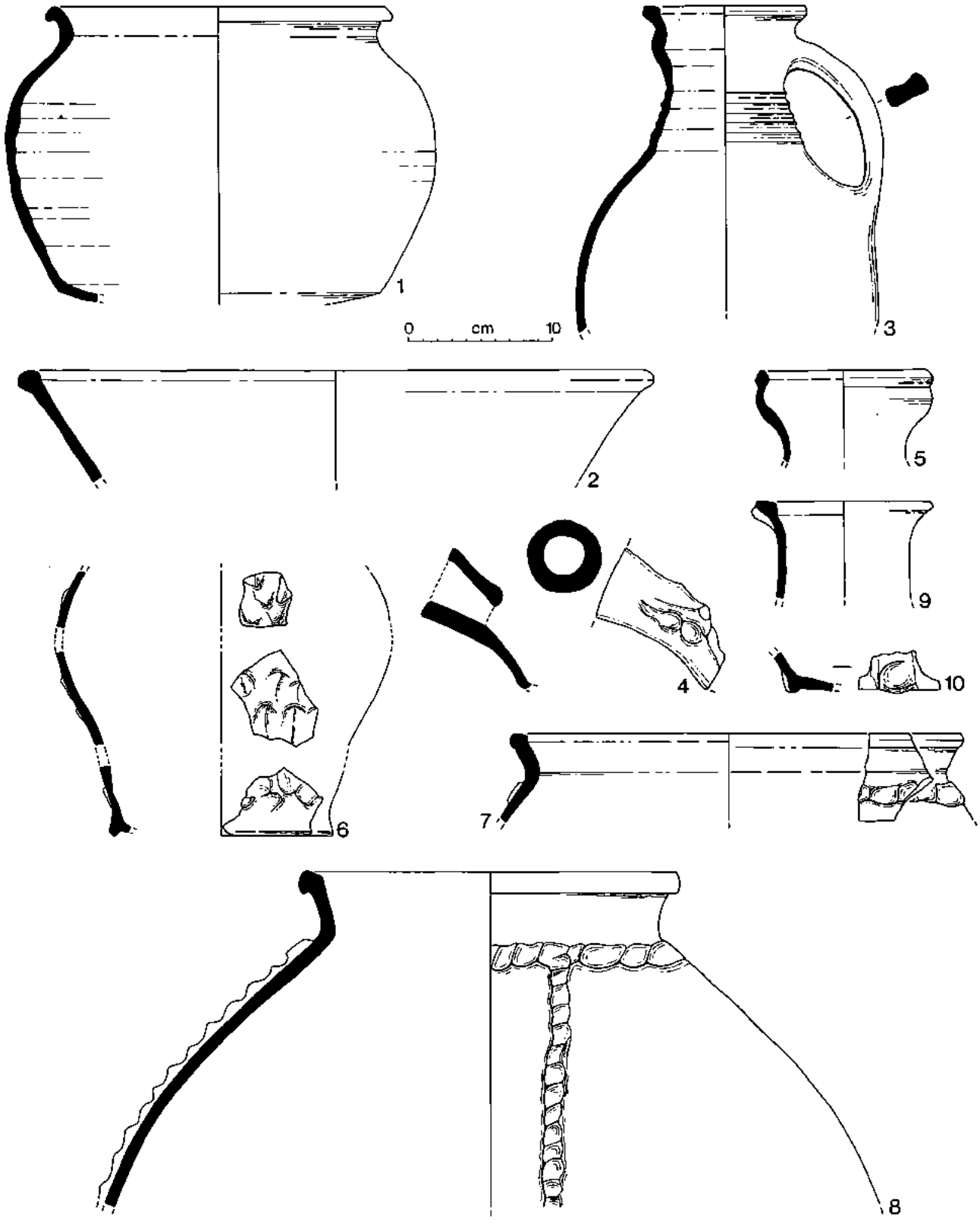

Fig. 8 Medieval Pottery.

ROOF TILE

Because of the quantity of roof tile from this excavation, it has been possible to identify three distinctive types of tile. Of particular value in establishing the characteristics of the types were the larger pieces of tile and those with nibs, pegholes and edges. These types were also identified in the Waltham Abbey Cornmill stream footbridge excavation (Wallis 1992, 146).

Type T1 — Nibbed tiles, flat, 15 to 20mm thick, knife trimmed. The fabric of this type of tile contains some quartzite grains which have left distinctive drag marks on the surfaces, where it has been trimmed and where the tile has been slipped out of the mould. Some parts of the edges of these tiles were not trimmed. Nibbed tiles were superseded by peg tiles during the second half of the thirteenth century. Type T1 tile fragments were found in Layer 72 and fill 93, of pit 91.

Type T2 — Peg tiles with circular pegholes, 15mm thick, flat, knife trimmed. The fabric of this group of tiles was the same as the fabric of Type T1 with the characteristic sand grain drag marks. These tiles may have been made in the last years of, or immediately after, the final production of nibbed tiles. Type T2 tiles were identified in cesspit F164, fills 165/141.

Type T3 — Peg tiles with circular pegholes varying in thickness from 10 to 17mm. The majority of fragments were between 13 and 15mm thick and varied in width from 153 to 190mm, the majority being about 165mm wide. Most are oxidised throughout. Although the larger fragments generally appear to be flat some of the part tiles are slightly cambered. None are knife trimmed. The fabric consists of a very fine clay with few sand grains. There are occasional flint and chalk inclusions. The surface of the tiles is pimply and often has pits of 1-5mm in diameter which may be the result of the chalk inclusions being burnt or dissolved out, as some have chalk in their base. Many of these tiles have ridges on the upper surface caused by a worn or damaged strike. They do not have the appearance of having been made with care and precision. A large quantity of this T3 tile was found in context 90, the fill of a well (89) dated to early sixteenth century.

A fragment of tile with a nib was found in context 92 (pit 91), but the surviving remnant showed no evidence of knife trimming or sand grain dragging.

Lack of nibs, or pegholes, made it impossible to identify whether some fragments with knife trimming and sand grain drag marks came from Type T1 or Type T2 tiles; however, they can be dated to the 13th century or earlier.

FLOOR TILE

Fragments of floor tile occurred in contexts 80 (Period 6), 90 (fill of F89), 92, 95 and possibly 97 (fill of F97). That in context 80 was very abraded. It was 40mm thick and had traces of glazing. The fragments in contexts 90, 92 and 95 had been slipped with cream slip before being glazed. They varied between 17 and 26mm thick and are probably 14th century or earlier.

DAUB

Daub which had been subjected to heat was found in a variety of contexts (listed in archive). Most fragments were fairly small, being between 10 and 25g in weight. Fragments in contexts 92 and 93 (F91) were much larger, 60 to 390g, and whilst similar in character to each other were different to the remainder of the daub. Traces of sooting were found on fragments from contexts 82 (F83) and 90 (F91).

UNIDENTIFIABLE

Two items classed as unidentifiable merit comment.

(1) Part of what appears to be an open-topped rectangular box-like object from context 92 (F91). It is 90mm wide by 40mm high, with walls and base 12mm thick and is made of roof tile type fabric (Fig. 9.7).

(2) A fragment of brick, 34mm+ thick, from context 173 (cess pit 164). It was made in a mould and the fabric contains quartzite grains. This may be from a medieval brick.

Architectural stone

by Andrew P. Harris

Sixty-five small and fragmentary architectural fragments were examined. The majority of the pieces were unworked, some were burnt. The moulded material, indeed perhaps the whole assemblage, is likely to have derived from the demolition and/or alteration of some parts of the nearby abbey. In common with many monastic institutions, Waltham Abbey was heavily plundered in the post-dissolution eras, its materials used for a range of purposes not all structural. A full catalogue is included in the archive.

Material

Greensand

This material is by far the largest single stone type represented in the assemblage (41 examples). The material is moderately durable, but prone to weathering, especially on exposed surfaces. The structure of the stone allows crisp carving. Greensand outcrops in the London and Kent region and was thus widely used in Sussex, London and Essex supplementing the local flints and chalk. Greensand is extensively used in Waltham Abbey and its occurrence and predominance in the assemblage is to be expected. The material was widely used for any number of tasks, including walling, moulding and architectural dressing. This wide usage reflects its availability rather than its suitability.

Carstone

Although numerically the next most significant material, the quantity (8) is small. Carstone is a ferruginous sandstone which occurs widely in the superficial strata of the Essex region. Its properties, being coarse, hard and durable, have ensured its use for architectural dressing and walling. It was seldom carved.

Others

Other materials present in the assemblage were represented by one or two examples. Only two fragments of limestone were recovered. Both of different types were identified. The small burnt fragment of black Purbeck marble (from the Isle of Purbeck, Dorset) retained no diagnostic features as to its form or date. The remaining example was of a shelly fine-grained oolitic stone of Clipsham or Barnack type. The limestones generally weather well and were widely exploited in all periods for a whole range of architectural and sculptural tasks. The "marbles" from Purbeck were used in a decorative capacity as well as for tomb monuments. The deposits were quarried in the Roman period and again in the 12th century and thereafter.

Slate, the other non-local material present in the assemblage, is of more recent date. All six examples are fragmentary and undiagnostic in form. Local material is represented by flint and chalk. Chalk is not a common building material and occurs mainly as either a filling material or in the core of the wall. Being less dense, it was frequently employed in vaulting.

Tooling

The worn and fragmentary nature of the material has ensured that in only four instances can tooling marks be identified. All show a narrow chisel and are undiagnostic for dating purposes. Fine finishing marks are visible on the surfaces of the moulded material.

Moulded fragments

Only three worked stones were present in the assemblage:

1. Unstratified. Shelly oolitic limestone. A large complete block showing half-shaft, dia. 240mm. One end of the stone is damaged and burnt. 12th century.
2. Context 134 (Period 5). Greensand. Fragment showing roll with three fillets and hollow chamfer. The piece is heavily burnt and seems to have been reused as two holes have been drilled into the rear. 13th century.
3. Context 92 (F91). Greensand. Small fragment showing roll with quirk, diam. 50mm.

The moulded material is almost certain to have derived from the nearby abbey or associated structures.

The majority of the material showed no evidence of working. The quantity of this material, and the fact that all of it was of greensand, suggests that this stone was in fact never worked. Greensand is a common walling material and it is suggested that all these pieces derived from the fabric of a rubble wall.

Stones from the following contexts showed considerable evidence for burning: 92, 109, 134, 181, 187, 190, 197.

Carstone is not present within the fabric of Waltham Abbey and, as carstone is often used in hearths, it seems likely that these pieces were introduced to the site to line a hearth or similar feature in which burning was taking place.

A source in domestic or industrial hearths is suggested. The evidence of the stones however indicates a lime kiln to be unlikely.

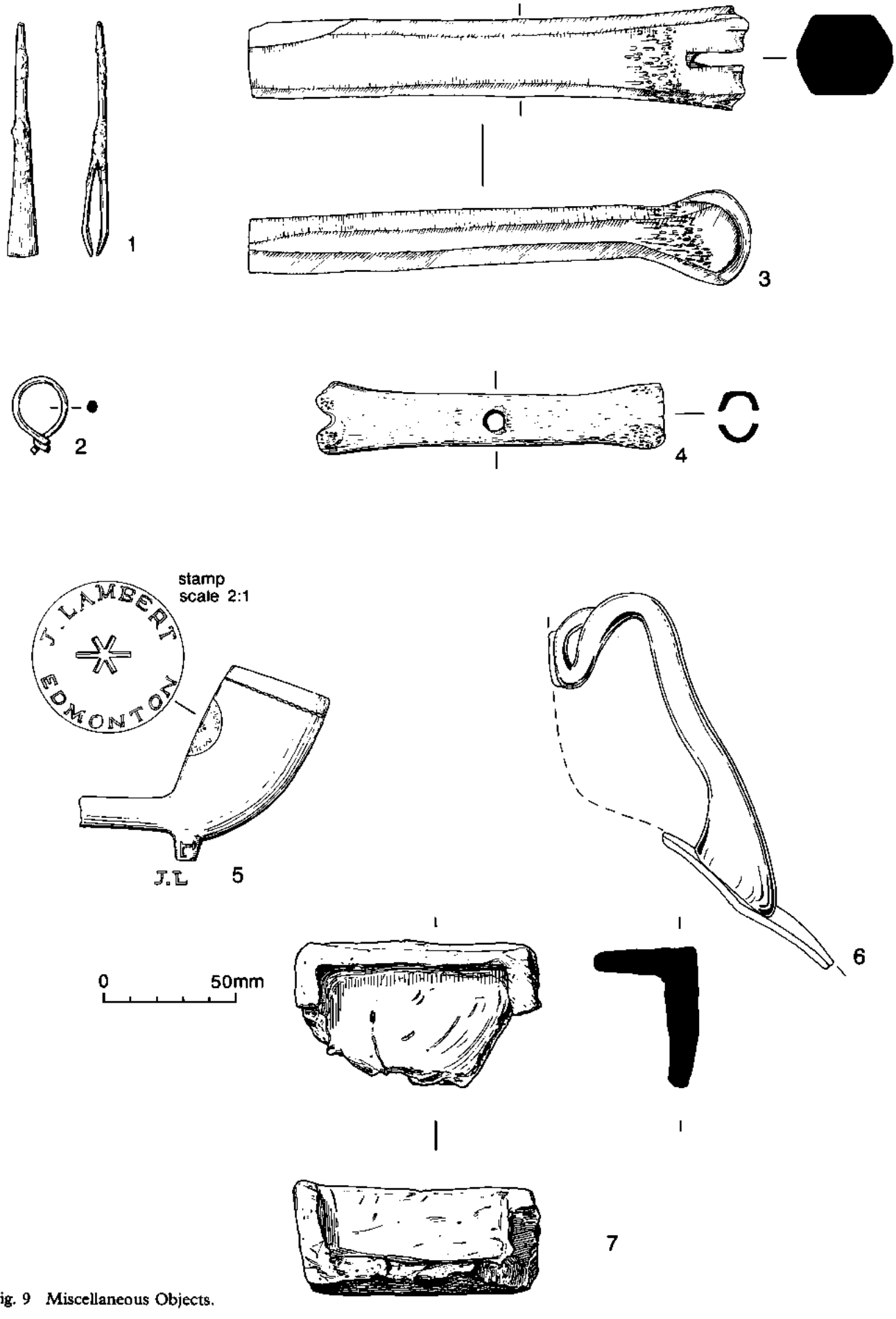

Fig. 9 Miscellaneous Objects.

Table 1 Macrobotanical remains from Waltham Abbey, Essex.

SAMPLE No.	4	5	6	7	8	9	10	11	12	13
CONTEXT No.	140	144	172	175	181	182	183	187	193	194
Cereal indet. (caryopses)	+c	+c	+c	-	+c	+++c	+c	++c	++c	-
(basal rachis nodes)	-	-	-	-	-	+c	-	-	-	-
Triticum sp. (caryopses)	+c	+c	-	-	+c	+++c	++c	+c	+c	-
(rachis internode)	-	-	+c	-	-	-	-	-	-	-
Triticum aestivum L. type										
(caryopses)	+c	+c	-	-	+c	++c	+c	+c	+c	-
(rachis nodes)	-	-	-	-	+c	++c	-	-	-	-
(rachis frags.)	-	-	-	-	-	+c	-	-	-	-
Hordeum sp. (caryopses)	-	-	-	-	-	-	+c	-	-	-
Secale cereale L. (caryopses)	-	-	-	-	+c	+c	+c	-	-	-
Avena sativa L. (caryopses)	-	-	-	-	-	+c	-	-	-	-
Avena sp. (caryopses)	-	-	-	-	+c	+++c	+++c	++c	++c	+c
Vicia faba L.	-	-	-	-	-	-	+c	-	-	-
Pisum sp.	-	-	-	-	-	-	+c	-	-	-
Indet. large legumes/pulses	+c	-	-	-	+c	-	-	-	+c	+c
Bromus mollis/secalinus	-	-	-	-	+c	+c	-	-	+c	-
Indet. large Gramineae	-	-	-	-	-	-	++c	+c	+cf.	-
Indet. small Gramineae	+c	-	+	-	+c	+++c	-	++c	++c	+c
Ranunculus acris/repens/bulbosus	-	-	-	+	+c	+c	-	-	-	+
Ranunculus sceleratus L.	-	-	-	+	-	-	-	-	-	-
Ranunculus sp.	-	-	-	+	-	+c	-	-	++	+
Papaver somniferum L.	-	-	-	++	-	-	-	-	+	-
Brassica sp.	-	-	-	+	-	-	+cf.c	-	-	-
Raphanus raphanistrum L.	-	-	-	+	-	-	-	-	-	-
Reseda sp.	-	-	-	-	+c	-	-	-	-	+cf.
Agrostemma githago L.	-	-	-	+t	-	+c	-	-	-	-
Chenopodium album L.	-	-	-	+	+c	+c	+c	+c	++sc	+++c
Chenopodium cf. *ficifolium* Sm.	-	-	-	-	-	-	-	-	++sc	-
Atriplex sp.	-	-	+cf.	+	-	-	-	+c	+	+c
Beta vulgaris L.	-	-	+cf.	-	-	-	-	-	-	-
Chenopodiaceae indet.	+c	-	-	-	-	+c	-	+c	+++sc	-
Vicia/Lathyrus sp.	+c	-	-	-	-	+c	++c	+c	+	+c
Medicago/Trifolium sp.	+c	-	-	-	-	+c	+c	-	+c	-
Rubus fruticosus sens. lat.	-	+++	+++	+++	-	-	-	+	-	-
Rubus sp.	+	+	-	-	+	+	-	-	+	++
Fragaria vesca L.	-	-	-	+	-	-	-	-	-	-
Aphanes arvensis L.	-	-	-	-	-	-	-	-	-	+
Rosa sp.	-	-	-	+	-	-	-	-	-	-
Prunus domestica subsp. *insititia*	-	-	-	++m	-	-	-	-	-	-

Key

c = carbonised sc = some carbonised m = mineralised
\+ = present ++ = common +++ = abundant
mo = modern t = testa frags

continued opposite

Macrobotanical Remains: an assessment
by V. Fryer and P. Murphy

Introduction

Thirteen samples were taken from contexts dating between the eleventh and thirteenth centuries. These included a well (135, sample 5), a cesspit (164, samples 6 and 7), an enclosure ditch (180, samples 8-13) and a pit (139 fill 140, sample 4). Three samples (1-3) were taken from layers 80, 126 and 130 respectively but these are not included in this report. Samples of wood and possible cess concretions were taken from contexts 172 and 175 but were not studied further due to deterioration in storage.

Methods

The samples were processed in a bulk sieving/flotation tank using

SAMPLE No.	4	5	6	7	8	9	10	11	12	13
CONTEXT No.	140	144	172	175	181	182	183	187	193	194
Prunus spinosa L.	-	-	-	++m	-	-	-	-	-	-
Aethusa cynapium L.	-	-	-	-	++	+	-	-	++	++
Conium maculatum L.	-	-	-	-	-	-	-	-	++	+
Polygonum *aviculare* L.	-	-	-	+	-	-	-	-	-	-
Rumex acetosella L.	-	-	-	-	-	-	-	+cf.c	-	-
Rumex sp.	-	-	-	+	++c	++c	+++c	-	+c	+c
Polygonaceae indet.	-	-	-	-	+c	+c	-	-	-	-
Urtica dioica L.	-	-	++	+++	++	+	-	+++	+++	+++
Betula sp.	-	+mo?	-	-	-	-	-	-	-	-
Anagalis arvensis L.	-	-	+	-	-	-	-	-	+	+c
Hyoscyamus niger L.	-	-	-	-	++	-	-	+++	+++	+++
Solanum nigrum L.	-	-	-	+	-	-	-	-	+	+
Mentha sp.	-	-	-	-	-	-	-	-	-	+
Verbena officinalis L.	-	-	-	-	-	-	-	-	+	+
Labiatae indet.	-	-	-	-	-	-	-	-	++	-
Ballota nigra L.	-	+	-	-	-	-	-	-	-	-
Lamium sp.	-	-	-	-	-	-	-	+cf.c	-	+
Galeopsis sp.	-	+cf.	-	-	-	-	-	-	-	-
Plantago lanceolata L.	-	-	-	-	-	+c	-	-	-	-
Galium sp.	-	-	-	-	-	-	+c	-	-	-
Sambucus nigra L.	+	++	+	-	+	+	-	-	+	-
Anthemis cotula L.	+c	-	+	-	++c	+++c	+c	++c	+c	++c
Anthemis cotula flower head	-	-	-	-	-	+c	-	-	-	-
Tripleurospermum maritimum (L.) Koch	-	-	-	-	-	+c	-	-	-	-
Cirsium sp.	-	-	-	-	-	-	-	-	-	+
Lapsana communis L.	-	-	-	-	-	+c	+c	-	+c	-
Alisma plantago-aquatica L.	-	-	-	-	-	-	-	-	+	++c
Lemna sp.	-	-	+	+	+	+	-	+	+++	+++
Eleocharis sp.	-	-	-	+	+c	+c	-	-	++	+
Carex sp.	-	-	-	+	+	+c	+cf.c	+c	+++	++
Indeterminate seeds	-	-	-	+	-	++c	+c	-	-	-
Indeterminate thorn	-	-	-	+	-	-	-	-	-	-
Indeterminate gall	-	-	-	+	-	-	-	-	-	-
Indeterminate inflorescence	-	-	-	-	-	+c	-	-	-	-
Indeterminate culm nodes	-	-	+c	-	-	+c	+c	-	-	-
% flot sorted	50	50	25	25	50	50	50	50	50	50

0.5mm meshes. The flots had been dried before they were received, with consequent loss of small and delicate macrofossils (epidermal fragments etc.). However this does not affect the overall interpretation of the deposits. The flots were sorted under a binocular microscope at low power and the plant remains identified are listed on Table 1. It should be emphasised that this is an assessment report which, though giving an indication of overall sample composition, does not purport to provide a full species list.

The cereals

Carbonised cereal grains were recovered from all contexts. Preservation was very variable and many grains were not identifiable to species due to distortion during carbonisation. Cereal chaff was found in only two samples, 6 and 9.

Wheats — grains of *Triticum* sp. were recovered from the ditch, the pit and the well. The majority of the grains were of a rounded form

and are of a *Triticum aestivum* (bread wheat) type. The grains from sample 9 were of a particularly short form. Rachis nodes and rachis fragments of *Triticum aestivum* type were found in samples 6 and 9. Intact rachis internodes were 'shield-shaped' and there were no persistent glume bases or swellings beneath their insertion points.

Barley — grains of *Hordeum* sp. were found in only one sample (10) from the enclosure ditch.

Rye — grains of *Secale cereale* were recovered from samples 8, 9 and 10, all from the enclosure ditch.

Oats — grains of *Avena* sp. were recovered from samples 8, 11 and 12 and were abundant in samples 9 and 10. A small proportion of the grains from sample 9 were still within their florets and the clean, broad basal breaks of the latter indicate that these are cultivated oats (*Avena sativa*).

Other food plants
Carbonised legumes including *Vicia faba* (horsebean) and *Pisum* sp. (pea) were recovered from the ditch and pit 139, but at very low densities.

The wild flora
The preservation of the seeds and fruits was very variable and included carbonised, non-carbonised and mineralised examples. While the presence of modern contaminants cannot be discounted, all examples have been included in Table 1. The majority of seeds are of common segetal and grassland species, but dietary residues and some medicinal plants are also present.

Discussion
Well 135
Seeds were present at a very low density with the exception of *Rubus fruticosus* (bramble) which dominated the assemblage. All the species were probably accidentally incorporated into the context and the quantity of bramble seeds may have been due to a bush adjacent to the well.

Cesspit 164
The presence of dietary residues including *Prunus domestica* subsp. *insititia* (bullace), *Prunus spinosa* (sloe), *Rubus fruticosus* (bramble), *Brassica* sp. (cabbage etc), *Fragaria vesca* (strawberry), *Sambucus nigra* (elderberry), *Rosa* sp. (rose etc) and cereals; medicinal plants including *Papaver somniferum* (opium poppy) and testa fragments of *Agrostemma githago* (corn cockle) confirm that this was a cesspit. A weed flora, probably derived from the surrounding area, is also represented.

Ditch 180
Although the flots are comparatively rich, they give little information about the nature of the ditch. The presence of *Lemna* sp. (duckweed), *Carex* sp. (sedge), *Eleocharis* sp. (spike-rush) and *Alisma plantago-aquatica* (water plantain) indicates that the ditch was wet, but the majority of the species present are of a background weed flora. Medicinal plants including *Verbena officinalis* (vervain), *Papaver somniferum* and *Conium maculatum* (hemlock) are present but these may also be part of the weed flora. Cereal grains and chaff are probably the residue of nearby crop processing.

Pit 139
Seeds were present at a very low density and were very diverse in nature, giving little indication of the use of the pit with the possible exception of general refuse disposal.

Faunal Remains
by O. Bedwin
A total of 690 fragments from 69 context were identified, with a date range of 12th to 19th centuries. However, only 2 fragments came from demonstrably post 16th-century contexts; the remaining 688 were from 12th to early 16th-century contexts. This material was in generally good condition, with many sizeable, unabraded fragments, reflecting the type of feature in which most of it was found, ie. backfilled wells and cesspits.

The species represented were as follows:

Bos 41.1%	*Ovis/Capra* 36.4%	*Sus* 14.3%	*Gallus* 5.2%
Equus 1.2%	*Pisces* 0.6%	*Canis* 0.6%	
Dama dama (fallow deer) 0.3%		*Lepus* (hare) 0.1%	

These figures confirm the pattern of medieval diet in Waltham Abbey built up from earlier excavations (though of course it is unlikely that the dog bones actually represent food remains). *Pisces* was represented by 4 vertebrae; given the difficulty of using these for species identification, this was not undertaken. Fish remains have been found in small amounts in other parts of the town, eg. at Church Street (Clarke *et al.* 1993, 109-10) and on the north side of Sun Street (Huggins 1988b, 148-50), and seem to have been a constant, though very minor, component of the medieval diet. Fallow deer (*Dama dama*) was present as 2 antler fragments from a late 15th/early 16th-century context, and this record can be added to the 13th-century find made at Church Street (Clarke *et al.* 1993, 110).

Metal Finds
by H. Major
None of the metalwork from the site was cleaned, conserved or x-rayed. In the case of the iron, this has made it impossible to produce a reliable catalogue, as most of the material is covered in heavy concretion which masks the shape of the objects. The report on the ironwork is therefore perfunctory.

Copper Alloy (Fig. 9)
1. Tweezers, in two pieces, top missing, probably undecorated. The blades narrow to a thin rod at the top, a very unusual feature. A pair illustrated by Biddle (1990, 690 no. 2189L) narrows towards the loop, but the rod is not so elongated as on the present example. They are probably contemporary with their context. L 45mm. 80 (late 13th-mid 14th century).
2. Three wire loops, of which one is illustrated. These are common finds of the period and were used as attachment loops on clothing (Margeson 1993, 20). 90 (early 16th century).
3. (Not illustrated) Roman bow brooch, details obscured by soil. The bow has cavetto moulding and there are side wings present. This is probably a Colchester B brooch, dating to *c.* AD 50-70. 178.

Iron
The iron objects appear to be principally nails, of which some are clearly horseshoe nails. Other objects included part of a horseshoe from context 92, two D-shaped buckles and a possible small chisel blade.

Lead
Lead was recovered from three contexts. The pieces from 92 and 134 were scrap metal, but 141 (13th century) contained fragments of a pipe made from a sheet butted edge to edge. The surviving length was only 55mm, with an internal diameter of 11mm. The diameter would seem rather small for use as a water pipe.

Bone objects (Fig. 9)
by H. Major
Identification by O. Bedwin
1. (Fig. 9.3) Unfinished bone object, made from a sheep bone, probably a metacarpal. It was probably intended as a knife handle. The sides have been squared off, and the inside scraped, but the epiphysis has not been trimmed off. 92 (late 15th-early 16th century).
2. (Fig. 9.4) Pig metacarpal with a hole drilled through the centre. This is one of a class of objects which have been variously identified as toggles, bobbins and buzz-bones. The latter interpretation as a musical instrument is favoured for examples from Norwich (Lawson and Margeson 1993, 213). 126 (13th-14th century).

Quern
by H Major
One small fragment of Rhenish lava quern was found (context 161, *c.* 1200). It is from a flat rotary quern, and the pecked grinding surface suggests that it is medieval, rather than residual Roman.

Clay Pipe
by H. Major
Fragments of 19th-century clay pipes were recovered from contexts 1 and 197. The makers present are W. Leach of Bethnal Green Road (William Leach listed by Oswald (1975, 141) for the period 1854-69); WE (maker not identified); ?L; and J. Lambert of Edmonton. There are ten bowls by the latter maker. Eight are the same, with JL on the spur (Fig. 9.5). The other two pipes do not have rouletted rims and, although they are marked J Lambert on the back of the bowl, they have TL on the spur. On one pipe the star is absent from the bowl mark. The T may be a mis-impressed J, and some of the other pipes have damaged Js which look rather similar. Otherwise, we may have pipes by two members of the same family. The maker is not recorded by Oswald.

Other styles present include fluted bowls and a bowl with cricket motifs on the sides.

Glass
by D.D. Andrews
The oldest glass found at this site were the two fragments from context 90 (F89). The handle may be assigned to the 16th-17th centuries. It can be paralleled in general terms by finds from Sandal Castle (Moorhouse 1983, fig. 101, 57) and Basing House, Hampshire (Moorhouse 1971, fig. 28, 32). The handle trailed back on itself (Fig. 9.6) was a feature of Wealden glass, and this object can be assumed to be of English manufacture. The small body sherd with traces of mould-blown decoration from the same context may have been from the same vessel, though precisely with what form these pieces were associated is uncertain.

The rest of the glass is from the bottom of F2, a 19th-century cesspit. It is in fair to good condition, with a tendency to be iridescent and sometimes with surface deterioration. It is all vessel glass, and the following vessels can be recognised as present:

Cylindrical phials	2
Octagonal-sided medicine bottles	4
Carbonated water bottles (ovoid)	2
Carbonated water bottles (cylindrical)	3
Beer bottles	3
Goblets	2
Pressed glass dish	1

This glass can be assigned to the second half of the 19th century, and perhaps the final quarter of that century. There is no residual material, though one or two pieces might be a little older than the rest of the assemblage. Characteristic forms are the ovoid bottles or "Hamiltons", the small cylindrical "ginger-beer type" bottles, and the thickened semi-circular or "blob" rims. Unfortunately none of the manufacturers of the carbonated waters can be readily identified, but one seems to have been based in the Kingsland Road in East London.

Discussion

Period 1: The depth of buried soil (Fig. 4) with its tripartite structure and clear stone line appears indicative of uncultivated pasture. The incorporation of some sherds of Roman pottery might indicate occasional disturbance of the soil. The sherds are relatively unabraded, and have clearly not suffered damage from plough or spade which would have accrued in a cultivated soil. The deposit is comparable with other loamy soils recorded elsewhere in Waltham Abbey, particularly north of Sun Street, where a similar depth of buried soil has been recorded (Huggins, P.J. 1988b, fig. 4 F10/11).

Period 2: Ditch 180 was dug through the buried soil. The rather sparse pottery from the ditch fills, together with finds from the overlying layers, indicate a date in the late 11th century for its construction. There was no trace of a bank on the eastern, presumably outer, side of the ditch. It appears that the top of the buried soil remained the ground surface throughout the life of the ditch, a few early medieval shell-tempered body sherds became incorporated in the soil and the soil profile adjacent to the ditch edge became disturbed. A slight slope developed from east to west on the surface of the buried soil, presumably as a result of run-off into the ditch (Fig. 4). A variety of weed species recovered from the ditch indicate that it was a fairly wet feature. It is possible a bank may have existed to the west of the ditch. However, at this level, excavation did not extend much beyond the western edge of the ditch, and the deposits here had been largely removed by later features F159/161 and F164.

The ditch was much narrower in the south section than the north (Figs 2.1, 4 and 5). Despite much of the south-western part of the ditch having been dug away by feature 164 (Fig. 2), the natural clay could be seen beginning to slope steeply upwards at the base of the south section, on the west side (Figs 3.1 and 4). It would thus appear that the ditch might be coming to a squareish ended butt end just south of the excavation trench; an entrance may have existed at this point.

The ditch was clearly a substantial feature, demarcating an area of some importance. The width and profile of the ditch, are comparable to the broadly contemporary ditch which surrounded an early manorial enclosure at North Shoebury in south-east Essex (Wymer and Brown forthcoming). Ditch 180 is on the predicted line of the '*Eldeworth*' enclosure (Bascombe 1988, 198 and fig. 1.C; Clarke *et al.* 1993). Excavations elsewhere in Waltham Abbey have revealed ditch sections which may relate to this enclosure, although the date of some of these appears to be considerably earlier than F180 (Clarke *et al.* 1993, 94). It seems possible that ditch F180 may have formed part of an early town enclosure.

The ditch fills included a rather sparse assemblage of pottery and bone, indicating that general rubbish was not being dumped into the ditch at this point. Distinct lenses and spreads of charcoal within the ditch fills may derive from domestic fires (Fig. 5). Abundant, carbonised plant remains from these deposits, comprised a range of cereals, including bread wheat and cultivated oats, together with peas and beans, may support this interpretation.

Period 3: The ditch clearly went out of use, and was infilled with a layer of 'hardcore' F155 (Figs 4 and 5). Layer 161 was then deposited across the site, presumably to provide a more or less level surface, since the deposit was quite thin above the buried soil, and much thicker over the hollow left by backfilled ditch F180 (Fig. 4). This process, removing as it did what must have previously been a major feature (ditch F180), was probably part of a wider reorganisation which affected this part of the town (below).

Period 4: The cess pit F164 in the south-west of the excavated trench, and well F135 in the south-east, separated by a fence (F159, F149, F153 Fig. 2.3) seem likely to have belonged to the yards of separate properties. Whilst the western yard might have belonged to a property fronting the Market square, the eastern would presumably have served a building fronting what is now Sun Street. The fence line (F159, 149, 153) seems to maintain the line of ditch F180.

Therefore, it seems likely that Sun Street and at least the eastern side of the market place were laid out at about the same time. Such a major reorganisation would accord reasonably with the supposed date of around 1200 for the laying out of the eastern side of the market place (Huggins, P.J. 1988, 202). If the interpretation that the excavated portion of ditch 180 was approaching a butt end is correct, it may be that only that part of the ditch running north from the butt end was backfilled. This would have allowed sufficient room to lay out the new road and the properties fronting it. Any ditch which ran south from the supposed entrance might have been left open, surviving as a recognisable feature for some time. This would accord well with the situation apparently mapped in the early 17th century (Huggins, P.J. 1988, fig. 1.C).

Once the two yards were established the type of deposits and features; pits, fence lines, wells, cesspits etc. recorded, are typical of what would be expected of a medieval town, particularly in such a prime location close to the market place at the centre of the town. However, the depth and range of deposits encountered at Waltham Abbey are, in fact, relatively unusual in many Essex towns.

The contrast between the circular form of well F135 and the rectangular shape of cesspit F164, is of interest. Presumably, the cess pit was rectangular to enable its contents to be shovelled out periodically with relative ease. The same contrast between rectangular cess pits and circular wells is apparent with the brick-lined features of the early 19th century, presumably for the same functional reasons. Both well and cesspit seem to have gone out of use during the early part of the 13th century.

Period 5: Most of the deposits of this period at the centre of the trench had been removed, by later features (Fig. 3.1). Part of what may be a fence line (F139; Fig. 3.1), appears to continue the line of the boundary established in the previous period. A number of layers were deposited, presumably as levelling/dumping taking place in two backyards separated by the fence line. The sequence of these layers, in the eastern yard, is rather more complex than that to the west. This may reflect deposition to fill a hollow left by slumping of the fill of well F135. This does not appear to have been a problem with the fills of cesspit F164, on the other side of the fence. Possibly more care had been taken in filling this feature, to ensure a properly consolidated seal for its noxious contents.

Period 6: The fence line across the centre of the trench traceable in the previous periods is not clearly present at this time; this may simply be the result of extensive damage caused by later features to Period 6 deposits in the centre of the trench (Fig. 3.2). However, it is possible that F131 and posthole F147 may be parts of such a fenceline (Fig. 3.2). The difference in deposition between the eastern and western parts of the trench is still recognisable at this period, indicating the continued presence of two separate yards. The pattern is much the same as for the previous period, with a fairly uniform deposit to the west, and 'patchy' deposition to the east. Most of the small layers and dumps are in the north west of the trench (Fig. 3.2) and might still reflect slumping of the fills of well F135, although this is less obvious than for Period 4.

Period 7: A substantial pit, F91, occupied most of the centre of the trench at this period. To the west of the pit, the excavated area was covered by a uniform deposit 109, whilst there was a patchwork of small layers, as in previous periods, to the east. The possible fence line represented by F103, F105, F107, suggests that the property division between two backyards had shifted slightly to the west, when compared to previous periods (Fig. 3). This fence separated the large rubbish pit F91 from well F89 which presumably belonged to a property fronting Market square (above).

The large quantities of butchered bone from pit F91 may indicate that, by the early post-medieval period, the yards off Sun Street were used as shambles, as well as part of the livestock market (Bascombe 1988, 200).

Period 8: The backfilling of the two brick-lined cess pits during the mid/late 19th century reflects the improvements to the town's sewerage and water supply at that time. Interestingly one of the brick cess pits (3) appears to have been constructed using reused Tudor brick (Ryan above).

Background continuity

The evidence for boundary maintenance is of interest, although it should be noted that confident identification of fence lines, and their alignments, in narrow excavation trenches is very difficult. It appears that the Period 4 fence line continued the alignment of F180,

running roughly alomg the line of the back-filled ditch's eastern side. Boundaries in Periods 5 and 6 are less easy to identify, but the suggested fence lines would indicate continuity with the Period 4 alignment. By contrast, the Period 7 fence line lies about 2 m to the west, along the line of the western side of ditch F180, by now buried by up to 1 m of deposits.

The boundary between nos 3 and 5 Sun Street shown on the O.S. map of 1879 would lie about 4 m to the east of the Period 7 fence line, at about the eastern edge of the excavated trench. This boundary lies 4 poles from the corner of the Market Place and Sun Street (P.J. Huggins, pers. comm.), and may have been established when these streets were laid out. The boundaries to the rear of 3 to 5 Sun Street do not continuously reflect direct continuity of alignment with ditch F180. Once the ditch had been backfilled and the Market Place and Sun Street laid out, the sub-dividion of plots increasingly reflected the rectilinear pattern created by the junction of these major features of the urban landscape, the processes being similar to those discussed by Rippon (1991), in considering rural patterns of land division.

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The taking of venison in the Forest of Essex, 1198-1207

by David Crook

Only a handful of the records directly created by the administrators and justices of the royal forests of England in the course of their work survive before the reign of Henry III, which began in 1216. What is known about the forest administration in earlier years is derived mainly from chronicles and charters, from the summary details of royal income from the forest recorded in the pipe rolls of the Exchequer, for 1130 and from 1155 onwards, and from royal letters registered in the Chancery rolls, which begin in 1199. Much the oldest original forest record is the roll of Shropshire amercements for 1179-1180, in the reign of Henry II (1154-1189).[1] There is nothing from the reign of Richard I, Henry's son (1189-1199). From the reign of King John, Richard's younger brother (1199-1216), there are a number of items. The most significant is a small plea roll of the forest eyre held in 1209 in Northamptonshire.[2] There are also some later thirteenth century copies of pleas from similar rolls for Huntingdonshire, Shropshire and Rutland, the originals of which have not survived,[3] and some lists of financial penalties imposed in the eyres held in Northamptonshire, Lincolnshire and Leicestershire in the same year.[4] Some copies, made during the reign of Henry III, of further documents from John's reign which probably also resulted from forest eyres, also survive. One of them certainly, and the others probably, also belong to 1209: regards of two forests in Yorkshire; and memoranda relating to assarts and wastes in Northamptonshire and Huntingdonshire.[5] There are also three versions of the chapters of the regard, at least one of which, and probably all three, are original documents of John's reign.[6] Their existence, among the forest records which accumulated in the Treasury of the Receipt of the Exchequer in the Chapter House of Westminster Abbey from the mid thirteenth century onwards, and were transferred to the new Public Record Office building in 1859, has long been well known. Printed versions and translations of a few of them have been available for nearly a century.[7]

The only major forest record dating from John's reign discovered since 1859 is a short roll of two membranes recording the numbers of deer and other forest beasts taken within the bailiwick of Humphrey de Barenton in the forest of Essex, which came to light in 1956 and is the subject of this article.[8] Although not dated, the contents of the document clearly show it to relate to the period between the forest eyre held by Geoffrey Fitz Peter and Hugh de Neville in Essex in 1198 and the next Essex forest eyre, held by Hugh de Neville, which took place in 1207 or 1208. It was almost certainly written in preparation for that eyre, since records of royal gifts from forests, with or without specific warrant, seem to have been made in preparation for later forest eyres. Records of such gifts in Northamptonshire between 1246 and 1255, interspersed with records of the illegal taking of venison by poachers, have survived. They were evidently prepared for the forest eyre in that county in the latter year.[9] The present roll is clearly written in an administrative hand characteristic of the reign of King John. Although it must have been compiled in 1207 or 1208, its contents go back to before 1200, making it the earliest surviving record of forest administration in England, other than the Shropshire amercements list of 1179-80. As such, and as the earliest English document containing information about the management of deer, it is of considerable significance in itself, and of particular interest for the small but detailed glimpse it affords of the royal forest in the period before the Charter of the Forest of 1217 and 1225 permanently modified the character of forest administration. When examined with the aid of information from other sources, it also throws valuable light on the history of the forest in Essex at the beginning of the thirteenth century.

At the beginning of John's reign in 1199, and for a long period previously, the whole of Essex was subject to the forest law. The heading of the roll identifies the material in it as relating only to the bailiwick of Humphrey de Barenton, not the forest of Essex as a whole. Humphrey belonged to a family which took its name from the village now called Barrington, in Cambridgeshire, and later gave it to the manor of Barringtons in Chigwell.[10] Tenurially, he was a tenant of the honour of Valoynes, of which, with his wife Amice, he held two knights' fees in Sheering;[11] it was presumably on them that he paid a heavy fine in lieu of payment of the fifth scutage of John's reign in 1204 and 1205.[12] He also held an hereditary forest office in serjeanty, half a virgate in Hatfield for the service of keeping the king's park and wood there.[13] The origin of his tenure appears to have been a grant by King Henry I, made between 1121 and 1127, to Eustace de Barenton, his grandfather, of land formerly held by Geoffrey the forester in Hatfield for the keepership of the king's forest, and some land forfeited for a forest offence, formerly held by a man called Adam; the charter was witnessed by William de Muntfichet, keeper of the forest in Essex, and was confirmed by King

Stephen between 1135 and 1138.[14] Humphrey's father, another Humphrey, appointed by Gilbert de Muntfichet, is mentioned as a forester, in the vicinity of Waltham, in 1143 in the history of the foundation of Waltham abbey, to which his family became benefactors.[15] His own grandson Geoffrey de Barenton was a forester in the vicinity of Hatfield in 1241,[16] and in 1323 Nicholas de Barenton claimed to be woodward in fee in the forest of Hatfield.[17] Humphrey's bailiwick as referred to in this roll was, however, clearly much larger than that covered by his hereditary local office, and included a large part of Essex.

More is known about its extent than the information given in the roll. On 17 June 1204 the king ordered him to allow the bishop of Ely to enclose his park at Rettendon, which must therefore have been within it.[18] The reference accords with the evidence of the places mentioned in the document, Ongar, Havering, Hatfield (Hatfield Broad Oak, Hatfield Regis) and Writtle, that Humphrey's authority extended over the western part of the county. The point is even more amply confirmed by another remarkable document discovered in 1975.[19] It is an undated memorandum, written on a single membrane, whose precise significance is very difficult to ascertain. It evidently resulted from a visit to Essex by King John, and mentions him being in Chelmsford. He is only recorded as having visited Chelmsford on 21 March 1201, 10 June 1209 and 26-27 April 1211.[20] The memorandum begins with a heading 'the names of the serjeants of Humphrey de Barenton where the lord king was', and goes on to name foresters in Danbury, Chelmsford, and the bailiwick of Brentwood. The latter, Robert de Lesnes, had evidently been in trouble with the king, because pledges to ensure that he appeared before him are named. A second heading goes on to name others of Humphrey's serjeants 'in the bailiwick of Ongar where the lord king was not yet', going on to give the names of foresters for Dunmow, Harlow, Barking, Stratford and Waltham. A final section seems to be headed 'these are in the forest, keeping it in the bailiwick of H. de Barenton until Hugh de Neville is there', and gives the names of forest officials for ?Ongar (most of the name is missing), the hundred of Harlow, the hundred of Dunmow, the hundred of Becontree, Barstable and Chafford (the bailiwick of Brentwood), and the hundred of Chelmsford and Dengie. All these places are in the western part of the county, and cover similar areas to those of the riding foresters, subordinates of the keeper of the forest of Essex, at the end of the thirteenth century.[21]

This fits in with other evidence from early in John's reign concerning the administration of the forest in eastern Essex. In 1200 William de Lanvalei offered, firstly, 200 marks for the custody of Colchester castle and of the forest 'as far as Chelmsford Bridge' as he had held it under King Richard; a little later he offered 400 marks, including the 200 already offered, for the custody of the castle and the custody of the forest of seven and a half hundreds as under Richard.[22] These references seem to indicate that Lanvalei held the forest of the north-eastern part of the county, from Chelmsford bridge to the coast, while Barenton held the west. Custody of the forest of Essex as a whole continued in the hands of the Muntfichet family; in 1200 Richard de Munfichet owed the king £100 for it and the custody of Hertford castle.[23]

A little is known of Humphrey de Barenton's service as an official under the crown, other than as a forest official. In 1197 he accounted for the shrievalty of Essex and Hertfordshire, apparently for the half-year between Easter and Michaelmas, as deputy to the sheriff Hugh de Neville, who took office about Easter. Despite his appointment as the king's chief forester in 1198, an office he was to hold continuously until 1216 and again from 1224 to 1229, Hugh continued to act as sheriff until 1200; but in subsequent accounts, and indeed in that for his second period in that office in 1203-4, his deputy was John de Neville, probably his son of that name who was later chief justice of the forest under Henry III between 1235 and 1244.[24] In 1199 Humphrey de Barenton was responsible, with Neville as the sheriff, for paying in to the Exchequer part of the issues from the forest eyre of 1198 held by Geoffrey Fitz Peter and Neville,[25] apparently in continuation of his responsibilities as deputy sheriff. Other than that, there is nothing to show that during this period he served as anything other than a forest official.

The details of the caption of the venison given in the roll are divided into several periods, defined by specific events, some of them dated, but never by year. The first period is much the longest. The date of its starting point, the eyre of 1198 ('the last pleas of the forest in Essex') [1, 3, 7, 13, 15-17, 20, 22] is not precisely known; all that can be said is that its financial issues first appear in the pipe roll account for Essex and Hertfordshire which was written after Michaelmas (29 September) 1198.[26] It was however almost certainly held during that year, which was the one under which Hugh de Neville's forest eyre throughout England was reported by the Yorkshire chronicler Roger of Howden.[27] The period ends with the next event mentioned, the king's visit to Ongar on the feast of St Laurence (10 August) [3, 4, 7, 13, 15-17, 20, 22, 24, 25], which we know from his itinerary took place in 1205, when he is recorded as having been at Ongar on 9 and 10 August. The third event mentioned is the king's departure on his military expedition to Poitou ('the passage of the lord king to Poitou') [4, 5, 7, 8, 13, 15, 16, 20, 22, 24, 25, 28-32], at the beginning of his long attempt to regain the continental lands he had lost to Philip II Augustus of France in 1204. John left Yarmouth for La Rochelle on 1 June 1206.[28] His return ('the arrival of the lord king from Poitou') [7, 8, 13, 33], about 13 December 1206, is the fourth event;

the fifth and final one is the Lent following his return [5, 7, 16, 24], 11 March 1207.

One other date is mentioned, the king's visit to Havering on the Saturday after the feast of St Nicholas (6 December)[26]. In no year is John recorded as having been in Havering on that precise day, but he seems from his itinerary to have been there on Thursday 8 December 1205, reaching Sutton at Hone in Kent, on the other side of the Thames estuary, on the same day en route for Canterbury, which he reached by 10 December. The explanation may be that he gave instructions for the taking of venison in his park there when passing through Havering on that Thursday which were only carried out two days later, or that the attestations of royal letters from which his itinerary is derived are not to be relied upon for absolute precision at this point. The forest eyre for which the document was probably compiled had taken place by about the autumn of 1208, since its issues appear in the pipe roll which began to be made up at Michaelmas that year,[29] and must have been held after the beginning of Lent in 1207. John's next recorded action affecting the forest of Essex, a report in the annals of Dunstable that in 1209 he ordered the destruction of all ditches, hedges and assarted houses, 'even the old ones', in the county, and only released 80 imprisoned foresters after they paid fines, lies beyond the period of this document.[30]

The caption of venison recorded in the roll refers of course to authorised hunting, not illegal poaching contrary to the forest laws. No warrant is given for most of the transactions, but twelve [5, 13, 21, 23-25, 29, 30, 32-35] are said to have been authorised by writ. Only one, or possibly two, of the writs referred to in the roll have been identified in the close rolls recording private written instructions issued under the king's seal. Robert Fitz Walter is said to have taken 10 bucks before the king's passage by writ [29]; it seems to have been that issued on 2 July 1205 at Marlborough to Hugh de Neville, instructing him to cause Robert Fitz Walter to have 10 bucks in the king's forest near Waltham in Essex.[31] The Templars are said to have taken by writ 6 bucks and 4 does between the king's passage and the following Lent, that is between about 1 June 1206 and 11 March 1207 [24]; as early as 24 April 1205 at Windsor Hugh de Neville was ordered to cause the master of the Templars to have 10 bucks or does in Essex as a gift to him for the feast of his chapter.[32] If these two transactions were connected, as seems likely, there was clearly a long delay between the authorisation and the caption.

Three writs issued to Hugh de Neville in Normandy in the summer of 1203 do not match the contents of the roll. On 11 June at Rouen Hugh was ordered to allow Warin Fitz Gerold to have 10 bucks in the forest of Essex; Warin's recorded caption of 40 does by writ [9] does not tally. The order of 18 June that year at Orival to allow Thomas Fitz Bernard to have 50 bucks in Essex to stock his park contrasts with the record that Thomas took 10 bucks and one doe partly by writ between 10 August 1205 and 1 June 1206 [25]. The instruction of 8 July 1203 at Rouen to give the bishop of London 15 bucks in the forest of Essex does not accord with the bishop's recorded caption of 3 harts and 3 does there between 1198 and 1205 [17].[33] The enrolled writs serve to indicate the subordinate position of Humphrey de Barenton. They affected his bailiwick, but as usual they were addressed directly to Neville. The king almost invariably gave any forest instructions through his chief forester, when he chose not to by-pass his forest officials altogether.

The whole document reflects the overriding importance of the personal wishes of King John in all matters relating to the forest. As Henry II's treasurer Richard Fitz Neal wrote in the *Dialogue concerning the Exchequer* (c 1178), 'The whole organisation of the forests, the punishment, pecuniary or corporal, of forest offences, is outside the jurisdiction of the other courts, and solely dependent on the decision of the king (*regis arbitrio*)'.[34] The memorandum arising from John's visit to Essex, although its exact context is difficult to define, nevertheless gives a strong impression of the impact a royal visit had on the forest administration. The divisions of the period covered by the caption roll are determined by the king's movements in the years immediately following the loss of Normandy, which led him of necessity to concentrate his attention on England and seek to use it as the source of the means needed for his enormous efforts to recover what he had lost.[35] No mention is made of his brief earlier journeys to Essex in March 1201, when he visited Chelmsford, and December 1203, when he was at Ongar and Havering.

Although John had an established hierarchy for the management of the forest, from Hugh de Neville as chief forester, through important subordinates like Humphrey de Barenton down to the most humble local forester, it did not constrain him from frequent personal interference in its affairs, especially when he was in forest areas. He is known to have taken it upon himself to impose amercements and fines for forest offences quite independently of the activities of his forest justices, as he did for example in Nottinghamshire in 1200, where there was the precedent of the fearsome visitation of his father Henry II in 1175.[36] He alone could authorise the disafforestation of part of the countryside, as he did in March 1204 when he removed the northern part of Essex from the forest, in return for a fine of 500 marks and 5 palfreys.[37] He could also, of course, take venison at will. The roll affords only one instance of his doing so [26], when he took 100 fallow deer at Havering, although there is also an entry recording a much smaller caption by his hunter Wydo [8]. Roger Rastel, who took a stag and 17 does in the autumn of 1205 [28], was also a royal hunter, but that is only known from records of the payment of his wages in the close rolls, not from this roll.[38]

The Charter of the Forest in 1217 (chapter 11) made specific provision for any archbishop, bishop, earl or baron passing through the king's forest to take one or two beasts by view of the forester, if he was present; in the 1225 version of the Charter it was limited to occasions when they were going to the king on his order or returning after doing so.[39] It is evident from this roll that some favoured individuals at least received far more generous treatment from King John. The only ones to take larger amounts of venison than the king were Geoffrey Fitz Peter, who John appointed as his justiciar and to whom he granted the earldom of Essex on the day of his coronation, and Hubert Walter, the archbishop of Canterbury, who the king appointed as his chancellor on the same occasion. The earl took a particularly large amount up to the time of the king's visit to Ongar in August 1205 [3], when he himself was holding the castle there and its honour,[40] and significant numbers thereafter [4, 5], necessitating an extra entry [6] to summarise the whole, which amounted to 20 harts, 3 hinds, 274 fallow bucks and 156 does, 2 brockets (young fallow bucks), a bull, 2 wild boars and 3 young boars. Hubert Walter did most of his hunting by proxy, although the names of his two huntsmen are partly obscured by a stain at the top right-hand corner of the roll [1, 2].

Geoffrey Fitz Peter was only one of a total of seven earls who are recorded as having taken deer in the bailiwick. The other six were the earls of Oxford (Aubrey de Vere), Salisbury (William Longespee), Arundel (William de Aubigny), Warenne (or Surrey) (William de Warenne), Clare (or Hertford) (Richard de Clare) and Norfolk (Roger Bigod); each merits only a single entry, although three of them were among the largest takers of venison [7, 15, 16, 20, 22, 23]. Arundel, Warenne, Clare and Norfolk were the most important earls in England after the earl of Chester, if assessed in terms of their numbers of knights' fees, which ranged between 140 and 186.[41] Salisbury had only 56, but he was an illegimate son of Henry II and his position as the king's half-brother gave him greater importance than he might otherwise have expected. Oxford had only 30 knights' fees, but held two castles in Essex, Castle Hedingham and Canfield.[42] The connections of these men with Essex varied, but some of them were close and important. Earl Aubrey became titular sheriff of the county in 1208, when his duties included responsibility for the upkeep of the king's park and houses at Havering.[43] The closeness of his connection with Essex is confirmed by the fact that when he offered a fine of 200 marks to be allowed to be the earl of Oxford and to have the third penny of Oxfordshire as earl, the sum was entered in the Essex and Hertfordshire account, not the Oxfordshire account, in the pipe roll.[44] Earl Roger had a wood in Romford, and in 1200 made a fine of 20 marks to be allowed to have it in fee and inheritance in return for an annual render of 5s.[45]

The only senior cleric other than the archbishop to take venison was the bishop of London (William de Sainte-Mere Eglise) [17], in whose diocese Essex lay. The military orders both did quite well, the Templars [24] a little better than the Hospitallers [30]. Both had major estates in Essex, but both mainly in eastern and northern Essex rather than in the bailiwick of Humphrey de Barenton: the Templars at Witham, Cressing, Rivenhall and Finchingfield;[46] and the Hospitallers at the same places, except for Rivenhall, and some others, although they also had some relatively minor holdings in the Waltham-Ongar area.[47] Minor clerks mentioned included Alured clerk of the justice or justiciar (?Fitz Peter or Neville) [11], John the clerk of Plessey [34], and Thomas de Neville [33], a royal clerk who was probably a relative of Hugh de Neville, and was of rather greater importance, as indicated below.

Untitled laymen who received venison included Warin Fitz Gerold [9], Pain de Rochford and the companions of Savary de Mauleon [10], Reginald de Cornhill [13], William de Curtenay [18], Geoffrey de Say [19], Geoffrey de Lucy [21], Thomas Fitz Bernard [25], Robert de Vieuxpont [27], Robert Fitz Walter [29], Robert Fitz Roger [31], William Fitz Geoffrey [32] and Ralph de Mandeville [35]. Some of them were men of some consequence in Essex, and little need be said about them here, except to mention facts of obvious relevance.[48] Geoffrey de Lucy, who offered a palfrey for licence to enclose his thicket in the forest,[49] was a son of Henry II's justiciar Richard de Lucy, whose estates had included the honour of Ongar. Pain of Rochford held a large piece of royal land in Hatfield from 1200,[50] and it was in the parish of Hatfield that he received his deer. Robert Fitz Walter, a grandson of Richard de Lucy, was favoured by King John in the earlier years of the reign, despite his surrender of the strategically important castle of Vaudreuil in the Seine valley to Philip II in 1203; later he became one of John's bitterest enemies and the leader of the rebel army against him in the civil war at the end of the reign. Geoffrey de Say was a cousin of William de Mandeville, earl of Essex (d 1189), and Geoffrey Fitz Peter's rival for the earldom, while Ralph de Mandeville was presumably a lesser member of the same family.

Some of the others had no obvious connection with the county. Robert de Vieuxpont and Robert Fitz Roger both had their principal interests in the north of England, although the latter also had property in Norfolk. Vieuxpont probably owed his venison to the fact of having been with the king on his visit to Havering. Reginald de Cornhill served John as sheriff of Kent. Warin Fitz Gerold, hereditary chamberlain of the Exchequer, was the only person mentioned in this document, apart from the bishop of London, who witnessed Magna Carta in 1215. Savary de Mauleon was a Poitevin aristocrat and military leader, whose

men evidently benefited from the king's generosity, while Philip de Cuynac's name suggests that he also was a Poitevin, perhaps from Cognac [14].

Two relatives of the chief forester benefited from the king's largesse. Roger de Neville, who took 13 bucks in Hatfield parish [12], had a park at Chrishall; in January 1206 Hugh de Neville secured permission for him to enclose a common way which lay outside the park if he provided an alternative route on his land in another part of the park.[51] Thomas de Neville, a royal clerk who took two does by writ after the king's return from Poitou [33], received a life grant of the manor of Writtle from John in February 1205, although he had to pay six palfreys and agree to pay 100 shillings in increment additional to the ancient farm; he continued to hold it throughout the period covered by this document. Hugh de Neville was the third witness of the king's charter, Geoffrey Fitz Peter being the first.[52] Thomas had earlier held Writtle at farm from the king.[53]

The roll serves as a reminder that the term 'venison' covered all the beasts which came under the protection of the forest laws, not deer alone.[54] Nevertheless, only a few of those other than deer appear in the document. Geoffrey Fitz Peter's haul included a bull, 2 wild boars, in Havering parish, and 3 'piglets' (*purcelli*), presumably young boars [5]; Aubrey de Vere had 4 bulls and 8 cows [7], while the king and Robert de Vieuxpont each took 3 young boars at Havering in December 1205 [26, 27], the king also taking 14 'pigs', presumably an alternative way of referring to boars, on the same occasion. The references to bulls and cows are obscure; perhaps they were wild cattle. The total numbers of deer recorded as having been taken since the eyre of 1198 were 51 harts and 11 hinds from among the red deer, 409 bucks and 665 does, plus the 100 bucks and does taken by John at Havering, from among the fallow deer, and 3 brockets, including one specifically said to be the brocket of a hart [4]. The 10 does taken by Geoffrey de Lucy in Writtle parish were said to have been taken with nets [21], but otherwise no indication of the methods used is given. There is little that can usefully be remarked about these figures since there are no others with which to compare them, except that obviously the caption of fallow deer far exceeded that of red deer and also of wild boar, which seem to have been relatively scarce.

The overall picture given by the roll is of the use of the forest as a source of patronage for the king's friends, servants and prominent local men, all people who would expect to benefit from his largesse. All those who can be readily identified were either magnates, gentry, clerics or royal servants. It has nothing to say of the effect of the forest laws on the day to day lives of the lesser sorts of inhabitants of the county; that was not the reason for which it was compiled.

APPENDIX

(1) The roll of caption of venison

In the original each entry begins with a paragraph mark. For ease of reference each entry has been given a number within square brackets; they do not of course appear in the original. Supplied material is given within square brackets. There is a stain in the top right-hand corner of the first membrane; otherwise the roll is in excellent condition.

Public Record Office, E 32/349

[m 1]

Capcio venationis de ballia Humfridi de Barinton' in Ess[ex]' post ultima placita foreste in Essex'

[1] H. Cant' Archiepiscopus cepit in Essex' post ultima placita foreste x damos scilicet in ballia Humfridi.

[2] Item H. Cant' Archiepiscopus ibidem octies viginti et xviij damas per Osbertum et Hugonem Hal...'[55]

[3] G. filius Petri Comes Essex' cepit in eadem ballia post ultima placita foreste usque ad f[estum Sancti Laurentii quando] dominus Rex jacuit aput Angr' [10 August 1205] xij cervos et unam cervam et sexies viginti [et vj] damos et [quater] viginti et xviij damas[56] et unum broketum.

[4] Item G. filius Petri cepit ibidem a festo Sancti Laurentii quando dominus Rex jacuit apud Angr' usque ad passagium domini Regis in Pictaviam [c 1 June 1206] ij cervos et ij cervas et j broketum cervi et lx damos et xvij damas.

[5] Item G. filius Petri cepit ibidem post passagium domini Regis usque ad primam Quadragesimam post adventum domini Regis de Pictavia [11 March 1207] vj cervos et quater viginti et viij damos et xli damas et unum taurum et duos[57] senglarios in parochio de Havering' et iij purcellos.

[6] Summa captionis G. filius Petri xx^{ti} cervos et iij cervas et tredecies viginti et xiiij damos et septies viginti et xvj damas[58] et ij broketos et j taurum et ij senglarios et iij purcelli.

[7] Comes Albr' cepit post placita foreste usque ad predictum festum Sancti Laurentii iiij^{or} cervos et iij damos et vij damas. Item a festo Sancti Laurentii usque ad passagium domini Regis cepit idem comes tres cervos et iij damos et xxvj damas. Item comes Albr' cepit post adventum domini Regis de Pictavia [c 13 December 1206] usque ad sequentem Quadragesimam ix cervos et ij cervas et vij damos et xxiiij^{or}[59] damas et iiij^{or} tauros et viij^{to} vaccas. Summa xvj cervos et ij cerve et xiij damos et lviij[60] damas et iiij^{or} tauri et viij^{to} vacce.

[8] Wydo venator domini Regis cepit v cervos post passagium domini Regis usque adventum eius in eadem ballia.

[9] Garinus filius Geroldi cepit xl damas per breve [61] et ij cervas in parochio de Hadfeld'. Simon filius Ricardi cepit xx damas.

[10] Paganus de Rochefort cepit ibidem vj damas et socii Savari de Malo Leone vj damas.

[11] Alur' clericus justic' cepit viij damas.

[12] [62] Rogerus de Nevill' cepit xiij damos in eodem parochio.

[13] Reginaldus de Cornhill' per breve partim [63] cepit post placita foreste usque ad festum Sancti Laurentii j damum et viij[to] damas per Symonem hominem suum. Idem cepit iij damos a passagio domini Regis usque adventum eius. Summa iiij damos et viij[to] damas.

[14] Philippus de Cuynac cepit duas damas.

[15] Comes Salesbiriensis cepit post placitum foreste usque ad festum Sancti Laurentii iij cervos et iij cervas et j broketum et iij damos et iij damas et a festo Sancti Laurentii usque ad passagium domini Regis cepit ij cervos et ij cervas et j damum et xj damas. Summa v cervi et v cerve et j broketi et iiij [or] dami et xiiij [or] dame.

[16] Comes Arundell' cepit post placitum foreste usque ad festum Sancti Laurentii v damas et a festo Sancti Laurentii usque ad passagium domini regis cepit j cervum et j damam et a passagio usque ad Quadragesimam sequentem iij damos. Summa j cervus et ix dame.

[17] Dominus London' episcopus cepit iij cervos et iij damas post placitum foreste usque ad festum Sancti Laurentii.

[18] Willelmus de Curtenay cepit in eodem termino iiij [or] damas.

[19] Gaufridus de Say cepit in eodem termino sexaginta et duas damas per breve.

[20] Comes de Warenn' cepit j cerva et ij damas post placitum foreste usque ad festum Sancti Laurentii et x damas a festo Sancti Laurentii usque ad passagium domini Regis. Summa j cerva et xij dam[e].

[m 2]

[21] Gaufridus de Luci cepit in parochia de Writl' x damas cum recibus per breve.

[22] Comes de Clar' cepit ij damos et ij damas post placita foreste usque ad festum Sancti Laurentii et a festo Sancti Laurentii usque ad passagium cepit j damam et j broketum.

[23] Comes Rogerus cepit xliij damos in secundo termino per breve.

[24] Templarii ceperunt per breve [64] xvj damos post festum Sancti Laurentii prenominati et post passagium usque ad Quadragesimam sequentem vj damos et iiij[or] damas. Summa xxij damos et iiij[or] damas.

[25] Thomas filius Bernardi cepit post festum Sancti Laurentii usque ad passagium x damos et j dama partim per breve.

[26] Dominus Rex cepit C tam damos quam damas et xiiij porcos et iij purcellos in parochio de Havering' die sabbati proxima post festum Sancti Nicholai [?10 December 1205].

[27] Eodem termino cepit Robertus de Veteri Ponte ibidem vij damos et viij[to] damas et iij purellos.

[28] Rogerus Rastel cepit in autumpno ante passagium j cervum et xvij damas.

[29] Robertus filius Walteri cepit x damos ante passagium per breve.

[30] Hospitalarii ceperunt ante passagium xv damas et post passagium vj damos per breve.

[31] Robertus filius Rogeri cepit j damam ante passagium domini Regis.

[32] Willelmus filius Gaufridi cepit j damum similiter ante passagium per breve.

[33] Thomas de Nevill' cepit ij damas post adventum domini Regis per breve.

[34] Johannes clericus de Plasseto cepit duas damas eodem termino per breve.

[35] Radulfus de Mandevill' cepit x damas per breve.

(2) The memorandum concerning the foresters of Humphrey de Barenton

The document is very faded from the third heading onwards, and some parts cannot be read with absolute confidence even with the aid of ultra-violet light, although it does help considerably. Supplied material is given within square brackets.

Public Record Office, C 47/11/1, no 36

Nomina servientum Humfridi de Barinton' ubi dominus rex fuit

In Danningeris Hugo Fage et Ricardus socius eius

In Chelmaneford' David de parco

In ballia bosci arsi Robertus de Lesnes plegii eius Ricardus de Berclesdun' Alof Malegresset quod fuit coram domino rege

In baillia de Angr' ubi dominus non dum fuit Galfridus filius Levenot

In Dunmawe Ricardus de Angr'

In Herlaue Vincencius de Herlaue

In Holt [65]

In Berkinges Willelmus de Watleghe

In Straford' Ricardus filius Ursi

In Waltham Ricardus filius Aucheri

Isti sunt in forestam custodiunt in ballia H. de Barenton' quousque H. de Nevill' adsit[66]

[?Ang]r' [67] Robertus de Mucgrosi

In hundredo de Herlaue

Osbertus [68] Masoulus

In hundredo de Dunmawe

Robertus Bramwod
In hundredo de Baintre
W... [69] de La Claye
In Berdestapel et Chapford
Ricardus de Berdestapel
In hundred' de Chelmaneford et Danesye
Simon Walensis

Author: David Crook, 3 St Andrew's, Grantham, Lincs NG31 9PE

References

1 Public Record Office, E 32/143. All records cited are in the PRO unless otherwise stated
2 E 32/62 (copy in E 32/249, rot 16).
3 E 32/37, rots 1-2; 144; 249, rot 11
4 E 32/249, rots 1, 2, 11
5 E 32/235; 249, rots 11-14, 20
6 E 32/250A; 253A, mm 1, 2
7 *Select Pleas of the Forest*, ed. G.J. Turner, Selden Society, XIII (1901 for 1899), pp 1-10
8 E 32/349, printed in the appendix, (1). It was discovered by Miss P.M. Barnes of the Public Record Office in Chancery Sack no. 2, no. 91.
9 E 32/63, 65; printed in Turner, *Select Pleas*, pp 79-116, especially pp 91-93. The best later examples were those apparently made for the Northamptonshire eyre of 1348: E 32/81, 83, 84, 87-89
10 G A Lowndes, 'The History of the Barrington Family', *Transactions of the Essex Archaeological Society*, New Series I (1878), pp 251-73; *Victoria History of the Counties of England: Essex*, IV (1956), pp 26-27
11 *The Red Book of the Exchequer*, II, ed. H. Hall (Rolls Series, 1896), p 503
12 *Pipe Roll 6 John*, p 35; *7 John*, p 191. The pipe rolls of this period are all printed by the Pipe Roll Society; detailed bibliographical references to them are not given here.
13 *Red Book*, II, p 507
14 *Regesta Regum Anglo-Normannorum*, II, ed. C. Johnson and H.A. Cronne (1955), no 1518; III, ed. Cronne and R.H.C Davis (1968), no 41
15 W Stubbs, *The Foundation of Waltham Abbey: the Tract 'De Invencione Sanctae Crucis nostrae in Monte Acuto et de ductione eiusdem apud Waltham'* (1861), chapter 32; *The Early Charters of Waltham Abbey, Essex, 1062-1230*, ed. R. Ransford (1989), nos 26, 28-30, 34, 35, 41, 52, 53, 55, 60, 65, 78
16 Turner, *Select Pleas*, p 71
17 British Library, Add. Charter 28561
18 *Rotuli Litterarum Clausarum [RLC]*, I, ed. T.D. Hardy (1833), p 1b. The bishop had offered the king two palfreys for his permission to enclose the park: *ibid*, p 24b
19 C 47/11/1, no 35, identified by Dr P.A. Brand of the Public Record Office in 1975, and printed in the appendix, (2)
20 Itinerary of King John, in *Rotuli Litterarum Patentium*, ed T.D. Hardy (1835). All references to John's movements are taken from the itinerary.
21 W.R. Fisher, *The Forest of Essex* (1887), pp 136-139, including map; information derived from the Essex forest eyre roll of 1292. The only apparent difference is that in 1292 Dunmow and Harlow comprised a single bailiwick.
22 *Rotuli de Oblatis et Finibus*, ed. T.D. Hardy, Record Commission (1835), pp 89, 102. It was the first of the two offers which was entered on the pipe roll: *Pipe Roll 3 John*, p 73
23 *Pipe Roll 2 John*, p 48
24 *Pipe Roll 9 Richard I*, p 97; *10 Richard I*, p 125; see also *Memoranda Roll 1 John* (Pipe Roll Society, NS XXI, 1943), p 80
25 *Pipe Roll 1 John*, p 97
26 *Pipe Roll 10 Richard I*, pp 136-137
27 *Chronica Magistri Rogeri de Hoveden*, IV, ed. W Stubbs (Rolls Series, 1871), p 63
28 *Ibid*
29 *Pipe Roll 10 John*, pp 36-37.
30 *Annales Monastici*, III, ed. H.R. Luard (Rolls Series,1866), p 31. The occasion may have been the king's visit to the county between about 12 and 18 June that year.
31 *RLC*, I, p 40b
32 *Ibid*, p 28b
33 *Rotuli de Liberate ac de Misis et Praestitis*, ed. T.D. Hardy (1844), pp 41, 43, 47
34 *Dialogus de Scaccario*, ed. C. Johnson (1950), p 59
35 For the consequences of the loss of Normandy for England, including its effects on forest administration, see J.C. Holt, *The Northerners* (1961), chapter ix
36 *Pipe Roll 2 John*, p 18; *Gesta Henrici Secundi Benedicti Abbatis, II*, ed. W Stubbs (Rolls Series, 1867), p 94
37 *Rotuli Chartarum*, ed T.D. Hardy (1837), p 123; *Pipe Roll 6 John*, p 32
38 *RLC*, I, pp 71b, 80, 81b
39 Turner, *Select Pleas*, p xli, n 2
40 *Pipe Roll 7 John*, p 192
41 S. Painter, *The Reign of King John* (1949), pp 20-21
42 *Ibid*, p 24
43 *Pipe Roll 10 John*, pp 25, 26, 38
44 *Pipe Roll 6 John*, p 34
45 *Pipe Roll 2 John*, p 47]]
46 *Records of the Templars in England in the Twelfth Century: the Inquest of 1185*, ed. B.A. Lees (1935), pp lxxii-lxxxiv
47 *The Cartulary of the Knights of St John of Jerusalem in England: Secunda Camera, Essex*, ed. M. Gervers (1982)
48 Information about the activities of several of them is given in Painter, *The Reign of King John*
49 *Pipe Roll 10 John*, p 36
50 *Pipe Roll 2 John*, p 36
51 *RLC*, I, p 63
52 *Rotuli Chartarum*, p 141b; *RLC*, I, p 19b; *Rotuli de Oblatis et Finibus*, p 245; *Pipe Roll 7 John*, p 195. See also *Pipe Roll 6 John*, pp 7, 33; *Pipe Roll 10 John*, p 26
53 *Pipe Roll 1 John*, p 102; *Pipe Roll 2 John*, p 50
54 Turner, *Select Pleas*, pp ix-xiv
55 The remainder of the line is illegible
56 Followed by an erasure
57 Written over *unum* expunged
58 Followed by an erasure
59 xxiiij [or] is written over an erasure
60 *lviij* is written over an erasure
61 *per breve* interlined
62 Written on the same line as [11]
63 *per breve partim* interlined
64 *per breve* interlined
65 Written smaller between the preceding and following entries, and apparently incomplete
66 This line is especially difficult to read. I am indebted to Dr Stephen O'Connor for his advice
67 Part of the *g* can be read, but the rest has apparently been trimmed away
68 Conceivably *Osbernus*, since only *Osb'* is given
69 The remainder of this name cannot be read

Essex Archaeology and History 26 (1995), 133-44

Settlement and farming patterns on the mid-Essex boulder clays

by J.M. Hunter

Most of the Essex till landscape consists of scattered settlements with early field enclosures of the type traditionally described as "woodland" or "bocage", distinct from "champion" landscapes of open fields and nucleated settlement characteristic of the English Midlands. The latter type has enjoyed much study, the former very little. This paper considers the landscape of the parish of Cressing, certain similarities and comparisons in Writtle and Felsted, and the very different landscape of the Tabor estate lying mainly in the parish of Bocking.

Cressing

The parish of Cressing divides historically into two distinct landscape types; "historically" because today the visible distinction is lost in the somewhat bleak arable scene arising from agricultural change, elm disease, and urbanization in the north of the parish. On the Tithe Map (1840) and the first edition 6-inch O.S., however, it is clear, the division lies on a line to the south of Cressing village and Hawbush Green running due east to the River Brain (Fig. 1). To the south lay the Templar demesne farm, identified by field names (Hunter 1993a, fig. 10) and the tithe exemption enjoyed by the Order which continued to be held by their successors and was recorded in the Tithe Awards (Fig. 2). By the Survey of 1656 of Cressing Temple Manor (ERO D/DAc96), the Templars' large open fields had been sub-divided, perhaps long before, for more finely planned rotations.

To the north lay a patchwork of crofts and small farms with shared fields, woodlands subject to progressive clearance, five greens, two moated sites and all the listed buildings of pre-1600 date other than the Temple itself. It was small scale and complex — a "peasant" landscape. The Parish church may pre-date the Templars. The adjacent field contains Iron Age and Romano-British features, and postholes found inside the church may be evidence of a Saxo-Norman building (Hope 1984).

Sources

The principal cartographical resources are the Tithe Award of 1840 (ERO D/CT 109), an earlier map which shows field patterns of the Temple Farm of 1794 (T/M 529) and a map of New House Farm of 1727 (T/M 504/1). Chapman and André (1777) is of value in showing greens and woodland that had disappeared by 1840, and much of this information is refined on the survey drawings of the first O.S., prepared 1799-1800.

Two plans have been prepared using as a base the first edition O.S. 6 inch:

Figure 3 Land ownership in 1840.

Figure 4 The older field boundaries. This excludes all straight, later field boundaries; boundaries lost between 1840 and the 1874 map which appear of interest are shown dotted. Field names of interest, for example "ley" and "croft", are noted and those indicating a subdivision such as "upper", and "lower".

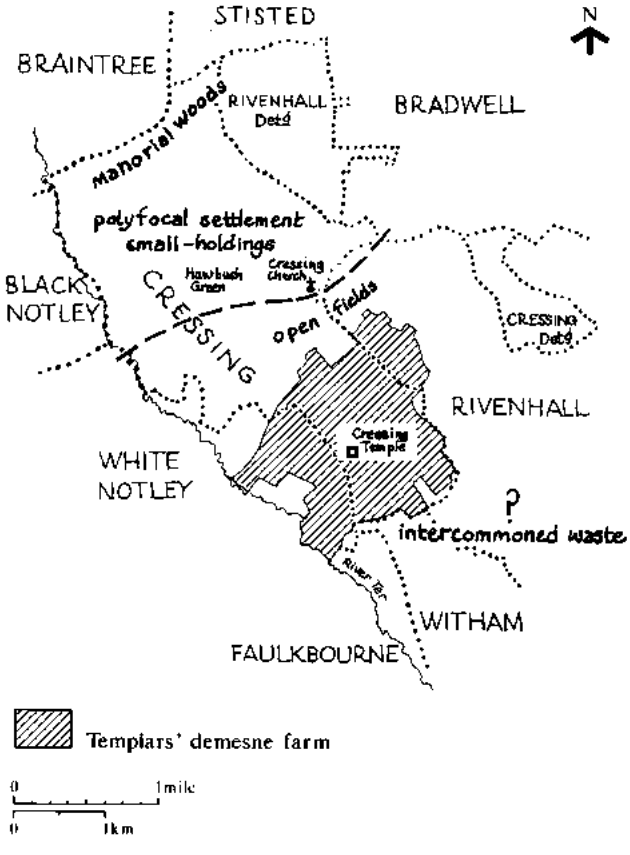


Fig. 1 Medieval Cressing.

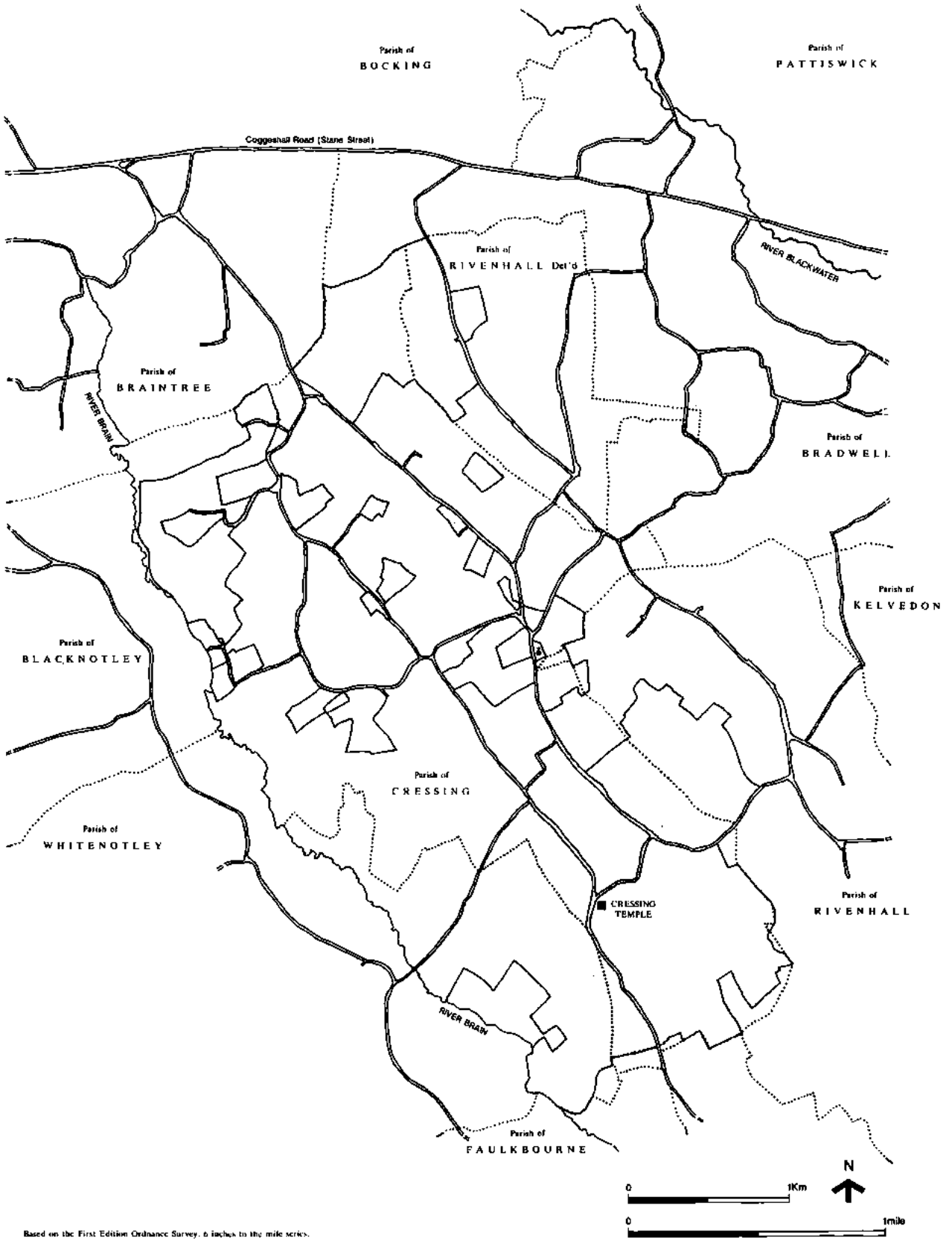
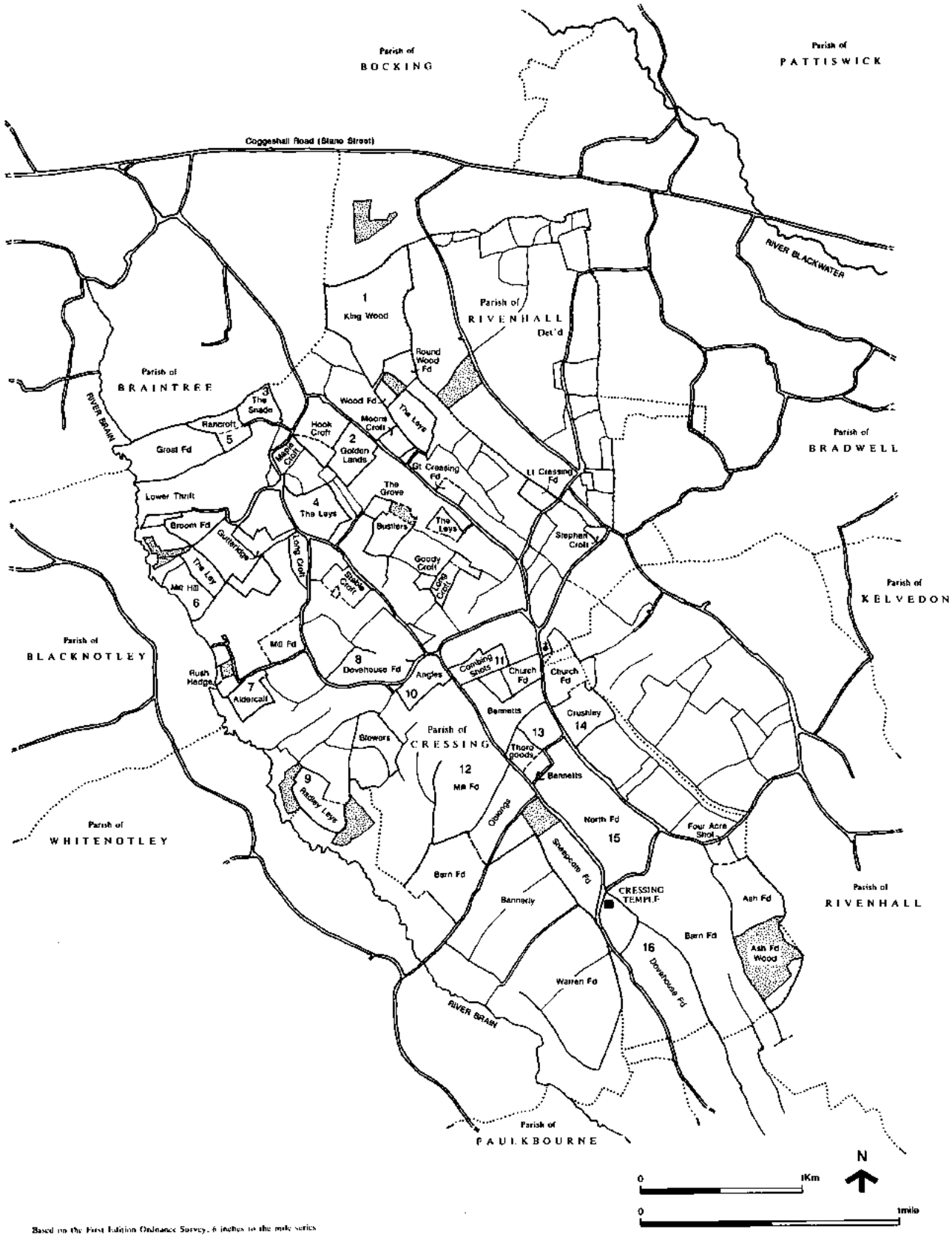


Fig. 2 Cressing — tithe-exempt areas shown in light grey tone.



Based on the First Edition Ordnance Survey, 6 inches to the mile series

Fig. 3 Cressing — land ownership in 1840.

Parish boundaries
The boundaries to Braintree and Black Notley, respectively, following a hundred boundary and the river Brain, are absolute; owners and ownerships are totally separate. To Rivenhall and White Notley they are fluid, including the detached area of Rivenhall suggested by Rodwell as a small Saxon estate (Rodwell 1993). Tithe-free Templar land crosses into both parishes. Into Stisted there is one incursion, probably an opportunity purchase, by James Lockhart (or a predecessor) who owned much of the tithe-free land in the north of the parish including the former Kingswood and also roughly half of the detached area of Rivenhall.

Changes between 1777 and 1800
The most obvious change is the total grubbing of Kingswood, of which a substantial area is shown remaining on Chapman and André's map. The greens still remain; also Whiteheads, a farm that had vanished by 1840.

Ownership in 1840 (Fig. 3)
Cressing Temple Farm, owned by William Steward and Fredrick Hewer, occupied the same area as in the map of 1794. It was let to Jeffrey Grimwood, who owned approximately as much land in other parts of the parish, which he let. Remaining land once in the Templar demesne farm was owned by the Trustees of the Count de Vandes; this and some other land in their ownership was let to William Brown. One parcel of demesne farm had been acquired by Lord Western, owner of a substantial estate in Rivenhall, including Rivenhall Place.

A compact block of land bounded by the main Braintree Road, the road to White Notley and the River Ter was owned by J.J. Tufnell and let to Abraham Barnard. This land crossed the parish boundary but not the river, and there was no other land owned by Tufnell in the area. Barnard was also a tenant of the Trustees.

The other main landowners were James Lockhart, William Porter, John Nottidge, William Ely and Daniel Brown, and the Trustees of the Count de Vandes. Ely farmed his own land, mostly in a compact block. Daniel Brown was also a freehold farmer.

Kelly's Directory of 1845 lists none of the landowners as residents. The list increased in 1850 to include tenant farmers: William Brown, John Ely, James Fairhead, John Laver and William Raven; Jeffrey Grimwood had died by this date. The preference generally of landowners was to let to one or two tenants with holdings of a reasonable size. The most notably "improved" land was that of Lockhart with all but one woodland erased and all internal boundaries straightened or re-aligned.

However tortuous the pattern of ownership may appear in the northern half of the parish, it would seem that considerable consolidation had been achieved by the landowners with the removal of most of the remaining woodland and elimination of crofts, and their rationalisation into efficient, rather than subsistence, tenant farms.

Field names and boundaries on Tithe Map (Fig. 4)
A large number of "croft" names survived, although no longer crofts, "ley" names indicating woodland clearance, and subdivisions of commonfields: "upper", "great", "little", "lower". Late divisions tend to be reckoned in acres, for example: Bennetts: 6, 7 and 9 acres. Combing Shots (great and little) occurs in the former commonfield west of the church. Some boundaries have 'z' kinks indicative of former strip divisions, and others are clearly former woodland edges.

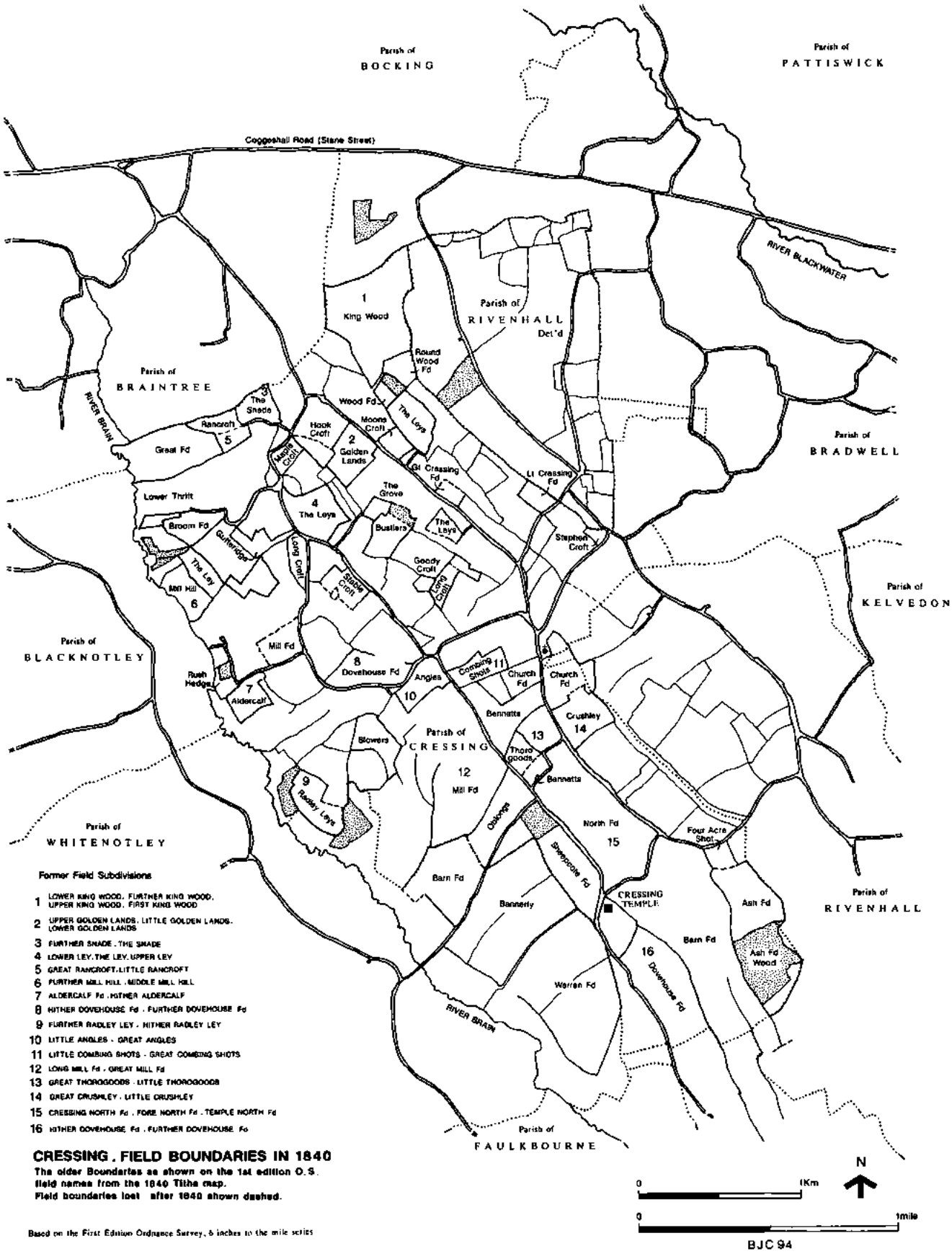
The linear greens, or wide verges, and small local greens have been enclosed and incorporated into farms by 1840.

1874 first edition O.S. 6-inch to the mile
The changes shown are minor compared to those of 1777-1840. A few field boundaries have been removed, several remaining small woods and also the larger Ashfield wood. Coppicing was already in decline and the few remaining woods were retained by the owners as game coverts.

External pressures
The French Wars brought unprecedented prosperity to farming and a busy market in land purchase resulted. Land ownership gave respectability, and in Norfolk between 1809 and 1812, "peers, courtiers, statesmen, nabobs, royal physicians, naval and military commanders" were purchasing their way in as estates came up for sale (Cannadine 1994, 12). Demand outstripped supply and prices were driven up, a phenomenon popularly known as "Terramania".

While one factor in land aquisition was the status brought by land to *nouveaux riches*, another was the rise in the price of corn. From 45 shillings a quarter in 1789, the price of wheat rose to an average of 102 shillings between 1810 and 1814, prices never attained before. Meanwhile the processes already changing farming accelerated: consolidation with enhanced rentals, shifts from communal to individual husbandry, and division of moors, commons and wastes. For landowners, the main instrument of change was parliamentary enclosure, and between 1760 and 1780, nine hundred acts were passed. However, from 1793 to 1815 there were two thousand acts and in addition, many enclosures through agreement which did not require an act of Parliament (Cannadine 1994, 14).

In Essex these trends were particularly evident. Between 1700 and 1845 there were 27 enclosure acts for common and waste, and 13 for open field; of these 14 and 8, respectively, were between 1801 and 1815 (Tate 1978). The rising demand from London for wheat spurred agricultural innovation, finer rotations,



Former Field Subdivisions

1 LOWER KING WOOD, FURTHER KING WOOD, UPPER KING WOOD, FIRST KING WOOD
2 UPPER GOLDEN LANDS, LITTLE GOLDEN LANDS, LOWER GOLDEN LANDS
3 FURTHER SHADE, THE SHADE
4 LOWER LEY, THE LEY, UPPER LEY
5 GREAT RANCROFT, LITTLE RANCROFT
6 FURTHER MILL HILL, MIDDLE MILL HILL
7 ALDERCALF Fd, HITHER ALDERCALF
8 HITHER DOVEHOUSE Fd, FURTHER DOVEHOUSE Fd
9 FURTHER RADLEY LEY, HITHER RADLEY LEY
10 LITTLE ANGLES, GREAT ANGLES
11 LITTLE COMBING SHOTS, GREAT COMBING SHOTS
12 LONG MILL Fd, GREAT MILL Fd
13 GREAT THOROGOODS, LITTLE THOROGOODS
14 GREAT CRUSHLEY, LITTLE CRUSHLEY
15 CRESSING NORTH Fd, FORE NORTH Fd, TEMPLE NORTH Fd
16 HITHER DOVEHOUSE Fd, FURTHER DOVEHOUSE Fd

CRESSING, FIELD BOUNDARIES IN 1840

The older Boundaries as shown on the 1st edition O.S.
field names from the 1840 Tithe map.
Field boundaries lost after 1840 shown dashed.

Based on the First Edition Ordnance Survey, 6 inches to the mile series

Fig. 4 Cressing — older field boundaries.

new techniques of drainage and the development of machinery. Half of the wheat grown in Essex was consumed in London by 1800 (Briggs 1989, 6). Scores of minor improvements in technique and equipment were devised by Essex farmers themselves. All these trends intensified from 1790 to 1815. Enclosure acts in these years brought an end to much of the commonfield farming still surviving in the extreme north-west of the county: 2,583 acres in Great and Little Chesterford in 1804 (ERO Q/RD c8 and 9), over 2000 in Littlebury in 1805 (Q/RDc6), 1174 in Hadstock in 1805 (Q/RDc7), and 1147 acres surveyed in Chrishall in 1808 (the award made in 1818) (Q/RD c14).

Much of the remaining areas of heathland commons shown on Chapman and André's Map was similarly enclosed in these years. Reporting to the Board of Agriculture in 1794, Messrs Griggs found that waste lands "including the forests may be estimated at full fifteen thousand acres; the greater part of which is capable of producing corn after a certain time for necessary improvements." Enclosure by the legal way would make this land profitable to the community (Griggs 1794). Enclosure acts followed: Dedham in 1803 ERO T/M85), Boxted and Great Horkesley in 1815 (Q/RDc11). Of particular interest is the enclosure of much that remained of Tiptree Heath in the parishes of Gt Totham and Gt Braxted in 1805 (ERO Q/RDc 3 and 4). Chapman and Andre show the heathland already much reduced in 1777 by piecemeal enclosures, defined woodlands and Braxted Park (Fig. 5), but 703 acres remained to be allotted under the award.

The profitability of farming also led to the destruction of woodland, accelerated during the Wars. The Rev John Howlett commented in 1801 "what immense quantities of timber have fallen before the axe and the mattock to make way for corn" (Briggs 1989, 7). Everywhere, rising profitability led to expansion of the cultivated area.

Peace in 1815, however, brought a collapse in the market followed by a depression lasting into the 1830s and still not at an end by the 1840s. Tenant farmers became desperate, banks failed and the condition of labourers worsened with widespread unemployment. In 1828 an Essex doctor noted in his diary: "the agricultural state of the country is as flat as possible. Rents are still excessive, but down they must come, however reluctantly on the part of the landlords, who appear in general regarding themselves only and their tenants as nothing" (Brown 1972, 150). Elsewhere, an observer noted "farmers must give up being gentlemen and gentlemen must give up being princes" (Brown 1990, 3).

Discussion

The implication of these external factors on the parish of Cressing is that the Tithe Award of 1840 depicts the landscape of 1815; there would have been small incentive to invest or improve during the lengthy post-war depression. The destruction of the remaining Kingswood took place between 1777 and 1800, but the enclosure of the greens is likely to have happened between 1800 and 1815, presumably by agreement since no award survives. The consolidation of smallholdings and crofts into tenant farms may, however, have been a process of the previous 50 years, perhaps accelerated by wartime terramania. It would be interesting to know when the landholdings of Tuffnell and Lockhart in 1840 were originally acquired.

The Tithe Map confirms the division of the parish into two distinct areas with a different history of landscape evolution. To the south the Templar demesne farm, with its large former open fields, subdivided at least by the mid 17th century and the ownership of the home farm fragmented. To the north, a process of consolidation of peasant crofts, strips in very small commonfields, greens and woods, into individual farms. By 1840, the process of consolidation can be seen completed, indeed 1815 seems a more likely date; later changes were to be minor until mechanisation and government investment in agriculture in the decades following the Second World War.

This analysis gives some confidence to reconstruct the landscape of the later Middle Ages. To the south, the large demesne farm created by a phased clearance of woodland or waste, the progress reflected in the dates of barn construction. To the north, the landscape of peasant smallholders which remains evident in relict survivals on the Tithe Map as described above. The greens may have been more extensive than those surviving to be depicted in 1777. To the extreme north were the tracts of manorial woodlands, Kingswood, but field name evidence indicates many other woodlands of a scattered type later cleared by small-scale and piecemeal enclosure (Hunter 1993a, 31).

Regressing further, I suggest a late Saxon and early medieval scattered settlement of crofts and small strip fields in the northern half of the parish, focused on greens and trackways. To the south lay extensive wastes, a source of pasture and woodland products, perhaps intercommoned with the inhabitants of Chipping Hill (Witham) and Rivenhall, and resembling the vast common of Tiptree discussed below. The parish boundaries were defined at a later date for purposes of tithe. This interpretation is supported by an enquiry into Templar property in 1307 which refers to eight acres of land lying waste in the common forest and twelve acres of wood in the common forest (Britnell 1983, 52). At this late date this land must have lain outside the demesne farmland reclaimed by the Templars. Probably visible on the surface of the waste were the long prehistoric boundaries still evident today in certain field boundaries and the lanes lying in the south of Cressing Parish (Hunter 1993a, 31).

During the late 12th and 13th centuries, the Templars were progressively reclaiming this land from their new centre to create a productive and compact commercial demesne. At much the same time it is

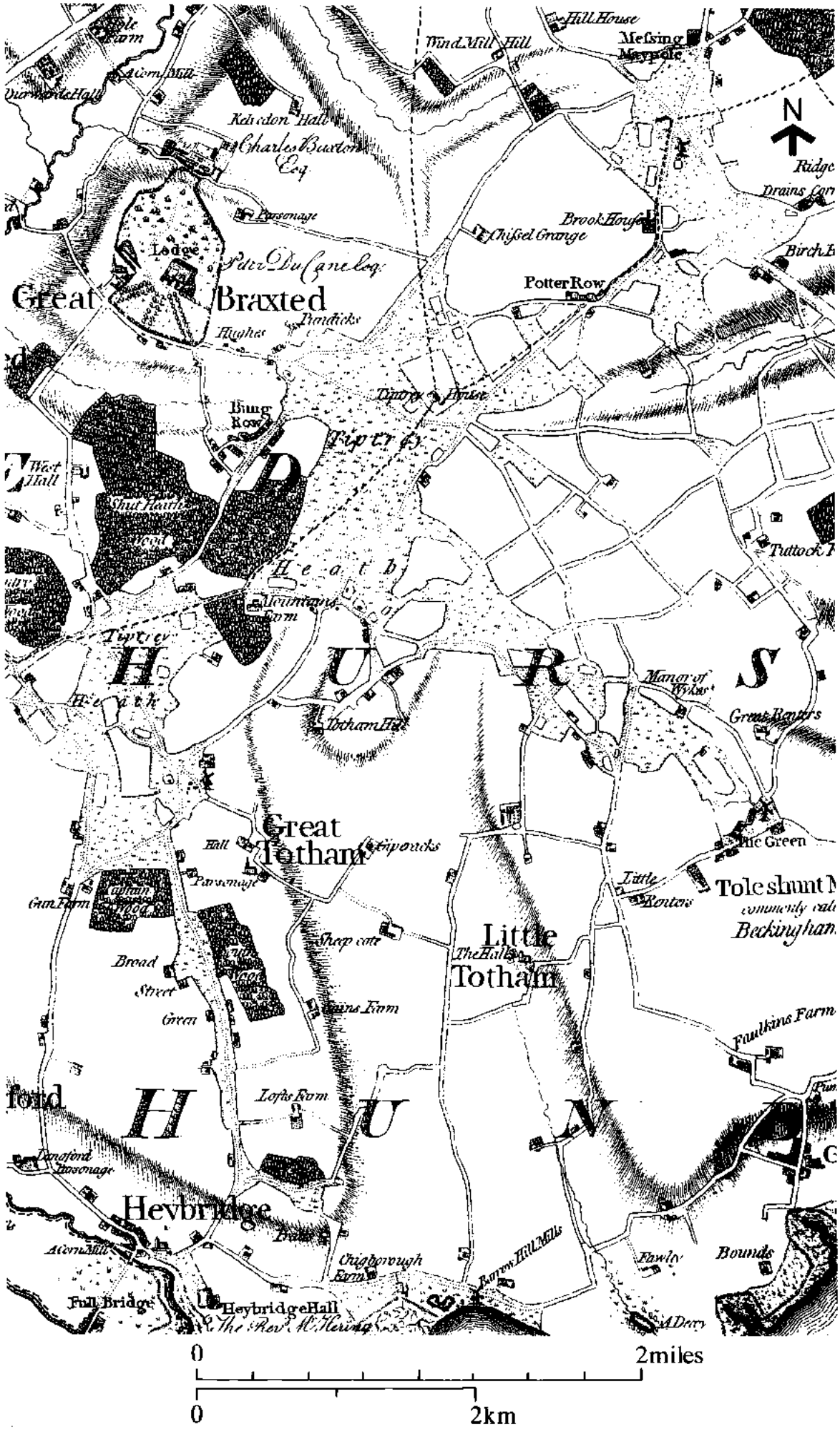


Fig. 5 Tiptree Heath, from Chapman and André's map of 1777.

likely that the northern woods were embanked to exclude animals and allow systematic management for timber and underwood; controlled grazing could be allowed for tenants' animals after coppice re-growth, for which there are references in 15th-century court rolls.

The crofts, fields and greens of northern Cressing can be considered further. R H Britnell, in a study of central Essex has defined fields and crofts in this area, both compact units of arable land (Britnell 1983, 39). The term *field* could be used of very large areas of up to 200 acres but also of units as small as twelve or five. A *croft* described a small area of up to about twelve acres, and there was thus some overlap. It would appear that both fields and crofts were normally surrounded by hedges. Crofts appear to have multiplied during the period for which documentation is available, some created in the course of woodland clearance and also by the subdivision of older units of cultivation (Britnell 1983, 43). While crofts were very numerous in the late Middle Ages, Britnell cites the example of Rauenstoc, described as a field in 1185, and a croft in 1435. In the 13th century crofts were characteristic of small holdings and also demesne lands.

While it seems likely that population growth brought pressure on resources leading to the demarcation and careful management of the remaining woodland areas, a similar process has been suggested by Tom Williamson to explain the straggling hamlets around defined greens and commons (Williamson 1988, 9). In the case of Cressing and other Essex areas where greens occur, this cannot be dismissed as a late process of assarting in wooded areas peripheral to the commonfields; the dates of surviving features such as moats and listed buildings show these patterns as well established in the Middle Ages. Certainly in Cressing the greens are integral to the older area of settlement and farming.

In the context of greens and commons, it may be relevant to consider at this stage the landscape of commons and heaths lying south-east of Cressing and Witham across the River Blackwater, very different in surface geology, consisting of poor soils, mainly glacial outwash and Kesgrave formations. In 1777 the great heath of Tiptree extended through the parishes of Messing, Great Braxted and the Tothams, and with extended arms reaching Tolleshunt Major and Heybridge. In the Middle Ages the "heath was not, it appears, partitioned between manors, but retained its ancient character as unappropriated waste where men of different villages intercommoned. The boundaries of Witham, Thurstable and Winstree Hundreds met in the middle of the heath, and free tenants of each of the three hundreds — from the villages of Inworth, Messing, Layer, Braxted, Maldon, Totham, Tollesbury and Tolleshunt — had common pasture there" (Britnell 1983, 52).

Chapman and André's Map shows the great heath on the eve of its enclosure, but it is clear that even by this time it comprised linked fragments of what had once been a far greater expanse of common grazing (Fig. 5).

The waste lying north of Witham may once have resembled this great common, but was reclaimed at a far earlier date for arable farming, for which its soils were suited. Still earlier peoples had left a record in the boundaries referred to above.

Writtle

The huge royal manor of Writtle, which included the later parish of Roxwell, covered 13,568 acres (Fig. 6). It may indeed have once been larger as prior to the Conquest the terra regis included much of the later parishes of Chignall Smealy and Chignall St James; this is suggested by detached parts of the parish and manor of Writtle shown on the Tithe Map and first edition O.S. 6-inch (Newton 1970, 5). Writtle had certain similarities to Cressing: strong lordship and a geographical division between a polyfocal zone of scattered peasant farming and an exclusive arable demesne. While the whole parish lay under forest law, the physical forest of parks, greens, commons and extensive woodlands comprised a third zone in the south. Unlike Cressing, which lies on boulder clay,

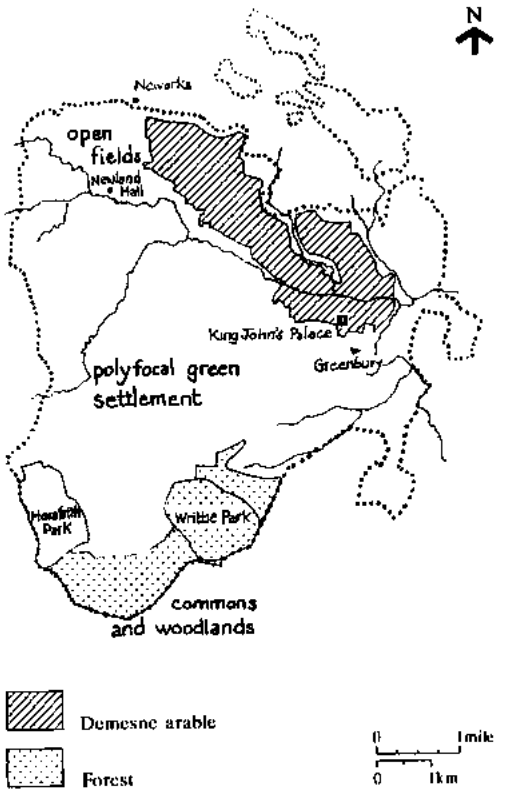


Fig. 6 The manor of Writtle (from Newton, 1970 and Rackham, 1980).

there is a logic to the Writtle zoning. The northern arable lay on productive boulder clay, but southwards the surface geology deteriorates, becoming an acid stony mix of glacial outwash, Bagshots and Claygates, in the Forest area. The Lord had the best land, and the question arises of how this came about. Ken Newton, author of *The Manor of Writtle* (1970), regarded the enclosure of the arable as seigneurial coercion and I wrote in 1974 with his approval that "before the 14th century the lord of Writtle Manor had enclosed the Common Fields and forced the tenants into tiny holdings of two to four acres outside his greatly increased demesne fields" (of approximately 1300 acres).

We might, however, consider an alternative model: early settlement as at Cressing, of smallholdings with extensive grazing of waste, woodland or wood-pasture, and a later planned expansion of an arable demesne. The original manor was considered by Newton to lie adjacent to Greenbury, the green which still survives beside the Church. In 1209, King John built his moated palace (traditionally, but wrongly, described as a hunting lodge) away from this earlier centre at approximately the line where the demesne arable begins.

In 1066 there was still grazing for 1500 pigs suggesting a large area of waste. Later expansion northwards involved clearance for arable with the exclusion of peasant strips; the focus being King John's new centre with its spacious farmstead. In the Forest at the southern end of the manor, wastes were consolidated into embanked woodland which retained common grazing rights, but were also imparked into Writtle and Horsfrith parks as exclusive wood-pasture. This conversion into managed coppice with standards woodland and the imparking is likely to have occurred in the late 11th and 12th centuries. The delineation of the greens may have occurred at the same time to preserve local rather than communal grazing. Communal grazing continued in the woodlands (after coppice regrowth) and Mill Common.

Newton's analysis of the "peasant" zone of Writtle is useful for an understanding of the similar areas of Cressing and elsewhere. On the evidence of medieval charters and manorial records, confirmed by late 16th-century surveys, the general picture given of the Writtle tenants' holdings is one of small, often very small, enclosures. Thus, for example, the 270a. of Shakestons Farm and 227a. of Mountneys Farm were disposed respectively over 27 and 15 crofts. Both farms were ranked as submanors. He cited other similar examples. While evidence exists for commonfields (other than the demesne) in the north of the manor, "in the southern part of the manor no hint of common fields is to be found ... In this area of the manor it is sharing of the fields not by the community at large but by coparceners which is the characteristic in the documented period. It is a type of field-system consistent with a forested region, particularly as a late extension of the area of original clearance" (Newton 1970, 34). How long fields in Writtle shared by coparceners endured, Newton found impossible to say. But by the time of a survey of 1564 they had wholly disappeared.

The relationship of this type of field, shared by coparceners, to clearance of woodland is evidenced by a 13th-century charter — the shares in such fields no doubt originating from co-operative assarting. "Divisions might also arise from partible inheritance or from a grant to a son from his father as a result of a marriage settlement."

Turning to the demesne arable, Newton saw a commonfield system in decay leading to "some great unrecorded redistribution of the lands of lords and tenants, the former's were consolidated into the large fields, the latter's into the small enclosures found in the extant evidence". The lord may have taken over the original commonfields, except those parts belonging to the other two manors (Newarks and Newland Hall), the tenants being compensated by assarts elsewhere.

Such major redistributions are known to have occurred in Midland manors arising from population growth and leading to a strong manorial or communal direction centred on nucleated villages. The alternative model suggested here envisages a planned clearance of the northern wastes from the new manorial centre — land undoubtedly cultivated in Imperial times, as evidenced by the Chignal villa, that had tumbled down in the post-Roman centuries. It must be remembered that Newton's study of Writtle was first written as a thesis in the 1950s when open-field farming in strips was still seen as an Anglo-Saxon introduction rather than a late Saxon development; consequently he may reasonably have viewed the demesne fields as considerably older than perhaps they were.

But the Writtle expansion well preceded that of the Templars at Cressing. Domesday lists 64 ploughs among the men in 1066 and 12 in lordship, so the clearance and farming of the demesne was well under way before the Conquest. The building of King John's new centre could represent a stage in that clearance as well as providing the ambience for a small royal palace. Returning to Newton's suggestion of eviction and re-settlement of tenants : if the land were available to clear, they would surely have created new commonfields at this date similar to those seen in decline in the reconstruction on a mapped base of the 16th-century survey of Walthambury (Great Waltham), rather than the earlier crofts of a largely pastoral economy (Hunter 1994, 115).

The alternative model suggests a community with no shortage of land in its pre-Conquest condition; a manorial structure consisting of tenants farming smallholdings, engaging in co-operative piecemeal assarting when the need arose, with extensive common pastures, part woodland or waste, on the northern and southern fringes of the manor. This structure could apply to early medieval Cressing.

Felsted

The parish of Felsted is a third example of polyfocal "green" settlement in Essex, and the most extensive to survive and be depicted on Chapman & André's map of 1777 (Fig. 7). Eleven greens are named within the parish and the network spread eastwards into the Leighs with Fair Wood Common, and northwards into Stebbing with Stebbing Green. The settlement pattern of farms and tofts is concentrated on the edge of the permanent grazing.

Other notable examples surviving in 1777 are at Great Dunmow — Parsonage and Dunmow Downs — at Bardfield Saling, and at Wimbish. These examples, with that at Cressing, are sited on productive boulder clay, and whatever local variation might occur, the overall fertility of the land is no different from adjacent areas which show no evidence for, or survival of, green settlement.

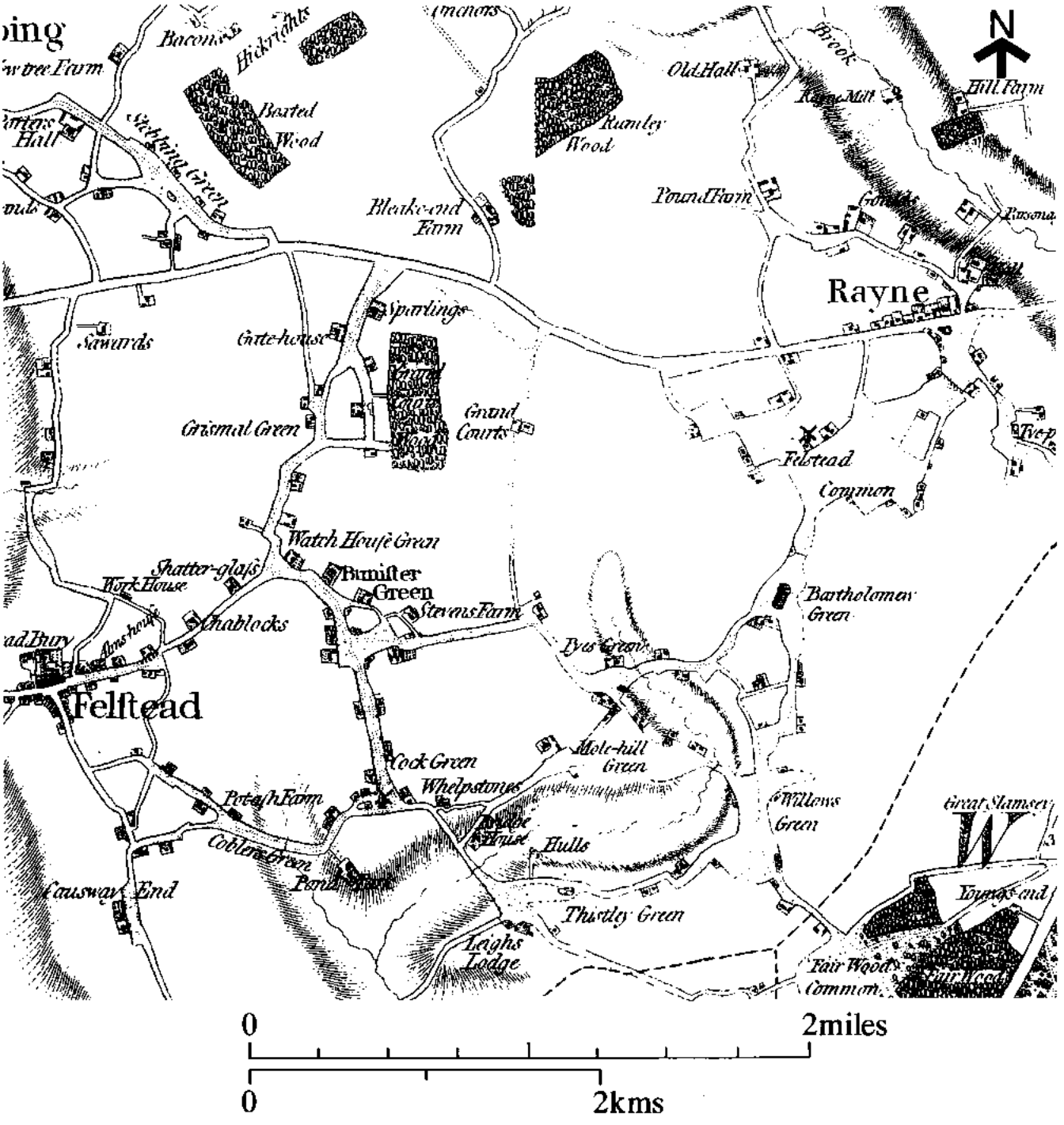


Fig. 7 The greens and commons of Felsted, Stebbing and Rayne (from Chapman and André's map of 1777).

The Tabor estate

The estate of the Tabor family at its furthest extent covered the major part of the parish of Bocking, the manor of Great Priory in Panfield, and extended into Gosfield to the wooded interfluve between Bocking and Gosfield. It comprised some 2050 acres (830 ha) with four home farms and five tenant farms (Fig. 8). The family made their first appearance in records of the seventeenth century, already owning Great Priory Farm and Bovingdon Hall. On the Bocking parish map of 1803 (ERO D/DO P2), Tabor ownership extended to much the same area as in 1976 when I carried out a hedgerow survey (Hunter 1993b).

There are no greens, tyes, or hamlets within the area of the estate. "Croft" occurs three times in field names. There are also no indications of former open or commonfields, although this by no means precludes their former existence. It is indeed likely that they did, close to Bocking and Bovingdon Hall, but if so they were enclosed at a very early date as the hedgerows appeared mostly of medieval or Tudor origin; out of a total of 24.1 miles (39.85km) only 6.68 miles (10.74 km) were either later than 1600 or undatable. The survival of such a substantial length of hedged field boundaries in 1976 reflects responsible estate management in the post-war decades when there were many pressures to remove them and it was then fashionable to place little value on such features. Similarly, very little woodland had disappeared between 1803 and the first edition 6-inch O.S.; the passion for converting woodland to arable during the French wars made little impression on a family estate with a long perspective.

Conclusions

The Tabor estate of long established home and tenant farms, the poly-focal "peasant" landscapes of Cressing and Felsted, and the former open field demesne of the Templars illustrate three distinct land use and settlement types, all within five miles of the centre of Braintree. All share a surface geology of fertile glacial soils and there appears at present no obvious logic as to why they should have evolved so differently. Tiptree Heath is another matter, the soils are poor and acid,

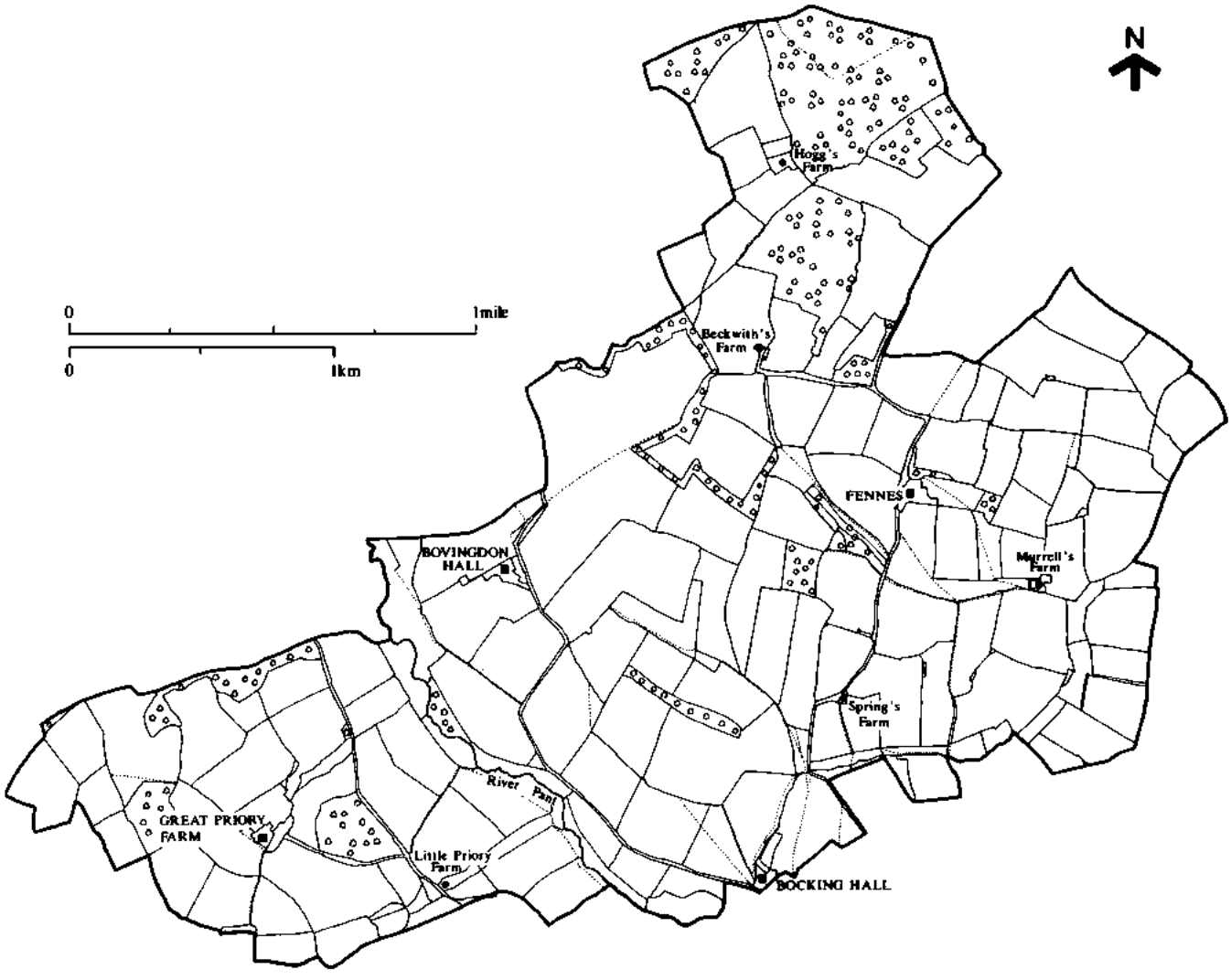


Fig. 8 The Tabor estate — from the 1st Edition O.S. 6-inch map.

and even in 1777 it appears a relic of a pastoral landscape that once stretched north-west to form an arc of heathland around Colchester, and south-west through the wooded hills of Woodham Walter and Danbury to the forests of Writtle and Waltham.

It would seem certain that "green patterns" of settlement, associated with piecemeal clearance are ancient and Williamson (1988, 8 and 11) has suggested that these began long before the Middle Ages, and moreover in a region where the transition from Roman to Anglo-Saxon rule was less disruptive. The physical demarcation of greens must have come at a time when it was necessary to protect permanent pasture from other demands on land, and safeguard its use for its immediate inhabitants. Hedgerow analysis of hedges bounding Molehill Green, Broxted, defining long-vanished tofts indicated 13th-century dating. At Cressing such hedges have long gone, and indeed the landscape is ruined in all aspects except crop production. Future archaeological evaluation of other surviving greens may provide some answers.

While the commonfield landscapes of the extreme north-west of Essex conform in general to the type extensively studied in the Midlands, those of the boulder clays of the county, together with "woodland" non-Midland landscapes elsewhere in south and south-eastern England, have received comparatively little study either theoretical or in the field. As a result, when seeking to analyse a particular parish or tract of land, models are lacking and one is made aware of just how little is yet known of the age of surviving Essex landscapes and the processes by which they came to be.

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The fortunes of war: the military career of John, second lord Bourchier (d. 1400)

by Michael Jones

'And yet time hath his revolution; there must be a period and an end to all temporal things, *finis rerum*, an end of names and dignities and whatsoever is terrene; and why not of De Vere? For where is Bohun? where's Mowbray? where's Mortimer? nay which is more, and most of all, where is Plantagenet? They are intombed in the urns and sepulchres of mortality. And yet let the name and dignity of De Vere stand so long as it pleaseth God.'[1]

Introduction

In this famous comment by the notable seventeenth-century judge, Sir Ranulphe Crewe, during the Oxford peerage case of 1626, he might have also poignantly asked, where is Bourchier? For in 1646, the year he died, the death also occurred of Robert Devereux, earl of Essex, son of Elizabeth I's favourite. This resulted in the extinction of the titles of Viscount and Lord Bourchier, whilst the barony of Bourchier fell into abeyance where today it still technically remains.[2] My intention is not to explain these recondite points of English peerage law but to resuscitate briefly from his 'sepulchre of mortality' one particular member of the Bourchier family, because his career, strangely neglected or misconstrued by generations of historians, vividly illustrates the fortunes of war as experienced by one fourteenth-century English noble.

A start may be made with John Bourchier's birth on St Gregory's day, 12 March 1329, an eventful one in the small, scattered Essex township of Tolleshunt, if evidence given in 1350 can be trusted.[3] For on that day Thomas de Hodynges buried his uncle in the churchyard, Walter atte Mote married, Gerard Huraunt set off for St James de Compostella, John atte Fen's house was burnt, Ralph atte Stokkes betrothed Joan Page, John Leybourne's wife gave birth to their first son and Richard le Rowe sent his eldest to school for the first time. Yet all these diverting details are merely ancillary to the purpose of the 1350 inquiry, to establish Bourchier's proof of age. For at the still-standing though much-altered Bourchier's Hall at Tollesbury,[4] Margaret Prayers, wife of Sir Robert Bourchier, who was to become the first lay Chancellor of England in 1340 and was later summoned to Parliament as the first Lord Bourchier, also gave birth that St Gregory's day to her first child.

Baptised John in the parish church and named after his grandfather, a justice of Common Pleas under Edward II,[5] the second John succeeded when plague carried his father off in 1349. Early in 1350 the formalities were complete and he performed homage for his lands.[6] A grant of livery to a retainer at Tolleshunt two years later shows him in residence at his birthplace.[7] Shortly afterwards, however, John joined the company of Edward, prince of Wales, taking up a military career that lasted for much of his remaining life. It took him chiefly to France and the Low Countries but also as far afield as Castile and Lithuania. Towards the end, in his sixties and loaded with honours, he returned to his native Essex; like his birth, the date of his death (21 May 1400), is also firmly established, since his son Bartholomew, third lord Bourchier, in turn also had to prove his age to gain his inheritance.[8]

It is thanks to such routine records that the bare outlines of John's domestic career can be traced through the latter half of the fourteenth century — evidence generated because of his obligations as a knight or member of the landed aristocracy to assist in the administration of his county or country and because private property rights or transactions required his attention. Some of these records will be used here to flesh out the story, especially to reveal his financial circumstances or to trace his movements and confirm his absences from England at particular points. To this written evidence can also be added certain material remains, in the form of church monuments, standing buildings or archaeological sites that provide further valuable confirmation of the ambitions, achievements and rising status of the Bourchier family in the fourteenth century; in the fifteenth it reached the top echelons of English society when John's grand-nephew Henry Bourchier became earl of Essex under Edward IV. But it is on John Bourchier's war experiences that attention will chiefly concentrate; his domestic life, membership of his household and the fortunes of his landed estates must remain subordinate themes.

Family background

The family of Bourchier (Burgcher, Bousser, Burser) may already have been of knightly rank in the thirteenth century: the eighteenth-century antiquary, the Rev. Philip Morant, in tracing the descent of Stanstead

Hall, Halstead, the surviving property with which John may be most closely associated,[9] from its Domesday tenant, via the Montchesny family, to the first John Bourchier, claims that he was son of a Sir Robert de Burser and his wife, Emma, who before 1300 married the last Montchesny heiress, Helen.[10] These details cannot currently be substantiated; Morant was mistaken on occasion and has been the source of errors uncritically repeated by later historians.[11] We may note his testimony but with due reservation; more certainly it can be asserted that successful marriage, the method by which the fortunes of the Bourchier family were enhanced in this case, was also the main key to its later success. It was, after all, the chief and normal avenue of social advancement in late medieval England amongst gentry families. Moreover, the early Bourchiers coupled it with that other high road to fortune for the ambitious: successful careers in the law.

The first John Bourchier was appointed a Justice of Common Pleas on 31 May 1321 and confirmed in office by the young Edward III in 1327.[12] When he died in 1329, his eldest son Robert had already begun following in his footsteps; he served as a justice of *oyer et terminer* in the early 1330s. He was also one of the knights of the shire for Essex in the Parliaments of 1329, 1330, 1332 and 1339. Morant claims that he even became Chief Justice of Ireland, though recent work fails to confirm this.[13] More definitely, after mustering for war service as early as 1324, and seeing action in the raid on Cadzand in 1337, probably in the company of Hugh Audley, earl of Gloucester, who retained him with the very large fee of £100,[14] on 14 December 1340 Robert Bourchier was appointed the first lay Chancellor of England.[15] Although he was replaced ten months later because of unpopularity and unwillingness to bow to parliamentary pressure, he remained close to Edward III. He took part in various expeditions, notably fighting in Brittany in 1342-3, at Crécy (1346) and the subsequent siege of Calais, and he was also sent occasionally on embassy.[16] His personal advance was sealed when he was summoned to the parliaments of November 1348 and March 1349 by a personal writ, becoming thereby Lord Bourchier, but he did not survive long to enjoy his new status, dying around 18 May 1349, a victim of the first visitation of the Black Death. Like his father, Robert had also married well to another sole heiress, Margaret, daughter of Sir Thomas Prayers of Sible Hedingham, Essex. She brought him a considerable endowment scattered through the county, including the manor at which her eldest son was born in 1329.[17]

During his father's lifetime, John was associated formally with him in various legal actions relating to family property;[18] Robert was active in the marriage and land market, acquiring several new manors in addition to those which came to him with Margaret Prayers.[19] When an aid for knighting Edward, prince of Wales, was levied in 1346, some manors in Essex held by 'Sir John Bourchier' contributed;[20] these were probably in the hands of Robert's younger brother, John, whose career needs to be distinguished from that of his nephew, though in the end most lands the elder man possessed passed to the latter. It may have been this elder John who as 'un jone chevalier', according to Froissart, captured Messire Pierre Portbeuf at a siege of Dinan (dép. Côtes-d'Armor) in the winter of 1342-3. But this detail is part of a later revision of the chronicler's text, after he had got to know our John Bourchier and may be purely fictitious.[21] Other examples of Froissart's imaginative and confusing authorial sleight of hand, intended to excite the interest of potential patrons or acquaintances like Bourchier, but serving to infuriate and mislead modern historians, will present themselves shortly. As for Sir John Bourchier, senior, as late as 1369-70 he received protections for service in Guyenne.[22]

John Bourchier's early military career

According to his own testimony given some forty years later during the Scrope-Grosvenor dispute, the younger John's first experience of war came during the siege of Calais in 1346-7, probably in his father's company although his name has not been found in any administrative document connected with the siege. By 1353 he had been knighted and it is probably to him that a protection, granted in 1355, refers as he set out abroad in the king's service.[23] Other evidence suggests that he was among the company that Edward, prince of Wales, took to Guyenne. His part in the prince's first raid, which reached Narbonne (dép. Aude) in the autumn of 1355, is noted by the closely contemporary English chronicler, Geoffrey le Baker.[24] The chances are that Bourchier was also at the battle of Poitiers (19 September 1356) though no definite proof can be adduced. It may be that his reputation as a soldier had begun to flourish since Froissart has him accompanying Henry, duke of Lancaster, in Normandy and Brittany in 1357, though many events related by him at this point, like another alleged siege of Dinan, are almost impenetrably enveloped in legend. Like the detail related above about a John Bourchier and an earlier siege of Dinan, this is also an addition to a revised and abbreviated version of Froissart's first book, the reliability of which remains highly suspect.[25]

A dearth of references to Bourchier in England from 1355 to 1363, when he was in the first flush of manhood, is the best evidence that he spent most of this period in France, though whether in Brittany, Gascony or elsewhere, remains largely uncertain. He was definitely in London on 8 September 1359, preparatory to accompanying Edward III to France and he testified to seeing Sir Richard Scrope and other members of his family bearing the disputed arms *Azure a bend Or* in the king's host before Paris later in the winter of 1359-60. After this, he was back again in

England, at least briefly, in 1361.[26] From 1362 his movements become clearer; he was among the troops despatched from Guyenne by the Black Prince to assist the claimant to the Breton ducal title, Jean de Montfort, on his return to the duchy in July 1362. A clear mark of his rising prominence is that a year later he was one of the Anglo-Breton guarantors of a truce agreed between Montfort and his rival, Charles de Blois, at the Landes d'Evran (dép. Côtes-d'Armor) on 24 July 1363, where Bourchier was exchanged with a Breton hostage, being released by Blois from the terms of this arrangement on 18 November.[27] For some part of the truce he remained in Montfort's company, being present with him at Guérande (dép. Loire-Atlantique) on 2 October,[28] and he accompanied Jean to Poitiers (dép. Vienne) where Prince Edward, seeking to bring the two contestants for the Breton throne to terms, arranged a further truce between them on 26 November to last until the following February.[29]

Bourchier's Breton counterpart at the Landes d'Evran, Guy de Rochefort, sire d'Acérac, released him on parole on 26 December until 11 June 1364.[30] Taking advantage of this lull in hostilities, John returned briefly to England where he gathered another small company of troops for Brittany.[31] In turn Montfort authorised Bourchier on 7 June 1364 to quit the lord of Acérac's elder brother, Guillaume, sire de Rochefort, who had been one of Blois's hostages the previous year.[32] The Breton succession crisis was about to be resolved: on 29 September 1364 Bourchier was present on the field of Auray (dép. Morbihan) when Montfort finally vindicated his claim by defeating and killing Blois.[33] Subsequently in the winter of 1364-5 Bourchier was employed reducing remaining centres of resistance to Montfortist rule like Redon and St-Malo (both dép. Ille-et-Vilaine),[34] and he was one of an influential coterie of Englishmen, led by William, lord Latimer, high in Jean IV's service.[35]

The years 1362-6 were thus passed mainly in Brittany, but preparations by the Black Prince to help Pedro I of Castile drew Bourchier back to Gascony. Chandos Herald lists him among those accompanying the prince on the campaign which culminated in the battle of Najéra (3 April 1367), though no specific deeds are attributed to him.[36] Returning to Guyenne, Bourchier spent the next few years there alongside his uncle.[37] In the spring of 1370 he travelled to England, passing once more via Brittany, since he was at Vannes (dép. Morbihan) on 15 April.[38] The reason for this journey soon became obvious: on 1 July he received his most important commission to date when he was named along with Sir Alan de Buxhill and Sir Thomas de Graunson as lieutenants to Sir Robert Knolles, who was to lead a large force of 2000 men-at-arms and 2000 archers to France.[39] Unfortunately neither the size nor make-up of Bourchier's own retinue is known since no indenture or accounts survive for him. Knolles's army landed at Calais later in the month and its failure is too well-known to require much comment; personal quarrels and a lack of co-ordination between the leaders led to disaster at Pontvallain (dép. Sarthe) on 4 December, when the rump of the force was cut to pieces by the newly appointed Constable of France, Bertrand du Guesclin, whose Fabian tactics (upon which his sovereign, Charles V, and his council insisted) had seriously undermined English morale.[40]

Bourchier in eclipse

Was Pontvallain, to come to perhaps the decisive crux in Bourchier's career, the beginning of his military misfortunes? Some modern authorities have thought so: according to René Blanchard,[41] it was at Pontvallain that Bourchier was captured by the Breton marcher lord, Girard Chabot, sire de Rays, a former companion on the Spanish expedition of 1367, who had recently returned to his French allegiance.[42] Rays, or rather his sister and successor, Jeanne, dame de Rays, did indeed later hold Bourchier to ransom, though it seems most probable that he fell into their hands on a later occasion. This is suggested by certain transactions in Brittany during the spring and summer of 1371 when Bourchier was apparently at liberty. On 5 June, for instance, at Knolles's own Breton stronghold of Derval (dép. Loire-Atlantique), to which he had retreated in the aftermath of Pontvallain, Bourchier and Sir Robert Warde lent Sir William Flete 640 marks 'a mon grant bosoign pour la deliverance de mon corps hors de mains de mes enemis' to be repaid by the feast of Angevin (8 September),[43] while at Nantes (dép. Loire-Atlantique) on 14 June Bourchier undertook to repay 100 marks himself at London by Easter 1372.[44] Indeed, as early as 5 March 1371, Thomas de Saham, tailor and citizen of London, cancelled a debt contracted by Bourchier for horses, bought from a merchant of Malines trading in Brittany in 1370 and due for repayment in London, implying that this had been done without any untoward complications.[45] Given the difficulties Bourchier was to experience reaching terms and raising his own ransom in the next few years and the close confinement in which he claimed that he was kept during this period (below p. 148), it seems improbable that he had already contracted ransom debts or was out on parole following capture at Pontvallain. In fact, the autumn of 1371 (Rays died on 3 December)[46] appears a more likely date for Bourchier's capture, probably in a skirmish on the borders of Brittany and Poitou. In any event, he was in captivity by 10 June 1372 when the first of several protections, annually renewed until 1377, was issued for him as a prisoner abroad.[47]

Some circumstances of his imprisonment are revealed in several documents, most notably in a plaintiff letter to his wife, written from Machecoul (dép. Loire-Atlantique), the main castle of the lordship of Rays, on 13 May 1374 (to which attention was first drawn by

K.B. McFarlane)[48] and a draft agreement for release, drawn up around the same time,[49] although it was to be another four years before Bourchier was physically free and a further two before his ransom was completely discharged. The letter, in particular, is one of the most remarkable and intimate private communications surviving between an English knight and his lady from the late Middle Ages and deserves to be better known than it is. It is almost certainly in Bourchier's own holograph; the detailed ransom agreement, too, is a relatively rare survival. Whilst it is not unusual for several years to elapse in settling important ransoms, the particular reasons for delay in any specific case are often difficult to elucidate easily as several modern studies have shown.[50] In addition to personal factors, like the prisoner's ability or inability to raise the necessary finances quickly, matters of public interest might also conspire to prevent swift release or the striking of a private bargain.

In Bourchier's case three factors seem especially responsible for him spending upwards of seven years in gaol when in the prime of life. First, the sum demanded for his ransom was large relative to his own resources, considering that he had passed many years abroad, leaving the administration of his estates to his wife and subordinates.[51] Secondly, efforts to secure his freedom were for several years linked with those to obtain the simultaneous release of Roger de Beaufort, a prisoner of the Gascon lord, the Captal de Buch, a matter further complicated by the Captal's own later capture. Since Beaufort's brother, Pierre Roger, was elected as Pope Gregory XI on 30 December 1370, negotiations for his (and hence Bourchier's and the Captal's) release were often conducted at the highest level. Indeed they were also linked to the more general resolution of Anglo-French disputes which was a major concern of Gregory XI's pontificate.[52]

Naturally, since the private and public interests of the pope were extremely complex, diplomatic and other delays inevitably occurred. Other parties too, like Jean IV of Brittany, suzerain of the dame de Rays, whose shaky hold on his duchy weakened to the point where he had to seek exile in England in April 1373,[53] and Charles V of France also had a strong interest in the outcome of any negotiations; this too introduced further complications and new parties to be consulted in any deal. Thirdly, again mixing private interests and public ones, Bourchier's hopes of release were also clouded by disputes among those claiming a share in the succession of his original captor, Girard Chabot, most notably between Girard's widow, Marguerite de Sancerre, who married secondly Beraud, dauphin d'Auvergne, and his sister Jeanne, dame de Rays, who, to give a further twist to the story, contracted marriage to Roger de Beaufort shortly after his imprisonment.[54] Only parts of this imbroglio can be unravelled from surviving evidence; here attention may particularly be directed to the financial aspects of Bourchier's ransom; the diplomatic complications have been dealt with in more detail elsewhere.[55]

Bourchier's ransom

After more than two years' captivity during which there is an almost complete silence concerning him, a sum of 12,000 francs (approximately £2000 sterling) for his ransom was agreed by May 1374.[56] This sum was made up of 4000 francs for his expenses in confinement, expenses which suggest that he lived in more style and comfort than the description he gave his wife implies, since there is mention of servants, and 8000 francs for the ransom proper. This latter (representing around £1300 sterling) would conventionally have been calculated on the basis of Bourchier's annual landed income. It comes, in fact, plausibly close to double the £750 p.a. that has been suggested in another context for this figure at the end of the fourteenth century by a recent historian of the Bourchier family.[57] But double (or, counting imprisonment expenses), triple Bourchier's income represented a burden that required a huge sacrifice by his family at a time of great economic uncertainty. R.H. Britnell has shown, for instance, that although the amount of land held in his own hand on the lord's demesne at Bourchier's Hall, Tollesbury, increased after the Black Death, as tenements fell vacant, the amount actually under the plough by the early fifteenth century had fallen by over a hundred acres in comparison with the situation prior to the plague and he comments on the declining efficiency of the manor.[58]

It was to persuade his wife of the need for a great effort to secure his release that Bourchier wrote on 13 May 1374, instructing her to sell or mortgage estates if need be to raise the cash urgently required. Initially, it had been agreed that the 4000 francs for expenses were to be paid at Bruges before Bourchier was allowed to leave Machecoul. He was then to pay 2000 francs in each of four successive terms over two years to complete the ransom. Explaining to Lady Maud, whom he addressed in the most fulsome and affectionate terms, why he had accepted such excessive obligations, he impressed on her 'le grant peril ou jeo ay de perdre la vie ou les membres a meins', though preserving enough stiff upper lip humour, despite his hardships, to plead with her 'sur lamour qest entre vous et moy' to arrange payment with the help of his English friends: 'que vous ne esparnietz reins que ne soyt engage ou vendu si meuxs nen poyetz fere, kar ky nad le corps il nad rein' ('spare nothing that may be mortgaged or sold if you cannot do otherwise, for he who lacks the body has nothing').

There is evidence that Maud acted on these instructions, which she received at home in England on 8 July 1374,[59] and that Bourchier's friends did try to rally round. A draft credence from Edward III to John, lord Neville, to speak with Jean IV of Brittany over the

delivery of Bourchier survives.[60] So does an obligation, dated at London on 20 October 1374, by the duke, then in England preparing to reinvade his duchy, to deliver Bourchier from prison within six weeks of his arrival in Brittany or to return the 1000 marks (£666 13s 4d) he and others had received from the bishop of London and Lady Bourchier, towards the ransom.[61] When nothing came of this, Maud also petitioned the king and council, briefly setting out Bourchier's obligations.[62] Some details had changed since May 1374: the 4000 francs were to have been delivered at Boulogne the previous Michaelmas, and William, lord Latimer, was to guarantee the outstanding 8000 francs, but Maud also claimed that full implementation had been prevented at a late stage by Roger de Beaufort's intervention.

After this flurry of activity, the trail temporarily goes cold. The failure of Jean IV's invasion of Brittany in 1374-5 and Latimer's downfall in the Good Parliament (April-June 1376) may have been reasons for delay, though the Commons did take up Lady Bourchier's petition again since its terms were subsumed in a more general request in that parliament to the king to help a growing list of Englishmen, who had been unfortunate enough to be captured (mainly on Gaunt's chevauchée of 1373-4 or in subsequent fighting in Guyenne), and whose fame and martial deeds had resulted in them being put to ransom well beyond their means, for Bourchier was not alone in his sufferings.[63] Among them were some notable figures: Sir Matthew Gournay, Sir Matthew Redmayne, Sir Thomas Fogg, Sir Digory Seys, Sir Geoffrey Workesleigh, Sir Robert Twyford and the Anglo-Gascon lord, Jean de Harpedenne.[64] Although Edward III agreed to act specifically in the cases of Fogg and Gournay, and by implication in that of the other knights, including Bourchier, new delays ensued because of the old king's death (21 June 1377) and personal and policy disputes amongst the young Richard II's ministers. A leading royal ecclesiastical counsellor, William Wykeham, bishop of Winchester, for instance, was in bitter dispute with Fogg's lord, John, duke of Lancaster, following events in the Good Parliament. On returning to power in 1377, Lancaster charged him with malversation in the matter of Fogg's ransom and even attributed the recent renewal of war with France to Wykeham's greed and short-sightedness.[65]

Negotiations over Beaufort's release (a matter taken up on a number of occasions during the Anglo-French peace talks at Bruges between 1374-1377) were another cause of delay in implementing the terms of Bourchier's release. By the time his own ransom resurfaces in extant records in 1377, the interest of Jeanne, dame de Rays, and her relatives in it seems to have been bought out, for on 5 March 1377 Beraud d'Auvergne and his wife came to terms with Jeanne and her mother, Philippe Bertrand, following a decision in the *Grands Jours* at Poitiers, to share the sum of 10,000 l. which had apparently been paid to them for Bourchier.[66] A payment of 700 l. by Jeanne de Rays, acknowledged by Beraud and his wife on 4 August 1378, probably represents an instalment following this agreement.[67] Bourchier's purchaser was Olivier, sire de Clisson, a close friend and neighbour of the Rays family, who had apparently struck what he hoped would be an advantageous deal with them in 1375 or 1376. For as an outstanding soldier and astute financier, Clisson, a rising figure in French royal service, clearly saw in Bourchier's misfortune a chance for profitable speculation through ransom brokerage.[68] It was thus his representative, Guillaume Leet (once a go-between in arranging the Beaufort-Rays marriage),[69] who finally agreed in late April 1378 to deliver Bourchier from his captivity.[70] Indeed by this date, the deed was as good as done since Bourchier had been brought from his place of imprisonment, wherever that had been in recent years, to Tournai. On 29 April, after he once more acknowledged his remaining obligation to pay 8000 francs, Bourchier was finally allowed to go free.[71]

He was still heavily dependent on his friends for raising this sum, but he could return to England after an absence of seven years or more. How he met his obligations remains unknown; various Bourchier manors were let at farm in 1377-8, but since the document containing this information is an isolated item and the only nearly contemporary manorial accounts for Bourchier lands are also fragmentary,[72] it is difficult to know how far this was an emergency measure or something that had already become customary. Nevertheless, regular payments must have been made, for two years later, on 20 April 1380, Clisson issued a quittance to the earls of Arundel, Warwick and Suffolk for the final (Easter term) instalment and declared Bourchier entirely quit.[73] In the interim, besides attempting to bring order to his private affairs, Bourchier's appetite for military action remained unsatisfied; indeed he was now perhaps driven by the hope of some equally fortuitious 'gain of war' to offset his recent losses.

Froissart is once again the sole authority for him embarking with Sir John Arundel in December 1379, in an expedition to relieve Brest (dép. Finistère) that ended in disaster when violent storms dispersed the fleet; such behaviour would have been a breach of the convention that undischarged prisoners should not fight against their captors and break solemn promises made by Bourchier himself.[74] Had this occurred, the defence might have been offered that since the expedition was directed to Brittany, nominally in alliance with England, such a breach had technically not occurred, though it seems more probable that Bourchier did not breach the chivalric code and was thus absent from the 1379 expedition. In 1380 Clisson acknowledged that he had indeed kept his word.[75] Shortly afterwards Clisson delivered a final quittance to his

erstwhile prisoner; almost immediately Bourchier enrolled to serve in France again in the army that Richard II's uncle, Thomas, earl of Buckingham, gathered in the summer of 1380.[76] But before recounting the later stages of Bourchier's military career, some loose ends with regard to the negotiations that had finally secured his release should be tied up.

The connection between Bourchier's ransom and that of Roger de Beaufort has been mentioned; the latter was a cadet of the important Limousin family of Rogier, whose fortunes were made when Pierre Rogier, a close adviser of Philip VI, became Pope Clement VI in 1342.[77] His sympathy for Philip's cause was evident in important loans that he and other relatives made in subsequent years though, like many other families living in frontier areas between zones of French and English allegiance, the Rogiers divided their loyalties, perhaps intentionally, to spread the risk of complete political disaster. Thus of the three sons of the comte de Beaufort, Clement VI's brother, the eldest, Guillaume Rogier, vicomte de Turenne, was pro-English for much of his life, the second, Pierre, became Pope Gregory XI on 30 December 1370, while Roger, the third, remained in French service. It was while serving under Jean, duc de Berry, in 1369 that he too suffered the misfortune of capture.

The event at which this happened is notorious: after taking Limoges (dép. Haute-Vienne) in August 1370 Berry left a garrison there under Roger de Beaufort and his companions.[78] But on 19 September the city capitulated once more to the Black Prince. Roger, together with a nephew, Jean de la Roche, was taken prisoner by the important Gascon lord, Jean III de Grailly, Captal de Buch, while less fortunate civilians were massacred in one of the most notorious, though exaggerated, acts of atrocity perpetrated during the Hundred Years War.[79] As for Beaufort and la Roche, although negotiations for their release began almost immediately and were taken up vigorously by Gregory XI after his election, the two prisoners were still in Buch's hands when he, in turn, was captured at Soubise (dép. Charente-Maritime) on 23 August 1372.[80] By then Bourchier too was a prisoner and a deal involving a multiple exchange was aired. Bourchier's potential release had already been tied into that of Beaufort; it was now also indirectly linked to that of the Captal, so that it can hardly surprise us that in ensuing discussions delay was heaped on delay and that it was to be a further seven years (and following the death of the Captal) before Bourchier obtained his conditional freedom and another two before he was finally discharged from his ransom.[81]

Bourchier's military fortunes after 1380

Bourchier's post-captivity career was left at the point he received a copy of Buckingham's indenture for service in France on 2 May 1380 and was preparing to accompany him abroad. On 12 June, the day he received a protection to go with Buckingham, he drew up a subcontract which shows that he intended to serve in arms for a year,[82] though he may not in the end have gone over to France with Buckingham's main force, since he was still in London as late as 20 October, arranging a contract for digging the still-extant moat around his manor of Stanstead.[83] (Plate 1)

He thus probably missed the first stages of Buckingham's chevauchée through northern and eastern France in the late summer and autumn of 1380. Like Knolles's expedition of 1370, the last with which Bourchier had been personally associated, this also achieved only moderate success. Moreover, Buckingham's arrival in Brittany was an embarrassment to England's ally, Jean IV, who after the death of Charles V (16 September 1380), had been seeking terms with the French.[84] Though the English government continued as late as February 1381 to make preparations for sending reinforcements to join Buckingham, by January a new Franco-Breton peace agreement had been drafted. This was confirmed at Guérande (dép. Loire-Atlantique) in April.[85]

In the interim Jean IV used Buckingham's force to invest Nantes, one of the few towns still holding out against him, thanks to French help, since his return from England in August 1379. It appears that Bourchier joined the siege but, as was common, especially in those conducted through the winter, disease took a severe toll and by early 1381 the English were anxious to lift it. Buckingham was at Vannes (dép. Morbihan), one of the main centres of Breton administration, on 27 February, accompanied by Bourchier and Latimer, both renewing long-standing acquaintances with Jean IV.[86] Just over a month later, as Jean IV sealed the new Franco-Breton treaty, the duke also agreed to pay off his English allies. Up to 50,000 francs was promised to Buckingham and his lieutenants and quittances for various instalments were issued in the following weeks.[87] How much passed to Bourchier is unknown though, still at Vannes on 12 April, he acknowledged receipt of a modest 300 francs for the wages of himself and his retinue.[88]

Buckingham's troops returned to England to find the Peasants' Revolt in full swing, and were used in its repression. Essex, Bourchier's home county, was one of the epicentres of unrest and, as a leading local landholder and experienced soldier, he was immediately put onto various commissions to punish the insurgents.[89] He was also now summoned to Parliament for the first time by personal writ, resuming the style once briefly enjoyed by his father; friendship with Buckingham and other local peers like Lord Fitzwalter or Richard II's rising favourite, Robert de Vere, earl of Oxford, further enhanced his position.[90] In keeping with his seniority and longer spells in England, Bourchier now took a more active part in both county and national administration, being particularly

associated with those whom Buckingham gathered around him.[91] He also gave some attention to the estates from which he had so long been absent.[92]

Foreign affairs, however, continued to interest him: in 1383, together with his wife, Maud, and eldest son, Bartholomew, Bourchier received an indulgence for supporting Bishop Despenser's crusade to Flanders,[93] in which a number of his former companions in arms — or opponents like Roger de Beaufort, participated, though he resisted the urge to enlist. He thus escaped the opprobrium that fell on the army's leaders when it was forced to retreat ignominiously.[94] But in the following year, new opportunities for service presented themselves; summoned first to fight against the Scots,[95] in November 1384 the royal council decided to send Bourchier with a small force as '*Rewaert*' or governor to support the men of Ghent, in revolt against Philip of Burgundy, successor to Louis de Male, count of Flanders, who had died the previous February, and for whose unnamed heir the English government ingenuously now claimed to be acting.[96] In command of a force of 100 men-at-arms and 300 archers, to which some other small contingents were gradually added, Bourchier spent the next year cooperating with a regime of leading citizens of Ghent, led by Frank Ackerman, who moved onto the offensive in the spring of 1385. As Professor Vaughan has written, 'Their strategy was dictated by their commercial needs: it was imperative for them to secure communication with England to ensure a continued supply of raw material for the cloth-workers'.[97]

Whilst economic concerns also clearly influenced the English in their support of the Gantois, in their broader strategic thinking, this entanglement in the affairs of the Low Countries was also defensible on the grounds that it contributed to the 'Barbican' policy that Richard II's government had been following for some years: placing England's first line of defence not along the country's southern coastline but across the Channel, where a series of castles and fortresses — among them Calais and its pale, Cherbourg and Brest and now, potentially, Ghent — served as England's frontline defences.[98]

There is no need here to describe in detail the various military actions in Flanders during the summer and autumn of 1385, recounted at length by Froissart and other chroniclers, in which the Anglo-Gantois forces were involved.[99] A notable feat was the capture of Damme in August by troops from Ghent, but Ackerman's success spurred Philip of Burgundy to mobilise French resources for a major counter-attack to subdue the rebellion in his wife's patrimonial lands. Gradually Ghent was isolated militarily and diplomatically, so that it became responsive to French overtures for peace; for their part, promised reinforcements from England were too few and too late to prevent an accommodation.[100]

Franco-Flemish negotiations were taken up actively in October 1385 and eventually on 18 December a peace treaty was agreed at Tournai. Both before the talks and as they were proceeding, Bourchier at Ghent appears to have acted with considerable bravery and

Plate 1
The moated site of Stanstead Hall, Halstead: on the right, the present restored Elizabethan house; on the left, the late medieval barn (by kind permission of Mr and Mrs N. Smith).

good sense; his advice on military matters was generally well-thought out and practical, and he exercised a moderating influence on the hotheads among the citizen body.

Froissart is joined by the English chronicler Thomas Walsingham in praising the way in which he prevented retaliation for various cruelties perpetrated by the French.[101] His own position remained secure: his appointment as regent was confirmed by the Gantois as late as 25 October and the English government was still expecting to send Bourchier further reinforcements when the ground was cut from under his feet by the peace talks.[102] He was allowed to leave the city with military honours, retreating with his men to Calais at the end of October or beginning of November 1385.[103]

With his usual flair for the dramatic, Froissart provides a vivid account of Bourchier's return to England to report to the king and council about events at Ghent which we must as usual take with a pinch of salt, but there is no doubt he was soon back on the continent, taking up residence in the garrison at Calais where he appears to have served for much of 1386, perhaps concerning himself especially with repairing and overseeing the fortifications.[104] The chronicler Knighton also numbers him among those who accompanied Henry Percy, 'Hotspur', on a chevauchée against Boulogne in late May 1386, after a first raid by Percy alone had resulted in numerous English casualties, events also related by Walsingham but without mention of Bourchier's part.[105]

From Calais it was also relatively easy for him to keep an eye on his own private affairs. But recognition of Bourchier's long experience of military matters and contacts with those around Richard II is also demonstrated by the fact that in August 1387, when relations between the king and his nobles were deteriorating rapidly, Bourchier was among those summoned by Richard to meet him at Nottingham to discuss the state of the realm.[106] It was, of course, on this occasion that the king posed the famous questions to the judges about royal prerogatives, and Bourchier was later present in the Merciless Parliament (3 February-4 June 1388) which condemned the king's favourites and restricted his powers.[107] What stance he took during these events is unknown: his close contacts with Buckingham (promoted duke of Gloucester in 1385) have been mentioned, but so too have those with his Essex neighbour Robert de Vere, by now duke of Ireland, one of those condemned by Parliament and driven into an exile from which he did not return alive.[108] There is evidence that Bourchier was willing to help Oxford's family avoid the full consequences of the forfeiture he had incurred and he remained on good terms with the dowager countess of Oxford in later years.[109]

Bourchier on crusade

Politics were never a consuming passion for Bourchier; he was by preference a man of action and he no doubt deplored the divisions that had riven the English aristocracy in recent years. Disenchantment, disillusion or

Plate 2 Alabaster effigies traditionally identified as John, lord Bourchier and his wife, Maud (St. Andrew's Parish Church, Halstead).

a desire to avoid making difficult choices may be behind one last episode in the vicissitudes of his military career. For with the conclusion of a series of Anglo-French truces from 1388, Bourchier, by then aged around 60, was free to complete the classic *cursus honorum* of a late medieval noble by going on crusade.[110] On 5 May 1390 he had a licence to cross the sea to 'Barbary', with a retinue of six esquires, fifteen valets and eight stable boys. Next day letters of exchange for £300 were arranged by a Lombard banker in London, Angelo Cristoforo.[111] Perhaps his first intention was, like that of Henry, earl of Derby, to join the expedition that Louis, duc de Bourbon, was preparing to lead to Africa.[112] If so, he quickly changed his mind, for when Derby arrived in Danzig in August 1390 on his own *Preussenreise*, it was in Bourchier's *hospicium* that he initially stayed, while it was one of his esquires that Derby rewarded for raising the standard 'primo super muro civitatis de Welle' [sc. Vilnius], the main military action of that summer's campaign.[113] When in the spring of 1391 Derby left Prussia, Bourchier stayed on. In the summer he featured in a notable incident at Königsberg recorded by the Monk of Westminster.[114]

The Scottish knight Sir William Douglas unexpectedly entered a church where Mass was being said in the presence of various English lords and their followers, including Lords Clifford, Despenser, Fitzwalter, Beaumont and Bourchier, at which point the celebrant stopped, saying he would not continue in the presence of schismatics (since the Scots supported the Avignonese pope and the English the Roman one). At this Douglas became incensed and withdrew in high temper, claiming that it was Clifford's doing, since they had already quarrelled some time before, presumably during earlier Anglo-Scottish border wars. When the English emerged into the street, Douglas led a furious attack on them, though the ensuing fracas cost him his life and some of his companions were injured in a counter-attack led by Bourchier who, like his squire in the previous year, seized a standard to rally his men. Others joining in the affray included supporters of the Roman pontiff from Germany, Bohemia and Guelders, and it was some while before peace was restored. Proud, brave and still quick-thinking as this episode shows, recognition of Bourchier, a soldier's soldier, culminated on his return to England when in late 1392 he was named Knight of the Garter.[115]

Last years

Bourchier remained active in Parliament and on local commissions almost to the end of his life; on 26 July 1398, for instance, he was ordered to release five prisoners whom he had apprehended with characteristic vigour and gaoled at Colchester for holding the 'Logge' at Tolleshunt by force.[116] He received Garter robes in 1399,[117] but by the winter he was in decline. On 14 February 1400 he was exempted from attendance in Parliament and Council and from further service on commissions.[118] He died a few months later on 21 May 1400 and was buried in the Bourchier chantry at St Andrew's, Halstead where mutilated fragments of his tomb survive.[119] It had been the intention of his

Plate 3
The Saracen's head helm (St. Andrew's, Halstead).

father to establish a College there for eight chaplains; it was his grand-daughter, Elizabeth, who with the help of Richard Clifford, bishop of London, and her two successive warrior husbands, Hugh, lord Stafford and Sir Lewis Robesart K.G., eventually succeeded in providing a sufficient endowment for five chaplains to celebrate masses in perpetuity for her Bourchier ancestors.[120] (Plates 2-4)

Some of the delay in raising this monument to family pride can be attributed to the restless worldly concerns of John Bourchier traced here that took him from Calais, Narbonne, Poitiers and Najéra, via Auray, Pontvallain, Machecoul, Nantes, Ghent and Calais to Danzig and Vilnius, and kept him so long from his native Essex heath, though as the anguished letter to Maud, lady Bourchier in 1374 shows, his wife, family and friends always seem to have lain at the centre of his life. In this respect, Bourchier's misfortune is our good luck, providing as it does a brief personal glimpse into the mind of one notable fourteenth-century soldier whose chequered and colourful career has otherwise to be disinterred from more formal and hence all too frequently anodyne records, although the story is full of incident and interest as this account has sought to demonstrate. Thus, correct as Justice Crewe was to lament 'an end to all temporal things', the historical record and the now sadly incomplete state of Bourchier's own 'urns and sepulchres of mortality' — his tomb at Halstead, the site of his manors at Stanstead Hall and Tollesbury and other visible signs of Bourchier pride like his stall plate at Windsor — are touching reminders that 'the name and dignity of Bourchier still stands'.

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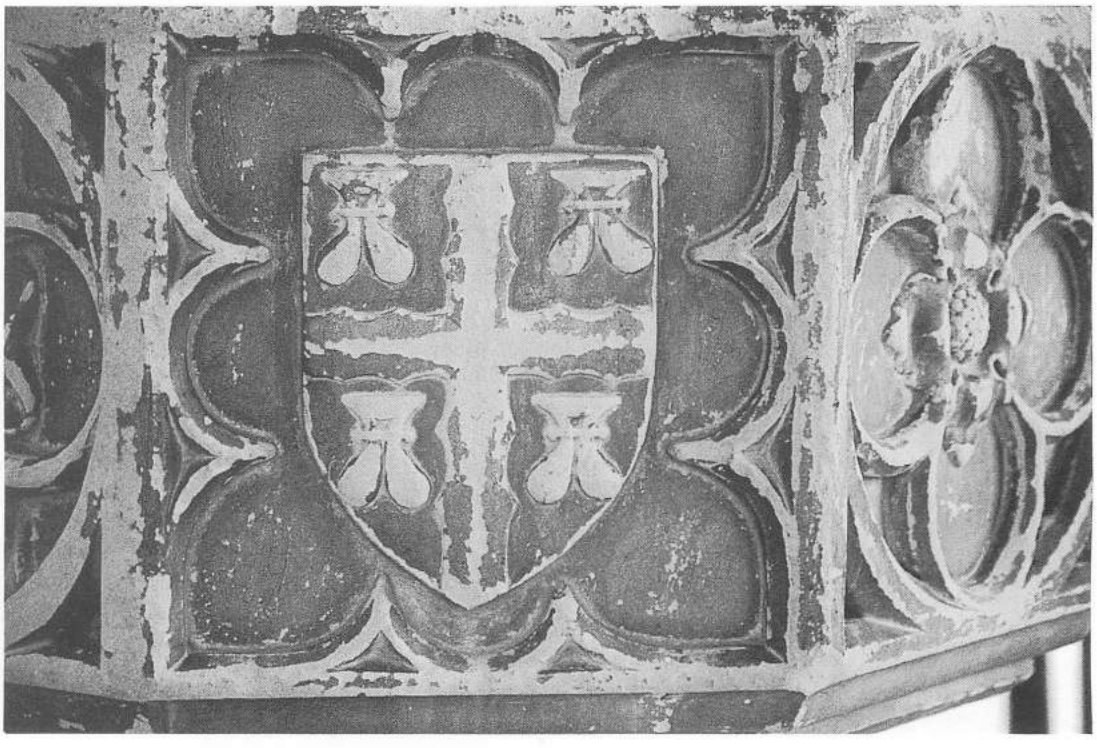

Plate 4
The Bourchier arms on the font erected by Elizabeth, lady Bourchier, *c.* 1420 (St. Andrew's, Halstead).

Notes

The following ahbreviations are used;

ALA	Archives de la Loire-Atlantique
BIHR	*Bulletin of the Institute of Historical Research*
BL	British Library
CCR	*Calendar of Close Rolls*
CP	*The Complete Peerage*, revised edn. V. Gibbs, H.A. Doubleday *et al.*, 13 vols. London (1910-59)
CPL	*Calendar of Papal Letters*
CPR	*Calendar of Patent Rolls*
CIM	*Calendar of Inquisitions Miscellaneous*
CIPM	*Calendar of Inquisitions Post Mortem*
DNB	*Dictionary of National Biography*, ed. Sir Leslie Stephens and Sir Sidney Lee
EHR	*English Historical Review*
PRO	Public Record Office
RCHM	*Royal Commission on Historic Monuments (England), Essex*, 4 vols. London (1916-22)
VCH	*Victoria County History*

1. *CP*, x, 256 note e.
2. *CP*, ii, 246-50; the account there of our John Bourchier's life is extremely brief and inadequate.
3. *CIPM*, ix, no. 591.
4. *RCMH, Essex*, iii, 217.
5. *DNB*, s.n. and *CP*, ii, 246.
6. *CCR, 1349-54*, 129, 165.
7. Muniments of the Marquess of Bath, Longleat House, Wilts. Longleat MS 101, grant to John FitzNichol of Shaldeford, senior, of a robe at Christmas or 10s for life on manor of Tolleshunt and 6s 8d p.a. for shoes, 11 April 1352. I have also used transcripts of Longleat documents in K.B. McFarlane's papers, Magdalen College, Oxford, for access to which I am grateful to Dr Gerald Harriss. Carter, 239-46 seeks to identify the many different manors of the parish: that which became Bourchier's Hall, Tollesbury, was held at Domesday by Eustace de Boulogne; cf. Reaney, 173, who identifies the same property as Tolleshunt Guynes in 1384.
8. *CIPM*, xviii, nos. 13-15. Bartholomew was aged 32 or more in 1400. His brass and that of his two wives survives at St Andrew's, Halstead.
9. *RCMH, Essex*, i, 146-7 for Stanstead Hall; below n. 83 for work undertaken there by John Bourchier.
10. Morant, ii, 253.
11. A most obvious error is the naming of Bourchier's wife as Elizabeth when all contemporary records call her Maud; Ward, 61-6 is the latest authority to repeat the inaccuracy. The supposition that Bourchier's wife was a member of the Coggeshale family (with whom he did have many dealings) essentially depends on cockle shells among the armorial evidence on the fragments of John's tomb (cf. Clark, 312 n. 2; Bayley, 100 and pl. VIII). Powell, 95-6, discusses with characteristic acumen the attributions of the surviving monuments at Halstead and identifies an alabaster head of a Saracen (in private hands in 1974; current whereabouts uncertain) as a probable part of the now much-fragmented tomb of John, lord Bourchier.
12. Tout, 372; his effigy, now mounted over what appear to be panels from the tomb chest of Robert, lord Bourchier, survive at Halstead (cf. Powell, 95). The famous Halstead shield, displaying the Bourchier arms *Argent, a cross engrailed Gules between four water bougets Sable*, once thought to date from the fourteenth century but now considered a seventeenth-century piece, currently lies on top of this effigy (cf. Mann, 80-100
13. Morant, ii, 253, repeated in *DNB*, but cf. his absence from Frame.
14. *CCR*, 1341-43, 46.
15. Wilkinson, 113-5 and *passim*.
16. *CP*, ii, 246; Wrottesley, 1898, index s.n. for Robert's part in the 1346-7 campaign.
17. cf. Morant, i, 329, 380, 400-1; ii, 135; for the tomb of Robert, lord Bourchier and Margaret Prayers at Halstead, cf. Powell, 95-6.
18. *Feet of Fines*, iii, no. 605; *CCR*, 1349-54, 64.
19. cf. Morant, ii, 40; *VCH, Essex*, iv, 59, 131. For Robert's estates see below, n. 58.
20. *Feudals Aids*, ii, 156-7, 159-60, 166, 170-1, 177.
21. Cf. Froissart, 1972, 588; cf. ed. Kervyn de Lettenhove, iv, 183; ed. S. Luce *et al.*, iii. 28. Other examples of Froissart's invention with regard to 'John Bourchier' is the part attributed to him in Gaunt's chevauchée of 1373-4 when, as we shall see, our John was already a prisoner (ed. Lettenhove, viii, 280), and his alleged part in Sir John Arundel's expedition of 1379 (*ibid.*, ix. 213; ed. Luce, ix, 210; and above p. 149).
22. PRO C61/82 m. 7, 2 April 1369; it is not clear whether it was him or his nephew who received a renewal exactly a year later when serving with the earl of Cambridge (*ibid.*, 83 m. 9).
23. Nicolas, i. 189, ii. 445-8; John is not mentioned in Wrottesley, 1898; *Feet of Fines*, iii. no. 1028 (as knight); Carte, i. 135 (protection, cf. PRO C61/68 m. 2, Sept. 1355).
24. Thompson, 1889, 129; Hewitt, 52.
25. Froissart, ed. Lettenhove, xvii, 334; cf. ed. Luce, iv, 186, 388; Fowler, 158-71 is the best modern account of events in Brittany from 1355-8. There is no mention of this siege of Dinan, but cf. Luce, 194-200; La Borderie and Pocquet, iii, 554 for a less critical stance.
26. Only four mentions of Bourchier in English sources have been found in these years, three of which do not necessarily entail his presence in England; some may in any case concern his uncle, John: *CPR, 1358-61*, 21, 6 March 1358, appointment as feoffee for Roger de Stonham and his wife but cf. *ibid.*, 43, 1 May 1358, when Stonham surrendered his letters as of no effect; on 8 September 1359 Bourchier was definitely in London to seal a deed quitclaiming Thomas Bourchier, probably a cousin, for lands at Coggeshall and Markeshall, once held by John Buk and his uncle, John Bourchier (PRO DL27/151, the fine armorial seal of which is described in Ellis, ii, no. P1077); Nicolas, i, 189 for 1359-60. *CCR, 1360-64*, 292, 12 Nov. 1361, cancellation on payment of a bond by which Sir William Bourchier, Sir John's younger brother, recognized owing him £500. The seal is the same one he used on a deed given at Patchingshall, Brimfield, Essex, on 2 Nov. 1353 (PRO, LR 14 (E 593)), when founding a chantry in Theale parish church in memory of his parents.
27. Longleat MS 139; on 13 Nov. 1363 Bourchier received a protection for a year in Montfort's service (PRO C76/46 m. 4). Jones, *Recueil*, i. no. 27 for the truce.
28. Jones, *Recueil*, i. no. 29.
29. *ibid.*, i. no. 30; Blois took Bourchier into his safeguard until *Laetare Hierusalem* next (3 March 1364) on 28 Nov. 1363 at Poitiers (Longleat MS 106).
30. Longleat MS 107: 'Nous Guy de Rocheffort seigneur Dacerac ayent povair de monseignour moseur Charles duc de Bretaigne viconte de Limoges de longier a monsieur Jahan seigneur de Boursier lostage en quoy estoit tenu aud. moseur le duc, comme plus plainement est contenu es lettres de celuy povair, ly avons alonge et recieu ledit hostage juques a la saint Barnabe prochaine venant apres le date de ces lettres. Tesmoegn nostre seau. Don' le mardi apres Noel lan mil ccc sexante et troys.' [Sealed on tongue with a fine impression of Guy's seal (vairy)].
31. *Feet of Fines*, iii. no. 1381, 3 Feb. 1364 for a fine between John and his wife, Maud, and Robert de Nailinghurst, clerk,

who frequently acted as one of John's attornies; *CCR, 1364-68*, 43 shows John at Halstead on 4 Feb. 1364; *ibid.*, 200, for a charter issued by him at Maldon on 23 Feb.; a grant of protection and general attorney was made to him on 27 Jan. 1364 for service with the Black Prince in Gascony (PRO C61/77 m. 4 and cf. *Rymer*, III, ii, 719-20). On 12 March John Verdun received a protection going abroad in Bourchier's company as did Ralph Davyell on 4 May (PRO C76/47 mm. 12 & 13).

32. Jones, *Recueil*, no. 36; Bourchier quitted Jean IV for his expenses as a hostage on 3 June (Morice, i. 1581 and cf. ALA, E 238 f. 72r).
33. cf. Froissart, ed. Lettenhove, vii, 37, 52-3, 56, 61; xvii, 409; ed. Luce, vi, 164, 169, 337.
34. Jones, *Recueil*, i, no. 38; Morice, ii, 468-9.
35. Jones, 1970, 39-50; Jones, 1991, 257-65.
36. He appears to have been in Brittany as late as 24 June 1366 when he received a quittance from Jacquemes de Keminade, a German merchant, acting in the name of Ludek Wale, by the hands of Robert Queldenac of Dinan, for 300 nobles (worth 50 gros Flemish each), which Bourchier and John Hertuelt had been obliged to pay Ludek (Longleat MS 109). Tyson, line 2335; Russell, 79ff. for the preparation and course of the prince's expedition.
37. He received a protection for service with the Black Prince in Guyenne on 1 June 1367 (PRO C61/80 m. 3). A letter, to be dated between 1367 and 1372, from Jean IV of Brittany to Bourchier, referring to the exploits of 'noz seignours et freres et de vous' (Jones, *Recueil*, i, no. 213 after Longleat MS 390), may refer to the Spanish expedition, though it is more likely alluding to events in Guyenne and Poitou between 1369-72. In Bourchier's absence abroad, his proctor presented Robert de Nailinghurst as prior and master of the Hospital of St Giles, Maldon, of which Bourchier was patron, on 21 June 1369 (*VCH, Essex*, ii, 190).
38. Jones, *Recueil*, i, no. 151, when he obtained pardon for Olivier Gauteron, accused of murder.
39. Longleat MS 137, original letters, 1 July 1370; cf. *Rymer* III, ii, 894. Bourchier was not present at Westminster with the other captains on 5 July to make various promises to the king over the division of spoils but swore to do so on 10 July, as noted on the dorse of the original agreement (BL, MS Cotton Caligula D III no. 115; cf. *Rymer* III, ii, 897); Sherborne, 723-5 for the size and make-up of the force.
40. The classic account of Knolles's expedition is Delachenal, iv. 301-48.
41. Blanchard, i, pp. cii-ciii.
42. *ibid.*, pp. xcviii-cv for the career of Rays; cf. Froissart, ed. Luce, vi, 38, 262, 287 for him in Spain with Sir John Chandos and Olivier, sire de Clisson.
43. Longleat MS 117.
44. BL, Add. Ch. 8417. A now virtually indecipherable letter from Bourchier to his wife, probably from Derval (?1371), reports that he was 'seyn et en bonpoint' and shows him borrowing 100 marks from Jankin Curteys, butler of Jean IV of Brittany (Longleat MS 400).
45. Longleat MS 116.
46. He was in Paris on 4 June 1371 (Delisle, no. 771) but dead by 3 December: Blanchard, i, p. cv.
47. PRO C76/55 m. 18; cf. also 56 m. 18 (10 June 1373), 57 m. 17 (27 April 1374), 58 m. 18 (20 May 1375), 59 m. 27 (15 Feb. 1376), 60 m. 7 (2 March 1377); original letters of general attorney survive for him 'dwelling abroad', 20 Oct. 1377 (Longleat MS 119).
48. McFarlane, 28, 45 and 241 after Longleat MS 396.
49. Longleat MS 395; see below Appendix nos. 1 and 2.
50. Jones, 1972, 7-26 and Given-Wilson, 1981, 17-28 for two near contemporary cases.
51. For evidence of his officers' misbehaviour in his absence, cf. writ to the sheriff of Essex to inquire into defects at the hospital of St Giles, Maldon, including a break-in by John, chaplain and steward of John Bourchier in 1373 (*CIM*, iii, no. 906, 12 Sept. 1373), though this was part of a long-running dispute over the patronage of the hospital between Edward III and Bourchier (cf. *VCH, Essex*, ii, 189-90); it was not entirely resolved even in 1382 (*CIM*, iv, no. 172). Britnell, 1986, 146 mentions tenants' flocks trespassing on the lord's demesne at Bourchier Hall in 1365 and 1371, after surviving court rolls (Essex Record Office, D/DK M75 mm. 5v, 12v; 76 mm. 4r, 5r).
52. Holmes, 1975, 7-20 for a useful summary.
53. Jones, 1970, 60-76.
54. Blanchard, i. pp. cv-cviii summarises Jeanne's eventful life.
55. Jones, 1995, deals at greater length with the diplomatic aspects of Bourchier's ransom.
56. Longleat MS 395, below Appendix no. 1.
57. Linda Clark in Roskell *et al.*, ii. 315.
58. Britnell, 1986, 142-6, 151 and in Thirsk, 57, 60, 66, summarising Britnell 1977, 53-66, which is a detailed discussion of the surviving rolls from Bourchier's Hall for the years 1337-42, 1349-52, 1356-7, 1403-6: Essex RO, D/DK/MB6-90; see also Holmes, 1957, 114ff. for the economic changes affecting great landholders in this period.
59. Longleat MS 396, below Appendix no. 2, is endorsed 'Ceste lettre nous vent le viij^{me} jour de Julet' and 'Porte par Russh'. As late as 1400 John Rush was still in Bourchier's service (*CIPM*, xviii, no. 15).
60. Longleat MS 156, below Appendix no. 4.
61. Jones, *Recueil*, i, no. 231, after BL, Add. Ch. 7909.
62. Strachey iii. 256a, where it is arbitrarily dated 1387; for the original see PRO SC8/21/1016, below Appendix no. 3.
63. Strachey, ii. 343a.
64. cf. Galbraith, 1927, 74, 179 for the capture of Gournay, Redmayne and Fogg.
65. *ibid.*, 97; Roskell *et al.*, iii. 95-7 for Fogg's career.
66. Blanchard, ii, no. cclx.
67. Samaran, 223 [now Archives Nationales, Paris, 1 AP *2210 no. 8].
68. Neither Lefranc nor Gicquel throw any light on this matter; John B. Henneman is writing a new biography. Currently the best indication of Clisson's role as a financier is found in the list of obligations found at Josselin (dép. Morbihan) on his death (Bruel, 193-245). Richard FitzAlan, third earl of Arundel (d. 1376), played a very similar role as creditor to fellow nobles in England (Given-Wilson, 1991, 1-26).
69. Mirot and Jassemin, no. 2843, 19 Feb. 1373.
70. Longleat MS 142, notarial instrument drawn up at Bruges, 27 April 1378, before Bartholomew de Arquato, by which Guillaume Leet, esquire of Olivier, sire de Clisson, agreed to deliver Bourchier, Clisson's prisoner, to Guichard d'Angle, earl of Huntingdon and Sir Hugh Segrave at Courtrai.
71. Longleat MS 165.
72. Longleat MS 232; cf. above n. 58. Bourchier's Hall was still kept in hand by Bartholomew Bourchier between 1401-6 (Britnell, 1986, 146) but that was only one Bourchier manor.
73. Longleat MS 120; there is no mention of the sums advanced to Bourchier by Richard, fourth earl of Arundel, in Given-Wilson, 1991.
74. *CP*, ii. 247 follows Froissart (cf. ed. Lettenhove, ix, 213; ed. Luce, ix, 210) for the Brest expedition but see Bourchier's promise in 1374 not to serve until his ransom had been paid (Longleat MS 395, below Appendix no. 1).
75. Longleat MS 120: 'et parmi ce quictons le dit sire de Bourcher tant de la foy et serement quil nous fist de non soy armer jusques a ce quil eust paie la somme des viij^{me} frans'.
76. A copy of Buckingham's indenture was sent to Bourchier on 2 May 1380 (BL, Add. Ch. 7914) and a protection for him to serve with Buckingham was issued on 12 June (*Rymer*, iv, 88), the same day that he engaged William Cap'oun to serve with him in France for a year (Longleat MS 121). On 11

June Edmund, earl of Cambridge, had acknowledged owing him 597 marks, to pay which he established an annual pension of £20 on the 500 marks p.a. that Cambridge took by royal order during the nonage of Thomas, lord Despenser until the loan was paid off (Longleat MS 141).

77. Anselme, vi, 315-9 for the Rogier family; cf. also Delachenal, iv, 282 n. 4.
78. Lehoux, i, 236, 240; cf. Delachenal, iv, 288-91, 293n. Hugues de la Roche and Roger de Beaufort with a retinue of five other knights and 87 esquires were mustered at Limoges on 22 August 1370 (Hay du Chastelet, 330-1).
79. Emerson, 238-40; Barber, 224-6; the most detailed account remains Leroux.
80. Delachenal, iv, 291 n. 2, 293 n. 3; Lehoux, i, 287-8.
81. Jones, 1995.
82. Longleat MS 121.
83. Longleat MS 136: indenture with Nicholas Degrowe, who dwelt on London bridge, by which he agreed to make 'une dowe entour le manoir de Stansted tout environ contenante quarante pies de long' entre les deux coustes et vignt et cinq pies de par sount pour ploume. Et ledit Nicholas apourtera et sera apourter et carier tout lisemer et la terre qui voudra hors de la dit dowe le long de quatourze verges apelles mette yerdes en Englis hors de checun couste tout environ la ou ledit Sire de Bourchier vouldra assigner et deviser'. It was to be finished by All Saints 1381 for the price of 100 marks and a quarter of wheat, Nicholas getting 40s to start. Bourchier agreed to find 'chambre et feu' and 'harnois' for him, to cut down all the trees in the 'dowe' and send a cart to bring Nicholas and his 'harnois' from London.
84. Jones, 1970, 90-2.
85. Jones, *Recueil*, i. nos. 354-5, 360-1, 363.
86. *CPR, 1381-5*, 235, 5 March 1383, inspeximus and confirmation of letters of Buckingham at Vannes, 27 Feb. 1381 n.s., pardoning Blethin ap Yrian (*sic*) for all treasons and other crimes committed in the company of 'Owen Retherrick' (i.e. Owain Llawgoch) 'qui se disoit princes de Gales', in the presence of Lords Latimer, Bourchier and Morley and Sir Hugh de Hastings, a document overlooked in Jones, 1970. For Bleddyn ap Einion, see Carr, 61.
87. Jones, *Recueil*, i, no. 362; Jones, 1970, 91 and notes.
88. Longleat MS 125. Buckingham allegedly still owed him 600 marks when Bourchier drew up a list of debtors in 1384-5 (Longleat MS 231). Others owing him money included Edward, prince of Wales (11735 francs 'et soit pluys'), Jean IV of Brittany (3000 écus Jean) and Sir Simon Burley (£40).
89. *CPR, 1381-5*, 73, 10 July 1381; renewed several times (*ibid.*, 8 Oct. 1381, 85, 14 Dec. 1381, 139, 8 March 1382, 253, 20 Dec. 1382, 246, 21 Dec. 1382).
90. *CPR, 1381-5*, 235, 6 Jan. 1383 for commission to Bourchier and Fitzwalter to arrest Walter Savage of Tendring for inciting rebels.
91. cf. those named to commissions cited in n. 89 above.
92. The dispute over St Giles' hospital, Maldon, for instance, prorogued on 18 March 1381 because of his absence abroad (*CCR, 1377-81*, 504), was proceeding by Dec. 1381 when Lord Fitzwalter and others were ordered to investigate (*CPR, 1381-5*, 83). For Bourchier's acquisition of a moiety of the manor of Ryveshales in East Mersea in 1383, see *CCR, 1381-5*, 309; and for other acquisitions cf. Morant, i, 353, 360, 367. The best guide to the estates Bourchier possessed at this point is given by the list of his demesne lands included in a grant of free warren received on 14 Dec. 1384 (*Cal. of Charter Rolls*, v, *1341-1417*, 296).
93. Longleat MS 2964.
94. Perroy, 166ff; the most recent detailed account is Aston, 127-48; see also Palmer, 44ff. and Van Heerwarden.
95. PRO SC1/56 no. 96; Longleat MS 154, is a summons from Richard II to Bourchier to serve with his men by the end of the month against the Scots, who have invaded, dated Westminster, 12 August, but without a year; similarly Longleat MS 398, Westminster, 30 May, also without year, informed him that news has been received from the earl of Northumberland that the Scots had invaded, and that another force led by the three sons of the king of Scotland was expected, ordering him to be at Westminster on the Translation of St Thomas [7 July] with his retinue.
96. Rymer (O), vii, 448; Froissart, ed. Lettenhove, x, 303ff. and 544-5. Richard II's commission is dated 18 Nov. 1384 in the enrolment in PRO C76/69 m. 21 and cf. m. 15.
97. Vaughan, 35.
98. cf. Palmer, 7ff.
99. Usefully summarised in Vaughan, 34-8; see also Roskell, 98-109 for English policy at this point in the Low Countries. The appointment of Bourchier is noted by Walsingham (Thompson, 1874, 363 and Riley, 1863-4, ii. 120) though he mistakenly calls him 'Edward Le Bourser'.
100. Perroy, 206, 208 provides some details on the troops; Thomas Restwold paid at least 24 ship masters for transporting troops to Ghent between July and Sept. 1384 and as late as Nov. 1385 316 horses were also transported (PRO E101/40/11). Bourchier received £367-14 in money and assignments worth £329-12s-8d when setting out for Ghent on 1 Dec. 1384 (PRO E 403/505, m. 13).
101. Froissart, ed. Lettenhove, x, 319, 406-7, 555; Riley, ii, 120-1.
102. Longleat MSS 106a, 108, 109, 159 and 164 provide copies of Bourchier's commissions as rewaert, the latest, 25 Oct. 1385 issued by the échevins of Ghent.
103. Perroy, 208 n. 3 shows English payments for his troops ceased on 7 Nov. 1385; Froissart, ed. Luce, xi, pp. lxxiii-iv for his retreat. He was named on a commission of array in Essex in view of an expected French invasion on 18 Feb. 1386 (*CPR, 1385-9*, 176).
104. He retained Sir Richard Claveryng for service at Calais in London on 18 April 1386, John Hemelrike on 1 May and Robert and John Nele on 3 May (Longleat MSS 144, 128 and 131). Letters of attorney were issued for his service at Calais for a year on 4 May (Wrottesley, 1893, 243 after PRO C76/70 m. 9). Simon Burley and others were ordered to review at Dover the troops of Henry Percy, John Bourchier and others going to Calais on 31 (*sic*) April 1386 (*ibid.*, m. 8) and a very faded and rubbed retinue roll for Bourchier's troop of about 70 men-at-arms and archers and five crossbowmen, either at Dover or Calais, in May 1386 survives (E101/42/14 m. 2).
105. Lumby, ii. 210-11 and cf. Riley, ii. 144. Longleat MS 155, a privy seal letter, Westminster, 8 May [?1386], notes that the French 'font grandes assembles de gens et puision dartillerie au fin que sodeignement ils purront assailler nostre ville de Caleys et nostre chastelx en la marche la entour encountre le teneur de ces presentes trieves' and urges the recipient to come to the council to advise the king on this and other matters. Longleat MS 376 is a similar summons, Westminster, 12 Dec., no year, ordering Bourchier to appear in council in London on Sunday, 13 Dec., to deal with pressing business and great matters: Sunday fell on that date in 1383, 1388 and 1394.
106. Longleat MS 149, below Appendix no. 5; for the crisis of 1387-8, cf. Tuck, 87-120; Goodman, 16-54, though neither notes the summons to Bourchier.
107. *CCR, 1385-9*, 457, 17 Dec. 1387, writ of summons.
108. Bourchier was named with Gloucester, Fitzwalter and de Vere on a commission of the peace in Essex on 18 Feb. 1386 and this was repeated on 28 July 1387 (*CPR, 1385-9*, 82, 385).
109. *CPR, 1391-6*, 305, 14 July 1393, grant, at supplication of Maud, countess of Oxford, to Thomas Percy, Bourchier and others of reversion of various manors which had once belonged to Robert de Vere; *ibid.*, 644, 30 Nov. 1395, further transactions over this grant. Halliday, 71-85 provides a brief conspectus.

110. Keen, 45-61 provides the general context.
111. PRO C81/515/6289, 5 May 1390, 'pur passer la meer vers les parties de Barbarie ovesqes sys esquiers, quinzse vadletz ovesqes oyt garcions, lour chivaux et lour harnoys ensemblement ovec eschange de troys centz livres pour ses despenses' (cf. *CCR, 1392-6*, 531). He had letters of general attorney on 6 May (C76/74 m. 4).
112. Du Boulay, 153-72; Palmer, 197-8 for Derby's original intentions. His bastard brother, John Beaufort, did accompany Bourbon (Keen, 56).
113. Toulmin Smith, 39, 105, 302.
114. Hector and Harvey, 474-6.
115. Beltz, cliv shows that he was elected in place of Robert de Namur (d. 18 Aug. 1392) and was eventually succeeded by Sir Thomas Rempston; *ibid.*, 343-5 for a summary of his career. His stall plate survives but is a replacement provided in Henry V's reign (St John Hope, pl. XIV). Longleat MS 397 is a memorandum concerning royal stable equipment, saddles etc. in Bourchier's custody, 1391-2.
116. Strachey iii, 356 for his presence in Parliament in 1397; *CCR, 1396-9*, 322.
117. Anstis, i, 13; Beltz, 254. No other records of provision of robes between 1392-99 appear to survive.
118. *CPR, 1399-1402*, 201.
119. Bayley, 80-100, reproducing in pl. VIII (after BL, Harleian MS 4204 f. 146), an early seventeenth-century sketch of the monument to Bourchier and his wife before its removal to the south aisle in order to accommodate more pews in the eighteenth century.
120. Clark, 311-37 for both Sir Robert Bourchier's petition to Benedict XII (1340) for the original college and the licence Henry IV to Richard, bishop of London and others to refound the college (1412). The font at Halstead bears the arms of Stafford as well as those of Vere and Bourchier.

Appendix

1 Agreement between Jeanne, dame de Rays and Sir John Bourchier for payment of his ransom, *c.* May 1374
[Muniments of the Marquess of Bath, Longleat House, Wiltshire, MS 395, original paper, 300 x 225 mm., some damage caused by folding, no watermark or trace of sealing].

Cest la maniere de lacordance que madamoiselle de Rais et mons. Jahan de Bourgchier hont faite sur le fait de la delivrance audit mons. Jahan.

Premier, que ledit mons. Jahan paiera a madicte damoiselle tant pour les despens que lui et ses vallez qui lont servi et autres en sa compaignie hont fait ou chasteau de Macha[c]oul[1] aillourz ou il a tenu prison que pour le temps a venir que lui sera en prison ou un ou deux host[ages] pour luy le temps durant de deux anz comancens a la feste Jahan prochaine que pour argent preste a lui pur madicte damoiselle et autres de ses gens[2] que pour despenz que ses vallez hont fait en la ville de Machecoul il poiera avant son partir de la ville [de] Machecoul iiij^{m} frans en la ville de Bruges et les autres poyemenz y seront auxi faiz en la maniere [...][3]

Item, poiera ledit mons. Jahan pour le principal de sa rancon pour toutes autres choses et pour touz droiz[4] li pouraest estre demandees a cause de sa ran[con] viij^{m} frans entre deux anz prochains venants par iiij termes, cest adsavoir a Noel lan 1xxiiij, ij mil frans et a la Saint Jahan ens' lan 1xxv, ij^{m} et au Noel ens' ij^{m} et a lautre Saint Jahan ensuievent les autres ij^{m} ainxin que si ledit mons. Jahan moroit ampres le premier terme fait avant la segont, ses heirs seront tenuz a acomplir la somme de v^{m} frans et non plus, et en cas quil moroit entre le segont terme et la tiers, ses heirs seront tenuz acomplir la somme de vj^{m} et se il vit tant que les ij anz soient acompliz, il serra tenu acomplir et poier toute la somme des viij^{m} es termez acordez ou randre son propre corps si il soit en vie et ne se armera ledit chevalier ledit temps durant des deux ans feniz comme un prisonier le puet faire de droit.

Et pour cestes chouses tenir et acomplir ledit mons. Jahan baidra bons pleges et seuffisens qui se obligeront par obligacions bonnes et resonables de paier lesdictez sommes aux jourz et aux termes ci desus devisez ou randre le propre corps doudit mons. Jahan ou cas quil seroit en vie ou leu que madicte damoiselle et lui seront dacort. Et[5] en cas quil ne baidra pleges il fera venir son frere et son filz esne ou autres hostaiges qui soufiront madicte damoiselle[6] qui tendront hostage ou leu que madicte damoiselle lour ordenera ou Royaume de France, lesqueulx jureront a ne sen partir dou leu senz le conge de madamoiselle ou de qui povoir aura de luy ainxin que toutesfois et quantesfoiz[7] que ledit mons. Jahan se randra sen corps il delivrera ses hostages frans et quiptes[8] demorera luy a tenir prison.

Et auxi ou cas que ledit mons. Jahan morroit le temps durant desdiz deux anz, son frere[9] delivre et hors de lostage et son filz[10] demoura comme principal deptour de la somme de vj^{mll} et adonc fera[12] damoiselle aussi saufconduit a son dit frere du Roy ou son constable ou du sire de Clicon ou de deux deux[13] sen aller seurement.

Et a chacun des poyemenz que ledit mons. Jahan ferra ou autre de par lui[14] madicte damoiselle li donra quiptance de son seel de la somme quil [paiera] ou de homme qui avoir povoir et procuracions de ley de ce faire. Et en cas que ledit mons. Jahan donra pleges et il ait excuse de malla[die] ou de faute devant ou dautre qui soit juste et lealle par quoy il ne puisse obair au jour quil devoir faire son poyement, [madicte] damoiselle ne nul depar le[15] ne lacusera lui ne ses pleges de serement ne de domages jusques a iij mois porchains [apr]es les termes [...][16] excuse ledit chevalier sera [re]cieu a son serement si elle est vray ou non. Et fera madicte damoiselle avoir saufconduit audit chevalier et a ses hostages ou pleges et ses gens[17] du Roy de France et de son constable ou du Roy et[18] dou sire de Clizcon, et li baidra madamoiselle gens a le conduire a ses despenz, luy ou ses hostages ou ses gens ou cas que mestier en aura est, contre faire que mestier ou auront.[19]

Et prometra madicte damoiselle tout ceste acordance et ledit mons. Jahan prometra ales acomplir en la maniere que dit est et y metre madamoiselle son seal et pour plusgrant fermete celui a mons. Brumor de Laval[20] et a Guillaume Leet[21] et a Gillet Souboais.[22]

1. Machecoul, dép. Loire-Atlantique.
2. Followed by *desquelx elle laquipta* struck out.
3. MS holed; two or three words missing.
4. *et pour touz droiz* interlined.
5. After *Ou* struck out.
6. *ou autres hostaiges qui soufiront madicte damoiselle* interlined.
7. *et quantesfoiz* interlined.
8. *frans et quiptes* interlined.
9. Sir William Bourchier.
10. Bartholomew Bourchier, whose date of birth is traditionally given as 1374 (cf. Morant, ii, 253), but his father's Inquisition p.m. shows that he was born *c.* 1368-1370 at the latest (*CIPM*, xviii, nos. 13-15). His brass survives at Halstead church.
11. *de vj^{m}* interlined.
12. After *baidra* struck out.
13. *du Roy ou son constable ou du sire de Clicon ou de deux deux* interlined.
14. *ou autre de par lui* interlined.
15. *ne nul depar le* interlined.
16. MS holed; two or three words missing.
17. *et ses gens* interlined.
18. *ou du Roy et* interlined.
19. *contre faire que mestier ou auront* interlined.
20. Brumor de Laval (d. 1383), who acted as guardian to Jeanne de Rays on the death of her elder brother (Blanchard, i. p. cv).
21. For Guillaume Leet, cf. Pocquet, i, 392-3.
22. Gillet Soubzbois was serving as an esquire with Girard Chabot, sire de Rays in 1370-1 (Morice, i. 1646, 1648-9)

and with Brumor de Laval in 1372 (Bibliothèque Nationale, MS Nouv. acq. française 23634 nos. 201-3) but later rose high in ducal service (Jones, *Recueil, passim*).

2 Autograph letter of credence from Sir John Bourchier to his wife, Machecoul, 13 May 1374
[Longleat MS 396, original paper, much damaged, 280 x 142 mm., holograph, no watermark, originally sealed plaqué with a signet (14-15 mm. diameter)].

Treschere compaygne jeo vous salue cent mil foytz et mes enfans ove la beneysoun de Deuxs et de la moye, Et si voillietz savoir que jeo suy mis a la summe de dusse mil fraunks pour ma raunsoun et deliverance de moun corps, cest a savoir pour drois et despens et touz aultres choses et demaundes que len me pourroit demaunder, et ne vous enmerveyllez de ceo que jeo ay accepte si graunde et grevouse et demesurable summe la graunt desese que jay et le graunt peril ou jeo ay de perdre la vie ou les membres a meins, et pour guider saufver mon corps et membres et en esperaunce de leyde de Deuxs et de mes seygnours et amis, jeo lay fet come Jehan Ruych,[1] portour de cestes, vous dirra de bouche, a ky jay encharge vous certefyer pleynement moun estat et ma volunte tochaunt ma dite delyveraunce, a ky ajustez ferme foy et credence de[2] tout ceo qil vous dirra tochaunt madicte deliveraunce et mon estat.[3] Ma treschiere et tresvraie de cour ame compaygne, jeo vous priet charge sur lamour qest entre vous et moy que vous ne esparnietz reins que ne soyt engage ou vendu si meuxs nen poyetz fere, kar ky nad le corps il nad rein. Treschiere compaygne le meillour remede et le plus brief que vous poyetz mettre pour lamour de moy y metetz, et je suy certein que en ces choses nieyt point defaute, et me remaundetz de vostre estat par le dit Johan Ruich, portour de cestes, et lestat de mes aultres amis et me recomaundetz a mes seygnours et a mes dames, et salwetz touz mes aultres amis. Treschiere compaygne le Seint Espirit vous eyt en sa sainte garde et nous doint procheynement entre veoir a honour et joye et a pleysirs de nos cours. Escript de ma mein a Machecol le xiij[me] de May lan mil trois ccc lxxiiij.

Johan de Bourgchier lo[...] [4]
Ceste lettre nous vent le viij[me] de Julet.[5]

Dorse: A ma treschiere coumpagyne Maut' de Bourgcher.
Par Russh'
Porte par Russh'[6]

1. John Rush, esquire, was still in Bourchier's service at his death (*CIPM*, xvii, no. 15).
2. *de* interlined.
3. *et mon estat* interlined.
4. MS holed before and after autograph signature.
5. Written in another hand.
6. Written upside down and at other end to other endorsements.

3 Petition of Maud Bourchier to Edward III and his council on behalf of her husband. *c.* 1374-5
[London, PRO, Ancient Petitions (SC8) 21/1016].

A nostre tresredoute seigneur le Roi et soun noble conseil monstre Maud la femme Johan de Bourchier chivaler que come soun dit seigneur ad este longement prisoner en Bretaigne a grant meschief de lui et de touz les seons, et son dit seigneur est rampsone a xijm [1] frankz apaier, cest assavoir iiijm [1] frank al feste de Seint Michel darrain passe a la ville de Boloigne pur le primer payement, et lour bailler obligacion de sire de Latymer de eopt mille frankz, sur certeins condiciouns et covenantz faitz parentre la Dame de Roys, sa mestresse, et le dit Johan Bourchier, les queles condicions et covenantz ne sont pas tenuz a grant meschief a lui et touz les seons, qar le dit Johan Bourchier ad este prest a parfournir les ditz covenantz a son paoir, et est touz jours, si la dite Dame les voloit tenir les covenantz susditz, mais Mons. Roger de Belfort, prisoner a le Capital qy[1] avera a femme la dite Dame, par quei sa deliverance est destourbe par le dit Mons. Roger. Par quei please a nostre dit Seigneur le Roi et son tresage conseil dordeigner la meillour voye del deliverance le dit Johan de Bourchier. Et que le dit Roger ne soit delivere hors Dengleterre devant qe les covenantz avantditz soient parfournez, en eovre de charite.

Dorse: Le Roi eut vorra ce que mieltz luy semblera affaire.[2]

1. *qy* interlined
2. Published first in Strachey, iii, 256a under the year 1387

4 [Draft] Letters of credence of Edward III for John, lord Neville, messenger to Jean IV, duke of Brittany, concerning the ransom of Sir John Bourchier, Westminster, 27 June (1373 x 1376)
[Longleat MS 156, paper, 296 x lll mm., no watermark or trace of seal].

De par le Roi.

Treschier et tresame filz pour pource que nous tenons bien de certeyn que vous orrez tres voluntirez de nostre bon estat et santee, vous ferons savoir que a la fesaunce de cestes nous estions tout sains et en bon point, la Dieu mercye, desirantz toutdys de vous oyer semblable novelle. Tresame filz nous avons charges nostre cher et foil Johan, sire de Neville, seneschal de nostre ostel, de vous exposer nostre volente et desir sicomme nous luy avons enforme, touchantz nostre cher et foial Johan de Bourgcher et sa deliverance hors de prisone. Si vous prions trescher filz que au dit sire de Neville veullez adjouster ferme foy et credence de ce qil vous eut dirra de nostre part et que vous veullez entre mettre vostre bon eyde et ordenance pour la deliverance mesme celuy Johan de Bourgcher par maniere que le dit sire de Neville vous priera de par nous, en quiele chose fesant trescher filz, vous nous ferrez bien grant pleisir prient[1] vous volons molt especialement bon gree savoir. Don' souz nostre prive seal a nostre paleys de Westm[oustier] le xxvij jour de Juyn.

A nostre trescher et tresamee filz le duc de Bretaygne.

1. An uncertain reading; *par contre* is another possibility.

5 Summons by Richard II to John, lord Bourchier to come to council at Nottingham, Shrewsbury, 2 August (1387)
[Longleat MS 149, original paper, traces of seal plaqué].

De par le Roy.

Trescher et foial, nous vous mandons et chargeons fermement que toutes autres choses lessees et excusacions cessantes viegnez devers nous a nostre chastel de Notyngham siques vous soiez illoeques en vostre persone en la feste de Seint Bartholomeu proschein venant [24 August] saunz nulle defaute pur parler alors ovec nous sur certeines matires tres chargeantes touchantes grandement lestat de nous et de nostre roiaume, les queles nous vous monstrerons pleinement a vostre venue, et ce en nulle maniere ne lessez sur la foi que vous nous devez et come vous desirez lonur et estat de nous et de nostre roiaume avantdit. Donne souz nostre signet a nostre ville de Salop' le second jour daugst.

Dorse: A nostre trescher et foial le sire de Bourcher.

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Short Studies in Topography and Family History

by the late J. Horace Round, revised by W.R. Powell

[NOTE. This article is the third to be published under the arrangements described in the editorial note in *Essex Archaeology and History* 24 (1993), 153. The studies contained in it, which have not previously been printed, were all written about 1920. I have added some new material and have supplied many footenote references, distinguished by an asterisk *. The first study, 'Notes on Medieval Maldon' has been recast in the light of another unpublished paper by Round entitled 'Maldon'. I hope to consider the medieval manors of Maldon more fully in a later volume of this journal. 'The Hanningfield family of East Hanningfield' needed much revision because part of the manuscript is lost. In carrying this out I have included, as Round probably intended, a detailed analysis of the will of William Hanningfield (d. 1426). Round mentions the will briefly in his study. As a young man he had helped to edit it, with other wills, for the Early English Text Society. Throughout his life he was generous in shouldering editorial chores for others.

W.R.P.]

Notes on Medieval Maldon

I promised to put together a few notes on the early history of Maldon, but my chief purpose is to call your attention to the very unsatisfactory treatment of the town, as compared with Colchester, by Morant, and to the need which exists for further research in a field so promising as that afforded by the history of this ancient borough.

Considering the prominent position it occupied in the warfare with the Danes, and the traces of Scandinavian settlement found along the Essex coast, it is desirable to make a careful search for any Scandinavian names that may be found in the neighbourhood.[1] Can we, for instance, identify the two small islands of Ruckholm and Hardholme which are mentioned in the charter of Richard I to Beeleigh Abbey.[2] *Holm* is a Scandinavian name for 'island', of which the Anglo-Saxon equivalent is *ea* or *ey*, found along the east coast in Canvey, Wallasea, Mersea and Horsey, and here at Maldon in Northey and Osea. The *holm* termination, so familiar in the Shetlands as applied to small islands, is a very strange one to find so far south as this.[3]

Passing to Domesday, though we have not for Maldon, as we have for Colchester, a separate and special survey of the town, we have several scattered entries affording, in the aggregate, considerable information. Just as Colchester is referred to as a hundred, so is Maldon as a half-hundred. In neither case is there now any district so called, and I cannot but think that, in both, the division referred to was the liberty — the *banleuca* as it is called in both instances — of the borough. This would imply that both boroughs had a separate jurisdiction and organization of their own, independent of the adjacent hundreds. I should like to see a map of the Maldon *banleuca* contributed to our *Transactions*, with the ancient boundary names clearly defined.[4]

The most interesting of the Domesday entries is that which states that Suen [of Essex] had inherited from his father, Robert FitzWimarc, half a hide in Maldon 'and in that land the king has 4 shillings of customary due, and it does its share with the other burgesses in finding a horse for the army, and in making a ship.'[5] This entry has more than local interest. Just as the walls of Colchester are mentioned in Domesday not for their own sake, but, quite incidentally, in connexion with the common pasture,[6] so here the military service due from Maldon to the Crown is not directly mentioned. An incidental allusion alone affords us a glimpse of its existence. Here we are confronted with one of the puzzles of Domesday. Why should the military service due be set forth fully in some cases, not at all in others, or only alluded to, as here, by accident? The object of the allusion, in Maldon, was to set on record the right of the burgesses to make the dwellers on Suen's land contribute towards the horse and the ship. I have elsewhere explained the similar intention of the entry relating to the Bishop's fee at Colchester.[7] From my knowledge of Domesday and its town entries I conclude that the horse and the ship were Maldon's contribution to the *landfyrd* and *scypfyrd*, that is to say, when the king called forth his host by land, the town sent him a horse, and when he summoned his naval forces, Maldon contributed a ship. These services are what we should term special compositions for general obligation. Such a case should be compared with those of Dover and Sandwich, the Cinque Ports enjoying their liberties in return for certain closely specified services at sea.[8]

The land held at Domesday by Suen of Essex descended in his family until 1163, when it escheated to the Crown after his grandson, Henry of Essex, had been defeated in trial by battle.[9] Morant argues that it became part of the manor of Great Maldon, which comprised the town and included also the land and

houses held in 1086 by the King.[10] But here he breaks down completely. This manor, he says, 'remained chiefly in the Crown; and for want of proper authorities we find it impossible to give a perfect account of its lords.' He goes on: 'King Stephen is said to have granted the seignory of Maldon to the Earl of Boulogne'. This Stephen could scarcely do, being Count of Boulogne himself, in right of his wife.[11] But what he did do was to give Maldon to his brother Theobald, Count of Blois.[12] I have further discovered that the Empress Maud, on her triumph, seized the possessions of Theobald, including Maldon.[13] Here again is a point where the history of the town comes into direct connexion with the history of England. The estate which Maud had thus seized she granted to Geoffrey de Mandeville, Earl of Essex.[14] Morant assumes, with much confidence, that the manor granted to Geoffrey was that held in 1086 by Ranulf Peverel.[15] There is little doubt, however, that what Geoffrey received was the Crown demesne itself.[16] On Geoffrey's fall in 1144 this estate reverted to the Crown. Henry II alienated it afresh, the grantee being his own brother, William 'Longsword', who from 1155 until he died in 1164 was holding land in Maldon valued at £22 a year.[17]

Having thus far traced the history of the royal manor, let us glance at the others. In 1086 Ranulf Peverel held two manors in Maldon, together comprising 6 hides and 34 acres.[18] These were part of a vast estate which became known as the honour of Peverel of London or Hatfield Peverel.[19] By 1130 the honour had escheated to the Crown, and was in the custody of William de Tregoz, who in that year claimed an allowance of 52*s*. for making two vineyards at Maldon and for clothing and paying the vine-dressers, and 10*s*. for buying 16 barrels and transporting them to Maldon and thence to London.[20] We may thus assume that in this year Henry I received from Maldon a consignment of real native wine. Whether he ventured to drink it is unfortunately not on record.[21]

Then there is the manor, comprising a total of 2 hides, held in 1086 by the collegiate church of St. Martin-le-Grand, London, as tenants of Eustace, Count of Boulogne.[22] Mr Freeman, relying on this entry, treats with considerable suspicion the accepted story that St. Martin was founded by Ingelric.[23] The alleged foundation charter of William I[24] is as he says, a suspicious document, but it is supported by a charter of Count Eustace, quoted by Morant.[25] Eustace there states that he had received from the Conqueror all the holdings of Ingelric, including the church of St. Martin-le-Grand, but that, accepting the counsel of wise men, and moved by penitence, he has restored to St. Martin lands in Maldon and elsewhere. When the documents relating to St. Martin's, now preserved at Westminster Abbey, have been made public, we may expect a flood of information on the early history of Maldon.[26]

We may now pass to the Essex inquisition of 1212, printed in the *Book of Fees*.[27] This mentions four Maldon estates. That of St Martin-le-Grand is spoken of as two prebends in the church of St. Mary, Maldon. Peverel's estate is represented by half a knight's fee in Little Maldon held by Matthew Mantel, for that is known to have been held as of the honour of Peverel.[28] It was here that Robert Mantel, Matthew's father, had founded Beeleigh Abbey;[29] both Robert and Matthew served as sheriffs of Essex. The other two estates mentioned in the inquisition of 1212 were the divided halves of the former Crown lands. The entry states that William Longsword (*de Longespee*) gave the town of Maldon to Oliver FitzErnis, and that after Oliver's death Eudo FitzErnis gave half of it to Eudo Paterik, which he still holds. The other half [he gave] to the brethren of Bois-Halbout; they exchanged it, by King John's permission, with the bishop of London, who now holds it. Bois-Halbout was a leper hospital in Lower Normandy.[30] In this entry the main point to observe is the title traced back to William Longsword. The index to the *Book of Fees* identifies this man as King John's bastard half-brother, also called William Longsword, who became earl of Salisbury in right of his wife.[31] But there is no doubt that he was the earlier William Longsword (d. 1164) who has been mentioned above. It should also be added that a careful study of the Pipe Rolls reveals that some particulars concerning Maldon in the 1212 inquisition are inaccurate.[32]

Morant, who gives a curiously garbled version of the transactions recorded in the *Book of Fees*, tells us that the moiety of Maldon held by Eudo Paterik (whom he refers to as 'Partridge, a Norman'), was held in 1284 by John de la Launde.[33] As Morant's strong point was his very full knowledge of the inquisitions *post mortem*, it is strange that he did not make use of the inquisition taken in 1269 on William de la Launde, which states that he had held a quarter of a knight's fee in Maldon of the king in chief.[34] Early in 1287 there was a notable lawsuit between the king, in right of his ward, William de la Launde and the bishop of London, on one part, and the men of Maldon on the other.[35] The issues in the case were the payment of 'toltray, markpenny, lessylver and stallage', and the burning of a park. The jurors decided in favour of the king and the bishop except as to stallage, on which the men of Maldon produced their royal charter.[36]

The lawsuit of 1287 proves that the dues in question were then in the joint possession of the bishop of London and the Launde family, and confirms the evidence quoted above from the 1212 inquest. Again, the fact that the above dues were payable to the holders of the two moieties proves that they were originally appurtenant to the undivided whole. They were so because the two holdings represented, between them, the king's ancient share of Maldon. This can be seen also from the Pipe Rolls,

where the payments to their holders are entered under the heading 'In terris datis', meaning that they had been granted out from the royal demesne. It is proved also by the fact that the inquest of 1212 was expressly intended to discover what lands or rights had been thus alienated.[37]

The charter granted to Maldon by Henry II is remarkable because of its early date, its great length, and the liberal privileges contained in it.[38] First as to the date, which Morant did not attempt to determine.[39] Being granted at the prayer of William de Mandeville, earl of Essex, it must be after his succession to the title in October 1166.[40] Being witnessed by Reynold, earl of Cornwall, it must be previous to his death in July 1175.[41] Now we find that the charter was granted at Pembroke, and the only occasion when Henry II is known to have visited Pembroke during his reign was in 1171. Moreover the day assigned to the charter is 7 October, and it was between 29 September and 16 October that Henry was detained at Pembroke, on his way to Ireland. Thus the date of Maldon's ancient charter is 7 October 1171.[42] It will be seen that it is eighteen years earlier than Colchester's first charter, though even that is rightly considered a charter of great antiquity. But the date of the charter is of more than local significance. I do not know of any other record belonging to Henry II's stay at Pembroke on the eve of his Irish expedition. The Maldon charter give us, in its list of witnesses, the names of his leading attendants at this critical period. Amongst them was William FitzAudelin, whose presence is of special interest, since his movements at this period, as the king's delegate in Ireland, require elucidation.[43]

The intervention of the earl of Essex in seeking the charter is singular, and perhaps unique.[44] His influence with the king may, perhaps, account for the great privileges bestowed on the town. These were granted 'by the service of free burgage-tenure' (*per servicium liberi burgagii*). They were not modelled, as was then the custom, on those of any other town, but were granted independently. The particular exemption from the jurisdiction of the Forest Courts proves that in 1171 the hundred of Dengie was included within the Forest of Essex. The most interesting provision, however, in the charter, is that relating to the borough's naval service. The burgesses were exempted from all foreign service — a duty which was threatening to become a burning question at the time — on condition that they sent one ship at their own cost for forty days whenever the king led or sent his army to war, as they had done in the time of Henry I. Like the tenants-in-chief, they were to receive the summons to perform this service directly from the king himself, and not through the sheriff of Essex. It should also be noted that forty days was the recognized period of service under the feudal system. In one point there is a curious contrast with Colchester, where we read in Domesday Book that the payment in commutation of military or naval service was to be made every year, whether there was war or not.[45] At Maldon the service was due only in wartime. One point, however, the two towns had in common. This is the remarkable absence in their earliest charters of any allusion to a merchant guild.

The Hanningfield family of East Hanningfield

The three parishes that bear the name of Hanningfield are an instance of those territorial groups which, when adjoining one another, must originally have been one. They extend over an area of nearly 7,000 acres in the hundred of Chelmsford, in addition to which there is a small portion of South Hanningfield within the hundred of Barstable.[46] My object in this short paper is to develop somewhat the account given by Morant of the Hanningfield family, which took its name from the district, and was prominent in Essex and Suffolk from the 13th to the 15th century.

Among the records connected with the Aid for the marriage of the king's sister, in 1235-6, there is a list of the knights' fees held of Robert FitzWalter, the well-known leader of the barons in the struggle for Magna Carta. The list includes William de Hanningfield, as holding two fees in Hanningfield and Middlemead.[47] These fees represent the manors of Hanningfield and Baddow, both in Chelmsford hundred. They had been held in 1086 by Ralph Baynard,[48] and had passed in the 12th century to Robert FitzRichard of Clare, ancestor of the FitzWalters.[49] Middlemead, later called Phillows, was in Little Baddow, about 4 miles north of East Hanningfield.[50] The Hanningfield fee, which was centred in East Hanningfield, continued to be held by the Hanningfield family, as military tenants of the FitzWalters, until 1426.[51] The family also held, besides other lands, the manor of Lawshall in Suffolk, the descent of which sheds light on their pedigree.

Lawshall, lying six miles south of Bury St. Edmunds, was held by knight service of the honour of Broughton, which belonged to the Benedictine abbey of Ramsey (Hunts.) The abbey had a singular way of discharging the service due from the honour.[52] Whenever it was due, four knights were selected by the whole body of knights and franklins who were tenants of the abbey. In 1242 the first of the knights thus chosen to accompany the King on his expedition to Gascony was William de Hanningfield, and the record states that he sent in his place his sons Sewal and Thomas.[53] In 1257 Sewal de Hanningfield was one of the four knights chosen to serve in Wales.[54] That might suggest that he had by then succeeded his father; but it is possible that William de Hanningfield was still living in 1267, when an Essex man of the name was among rebels receiving the king's pardon.[55]

The peculiar character of Ramsey Abbey's knight service, and of the abbots' court for the honour of Broughton, attracted the notice of the late Professor Maitland. In 1889 he edited for the Selden Society *Select Pleas in Manorial Courts*, in which he dwelt, at some length, with the records of these courts (1258, 1293-5). In the index to that portion of the book (see p. 203) there are Hanningfield entries under 'Hanyfeld' and 'Heningfeld'. One of these (p. 78) relates to a court held in 1294, and ought to be compared with the record, quoted above from the abbey's cartulary, of the court at which the knights were chosen in 1242. For their connexion is direct. The record of the 1294 court refers as follows to that of 1242.

> William de Hanningfield, in Lawshall, gives corporal service, for it is found in the rolls of Abbot Randolf that one William de Hanningfield, knight, his grandfather, did corporal service for the abbey, according to the custom of the abbey, by his sons Sewal and Thomas, who, as two esquires, were received in the said army in place of one knight. And because William who now is has denied the said service in full court, order is given to the riderman to distrain him day by day until he does the said service. And be it remembered that the said Sewal was the father of this William who now denies the said service.

There are references to William de Hanningfield (fl. 1294) in connexion with Lawshall.[56] He was clearly identical with the man of that name who in 1308 settled the manor of East Hanningfield on himself for life, with remainder to his son Thomas, and Isabel, Thomas's wife.[57] In 1318-19 Thomas and Isabel were concerned in a fine for Lawshall.[58] William, Thomas's father, was probably dead by then; he was certainly dead by 1320, when Alice of Hanningfield occurs as his widow, in association with his son Thomas.[59]

The Essex and Suffolk records, taken together, enable us to construct the following pedigree.

William de Hanningfield (fl. 1235, 1242, 1267)

- Sewal (fl. 1242, 1257; d. by 1294)
  - William (fl. 1294, 1308; d. by 1320)
    - Thomas (fl. 1308, 1320)
- Thomas (fl. 1242)
  - Thomas (fl. 1308, 1320)

Another member of the family, obviously related to the above but not yet fitted into the pedigree, was Sewal, son of John de Hanningfield, who in 1289 was holding a small estate in West Hanningfield and Sandon.[60] He may have been identical with Sewal de Hanningfield who in 1305 held lands in Chelmsford, Buttsbury and Hanningfield.[61]

The Hanningfield family had substantial and widely-scattered estates in Essex, in addition to those already mentioned. William, son of Sewal de Hanningfield, in 1285 exchanged a property in Chigwell for a half-share of Allfleets in Wallasea Island.[62] As Allfleets was held by the William Hanningfield who died in 1426, and whose will mentions it,[63] he must have been the descendant and heir of the William who was living in 1285 but dead by 1320.

* * *

It has proved possible to augment Round's account of the Hanningfield family. William son of Sewal de Hanningfield, who appears in the above pedigree as living in 1294 and 1308 but dead by 1320, was a prominent and versatile official who served the King abroad as well as at home. He went to Gascony in 1295[64] and to Scotland in 1306.[65] In Essex he acted as an itinerant justice many times between 1295 and 1309;[66] as a recruiting officer in 1300;[67] as a tax assessor in 1309 and 1312;[68] and as a commissioner for coastal defences (*de walliis et fossatis*) in 1314.[69] In 1307 he and the sheriff of Essex were required to enforce a government order restricting certain imports at Colchester.[70] William de Hanningfield's service did not pass unrewarded. In 1301 he was granted hunting rights ('free warren') over his demesne lands in Hanningfield, Sandon, Stanley (in Pebmarsh) and Lawshall.[71] In 1306, for his service in Scotland, he was given the Essex lands, lying in Hatfield Peverel, Ulting and Langford, of Gilbert Mauduit, who had been hanged as a rebel for adhering to Robert Bruce.[72] Our William de Hanningfield may have been identical with the man of the name who in 1302 received the royal licence to marry Eleanor, widow of Roald FitzAlan, 'if she will.'[73] Perhaps the lady was not willing; for there is no evidence that our William de Hanningfield ever had a wife named Eleanor. His wife Joan was living in 1285, and his widow Alice in 1320.[74]

The Hanningfield family must originally have lived in the district from which they took their name. Their estate there was sometimes described as the 'manor of East Hanningfield'.[75] It extended into several of the adjacent parishes, and in 1388 comprised 360 acres.[76] As part of a two-knights' fee it had independent feudal status, but it must be distinguished from the capital 'manor of East Hanningfield' which was part of the estate held in 1086 by Odo, bishop of Bayeux. Odo's manor of 'Hanningfield', assessed at 23 hides, was one of the largest in Essex, comprising most of the area later divided into the three parishes of East, South, and West Hanningfield.[77] Like many other manors belonging to Odo it descended as part of the honour of Swanscombe.[78] It was held in the 13th century by the Munchensy family. William de Munchensy (d. 1287) was succeeded by his daughter Denise, later wife of Hugh de Vere. She outlived her husband and died in

1313, holding, according to her inquisition *post mortem*, the manors of East Hanningfield, West Hanningfield and South Hanningfield.[79] The three manors then passed to the earls of Pembroke.[80] They were still descending together in the 18th century, when Morant rightly described them as 'the capital manors in the three Hanningfields'.[81] To each of them belonged the advowson of a parish church.[82]

The 'manor of East Hanningfield' held by the Hanningfield family was also known, from the 15th century, as Claydons. Its manor house was at Great Claydons Farm, about ¾ mile west of East Hanningfield village. Claydons was named from the family of William de Claydon, who died in 1330 holding the 'manor of East Hanningfield' jointly with his wife Eleanor, who survived him. They acquired it by demise of Thomas, son and heir of William de Hanningfield, at an annual rent of £8, and by service of 1½ knight's fee due to the heir of Robert FitzWalter.[83] In 1327 William de Claydon had been the largest resident taxpayer in the three Hanningfield parishes.[84] No evidence has been found that he or his family had any connexion with East Hanningfield except during a few years up to 1330, and it seems remarkable (though not without parallel),[85] that after such a brief stay in the parish, as under-tenants, their name should be permanently preserved on the map. 'Claydons manor alias Hanningfields manor', held of Lord FitzWalter, was recorded in 1485.[86] The ancient manor house of Claydons was immediately south of the modern farmhouse, on a site still marked by a homestead moat.[87] In 1388 it was reported that the house was in ruins, and that proper repairs would cost over £10. The manor, lying in East, West, and South Hanningfield, Sandon, and Woodham Ferrers, then comprised 270 a. arable, 6 a. meadow, 60 a. 'several' wood which could be cut every 21 years and had been cut two years earlier, 24 a. common wood, worth nothing because eaten down and destroyed after the last cutting a year ago, and 53*s*. 4*d*. rent. These particulars come from the inquisition *post mortem* on William Hanningfield, who had died on 5 April 1388 leaving a son and heir, also William, then eighteen years old.[88]

William Hanningfield (d. 1388) was evidently a descendant, direct or collateral, of the William Hanningfield who died shortly before 1320. Little is known about him. That he was a man of standing appears from his service as a tax commissioner for Suffolk in 1379-82.[89] His son William, who succeeded to Claydons in 1388, was probably the man mentioned by Round as dying in 1426. In 1412 he was recorded as holding, through feoffees, lands in East Hanningfield, Sandon, Mayland, Southminster, and Bradwell-juxta-Mare.[90] He was clearly a well-respected figure, often acting as a trustee in conveyances of real estate.[91] He was a tax commissioner for Essex in 1412, and a loan commissioner for Suffolk in 1420.[92] He must have had some legal knowledge, for besides serving as a guardian of the peace for Essex,[93] he was sometimes nominated to serve, outside the county, as an arbitrator or as a mainpernor.[94]

William Hanningfield died on 12 September 1426,[95] having made his will on 1 September with a codicil on the 4th.[96] Round's claim, noted above, to have assisted Frederick J. Furnivall in editing the book containing the will, is confirmed by his initials in editorial notes. Furnivall (1825-1910) was an eccentric but brilliant scholar and a driving force behind several learned projects, including the *Oxford English Dictionary*.[97] How well Round knew him is not clear, and there is no evidence of any later association between them. William Hanningfield's will directs that he shall be buried in St. Nicholas's chapel in Bicknacre priory church. Small gratuities shall be given to the clergy of the church, to the poor, and to the testator's tenants, including those in Suffolk. To the priory church are left 100 marks (£66 13*s*. 4*d*.) to repair St. Nicholas's chapel, and to Lawshall church, for building work, £40. The will appoints as executors Robert de Tey 'esquire of Essex', John Basset of (Great) Chishall, John Whetley of London, and Philip Dene. Robert de Tey was lord of the manor of Marks Tey. He was an old friend of William Hanningfield, but he died less than a year after him, and the will was executed by Dene and Basset.[98]

William Hanningfield's lengthy codicil instructs his executors to sell his manor of 'Chardacre and Valans' in Suffolk, and that of 'Bonylys' with 'Frankelensmonday land and Smithisland',[99] in order to endow a chantry in St. Nicholas's chapel, where, during the next forty years, two priests shall sing for the souls of the testator and his family. Money raised by selling the manor of Piries (in Tillingham)[100] shall be distributed in alms at the executors' discretion. The 'manor and land called Aiottes, Bartlottes, Pathislond, Gardyns, and Eastland in Bradwell' (-juxta-Mare)[101] are also to be sold, to provide four poor lepers with four marks a year each for ten years.

The codicil further stipulates that William Hanningfield's obit is to be celebrated annually in Bicknacre priory and in the churches of Bradwell-juxta-Mare and Canewdon; and that ten marks are to be given towards building work at Canewdon church. Bread and herrings to the value of 20 marks are to be distributed among the poor men of Rochford, Dengie, and Chelmsford hundreds every year for ten years. (High) Laver bridge is to be rebuilt in stone at a cost of 600 marks, provided that the neighbouring landowners are not obliged to repair it.[102] Five hundred marks are to be spent, subject to the same proviso, on 'the bridge between Easterford and Chelmsford.' That was probably Kelvedon (formerly Easterford) bridge.[103] Hanningfield's executors are also to sell his reversion of 'Totham', his land called Skotts (in Canewdon), and West Newland (in St. Lawrence) and the rent

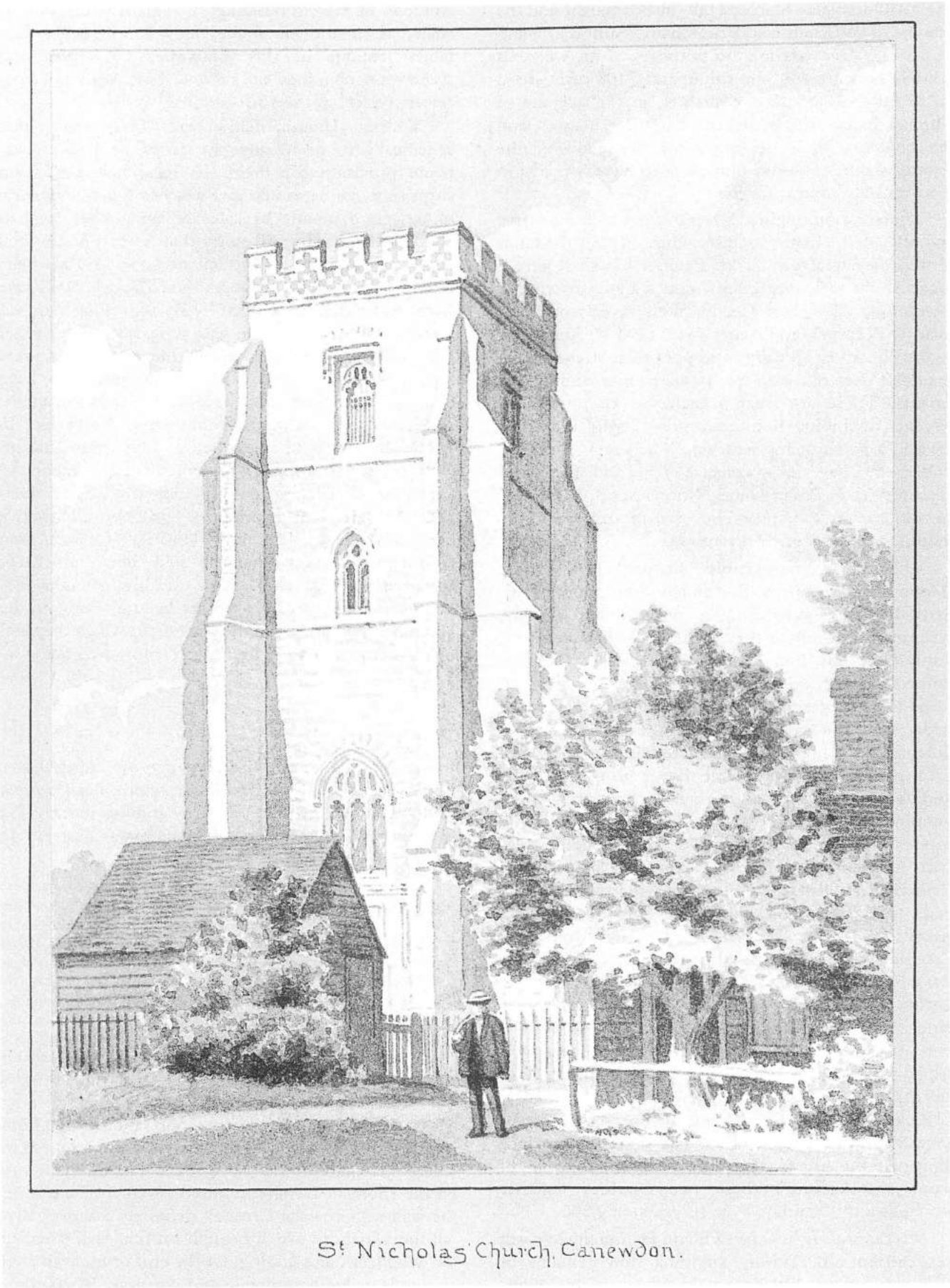

Fig. 1 St. Nicholas's church, Canewdon, showing 15th-century west tower. Drawing by A.B. Bamford (1857-1939) in the Essex Record Office.

from Allfleets; also Stanley Hall (in Pebmarsh) and the manors of 'Welsham and Brittenham' (Suffolk),[104] and to use the proceeds for the purposes of his will. His household goods (or their value) and £100 cash, are to go to his children. His cash box, in the keeping of Thomas Essex, is to be delivered to the executors, and the contents shall be spent for the good of the testator's soul. Thomas himself is to have 5 marks in hand and 20*s*. a year for life.

William Hanningfield's tomb, for which 50 marks are allocated, shall resemble that of 'Sir Thomas More', the late Dean of St. Paul's.[105] It shall have a broad stone with four pillars, and a Latin inscription mentioning his wives Cecily (with seven children), Joan (with three), and Agnes (with two).[106] Alms shall be distributed to all clergy and poor men attending the testator's funeral, and to poor people among his tenants. There are small legacies to Hanningfield's servants, including 'John, my priest', who is also to receive 'a gown of my wearing.' The senior executor, Robert de Tey, is to receive £30 and the other executors £20; Philip Dene, 'who is poor', is also left an annuity of 6 marks. They are to dispose of his residuary estate at their discretion.

The most remarkable feature of William Hanningfield's will is the range and scale of his charitable gifts, amounting to no less than £1,139, excluding alms left to the discretion of his executors, bequests to his friends, and payments for services connected with his obsequies. The legacies for rebuilding bridges are particularly notable. Easterford bridge, over the Blackwater, lay on the main London-Colchester road, and Willam Hanningfield must often have travelled that way. High Laver bridge, over the Roding, was a less obvious choice. It lay on a cross-country road between Chipping Ongar and Harlow, in an area that was probably busier in the Middle Ages than in later centuries.[107] From the large sums earmarked for the bridges it seems that major works were envisaged. Only four years earlier, in 1422, masons had contracted to build a new bridge at Catterick (Yorks) for the much smaller sum of 260 marks.[108] In that case building stone was available locally, which must have reduced the cost; on the other hand there is reference to a previous contract for the piers of the bridge. William Hanningfield's piety is displayed by his legacies for the church buildings of Bicknacre, Lawshall, and Canewdon, for the chantry at Bicknacre, and the obits at Bicknacre, Bradwell-juxta-Mare, and Canewdon. His social conscience appears in the gifts for lepers' stipends and for doles of bread and herrings: these two charities together represent a total outlay, over 10 years, of £240.

We cannot say how far William Hanningfield's will was carried out. Hardly anything now remains of Bicknacre priory, and little is known of its buildings. Holman, about 1720, observed the FitzWalter arms among heraldic shields depicted 'in the parlour windows of the old building'.[109] This is worth noting, since, as mentioned above, the Hanningfields were feudal tenants of the FitzWalters. Lawshall and Canewdon churches do survive, both with tall west towers typical of the 15th century.[110]

William Hanningfield's will leaves very little specifically to his family; no doubt he had already made provision for them. It does, however, seem surprising that he should give away so much to charity, to be raised mainly by sales of land, when he had children living. His will states that he had had a total of twelve children, but he left no sons, and his heirs were his daughters Elizabeth (aged four), Katherine (two) and Agnes (30 weeks).[111] By 1438 Elizabeth had married John Basset, who was almost certainly son of her father's executor.[112] Katherine and Agnes were then still living, unmarried. Agnes seems to have married Roger Drury (d. 1495), and later John Pagrave of Norwich.[113] No more is known of Katherine. In 1455 John Basset 'the younger' and his wife Elizabeth were parties to a family settlement of her manor of Claydons.[114] The manor was sold in 1476 by 'John Basset of Chrishall the elder' — probably Elizabeth's husband — to Thomas Hill.[115] It was then considerably larger than it had been in 1386, comprising 400 a. arable, 12 a. meadow, 100 a. wood, 100*s*. rent. Thus was broken the last link between the Hanningfield family and the place from which they had taken their name more than two centuries earlier.

Wallfleet

In his learned and valuable paper on 'The Oyster Fisheries of Essex', Mr J.C. Shenstone dealt with a well-known puzzle in Essex topography, namely the identity of 'Wallfleet', once famous for its oysters. He wrote as follows:[116]

> In early days it seems that the oysters from the Blackwater were thought superior to those from the Colne; for as far as one can ascertain, the Wallfleet oysters, which up to the 16th century were famed above all others, came from the Blackwater estuary. This is not quite certain, it is true; for there is no place in Essex known as Wallfleet, and the identity of the locality so-called has been in doubt for centuries. There is, however, a consensus of opinion among our older writers that Wallfleet was either in the Blackwater estuary or on the straight piece of coast running north and south between the estuaries of the Blackwater and the Crouch, or else that it covered both estuaries and the intervening portion of coast.

Mr Shenstone then cited, in support, the passage from Norden (1594), who admitted 'some disputation' as to where this 'place in the sea' actually was, but held it to be the shore of Dengie hundred, from St. Peter's on the wall to 'Crowche Creeke', definitely asserting that 'all the sea shore which beateth on that wall is called the Wallfleet', and adding, 'at the end of the wall ... is an ilande called commonlie and corruptly Wallet (but I take it more trulie Walflete) Ilande wher and about which ilande thys kinde of oyster aboundeth'.[117]

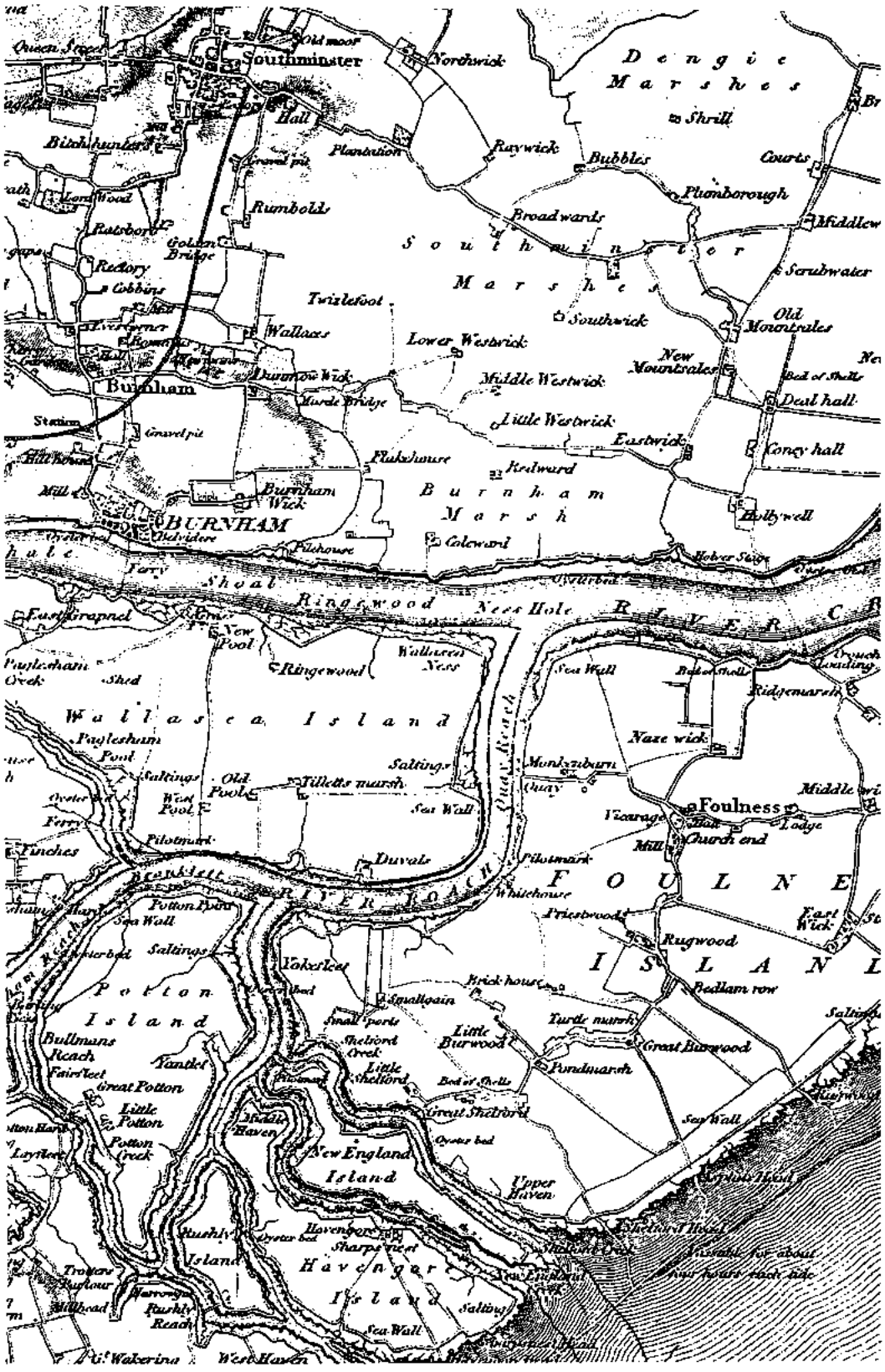

Fig. 2 The River Roach and its creeks. From the Ordnance Survey One-inch map, 1840 (reprinted 1894).

Now I venture to say that neither Norden nor Mr Shenstone can have borne in mind what was meant by the termination 'fleet', though it is familiar enough to us in Essex. The true 'fleet' is the channel between an island and the mainland. On the opposite shores of the Colne estuary were two islands, Mersea and Brightlingsea. The former was divided from the land by the Pyefleet channel, the home of the 'Pyefleet oysters', the latter by the Borefleet (now Brightlingsea Creek), where also were important oyster layings. In some cases a 'fleet' may have been not so much a channel as a creek; but it could not denote such open areas such as the 'Dengie flats', and 'Ray sands'. Moreover, we shall meet with our Essex Wallfleet as the name of a small haven, or in the language of the Customs, a 'creek'.[118] But where ought we to look for it?

Even the experts of the British Museum and the Public Record Office seem to be baffled by the name. The former can only infer from a charter in which a fishery is granted at 'Walfliet', in the reign of Henry III, that it was somewhere 'near Ashingdon'.[119] The latter, in spite of Mr Robert Fowler's wonderful knowledge of Essex topography, have had to leave it unidentified in a patent roll entry under Henry IV.[120] From the roll we learn that the port of Colchester, in 1401, had four 'creeks, namely Maldon, Leigh, Shoebury, and 'Walflete'. Maldon and Leigh we recognize as Essex ports, but Shoebury and 'Walflete' are a surprise. The evidence to which I am coming suggests that 'Walflete' represents Burnham-on-Crouch, the 'Crowche Creek' mentioned by Norden.

I have been lucky enough to note, among the manuscripts of the House of Lords, four references to Wallfleet as a name in full use in 1642.[121] The Earl of Sussex claimed (as Lord FitzWalter) 'the sole right of fishing in Wallfleet and the river of Burnham', and complained that others were carrying off his oysters and spat, and 'threatened to expel the petitioner in a violent manner with 60 sail of fishing boats', though their claim was condemned by trial at law. Asser, a Barking fisherman, was the chief offender, and laughed at the House's orders. As Burnham is opposite Wallasea Island, we have now practically identified as part of the Crouch fishery, appurtenant to Burnham manor, the home of what, in Norden's opinion, were 'the beste oysters in England.'[122] Taste, however, varies with the centuries, and now, probably, the Colchester 'natives' are held to have no superior.

It is an interesting illustration of the help which local knowledge can render on topographical problems that Mr Auger, of the Quay, Burnham, has been good enough to inform Mr E.L. Cooke of Colchester[123] that 'Wallfleet is the creek dividing the islands of New England and Havengore; as you proceed up Yokefleet in a southerly direction it is the second creek you pass on the east side.' This is a most precise statement. Mr Cooke explains that Yokefleet is the channel east of Potton Island, and that it 'branches out from the Roach, a tributary of the Crouch, in a southerly direction, and then turns up to the south-west, from which these small creeks, Barnfleet and Wallfleet — or havens as they are called locally — run across into the Thames.'[124] This last statement seems to be of much interest, for it may explain the origin of the disputes mentioned above. These may have arisen from doubts as to whether these creeks belonged to the Thames or to the Crouch. Mr Cooke explains further that, on the map, Barnfleet is called Shelford Creek, and Wallfleet is Havengore.[125]

The strange thing is that we all seem to have overlooked Morant's footnote at the end of his account of Rochford.[126] After describing the 'Six Islands' (Foulness, Wallasea, Potton, Havengore, New England and Rushley), he appends this note: 'In the creeks round these islands are fed the small oysters called Wall-fleet oysters.' This seems to show that the name was then (1768) still in use. It is at variance with the views of Norden and Mr Shenstone, but in agreement with the modern usage described above.

[NOTE. For a further discussion of 'Wallfleet' see P.H. Reaney, *Place-Names of Essex*, under ROACH (p. 10) and WALLET CHANNEL (p. 16 and addenda, p.lxi).]

Robert Bruce in Essex

To the late Mr W.C. Waller, the Treasurer of our Society, we are indebted for much laborious investigation into manuscript sources of local history still preserved in Essex.[127] Among these is the curious 'wardstaff' roll of the hundred of Ongar, drawn up in the days of Henry VIII, which was partly printed by Morant.[128] This record I discovered when examining the muniments of the late Mr James Round for the Royal Commission on Historical Manuscripts. Mr Waller was thus enabled to borrow and study it. His 'Note on the hundred of Ongar' duly appeared in our *Transactions* as a result of that study.[129]

The wardstaff roll contains the curious statement that the services entered as due had been observed not only 'in the time of King Edward III and Robert le Bruce, sometime King of Scots, but also long before, when the Saxons inhabited this realm.' Mr Waller, referring to this passage, notes two 13th-century references to the Bruwes family in connexion with Theydon Mount alias Theydon Bruwes), and comments:[130]

> These entries illuminate the connexion of the Bruces with the hundred of Ongar. The introduction of the name here leads to the inference that Robert Bruce was at one time bailiff of the hundred [of Ongar].

In fact the Bruce family was quite distinct from that of Bruwes, and though they had lands in Essex, had nothing to do with Theydon Mount or with the hundred of Ongar.[131] As I have shown, the hundred of Ongar — that

is to say, the profits arising from its lordship — was given by Henry II to his great minister Richard de Lucy long before the Bruces obtained a footing in Essex, and descended to Richard's heirs.[132] The office of bailiff was far below the notice of so great a noble as Robert Bruce. But why should the wardstaff roll of Ongar hundred make a point of mentioning him?

On turning again to Mr Waller's paper, we discover that in 1542-3 John Stoner was granted by patent 'the bailiwick of Ongar and *Harlow* with the office of the wardstaff of the *said hundreds*.' Here, it seems, we have the answer to the question. For the Bruces, as we shall see, were granted the hundred (or half-hundred) of Harlow.

It is probably little known that Robert Bruce, hero of the struggle for Scottish independence, was born at Writtle on 11 July 1274.[133] Morant has set forth, accurately enough, under Writtle and Hatfield Broad Oak, how those manors had come to his family.[134] Robert's great-grandfather, also named Robert, had married Isabel, one of the sisters and coheirs of John le Scot, earl of Huntingdon and of Chester, whose father, David, earl of Huntingdon, was a younger brother of the Scottish king William I ('the Lion').[135]On the death of John le Scot in 1237 the English king, Henry III, refused to allow his Cheshire lands to be divided among coheirs, and promised them other lands in compensation.[136] As security for this Isabel was in 1238 given the manors of Writtle and Hatfield Broad Oak, to hold in tenancy.[137] In 1241 she received a charter granting her those manors, along with 'the half-hundred appurtenant to the manor of Hatfield', to hold for one knight's fee, in exchange for her share in her brother's lands.[138] The half-hundred was that of Harlow. This substantial inheritance descended in the Bruce family for more than sixty years. In 1302 Sir Robert Bruce, Isabel's grandson, was holding Writtle, Hatfield, and Harlow half-hundred.[139] He died in 1304. Robert Bruce, his son and heir, was crowned king of Scotland in 1306, and consequently forfeited his English estates.

As the future King Robert was born at Writtle, the Bruces must have had a residence there, and it is likely that this was the so-called King John's Hunting Lodge.[140] The family was also connected with Essex through Great Baddow, which had been held by the earls of Chester, and which earl John le Scot (d. 1237), had settled in dower on his wife, Helen of Wales. She married, as her second husband, Robert de Quincy of Wakes Colne, son of the earl of Winchester.[141] In 1241 earl John's sister, Isabel Bruce, brought an action for waste against Robert and Helen de Quincy, and it was agreeed that she should have immediate possession of Great Baddow, subject only to an annual rent of £20 during Helen's life, and of £10 to Robert if he survived Helen.[142] In 1303 Christine Bruce, widow of Sir Robert Bruce, Isabel's son, was holding Great Baddow as two knight's fees.[143]

Notes

1. * J.H. Round was a pioneer in place-name study. See his: *Notes on the systematic study of our English place-names* [1899]; 'The settlement of the South-Saxons and East-Saxons', in *Commune of London*, 1; 'Norse place-names in Essex', *E.A.T.* **n.s.** xvi. 169; London Univ. Libr., I.H.R. MS 655, Letters from Allen Mawer to J.H.R. 1921-4. For Maldon before the Norman Conquest see *The Battle of Maldon, Fiction and Fact*, ed. J. Cooper (1993).
2. *Cal. Chart. R.* 1341-1417, 186-7 (confirmation 1364 of charter of 1189).
3. * For the Old Norse **holmr** see A.H. Smith, *English Place-Name Elements* (1970), i. 258. For the location of Ruckholm and Hardholm cf. 'The pasture of Tiwolditun [Heybridge] which is called *holm*', mentioned in a deed of 1184: *E.A.T.* **n.s.** xvi. 175.
4. * For Maldon half-hundred and the *banleuca* of the borough see: *V.C.H. Essex*, i. 434, 491, 531; J. Tait, *Medieval English Borough*, 49; J.H. Round, 'The Liberties of the borough of Colchester', *Essex Arch. and Hist.* 25 (1994), 75.
5. *V.C.H. Essex*, i. 491. * J.H.R. identifies Suen's holding with the manor of Southouse and Sayers, but that seems to be incorrect.
6. * *V.C.H. Essex*, i. 577.
7. *E.A.T.* **n.s.** xiv. 137.
8. * For the naval service of the Cinque Ports see J. Tait, *Medieval English Borough*, 125-6.
9. * I.J. Sanders, *English Baronies*, 139.
10. Morant, *Essex*, i. 328-9. *For the King's Domesday estate see *V.C.H. Essex*, i. 434.
11. * See J.H. Round, 'The Counts of Boulogne as English lords', in *Studies in Peerage and Family History*, 147-80; Sanders, *English Baronies*, 150.
12. * *Regesta Regum Anglo-Normannorum*, iii, ed. H.A. Cronne and R.H.C. Davis, no. 543.
13. * J.H. Round, *Geoffrey de Mandeville*, 90-1; *Regesta Regum Anglo-Normannorum*, iii, no. 274.
14. * Ibid.
15. * Morant, *Essex*, i. 331*n*; cf. *V.C.H. Essex*, i. 531.
16. * J.H. Round, *Geof. de Mandeville*, 90 note 5.
17. * *Pipe R.* 1156-8 (Rec. Com.), 17,72,132, and later *Pipe Rs.* to 1164, 37. For William, brother of Henry II, see: *Regesta Regum Anglo-Normannorum*, iii, nos. 19, 21, 329, 599, 825; *Sir Christopher Hatton's Book of Seals*, ed. L.C. Lloyd and D.M. Stenton (1950), no. 413.
18. * *V.C.H. Essex*, i. 528, 531, cf. 432.
19. * Sanders, *English Baronies*, 120.
20. * *Pipe R.* 1130 (Rec. Com.), 135. For Essex vineyards at this period see *Essex Archaeology and History*, 21, p. 48.
21. * In 1994 wine was being produced at three Essex vineyards, including one at New Hall, Purleigh, two miles from Maldon.
22. * *V.C.H. Essex*, i. 465.
23. * Cf. J.H. Round, *Commune of London* (1899), 28f., quoting E.A. Freeman, *Norman Conquest*, iv, App. C.
24. * *Regesta Regum Anglo-Normannorum*, ed. H.W.C. Davis, i, no. 22.
25. Morant, *Essex*,i. 328n; *For the full version see Westminster Abbey Muniment Book 5 (Cartulary of St. Martin-le-Grand), fol. xviii*d*, date 1075 x 1085.
26. *In 1894 J.H. Round offered to prepare a report on the archives of Westminster Abbey. The Dean, George Bradley, welcomed the proposal, but the Chapter eventually decided against it, because the Keeper of Muniments, Edward Scott, wished to keep the abbey's manuscripts entirely in his own hands: Univ. London, I.H.R. MS. 624, G.G. Bradley to J.H.R. 4 Aug.-20 Nov. 1894. For Scott (1840-1918) see *Who was Who*. Under his successors the abbey's archives have long been open to students. They contain much Essex material.
27. * *Book of Fees*, 121.
28. * Ibid. 1464; *Cal. Chart. R.* i. 108.

29. * *V.C.H. Essex*, i. 172; J.H.Round, 'The Mantels of Little Maldon', *E.A.T.* **n.s.** xx. 254.
30. * Com. Cesny (Calvados).
31. * *Bk. of Fees*, iii (1930), 381; *Complete Peerage*, xi. 379.
32. * The descent of Maldon from 1164 to 1212 is reserved for fuller treatment in a later article.
33. Morant, *Essex*, i. 331 and note.
34. *Cal. Inq. p.m.* i. no. 723.
35. *Placitorum Abbreviatio* (Rec. Com.), 212a. *From other records it appears that the king's ward was John de la Launde: Westminster Abbey Muniment Book 5, fol lxxxiiid, lxxxvd.
36. * Under Henry II's charter the burgesses of Maldon were quit of stallage: *Cal. Chart. R.* 1257-1300, 351-2.
37. * for the terms of reference of the 1212 inquest see *Bk. of Fees*, i. 52.
38. * *Cal. Chart. R.* 1257-1300, 351-2 (confirmation by Edward I in 1290).
39. * Adolphus Ballard, in *British Borough Charters, 1042-1216* (1913), p. xxxix, could not date it more precisely than 1166 x 1175.
40. * *Complete Peerage*, v. 117-18.
41. * Ibid. iii. 429.
42. * Round had already determined this date in his *Commune of London*, 152, but in a curiously obscure passage.
43. * Cf. *Commune of London*, 151-2, 161, 182-3, 190.
44. * The earl's interest in Maldon is not clear. His father Geoffrey de Mandeville (d. 1144) had held lands there, but they were forfeited at his death, and there is no evidence that William recovered them.
45. *V.C.H. Essex*, i. 578.
46. A strip of some 20 acres near the hundred boundary.
47. *Book of Fees*, i. 577.
48. * *V.C.H. Essex*, i. 524.
49. I.J. Sanders, *English Baronies*, 129.
50. * *P.N. Essex*, 135. The manor of Middlemead (Mildemet) lying in Little Baddow but in Dengie hundred, was in 1086 held by the bishop of London: *V.C.H. Essex*, i. 442.
51. * See below.
52. *Red Bk. Exchequer* (Rolls Ser.), 37: where, however, 'Maidenhurst' represents 'Moin (or Morvyn) de Herst (or Hirst)'; *Ramsey Cartulary* (Rolls Ser.), iii. 48, 219.
    * Ramsey Abbey had acquired Lawshall before the Conquest: *V.C.H. Suffolk*, i. 515; P.H. Sawyer, *Anglo-Saxon Charters*, no. 1030.
53. *Ramsey Cart.* iii. 50.
54. Ibid. 52.
55. * *Cal. Pat.* 1266-72, 158.
56. *Feet of F. Suffolk*, ed. W.Rye, 88, 126.
57. *Feet of F. Essex*, ii. 121.
58. *Feet of F. Suffolk*, 143.
59. * *Feet of F. Essex*, ii. 199.
60. * *Feet of F. Essex*, ii. 65.
61. Ibid. 99.
62. Ibid. 47.
63. *The Fifty Earliest English Wills*, ed. F.J. Furnivall (1882), 68-72. I assisted Dr Furnivall in editing this work for the Early English Text Society. * For this will see further below.
64. * *Cal. Pat.* 1292-1301, 215; *Cal. Close* 1296-1302, 7.
65. * *Cal. Pat.* 1301-7, 485.
66. * Ibid. 1292-1301, 162, 164, 408, 546; ibid. 1301-7, 42, 82, 278, 281, 285, 358; ibid. 1307-13, 249.
67. * *Cal. Close* 1296-1302, 395.
68. * *Cal. Pat.* 1307-13, 184, 521.
69. * Ibid. 1313-17, 234.
70. * Ibid 1301-7, 488.
71. * *Cal. Chart. R.* iii. 21.
72. * *Cal. Pat.* 1301-7, 482.
73. * Ibid. 100. There may have been another William of Hanningfield at this period, with interests in Bristol and Ireland: *Cal. Pat.* 1313-17, 142, 605.
74. * *Feet of F. Essex*, ii. 47, 199.
75. * Ibid. 121; *Cal. Inq. p.m.* vii, no. 281; P.R.O., C139/29 (Inq. p.m. dated 1426).
76. * *Cal. Inq. p.m.* xvi, no. 590.
77. * *V.C.H. Essex*, i. 458.
78. * Cf. Sanders, *English Baronies*, 144.
79. * *Cal. Inq. p.m.* v, no. 475 (p. 268).
80. * *Cal. Inq. p.m.* vi, no. 518; ibid. xvi, no. 917; *Complete Peerage*, x. 382-96.
81. * Morant, *Essex*, ii. 36.
82. * *E.A.T.* **n.s.** xviii. 21; Newcourt, *Repertorium*, ii. 305-10. The advowson of South Hanningfield was acquired *c.* 1200 by Leeds priory (Kent): *Feet of F. Essex*, i. 48; but in the early 15th century it reverted to the lord of the manor.
83. * *Cal. Inq. p.m.* vii, no. 281; *Cal. Close* 1330-33, 72.
84. * *The Medieval Essex Community*, ed. J. Ward, 84.
85. * Cf. Foliot's (later Forest) Hall in High Ongar: *V.C.H. Essex*, iv. 179.
86. * Morant, *Essex*, ii. 36.
87. * O.S. 1:25000 map TL70; R.C.H.M. *Essex*, iv. 36.
88. * *Cal. Inq. p.m.* v. no. 590: by 1388 'de' had been dropped from the family name. Manor courts continued to be held for Claydons until 1921: E.R.O., D/DGe M276.
89. * *Cal. Fine R.* 1377-83, 149, 225, 339.
90. * *Feudal Aids*, vi. 441.
91. * *Feet of F. Essex*, iii. 233, 241, 265, 272 &c.; *Cal. Close* 1399-1402, 396; ibid. 1402-5, 160; W.A. Copinger, *Manors of Suffolk*, i. 267.
92. * *Cal. Close* 1409-13, 270; *Cal. Fine R.* 1413-22, 317.
93. * *Cal. Close* 1409-13, 322.
94. * Ibid. 61 (London); 187 (Surrey); 310 (Kent); *Cal. Fine R.* 1399-1405, 11 (Sussex); 165 (Beds. and Berks.).
95. * P.R.O., C139/29; Morant, *Essex*, ii. 36, cf. 262.
96. * *The Fifty Earliest English Wills* (Early English Text Society), 68-72. For this will see also *E.A.T.* **n.s.** xiii. 18.
97. * *D.N.B.*; K.M.E. Murray, *Caught in the Web of Words: James A.H. Murray and the O.E.D.*, 87-90, and index.
98. * Morant, *Essex*, ii. 202; *Cal. Close* 1399-1402, 396; *Feet of F. Essex*, iii. 233. Philip Dene proved the will on 22 Sept. 1426; John Basset exhibited the inventory on 24 May 1430.
99. * These manors have not been identified.
100. * Cf. Morant, *Essex*, i. 371.
101. * Eastlands in Bradwell-juxta-Mare is 1 km. WSW of St. Peter's-on-the-Wall. 'Bartlottes' is probably Bartletts Farm in Rettendon: *P.N. Essex*, 261.
102. * For High Laver bridge see *V.C.H. Essex*, iv. 87.
103. * Cf. *P.N. Essex*, 291. The old Easterford bridge stood immediately south of the present Kelvedon bridge: see Chapman and André, *Map of Essex*, 1777. Traces of it were still visible forty years ago (personal knowledge). In 1351 it was reported that the bridge was broken and that Sir John de Bohun, lord of Felix Hall, Kelvedon, and the Abbot of Westminster, lord of Feering, were liable for its repair: *E.A.T.* **n.s.** xiv. 340.
104. * For Stanley Hall see: Morant, *Essex*, ii. 262; T.D.S. Bayley, *Pebmarsh Church*, 31. The manor of Welshams lay in Brettenham parish, near Lavenham. It had come to William Hanningfield by his marriage to Cecily, coheir of Roger Willisham: *Feet of F. Suffolk*, 288.
105. * For More, dean of St. Paul's 1406-21, see Newcourt, *Repertorium Eccl. Par. Lond.* i. 43.
106. * Cecily was still living in 1421-2: *Feet of F. Suffolk*, 288.
107. * Cf. the decline of Hatfield Broad Oak after the 16th century: *V.C.H. Essex*, viii. 159. The road across High Laver bridge is not marked on Norden's *Map of Essex*, 1594.
108. * L.F. Salzman, *Building in England* (1952), 497.
109. * *E.A.T.* **n.s.** xviii. 227-8.
110. * Pevsner. *Buildings of Suffolk* (1974), 328 and *Buildings of Essex* (1979), 108. For Canewdon church see Figure 1.
111. * P.R.O., C139/29 (inquisition *post mortem*).

112. * Morant, *Essex*, ii. 262: where, however, it is stated that Elizabeth married the elder John Basset.
113. * W.A. Copinger, *Manors of Suffolk*, vii. 43, refers to her as 'Anne'.
114. * *Feet of F. Essex*, iv. 50.
115. * Ibid. 74.
116. *V.C.H. Essex*, ii. 435. * For James C. Shenstone (1854-1935) see *Essex Review*, xliv. 194. He also contributed the article on 'Botany' to *V.C.H. Essex*, i. 31-67.
117. *Norden's Description of Essex* (Camden Soc.), 10-11.
118. See below.
119. *Index to Charters and Rolls in B.M.* 774.
120. *Cal. Pat.* 1399-1401, 487. Cf. *V.C.H. Essex*, ii. 265 and note.
121. Hist. MSS. Com. 4, *5th Rep. House of Lords*, 16, 19, 21, 29.
122. *Norden's Description of Essex*, 10.
123. I am indebted for this information to Mr Gurney Benham.
124. For Yokefleet see *P.N.Essex*, 17.
125. * For Shelford Creek see *P.N.Essex*, 16 and Addenda, lxi. On modern maps the creek between the islands of New England and Havengore is called New England Creek: see O.S. 1:25000, sheet TQ 88/98, and Fig. 2 (above).
126. Morant, *Essex*, i. 326.
127. * For William Chapman Waller (1850-1917) see *E.A.T.* **n.s.** xiv. 356.
128. Morant, *Essex*, i. 126.
129. *E.A.T.* **n.s.** ix. 217. * This document, now E.R.O., D/DRg 1/197, was analysed in *V.C.H. Essex*, iv. 6-8.
130. *E.A.T.* **n.s.** ix. 213*n*.
131. J.H. Round, 'The Manor of Theydon Mount', *E.A.T.* **n.s.** xii. 199; * *V.C.H. Essex*, iv. 276.
132. *E.A.T.* **n.s.** vii. 146, 149-51. * For 'The hundred of Ongar' see *V.C.H. Essex*, iv. 1-8.
133. * *Complete Peerage*, iii. 56 (s.v. Carrick). Robert's birthplace is not mentioned in *D.N.B.*
134. Morant, *Essex*, ii. 61, 502. * Cf. *V.C.H. Essex*, viii. 165.
135. * Cf. *Complete Peerage*, vi. 644-7; iii. 169-70.
136. For this historic case see J.H. Round, *Peerage and Pedigree*, 131 f.
137. *Cal. Pat.* 1232-47, 224.
138. *Cal. Chart.* i. 262; * Sanders, *English Baronies*, 102.
139. *Feudal Aids*, ii. 133. * Sir Robert had acquired the Scottish earldom of Carrick by marriage, but in 1292, after his first wife's death, had resigned it in favour of his son Robert, the future king of Scotland. He was summoned to the English Parliament and is thus held to have become Lord Bruce (Brus): *Complete Peerage*, ii. 360; iii. 55-6.
140. * Cf. P.A. Rahtz, *Excavations at King John's Hunting Lodge, Writtle, 1955-7* (1969), 5-7.
141. Morant, *Essex*, ii. 17, 221; * *Complete Peerage*, ii. 169.
142. *Feet of F. Essex*, i. 138.
143. *Feudal Aids*, ii. 134; * *Complete Peerage*, ii. 359.

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A detached kitchen at Great Yeldham: excavation and building study at Old Post Office Cottages, 1988-89

by C. Crossan and the late P. Christie

with contributions by D.D. Andrews and D.F. Stenning, H. Major and H. Walker

Two bays of a timber-framed outbuilding were excavated at Great Yeldham and a study made of the standing structure. The results have identified a detached 3-bay kitchen built c. 1500. At least three clay floors and a series of hearths were uncovered in the north bay and the kitchen appears to have been in use for about 100 years. A fourth (southern) bay was added in the 17th century. The standing structure was built mostly from re-used timbers, while occupation material containing medieval pottery beneath the clay floors suggests that an earlier building of different shape existed on the site, associated with the surviving hall house on the street frontage. Brick floors were laid probably in the first half of the 18th century and the bays were partitioned. Records from the mid-19th century show that the outbuilding was a store.

Introduction

During the winter of 1988-89, excavation of the floors and examination of the standing structure was carried out in the outbuilding behind Old Post Office Cottages, High Street, Great Yeldham (Fig. 1). The cottages are listed Grade II, and are dated to the 14th century. The outbuilding (also listed Grade II) dates to *c.* 1500 (Plate I).

After an application for conversion of the outbuilding into a garage was received by the Essex County Council Planning Department, a joint project was mounted by the Archaeology Section and the Historic Buildings Section. The standing structure was studied at the time of the excavation by the late Mike Wadhams and again recently (1994) by David Andrews and David Stenning of the Historic Buildings Section (see Appendix). The excavation of the floor area was carried out between November 1988 and February 1989 by Carl Crossan, who prepared the archive from which the present report was written by the late Patricia Christie.

The site

The timber-framed house (now two cottages, formerly known as Old Post Office Cottages and recently renamed Old Hall Cottages) is a 2-bay hall, aligned north-south, with two jettied and gabled cross wings, built *c.* 1400. Extensive alterations from the 16th century onwards included the insertion of floors and the addition of external chimney stacks. The original timber frame is virtually complete and the interior retains many original features.

The outbuilding to the rear of the house was believed to have been built at about the same date as a detached kitchen serving the house. It consists of four bays, 14.4m long overall (external), 5.16m wide, 4.71m high (internal, from brick floor to roof ridge). Only bays 1 and 2 were available for excavation; bays 3 and 4 belong to the adjoining property and were not under threat at the time. The reassessment of the building by the Historic Buildings Section now shows that it was built mainly of re-used timbers, probably as late as 1500, and this has substantially altered the original interpretation of the site, making it both more complicated and more problematic.

No information is available on the recent history of the site until the Tithe Survey of *c.* 1840, the 1841 Census return and Kelly's Directory of 1845. These show that the land and buildings were owned by the Rev. Charles Way; the house and garden were occupied by Eliza Fuller, baker and postmistress, the outbuilding and adjoining cottage by Charles and (later) James Jephson while a building on the north-east was occupied by John Chapman, wheelwright. Charles Jephson is described as 'grocer and tea dealer' in 1845, while James Jephson (?his son) is listed as 'beer retailer and shopkeeper' in 1859.

The excavation

Owing to limitation on access and other factors, only the interior of the building was excavated, and no investigation through the footings to the outside was feasible. The excavation was entirely carried out by hand and stopped at what was thought to be the top of the old land surface; nowhere was the natural subsoil reached. The general geology of the area is boulder clay, with local outcrops of Barham sand and gravel. The precise nature of the subsoil beneath the site was not determined, but it is assumed that clay for the

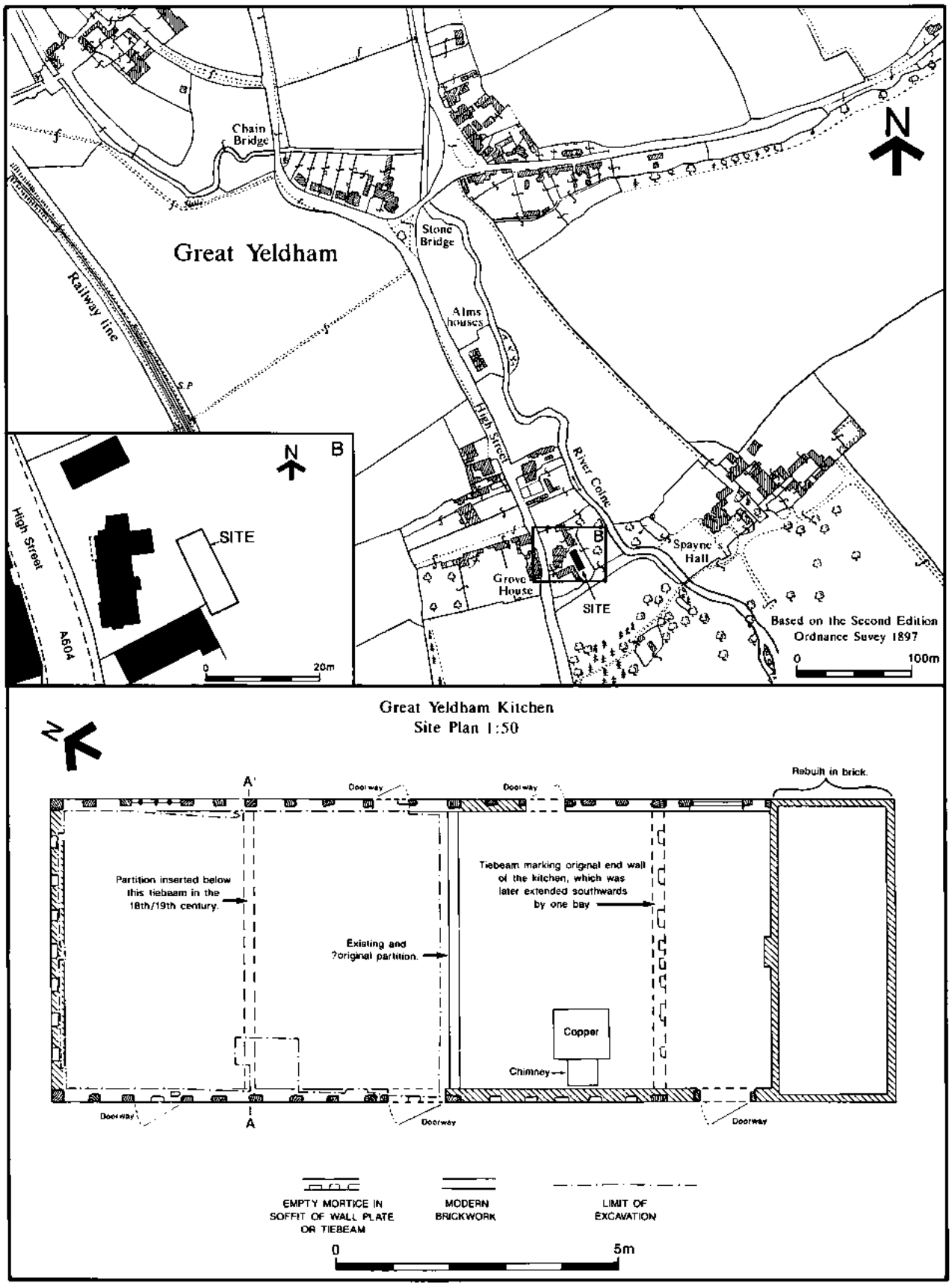


Fig. 1 Great Yeldham. General site location (above); plan of detached kitchen (below).

Plate I Great Yeldham. Exterior of the detached kitchen from the west.

floors was obtained locally.

Clearance of a thick layer of accumulated rubbish (context 1) revealed a brick floor over both bays. Prior to the excavation, a partition between bays 1 and 2 had been removed, leaving the ground timbers in place. The bays were excavated separately (though the context numbers run consecutively) and showed considerable difference. The intensively used and much repaired brick floor in bay 1 (Fig. 5) and the less worn floor in bay 2 had been laid over clay floors containing a series of hearths dated on the slight ceramic evidence to the 15th/16th centuries. Beneath the clay floors was an occupation layer of dark earth containing mainly 13th-century pottery. Subsidence due to animal burrowing and subsequent repair had resulted in the archaeological evidence being lost on the east side of bay 1.

From the excavated sequence, the pottery, and analysis of the standing structure, two main periods are identified. The first of these corresponds to the medieval occupation prior to the construction of the building. The second period corresponds to the building itself and is subdivided into three phases, from *c.* 1500 onwards. The periods and their associated features, designated by context numbers, are described below.

Period 1: 12-14th centuries: Medieval occupation (Fig. 2)
The earliest occupation on the site pre-dated the present timber-framed building by more than two centuries. Features assigned to this period are summarised below.

Earth floor

A dark brown silt loam up to 100mm deep covered the area of both bays (contexts 132, 129). It is described as a ?floor and was distinguishable from the underlying soil (?old land surface) by the presence of charcoal flecks. The interface between the top 30mm of this earth floor and the overlying clay floor contained 13th-century pottery and oyster shell.

Hearth

An area in the centre of bay 1, coarser and darker than the earth of the floor, contained more charcoal and oyster shell and was interpreted as a possible destroyed hearth (context 179). A smaller patch consisting of a thin red smear of burnt clay with charcoal (context 176) was noted further north on the earth floor. Both these contexts could represent the remains of truncated features (see Discussion).

Postholes

Ten postholes (general context 180), aligned across three-quarters of bay 2, could belong to this period. They were not noticed until the last of the overlying clay floor was removed, but the 'mottled appearance of the clay' and the clay packing of the holes inclined the excavator to place them in Period 2. On the evidence presented in the archive, this writer suggests an earlier date and has transferred them to Period 1.

The postholes, in west-east order, comprise: a group of three (contexts 154, 157, 158), one of which appears to be circular (157) in contrast to the rest; two pairs of similar size and shape, with flat or near-flat bottoms in most cases, the largest and deepest being context 172 at the east end. Clay packing survived in some, around the secondary fill of dark brown sandy loam, while others had mixed clay (some lumps) and loam; four contained 12th-14th century pottery and one contained oyster and mussel shell.

A further posthole (or pit) on the extreme south side of bay 2 (context 156), described as 'apparently early', has been added to this period. It measured 220mm diameter, 100mm deep, with rounded base, and appears to have been filled in and overlain by a depression (context 109) dated to Period 2.

Period 2, phase 1; c. *1500-1600: Kitchen* (Fig. 2)

This phase is defined by the construction date of the building, thought on current evidence to have been *c.* 1500, and covers the time when it was in use as a kitchen, as shown by the successive hearths. It is suggested that the kitchen had ceased to function as such by the end of the 16th century.

Standing structure (Appendix and Figs 2 and 3)

The original frame, built mainly of re-used timber, was three bays long, with a hipped roof and gablet at the north end. Bays 1 and 2 were unpartitioned and open as a work area; bay 3 was partitioned off from bays 1 and 2, presumably for preparation and storage. Bay 4 was added later, probably in the early 17th century. The original entrance was in the west half of bay 2 at the south side and a doorway may also have existed on the east side of this bay. There is evidence of an original window located in the east wall of bay 1. Roof timbers are heavily sooted and wall studs also are smoke-blackened in the north bay (bay 1).

Floor excavation

Clay floor(s)

A layer, up to 120mm thick (described as 'core floor') of pale yellow/brown silty clay containing small lumps of chalk (contexts 101, 130), was laid over both bays. Patches and lenses of burnt matter were noted in and on the clay layer and at least five hearths were identified in bay 1. A further extensive layer of plastic clay (context 101) was laid over some early hearths of this phase and was in turn covered by patches of burnt material.

Hearths in bay 1 (Fig. 4; profiles)

Context 139 Pit with burnt sides; remains of pale grey fill at north end (?ash).

Context 144 Pit, sides burnt *in situ*; cut hearth 139. Yellow/brown loam fill. Contained medieval pottery.

Context 118 Open hearth lined with quernstone (context 127) filled with mixed ash and charcoal. Pre-dates hearth context 85.

Context 85 Three-stage hearth: (a) open hearth in depression (650 mm diam., 170 mm deep) filled with charcoal and ash; (b) clay re-lining: burnt clay; (c) brick re-lining: clay lining under base of crumbly Tudor bricks (context 91).

Context 104 A charcoal layer *c.* 30 mm thick covered a broad area of red clay burnt *in situ* very near the west wall. A stakehole (context 175) on the east side is interpreted as supporting some fitment associated with the hearth.

Pits and depressions in bay 1

Context 142 Large pit with ill-defined edges and disturbed west side; cut by a later (post-kitchen) hearth, context 87. The fill of dark brown loam and clay contained ?residual 13th-century pottery.

Context 124 Oval depression, 50 mm deep, with red burnt clay at the south-west side, filled with dark grey-brown sandy loam with ash and charcoal.

Context 122 Small depression in the clay floor, filled with mixed red burnt clay and charcoal.

Stakeholes

In bay 1, a single stakehole (context 175) measuring 60mm diam., 200mm deep, was set in the charcoal of context 104, penetrating the clay floor, and could represent some fitment associated with the hearth.

In bay 2, six stakeholes (contexts 120, 136, 134, 137, 135, 138) set in three pairs were evenly spaced apart down the centre of the bay. Only two were sectioned (120 and 135) and measured 60mm diam., 200mm deep and 80mm diam., 160mm deep respectively. All were filled with dark brown loam. It is suggested that these stakeholes may represent the legs of a trestle during some part of the kitchen phase. A further stakehole to the north (context 149) could also belong in this phase.

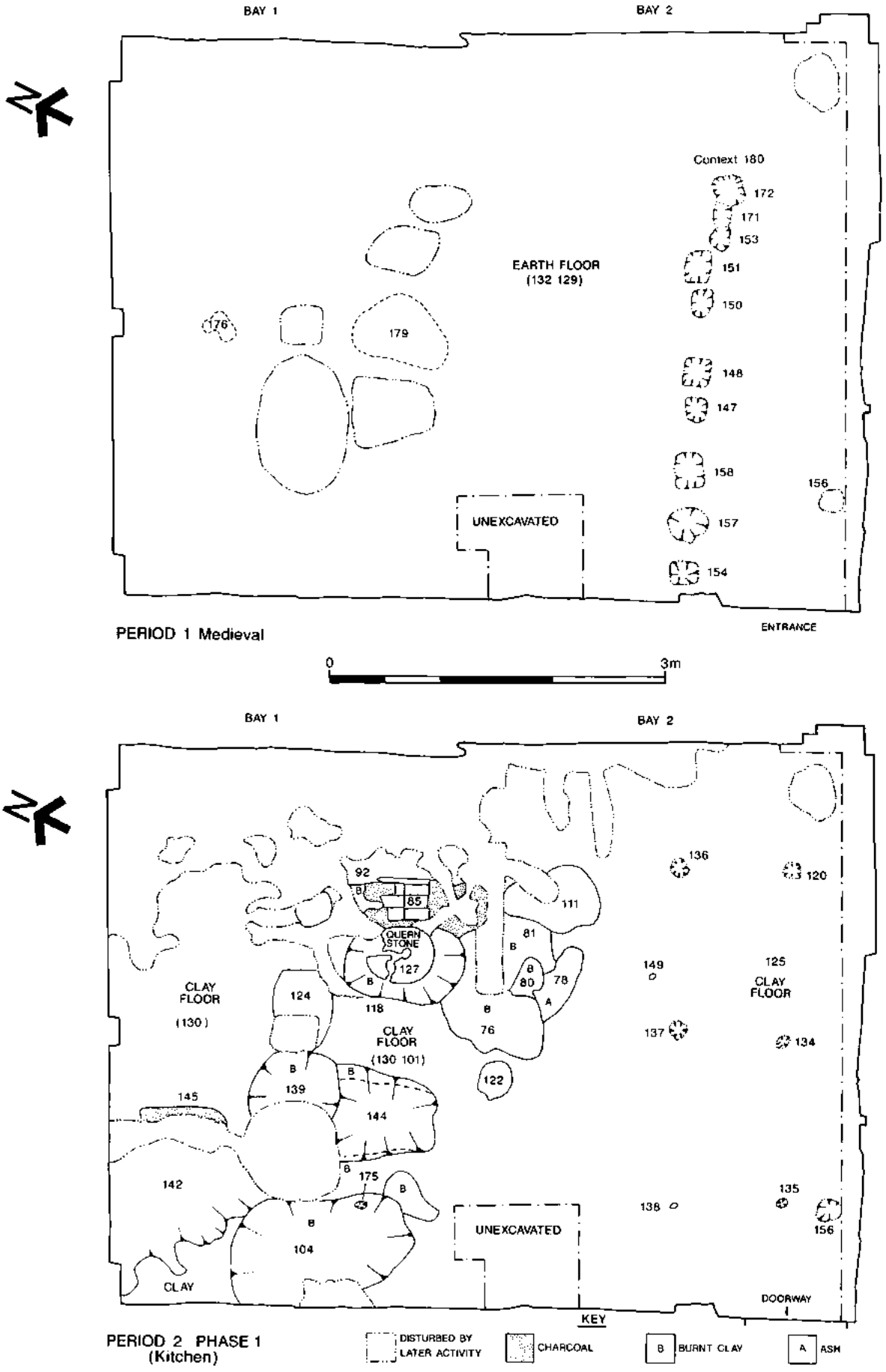


Fig. 2 Great Yeldham. Plans of Period 1 and Period 2, phase 1.

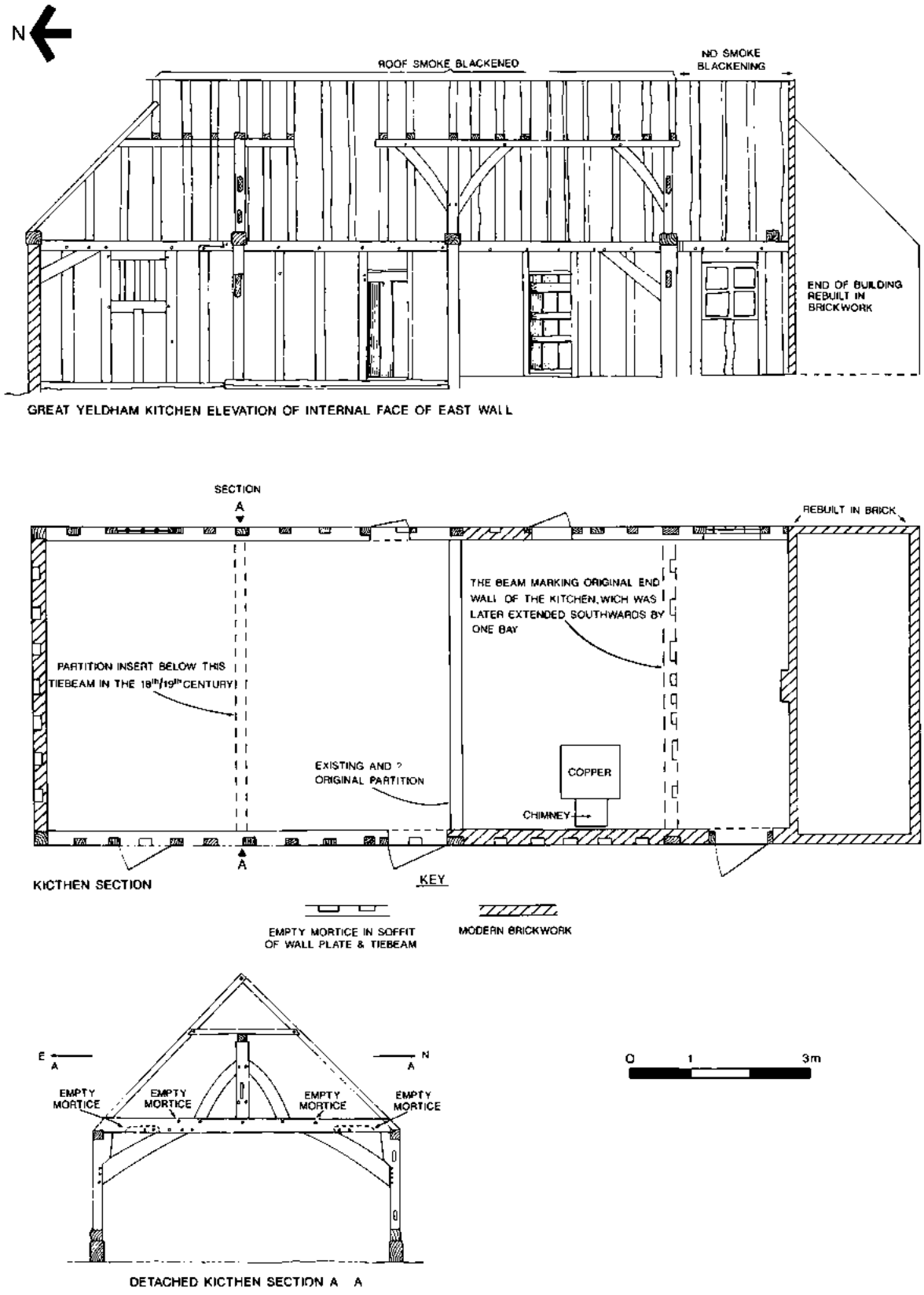


Fig. 3 Great Yeldham. Timber frame survey.

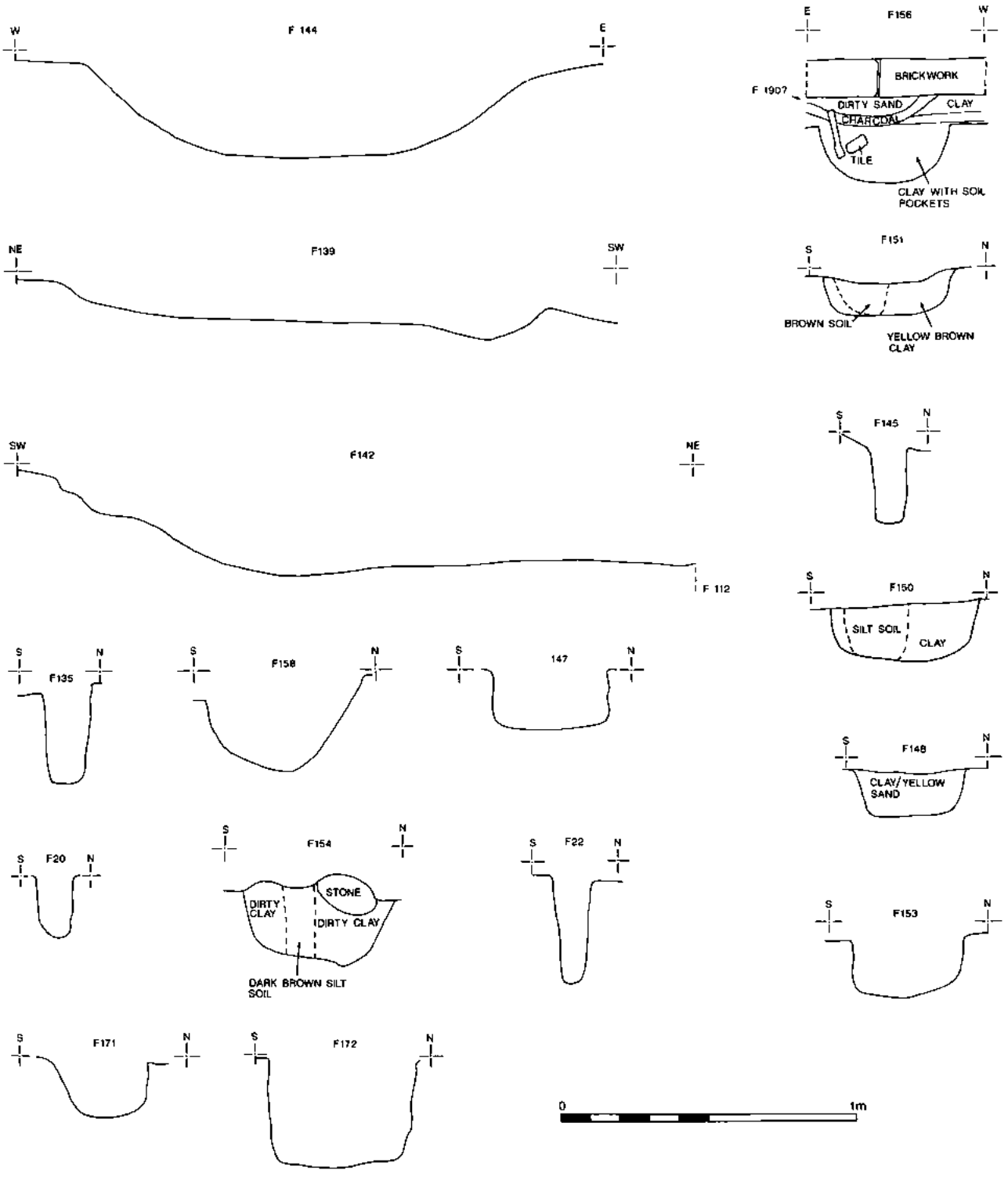


Fig. 4 Great Yeldham. Profiles of features in Period 1 and Period 2, phase 1.

Tile spread

A spread of broken peg tiles beneath a layer of ash in bay 2 was embedded in a thin dark brown layer containing a sizeable quantity of 15/16th-century pottery (context 111). This deposit lay over the earliest clay floor and constitutes the main ceramic dating evidence for the kitchen phase.

Areas of burning and floor repair

Numerous patches of burnt material (red clay, ash, charcoal) as well as cleaner deposits of clay, overlay the floors, especially in the centre and on the east. None appeared to represent distinct features and may best be interpreted as successive rakings from open hearths, and patching of the floor surface.

Period 2, phase 2; 17th-early 18th centuries: post-Kitchen (Fig. 5)

Few archaeological features were assigned by the excavator to this phase, which is defined by the laying of a clay floor over the hearths of the kitchen and the extension of the 3-bay structure to the south with the addition of a fourth bay.

Clay floor

A layer of yellowish brown silty clay, disturbed and heavily trampled in places, was distinguished in both bays and thought to be the same floor (contexts 17 and 71). It covered areas of burning and features of phase 1 (Kitchen). It survived best on the west side of bay 1, but elsewhere is described as 'disturbed' and 'heavily trampled'. It seems possible that there may have been a brick floor over part of this final clay floor which could have provided the 18th-century bricks re-used in phase 3 (see below).

Pit/?hearth

A pit (0.90m diam., 250mm deep) was filled with mixed brown sandy loam and rare charcoal flecks. It contained Tudor brick fragments (context 88) and clay pipe stems. Discoloured clay at the base suggests it could have been a hearth.

Hearth(s) in bay 2

A badly disturbed hearth (context 86) with brick surround contained grey ash and charcoal and one sherd of late 16th-century pottery. Two red Tudor bricks, probably 16th century (context 106), had mortar top and bottom, indicating that they were re-used. A second possible hearth (context 110) also contained late 16th-century pottery. These hearths appear to be set into the clay floor of this phase. Owing to their position, the original doorway in the west wall is unlikely to have remained in use during this time. It is suggested that they could represent the remains of a demolished bakeoven (see Discussion).

Pit in bay 2

A square-cornered depression (context 109), extending beyond the southern limit of excavation, was filled with yellowish-brown sand and charcoal and overlay an earlier pit assigned to Period 1 (context 156).

Posthole (Fig. 6)

The post contained by this centrally placed square posthole (context 30) would have contacted the roof structure near the top of the hipped roof section; there is no sign of a joint at this point. The filling consisted of clay packing containing pipe stem, brick packing (sandy loam with brick fragments) and a post pipe of dark grey sandy loam. The posthole (35 cm across and at least 1.20 m deep) was not fully excavated. It appeared to pre-date the phase 3 brick floor and to have been retained when this was laid. The brick packing may have been a later insertion to wedge a (by then) decaying post base.

Stakeholes

Three stakeholes (contexts 20, 21 and 22) were identified in the clay floor on the east side of bay 2, all filled with sandy loam. They measured between *c.* 60-100mm in diameter; two were *c.* 100mm deep and one (context 22) reached 200mm in depth.

Slots/gullies

Two parallel slots (contexts 59 and 60) on the east side of bay 2, cut by a later trench, could have been drainage gullies through the east wall. Context 59 had defined sides and was more convincing as a feature than context 60 which could have been an animal burrow. Both were filled with silty brown clay containing chalk lumps and peg-tile fragments.

Brick cill (context 105)

Eight soft red Tudor bricks were laid on a bed of clay 20mm thick, cut into the surrounding burnt areas. Six bricks were laid north-south, two were laid east-west. One was a perforated brick; all had been subjected to heat and were crumbly. The feature was disturbed to the west, less so to the east, and survived to a length of *c.* 1.0m. It can be interpreted either as bricks re-used for the footings of the earliest partition between the bays during this phase, or as the base of a screen related to the latest stage of the hearth (context 85) in phase 1.

Period 2, phase 3; 18th/19th centuries to present: Store (Fig. 5)

During this phase the plinths supporting the ground cills were renewed in brick, and the west walls of the southern (unexcavated) bays were rebuilt in brickwork. A timber partition was inserted between bays 1 and 2, brick floors were laid in both bays, and a new entrance was made in the west wall of bay 1. A copper and chimney survive in bay 3, which was clearly used as a washroom. As a result of the partitioning, and the differing nature of the floors, bays 1 and 2 are described separately.

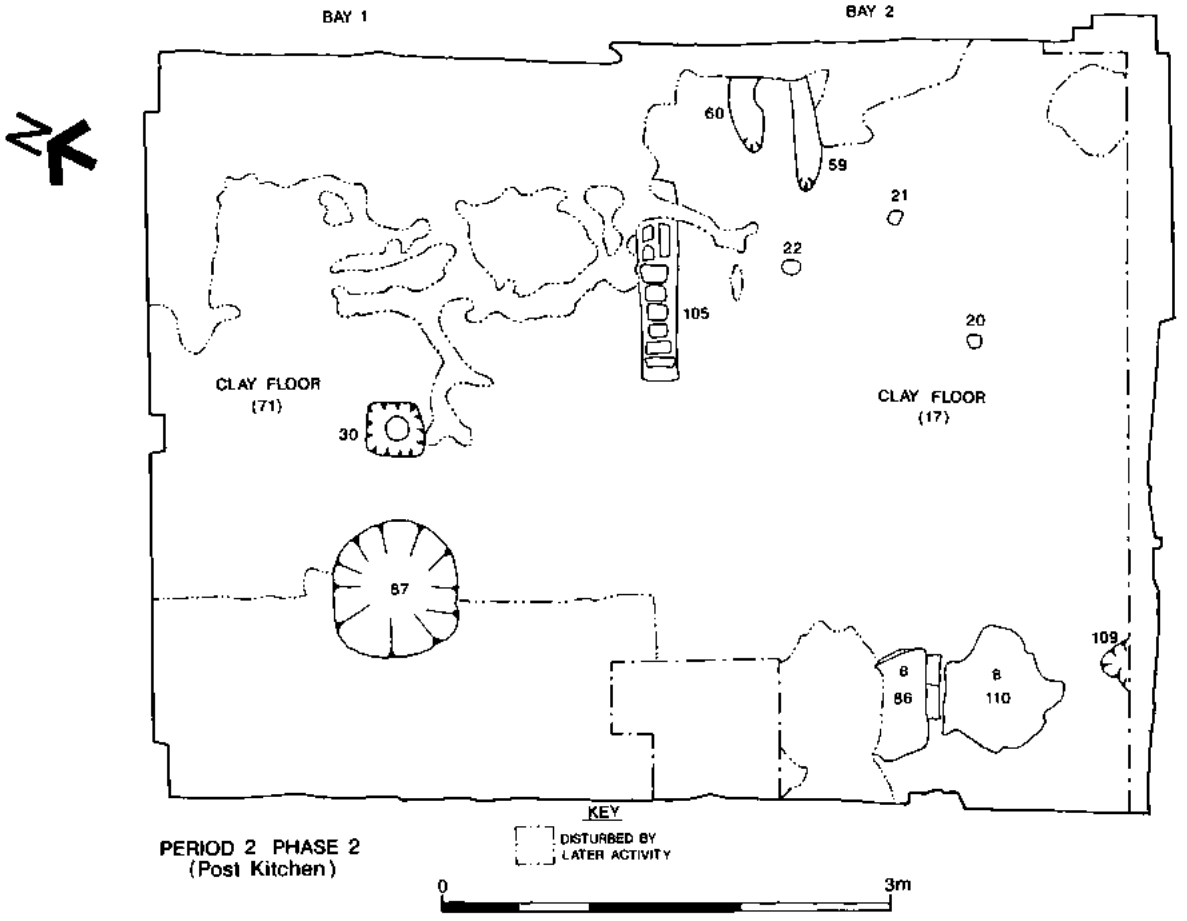
Bay 1

Brick floor

Three main areas of paving bricks, or pavers, laid on edge, comprise this floor. From the centre eastwards, bricks (context 10) datable probably to the 18th century and possibly re-used, were aligned east-west. From the centre westwards, a band of similar bricks (context 9) was aligned north-south. The bricks in context 10 were more worn than those in context 9. South of the new entrance, with its cobbled threshold (context 6), 18th-19th century bricks similar to those used in bay 2 were aligned east-west (context 11).

Bedding (contexts 65, 66, 67)

A soft, sandy, pale brown mortar formed the bedding for the brick floors and lay beneath the cobbled threshold in bay 1. Beneath this bedding, a heavily trampled layer was noted over the surface of the last clay



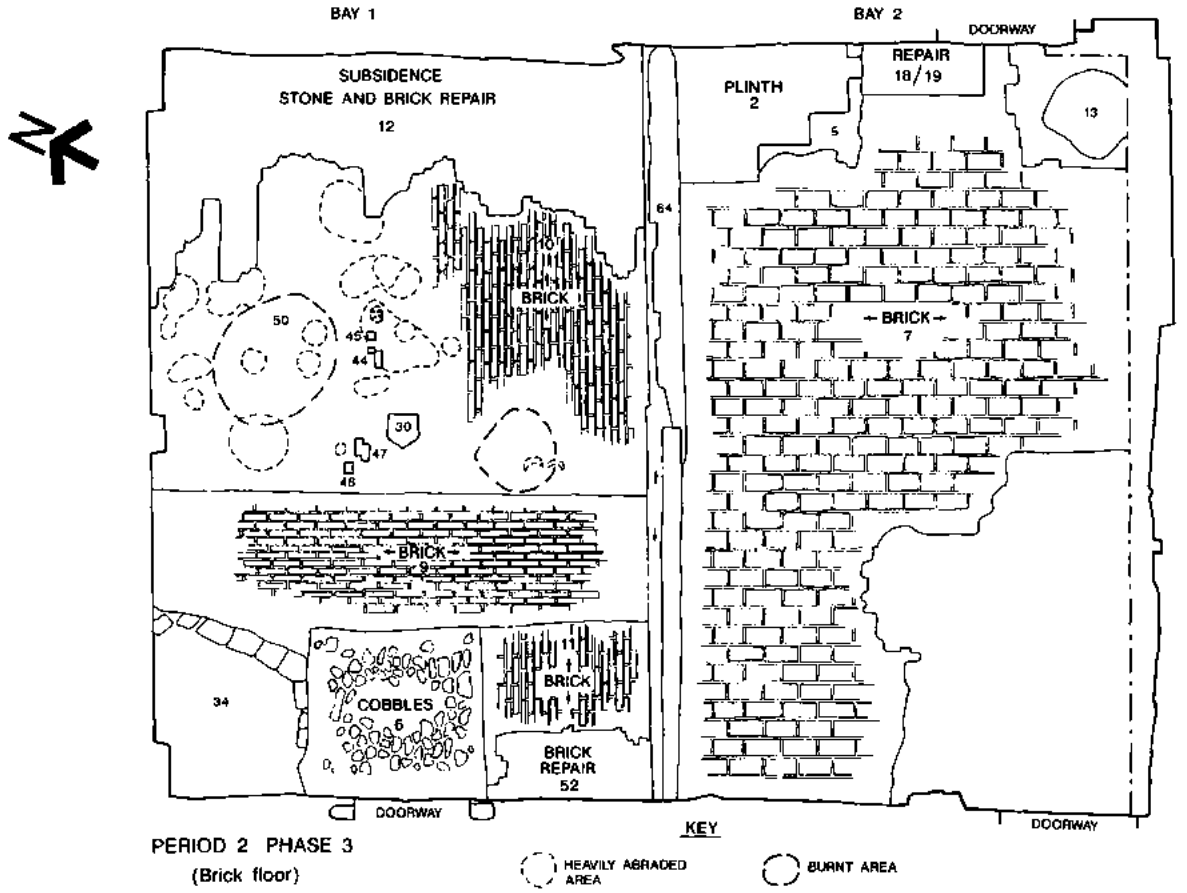


Fig. 5 Great Yeldham. Plans of Period 2, phases 2 and 3.

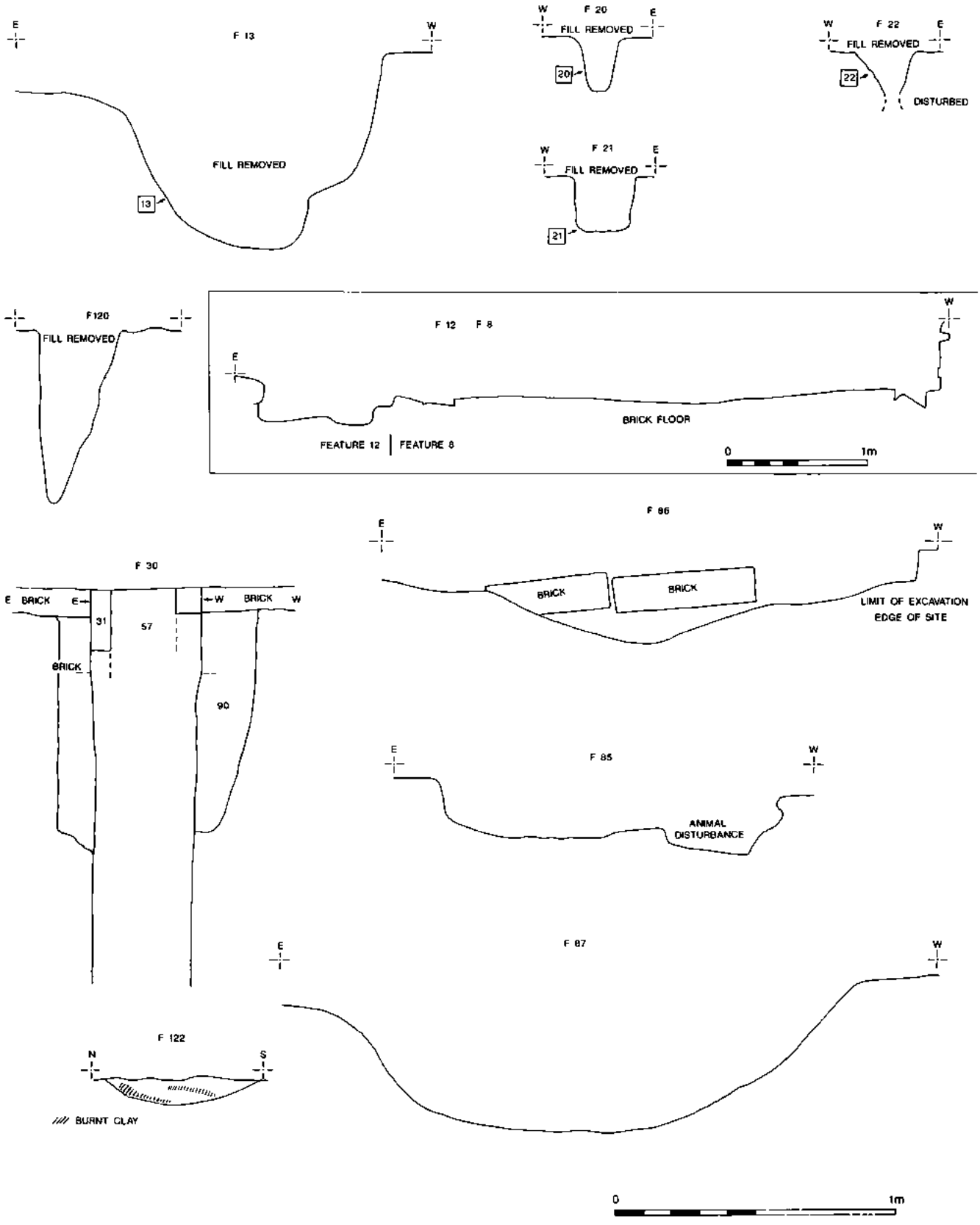


Fig. 6 Great Yeldham. Profiles of features in Period 2, phases 2 and 3.

floor, which contained occupation debris including 18th-century pottery and clay pipes.

Repairs to floor

The brick floor was heavily eroded overall, but along the east and part of the north side it had subsided, apparently due to extensive burrowing by rodents, and had been repaired with a filling of mixed bricks and flat-topped stones (context 12). A slot (context 52) on the west side, filled with sandy loam and broken brick, may also have been a repair to the floor resulting from animal activity, while further patches of repair were noted elsewhere on the floor.

Features associated with the brick floor in bay 1 included a cobbled threshold (context 6) on the west, a brick-lined cut (context 34) in the north-west corner (?base for a copper) and two pairs of stakeholes (contexts 44, 45, 47, 48) in the vicinity of the large posthole (context 30). The remains of fires on the north and an extensive patch of white (?lime) plaster (context 3) on the west completed the final deposits over the brick floor before the accumulation of more recent debris.

Bay 2

Brick floor (context 7)

Pale yellow bricks, similar to those from context 11 in bay 1 and laid on a bed of loose sand, were originally complete over the bay but had disintegrated badly by the time of excavation. The only intact bricks were found beneath a brick plinth (context 2) in the north-east corner, interpreted as a possible stove or copper base.

Other features in bay 2 included:

Flagstones (context 18) laid over a repair trench (context 19), which formed part of the threshold to a door in the east wall.

A large post-pit (context 13) which may pre-date the brick floor, with outer clay packing and inner fill containing floor bricks, 19th-century pottery, china and clay pipe stems. The post appeared to have been removed in the 19/20th century.

The timber frame of the partition (context 64) between bays 1 and 2 had been removed in 1988 prior to excavation, but the two ground beams were still present, laid on a double course of bricks (context 63) the same colour and dimensions as the floor bricks in bay 2. The bricks were on the same line as the cill (context 105) assigned to phase 2 above.

The north (excavated) part of the outbuilding has now been converted to use as a garage for Old Post Office Cottages, recently renamed Old Hall Cottages.

Finds

Metal

by Hilary Major

Three copper alloy objects, including an Essex Regiment cap badge, and a small collection of iron objects consisting mostly of nails, came from varied contexts in all phases. The iron objects, which were not cleaned or X-rayed, included a tanged blade and a tanged bar, probably a file or rasp, while a plate fragment, possibly with a rivet through it, from context 115 was associated with the tile spread (context 111) dated to the Kitchen phase.

The quernstone (Fig. 7)

by Hilary Major

This is an upper stone from a medieval flat quern made from Niedermendig lava, re-used as a hearthstone (context 127 in Fig. 2). It is almost complete, but badly fragmented. There is an arc missing from one edge, possibly deliberately removed for its re-use. The relatively fresh condition of the break, however, suggests that this is later damage, occurring at the thinnest point of the stone. The top surface is covered with partly concreted ashy material and mortar, which is absent from the break, and the grinding surface has a hard, white, calcareous deposit on it, together with concreted ash and mortar. There is a small blackened area along part of the edge.

The top of the stone is roughly finished and has two small, non-perforating holes near the edge, *c.* 10-18mm deep. A third depression nearer the centre is probably a natural irregularity. The holes may have held a clamp for a handle, although a quern of this diameter may have been turned using a simple mechanical arrangement to reduce the effort needed to turn it.

The grinding surface had sub-radial, slightly curved grooves, a pattern known as 'sickle dressing'. This type of dressing is fairly common on medieval querns and occurs throughout the period. A complete stone from Norwich, discarded in the late 13th century, was probably used for grinding malt rather than for the production of flour (Atkin *et al.* 1985, 212). Examples from Essex include a fragment from a 16th-century context in Colchester (Buckley and Major 1988, 136).

There are no slots for the rynd, which must simply have been wedged into the central hole. The stone is of variable thickness, 12-33mm thick, with a slightly oval central hole, 70 x 85mm. The overall diameter is 530mm. The stone appears to be typical in size for a medieval flat quern. There are too few diameters recorded to calculate a reliable average for this dimension.

The re-use of lava querns as hearthstones is known from other sites. At Norwich (Atkin *et al.* 1985, 212) broken querns were used in a hearth and a complete lava millstone or larger quern found in Watford formed the hearth in a mid-15th century lead-working workshop (Webster and Cherry 1975, 244).

Pottery

by Helen Walker

A total of 192 sherds weighing 1.4kg was excavated. Most pottery came from Period 1, where products of the Hedingham kilns predominated; this is not unexpected as Sible Hedingham lies only about 7km south-east of Great Yeldham. Later phases yielded smaller amounts of post-medieval and modern pottery.

Method

The pottery has been classified using Cunningham's typology (Cunningham 1985, 14), and her fabric numbers are quoted in this report. In discussing the cooking pots, Cunningham's sub-forms are also used, as described in Drury (1993, 81-4).

Fabrics from the phased contexts (described in approximate chronological order)

Fabric 20 Medieval coarse ware, a hard sand-tempered grey ware; it derives from a variety of sources and spans the 12th to 14th centuries.

Fabric 20D Hedingham coarse ware, described by Walker (1988, 172-3) and dates mainly from the later 12th to 13th centuries.

Fabric 22 Hedingham fine ware, described by Drury (1993, 86-9);

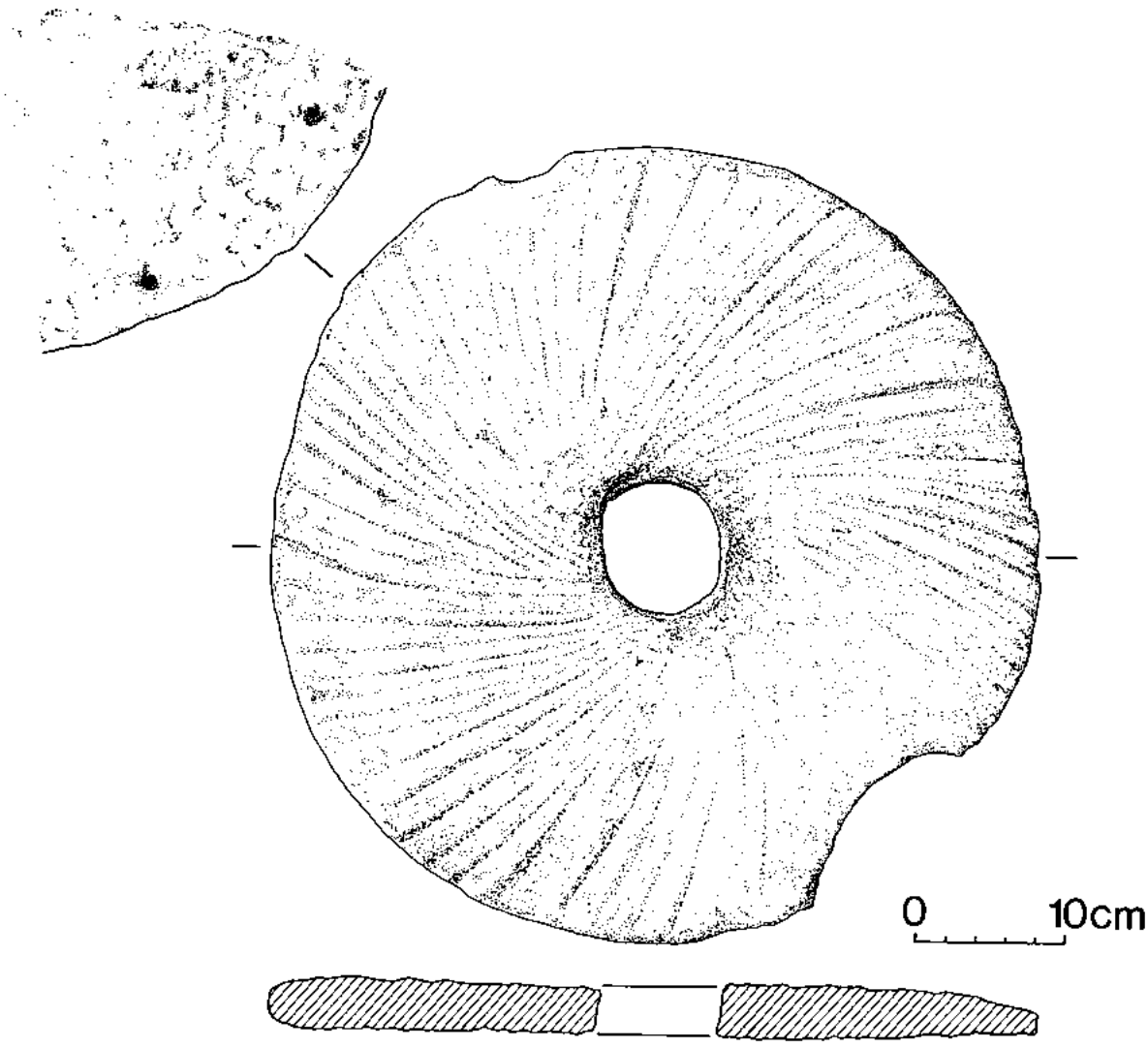


Fig. 7 Great Yeldham. Medieval quernstone made from Niedermendig lava.

also Walker (1988, 173). It dates mainly from the later 12th to 13th centuries.

Fabric 21 Sandy orange ware, described by Cunningham (1982, 359); also Cunningham (1985, 1). This covers any locally made, sand-tempered, mainly oxidised fabric and has a date range of 13th to 16th centuries.

Fabric 35B Mill Green-type ware, where the fabric is visually indistinguishable from that of Mill Green ware (as described by Pearce *et al.* 1982) but the forms, methods of decoration etc. are untypical. The date range is perhaps late 13th to 15th century.

Fabric 40 Post-medieval red earthenware, described by Cunningham 1985, 1-2) and dating from the late 15th/16th century onwards.

Fabric 46A English tin-glazed earthenware, dating from the 17th to the end of the 18th century.

Fabric 48A Chinese porcelain, imported in quantity from the 17th to the end of the 18th century.

Fabric 47 Staffordshire salt-glazed white stoneware, dating from the 1720s to 1770s.

Fabric 48B English porcelain, dating from the mid-18th century onwards.

Fabric 45M Modern stoneware; the example found here is probably 19th century.

Fabric 48D Staffordshire ironstone types, early 19th to 20th century.

Pottery from Period 1

A total of 119 sherds weighing 743g was excavated. Only three fabrics were present in this phase; Hedingham fine ware (Fabric 22), Hedingham coarse ware (Fabric 20D) and medieval coarse ware (Fabric 20). Medieval pottery came from the earth floors, with relatively large groups from floors 128, 131 and 177. One or two sherds were also found in postholes.

Finds of Hedingham fine ware comprised two sherds decorated with applied vertical strips (from post hole 153, fill 165, and from earth floor 177); this is a typical method of Hedingham fine-ware decoration. In addition, a fragment from a Hedingham fine-ware lid or shallow dish came from earth floor 128 (too fragmented to illustrate). Several coarse-ware forms were present and are described below:

Bowls: One medieval coarse ware possible bowl fragment with a beaded rim, context 128.

Cooking Pots: Three Hedingham coarse-ware rims with squared, sloping tops (sub-form H2), from earth floors 128, 177, 179.

One Hedingham coarse-ware fragment, context 131, with a rim that is transitional between Cunningham's flat-topped rim (subform H1) and the later blocked rims without a neck (sub-form H3). This transitional type occurs at Naylinghurst, Braintree, where it is dated to between *c.* 1230 and 1260 (Drury 1976, 271).

Jugs: One Hedingham coarse ware jug rim, earth floor 131, comparable with an example from Rivenhall (Drury 1993, fig. 42.93).

Coarse-ware decoration comprised one sherd of medieval coarse ware from earth floor 131, showing a thumbed, applied strip. As for dating, the H2-type cooking-pot rims have a suggested date range of early to mid-13th century (Drury 1993, 81), while the cooking-pot rim may be mid-13th century. Hedingham strip jugs were also current in the earlier 13th century, so a date perhaps in the first half of that century can be assigned to Period 1.

Pottery from period 2, phase 1 (the kitchen)

A total of 36 sherds weighing 336 g came from pits 144 (fill 140) and 142 (fill 141), and from layers 78 and 115. All of these contexts, except for 115, produced residual sherds of medieval sandy orange ware, medieval coarse ware and Hedingham coarse ware. However, part of a sandy orange ware flanged rim bowl was found in lens 115. It has a partial internal plain lead glaze and probably belongs to the early post-medieval period, i.e. the 15th/16th century, and may well have been used for food preparation.

Pottery from Period 2, phase 2 (post-kitchen)

Twelve sherds weighing 35 g came from four contexts, and of these, depression 109 (fill 108) produced only residual medieval pottery, comprising one sherd of Hedingham coarse ware. Post-medieval red earthenware was the latest pottery from hearth 86 and possible hearth 110. Both sherds were glazed and date from the 16th century onwards. The fill (113) of gully 112 produced sherds of plain English tin-glazed earthenware (fabric 46A) dating to the 18th century and a sherd of modern stoneware (fabric 45M) dating from the 18th century onwards.

Pottery from Period 2, phase 3

Seventeen sherds weighing 141 g were excavated. Context 35 (part of brick-lined cut 34) contained pottery no later than 15th century, including two residual sherds of Mill Green-type ware. Context 29, part of a floor repair, produced a fragment from an ?18th-century Chinese porcelain plate (fabric 48A). Occupation debris 68 also produced 18th-century pottery, comprising a white salt-glazed stoneware lathe-turned base (fabric 47).

A relatively large group came from post-pit 13 in bay 2. The lower fill, context 14, produced residual medieval sherds, a sherd of modern porcelain (fabric 48B), and part of an ironstone china oval dish rim (fabric 48D), dating from the early 19th to 20th centuries. The outer fill, context 15, contained one sherd of post-medieval red earthenware; its fabric is quite sandy and there is a plain lead glaze on both surfaces. The outside shows rouletted decoration. It appears to be from a large vessel, probably a crock or storage jar, and could be as late as 19th or 20th century.

Unphased pottery

Context 41, the fill of an animal hole, is unphased but contains some pottery of interest comprising:

Two Hedingham coarse-ware transitional cooking-pot rims of the mid-13th century, similar to the example described in Period 1.

One Hedingham fine-ware jug rim; the form is paralleled at King John's Hunting Lodge, Writtle (Rahtz 1969, fig. 54.14), but this rim lacks the glaze and decoration found on the Hunting Lodge example.

Context 41 also contains a sherd of Metropolitan slipware datable from the 17th to earlier 18th centuries.

The bricks

by D.D. Andrews

The principles adopted in this report for characterising bricks are those established in the Cressing Temple brick typology (Ryan and Andrews 1993). The bricks sampled are of two types, Tudor bricks (ie. relatively thin hand-made bricks of the 15th-17th centuries), and flooring bricks or pavers.

Tudor bricks were sampled from contexts in Period 2 phase 1, context 91 in hearth (context 85) and Period 1 phase 2, context 88 in pit/hearth (context 87), context 106 in hearth (context 86) and context 105 (brick cill). Although only a small number of bricks were involved, they do seem to fall into two main groups:

(1) best represented by three bricks from context 105. These measure 240 x 110 x 50mm, and are in a dark red fabric with abundant iron ore. They are irregular with rough bases and sandy sides. One has two narrow perforations, a feature usually found on bricks dating from the 15th century. A rather similar brick was present in context 91.

(2) best represented by two examples from 106. They measure 235 x 115 x 505mm and have slightly rough to relatively smooth sandy bases. A similar brick was sampled from context 91, and two fragments from context 88, one with sunken margins, seem to be similar.

These bricks may be dated broadly to the later 15-16th centuries, and type 1 might pre-date type 2. In general, they all seem older than the contexts in which they were found, and were presumably re-used. This was demonstrable in the case of the bricks from context 106, which have mortar on them; one has a worn edge as if re-used in a floor. The bricks in context 91 were found in a hearth and are both sooted.

The flooring bricks are of two main types: smaller ones measuring 210-215 x 95-100 x 50-55mm and slightly larger but thinner ones measuring about 240 x 110 x 45mm. The smaller ones are dense, well made and well fired and range in colour from cream to pink. They in turn may be sub-divided into two categories, though whether this signified a different source or date is uncertain:

A. predominantly cream to yellow, though sometimes pinkish, with crisp edges and sandy bases. Two have diagonal pressure marks.

B. cream to pink, with a streaky fabric suggesting they are made from a mixture of clays. They also differ from (A) in having less crisp arrises, more iron ore, and sand on top and bottom surfaces such that it is difficult to distinguish the two.

The floor in bay 1 was made of these smaller bricks laid on edge, whereas that in bay 2 (context 7) was made of the larger bricks laid flat. No bricks from context 7 were sampled, but similar bricks from context 11 and context 58 have been examined. They are cream-coloured and regular with a sandy base. Some have diagonal pressure marks.

Evidence for the use of specially made flooring bricks or pavers before 1700 is as yet wanting, and it seems reasonable to assign these bricks to the 18th century or later. The larger ones look as if they may have been contemporary with the insertion of the partition between bays 1 and 2, and therefore ought to be later in date.

Clay pipe

by Hilary Major

Five bowls and bowl fragments and 43 stems were recovered from the excavations. All those in reliably dated contexts belong in Period 2, mostly on the trampled surface of the clay floor (context 71) or in the bedding for the brick floors of phase 3. (Catalogue in Archive.)

Where identifiable, the bowls from this small group date to around 1700. The bowl rims are nearly parallel with the bases, rather than having the forward droop of 17th-century bowls, but they are still rouletted or lined, a practice largely discontinued after the introduction of technical changes in pipemaking around 1700 (Oswald 1975, 19). The mouthpiece from context 29 (within context 12) has traces of paint, which Harley (1963, 24) sees as post-1700. There are

no definite later 18th or 19th-century bowls in the group, and it is possible that all of the pipes were deposited during a fairly short time span.

Edible molluscs

A very small group of shell, consisting mainly of oyster, with one piece of mussel, came mainly from contexts beneath the clay floor of Period 2, and appears to be associated with the Period 1 occupation.

Discussion

The excavation of the floors has confirmed that the existing timber-framed building was constructed as a detached kitchen, serving the hall house fronting Great Yeldham High Street. However, the reappraisal of the standing structure has shown that the story is more complicated than was originally supposed.

The bulk of the pottery from the excavation predates the 16th century construction of the present building and indicates that there was occupation on the site from the 13th century onwards (Period 1). The earth 'floor' of Period 1 contained mainly 13th-century pottery, as did the interface between it and the overlying clay floor associated with the standing structure of Period 2, suggesting that an earlier building stood on the same spot. It is not possible to establish the nature of this building, or whether the re-used timbers in the existing structure were derived from it. If they were, the evidence from the tiebeam shows that it came from a frame which was larger, or at least wider, than the present structure. In view of the undecorated nature of the re-used timbers, it can be suggested that this earlier building had a utilitarian use and could have been the original, probably square, detached kitchen associated with a medieval house. The surviving hall house is thought to have been built *c.* 1400 and would have been served through the 15th century by a detached timber-framed kitchen standing on or near the site of the present structure. This building may have been associated with the earth 'floor' of Period 1. It was then replaced, perhaps after destruction by fire, by a narrower 3-bay kitchen on a similar alignment, re-utilising some of the timbers. The postholes (context 180) would have contained sizeable posts which could have formed part of this earlier building. Whatever their date or function, they must have been removed before the 6-stake structure (assigned to Period 2) was in use.

It becomes apparent that the ceramic and structural evidence conflict, and that there is a considerable gap in the sequence between the earth 'floor' of Period 1, with its 13th-century pottery, and the construction of the 3-bay kitchen *c.* 1500. The virtual absence of 14th/15th-century pottery may be due to the centre of activity being elsewhere, in the unexcavated areas of the site. Another possibility, and perhaps a more plausible one, is that the 14th or 15th-century deposits were removed when the site was levelled to build the Tudor kitchen.

In Period 2 the kitchen phase appears to have lasted about 100 years. The first substantial clay floor would have been laid once the frame was in place and, in view of its thickness, may also have served as a levelling layer. No late 15th or 16th-century pottery was found in the construction level beneath the floor. The builders, unlike their modern counterparts, appear to have been remarkably tidy.

Two main hearth areas can be identified on the clay floor in bay 1, which was clearly the kitchen: (1) on the east side, the earliest hearth was lined with a broken medieval quernstone; the later hearth (context 85) had three stages, the last containing 15th-16th century bricks; (2) in the centre of the bay two successive hearths were identified, with late medieval sherds in the stratigraphically later one (context 144). However, if the building was not put up until 1500, these sherds must be residual and do not, as originally believed, constitute dating evidence for the hearths. The third hearth in this bay (context 104) seems rather too near the west wall of the standing structure to be practicable, and it is not surprising that the wall studs show sooting at this point. These open hearths, some deeper than others, would no doubt have had differing functions such as roasting, baking and boiling, for cooking the various foodstuffs which would need different treatment and different cooking utensils.

The paucity of ceramic evidence in this phase makes any precise dating virtually impossible, but the sequence of two clay floors (contexts 130 and 101) in bay 1, associated with successive hearths, would suggest that the kitchen lasted throughout the 16th and into the 17th century, until such a time as the main house was equipped with an integral kitchen. Fire hazard in timber-built kitchens of this type would have been considerable, and in this case there seems to have been no provision in the roof over the hearths for smoke (and sparks) to escape. Indeed the walls as well as the roof were smoke-blackened, and only the gablet at the north end provided an outlet for the smoke and heat from the kitchen.

The 6-stake structure (contexts 120, 134-8) in bay 2 assigned to the kitchen phase could, it is suggested, be seen as the legs supporting a trestle table onto which food was put before and after cooking in bay 1: raw food brought in on the east side from bay 3 (the storage and preparation area?) would be placed on the eastern half of the board; after cooking, the food would be placed on the western end, to be carried out to the house through the doorway in the west wall. Some modifications and changes would have been made in kitchen furniture over a century of use, but the main hearth areas appear to have remained constant. It should be remembered, however, that only about 60% of the building was excavated and that further

information as to function in all phases may exist in the unexcavated part.

The post-kitchen phase had few features assigned to it originally by the excavator and is defined mainly on the evidence of the kitchen having gone out of use. The addition of a fourth bay to the south and the laying of a third clay floor covering the kitchen hearths took place during this phase (Period 2, phase 2). The large pit (context 87) in bay 1 may represent a hearth but lacks convincing burnt material. The hearth(s) in bay 2 (contexts 86, 110) were tentatively assigned by the excavator to a late phase of the kitchen but, if a trestle table existed then, the hearth(s) must post-date it and belong to a time when the doorway in the west wall had ceased to be used. The hearth(s) seem too near the west wall unless there was some sort of chimney, and the studs are not sooted like those in a similar position in bay 1 close to a hearth (context 104). It has been pointed out (Wadhams unpub.) that some detached kitchens were converted into bakehouses after the provision of an integral kitchen in the main house and it is suggested that the brickwork of context 86 could represent the remains of a demolished domestic bread oven.

Little is known about the early part of phase 3 except that brick floors were laid and the bays were partitioned. At some point the cill beams were raised onto brick. The floor bricks in bay 1 have been dated to the 18th century and those in bay 2 to the 18th-19th century, but the bedding indicates that brick floors were laid simultaneously over both bays: new bricks in bay 2 and re-used bricks laid on edge in bay 1. Bricks would be laid on edge to provide extra strength and reduce wear on a floor as, for example, in a stable. However the differing alignment of the bricks in bay 1 is puzzling and may reflect the use of this bay in the 18th century. The clay pipes, which were all found in or under the bedding for the brick floors, indicate that these floors were laid in the first half of the 18th century and probably no later than *c.* 1750. After some 200 years of use they had become very eroded, particularly in bay 1 where subsidence round the sides was also a factor. By *c.* 1840 onwards it is known that the Jephsons were using the building as a store, dealing in groceries, tea and beer. It seems likely that this function may have begun earlier, in the 18th century. One can envisage the weight of ale casks causing heavy wear on a soft brick floor already undermined round the edges, where the timbers may have rotted and rodents had burrowed extensively. The major repairs to the floor in bay 1 appear to have taken place in the 19th century and the brick footings may also date from this time. It seems logical to interpret bay 1 as the beer store, being at the cool north end of the building. It also seems likely that this bay was used as an ale store from the beginning and that the floor bricks were laid on edge to reduce the wear caused by heavy casks.

The brick-lined feature (context 34) in the corner

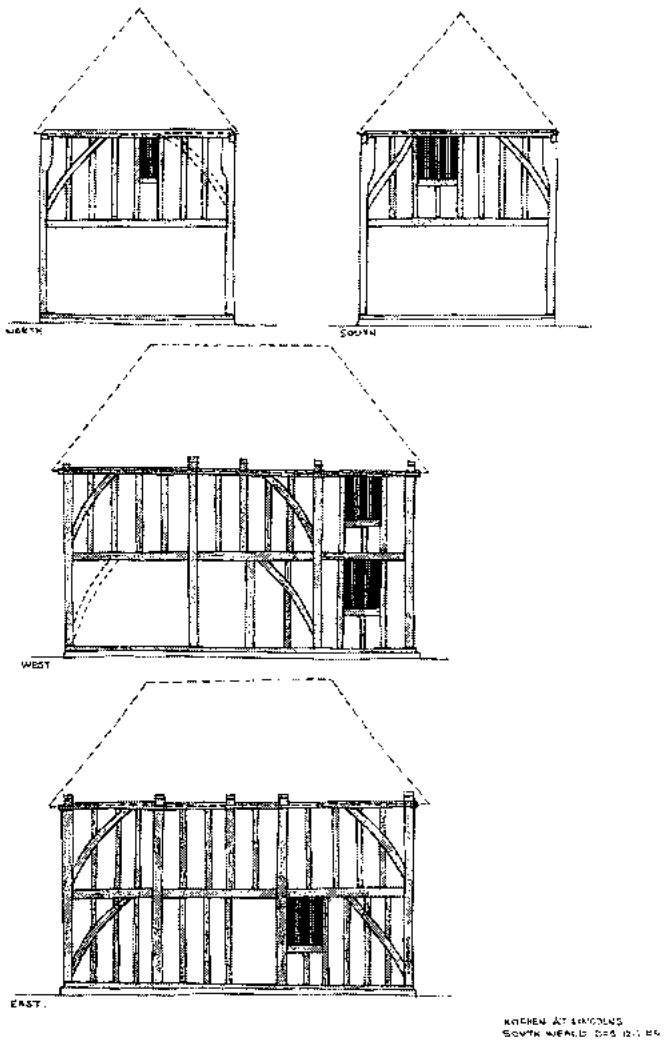


Fig. 8 Lincolns, South Weald. Timber frame survey.

of bay 1 and the plinth in bay 2 could have been bases for coppers, similar to one surviving in bay 3 in the south part of the building, or perhaps for a heating stove. It would not have been necessary or advisable to have had a heating stove in the beer store, but a copper for boiling water would be another matter.

Detached kitchens have been known for some time from surviving examples in large houses or monastic establishments. The best known medieval kitchens are square or polygonal buildings like those at Glastonbury or Fontevrault, with central chimneys. Square buildings are also found lower down the social scale, as is shown by a square timber-framed kitchen at Braxted Hall (Hewett 1980, 209). A relatively common type, well illustrated by an example at Lincolns, South Weald (Figs 8 and 9) comprised three bays with one end bay partitioned off and having an upper storey which served for storage or sleeping. A good parallel for the Great Yeldham building is a kitchen at the Old Stores, Chappel, which is also rectangular and single storey (Fig. 10). Although virtually nothing is known of the internal arrangements of these buildings, it is a

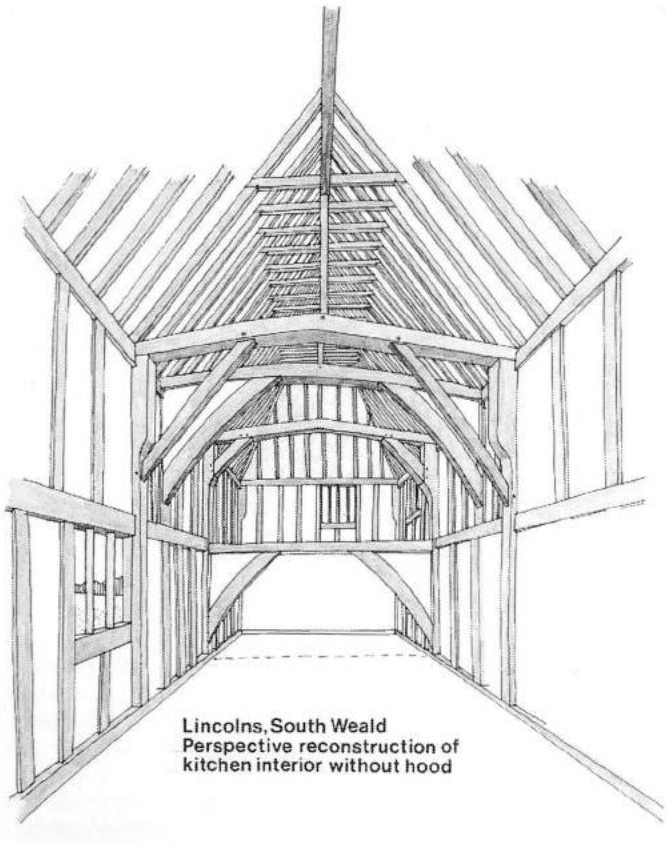


Fig. 9 Lincolns, South Weald. Reconstruction of kitchen interior.

puzzling feature of the Great Yeldham example that it did not have (in the excavated area at least) a well-built open hearth made of brick or peg-tile, of the type well known from excavations in medieval halls and service rooms.

Research in recent years has shown that many smaller houses had detached kitchens. Sixteenth-century surveys in Essex and Sussex show that a high proportion of houses (up to a third at Ingatestone and a quarter at Felsted) had detached kitchens. A manorial survey in Sussex of five parishes shows that a third had detached kitchens (Wadhams unpub.). More than twelve surviving examples are known in Essex to date; none have been excavated apart from Great Yeldham, and that only partially. In East Sussex, excavations at the moated site of Glottenham (Martin 1989, 94-7) have identified the remains of a badly damaged building (Building 2) thought to be a detached kitchen dating from the 12th-early 13th century (Period C). This timber-framed building was almost square (9.5 x 8.5m); the stone ground walls had been robbed out and the slightly raised floor was either too damaged or unavailable for excavation. A large surface midden was found outside the building which contained material indicating that the structure was a kitchen. This building could have analogies with the earlier (13th-14th century) building at Great Yeldham, though probably built on a larger/grander scale. It is clear that more excavation in conjunction with further study of

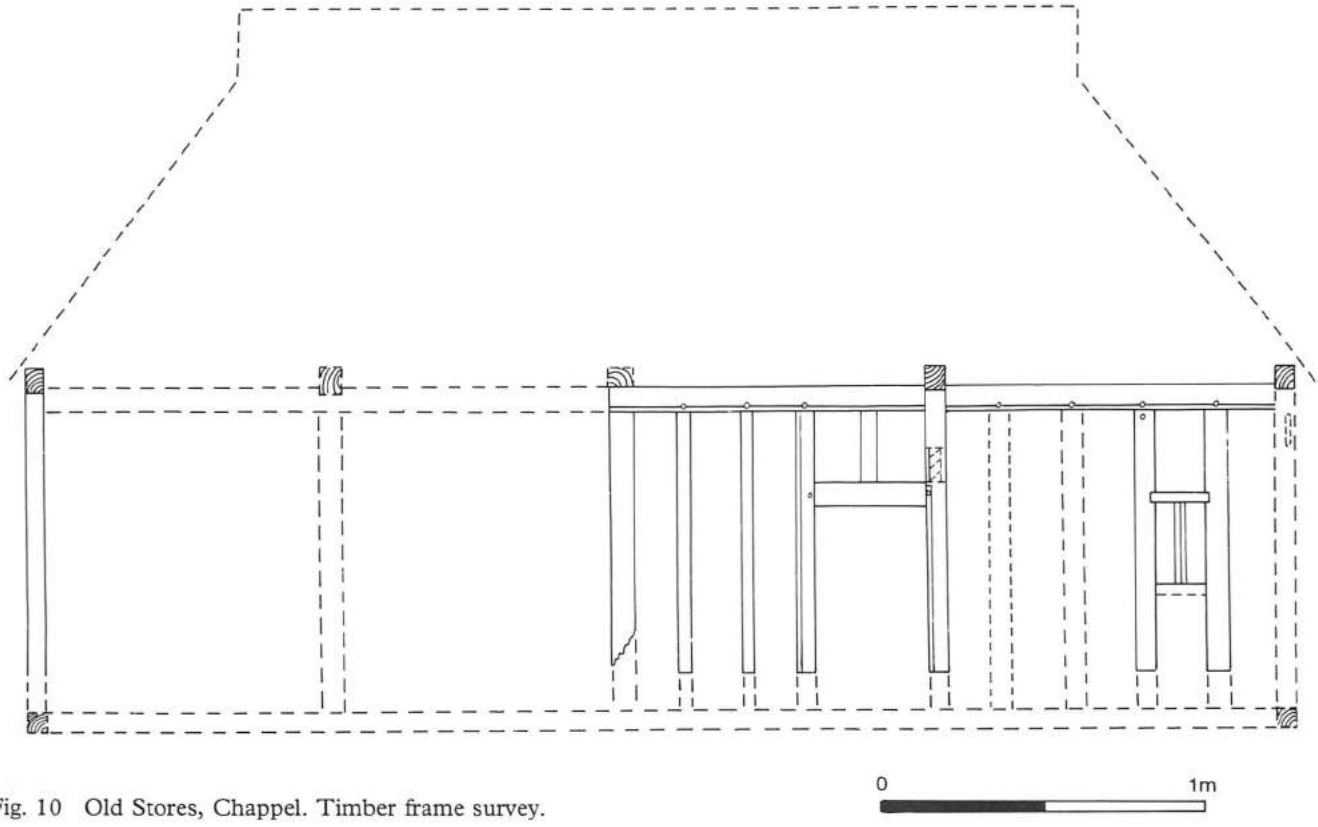


Fig. 10 Old Stores, Chappel. Timber frame survey.

the surviving structures is needed. It is to be hoped that the work at Great Yeldham may help to stimulate research into this particular group of domestic buildinngs, with their interesting aspects of food, cooking, utensils and furniture, about which little appears to be known, during medieval and Tudor times.

Acknowledgements

Thanks are due to all those who have contributed to this joint project, to D.F. Stenning, D.D. Andrews and the late Mike Wadhams for their study of the building, to Hilary Major, Helen Walker and D.D. Andrews for reporting on the finds, and to Pat Ryan for historical information. We are indebted to Roger Massey-Ryan for the illustrations, to D.F. Stenning for the drawing of Lincolns, South Weald and to R. Shackle for that of the Chappel kitchen.

Appendix

Description of the outbuilding at Great Yeldham

by D.D. Andrews and D.F. Stenning

The building measures 14.4 x 5.16m (47ft 3in. x 16ft 11in., or effectively one rod), being four bays long and single storey (Fig. 3). It is timber-framed and weatherboarded, though in places the walls have been rebuilt in brick, with a modern tile roof which is hipped at each end (Plate I). It is divided by a partition wall at its central truss into two separate ownerships.

The majority of the frame consists of re-used timber (probably 14th century). The most conspicuous evidence for this are studs with trenches for braces, rafters with trenches for collars, and the tiebeam in the northern half of the building. The latter clearly came from a larger structure, presumably an open hall, and has empty mortices for braces either side of those filled by the existing arched bracing, and also empty mortices on its upper surfaces for down braces located to either side of the existing ones (Fig. 3). The promiscuous use of reclaimed material makes it difficult to identify the original features of the building and to date it.

It is necessary in publishing the building to observe first of all that the southernmost bay is an extension. The smoke-blackening which is a feature of the roof does not extend into this bay, nor does the collar purlin of the crownpost roof which has a neatly rounded-off end located over the southern tiebeam. (Although this tiebeam has mortices in its soffit for a partition, it has to be admitted that above it there are no obvious traces of infill.) The principal posts of this truss have (or had) the distinctive angle braces present at the northern corners of the building suggesting that it originally ended at this point, and on the east side where the wall plate survives, that in the southernmost bay has been crudely tacked on to the timber to the north. The rafters have been re-arranged in the southern bay, but they include two rafter couples which have pairs of collar trenches suggesting that the extension had from the first a hipped roof as it does today.

Thus, as originally constructed, the building was three bays long with a hipped roof and gablet at the north end. The gablet served for the emission of smoke from the hearths found by excavation in the north bay where the walls as well as the roof were smoke-blackened. The southern bay was probably partitioned off. The existing dividing wall includes old timbers, and although the existing infill makes it difficult to examine the mortices in the soffit of the tiebeam, it looks as if there was always a wall in this position.

The only unquestionably original aperture is a diamond-mullion window in the east wall of the north bay. The existing door in the west wall adjacent to the partition wall may well mark the position of an original one, as may that facing it in the east wall. It is conveniently located, almost opposite the cross-passage door in the hall house and close to the well in the yard between the outbuilding and the house. An empty mortice in the soffit of the wall plate over the door would imply that there was never a door here, unless the wall plate is re-used. This is quite probable: in the north wall (rebuilt in brick and today removed so that the building can serve as a garage, but reconstructable from empty mortices) and in the east wall north of a scarf joint, the wall studs are set at slightly narrower intervals, implying that the wall plates in these parts of the building were made from new timber and those elsewhere were of re-used material. There may have been a door in the original south wall before the building was extended. Reconstruction of the framing beneath this tiebeam reveals two over-sized studs secured with two pegs which look like doorposts. It is uncertain, however, whether they relate to the use of the original building of which the tiebeam formed part, or to the existing one in which it has been re-used.

The main features useful for dating the building are the following:

(1) the edge-halved scarf join in the east wall plate, of a type known to have been used after *c.* 1375 (Hewett 1980, 267) and which went out of use in the 17th century.
(2) the straight short internal braces between the wall plates and the corner posts, which are rather unusual and suggest a late date, perhaps in the 16th century.
(3) a thin board-like brace between the crown-post and collar purlin on the central truss. This is set in a mortice too large for it, and therefore seems contemporary with the erection of the building and not re-used like most of the timber in the roof. It too suggests a 16th-century date.

Even when viewed together, this evidence does not constitute a very precise indication of the building's date, except to show that it is relatively late and probably 16th century. The addition of the southern bay may be assigned to the 17th century, as the rafters and few surviving studs look no later than the first half of that century.

The building underwent major alterations in the 18th-19th centuries. A partition (removed in 1988), with splay-jointed and nailed studs which were boarded over, was inserted beneath the northern tiebeam. This meant that the building was probably partitioned off at each bay, though there seem to have been interconnecting doors throughout. The south two bays of the west wall were rebuilt in brickwork that looks late 18th to early 19th century. A copper and chimney, both surviving, were provided in the second bay from the south (bay 3) which was clearly used as a washroom. In the 20th century, the north wall was renewed in brick, and the south half of the southernmost bay was rebuilt in brickwork so that it became separated off from the rest of the building.

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Beyond the 'Morant Canon' II: some Essex Parish Historians

by W.R. Powell

Few Essex parish histories were published before 1850. Such work, involving much drudgery and little financial reward, was particularly uninviting in times when archival services were lacking, travel was expensive and dangerous, and when there were few public libraries and none of the cheap guides to sources, dates, palaeography, and linguistics that are available today. The local historian, before venturing into print, needed a wealthy patron or at least a list of promised subscribers. Thomas Fuller's *History of Waltham Abbey* (1655), is dedicated in sycophantic terms to James Hay, earl of Carlisle, the lord of the manor. Fuller, better known for his *Worthies of England*, was then incumbent of Waltham. His *History* is the first Essex monograph to appear in print. Containing no more than 22 pages, it is mainly concerned with the Augustinian abbey, while providing a little further information on the post-Dissolution history of the church, and on the town and parish of Waltham.

Our earliest parish history, in the full sense, is **The History and Antiquities of Harwich and Dovercourt, Topographical, Dynastical and Political** (pp. xxiv + 464), published in 1730 and reprinted in 1732.[1] The title page explains that the work had been 'first collected by Silas Taylor alias Domville, Gent., Keeper of the King's Stores there', and had been 'Now much enlarged in all its Parts with Notes and Observations relating to Natural History,' by Samuel Dale, who figures as the principal author. The book was printed in London for C. Davis in Paternoster Row, and T. Green over against the Muse at Charing Cross.

The career of Silas Taylor (1624-78) has already been described in this journal.[2] He had been posted to Harwich in 1665 and served there until his death. In the 1650s, while living in Herefordshire, he had collected material for the history of that county, and in 1663 he had published a *History of Gavelkind*, with help from Thomas Barlow, provost of Queen's College, Oxford, and librarian of the Bodleian. Taylor's draft history of Harwich was compiled about 1676, and was left in manuscript at his death.[3] During the following years it was used by several topographical writers, including Richard Newcourt in his *Repertorium Ecclesiasticum Parochiale Londinense*.[4] Some years after Taylor's death his manuscript was borrowed and transcribed by Samuel Dale; what later happened to the original is not known.

Dale (1659?-1739), who came from Whitechapel, had moved to Braintree *c.* 1680, practising there as an apothecary and later as a licentiate in medicine.[5] He became an authority on botany and geology, and also assisted William Holman in collecting material for his projected history of Essex. He published *Pharmacologia* (1693), and contributed to the Royal Society's *Philosophical Transactions* items on various subjects, including the fossils of Harwich Cliff. Having made a copy of Taylor's 'History of Harwich', says Dale:[6]

> Afterwards, whatever I found in my reading relating unto Harwich, I transcribed into the left-hand page of my copy (the original being only written on the right), and thus I contrived to do for divers years without any view or design of publishing them myself, not being without hopes, that they might be of some use to a better hand, who might undertake the publication of a general history of England, or a particular one of this county; for which cause I never declined lending them to any of my aquaintance ... but after a long waiting without effect, besides, years encreasing upon me, and being loth that they should be altogether buried in oblivion, by their being after my decease torn to pieces as waste papers, or destroyed by mice and vermin; I resolved to send them abroad myself.

Dale's editorial skill gives the *History of Harwich* a professional polish. The book is very well produced, especially in the large paper edition. It is dedicated to Sir Hans Sloane Bt., president of the College of Physicians and of the Royal Society, 'in grateful acknowledgement of many favours.'[7] In the introduction (page v) Dale explains that he has preserved Taylor's original text, 'printing it on the upper part of the several pages', with his own additions as footnotes in smaller type and double-columns. A long Appendix is mainly devoted to Dale's researches into the local fossils and plants. There are fourteen illustrations, including six good topographical views by R[obert] Sheppard, an engraver known to have worked at this period for London booksellers.[8] The views contain explanatory notes on features of interest. One of them, depicting Harwich promontory from the Cliff, has in the foreground a seated figure making notes, perhaps Dale himself (Plate 1). The brief index is of little use except for natural history. But the Bibliography (pp. xiii-xxiv) is impressive. It is clearly the work of Dale, and lists many recent books.[9] While there are no items particular to Essex, there are many general works on archaeology, history, genealogy, ecclesiology, and topography, including Thomas Gale's *Antonini Iter Britanniarium* (1709), Thomas *Madox's Firma Burgi* (1726), Arthur Collins's *Peerage of England* (1710), and Edmund Gibson's edition of

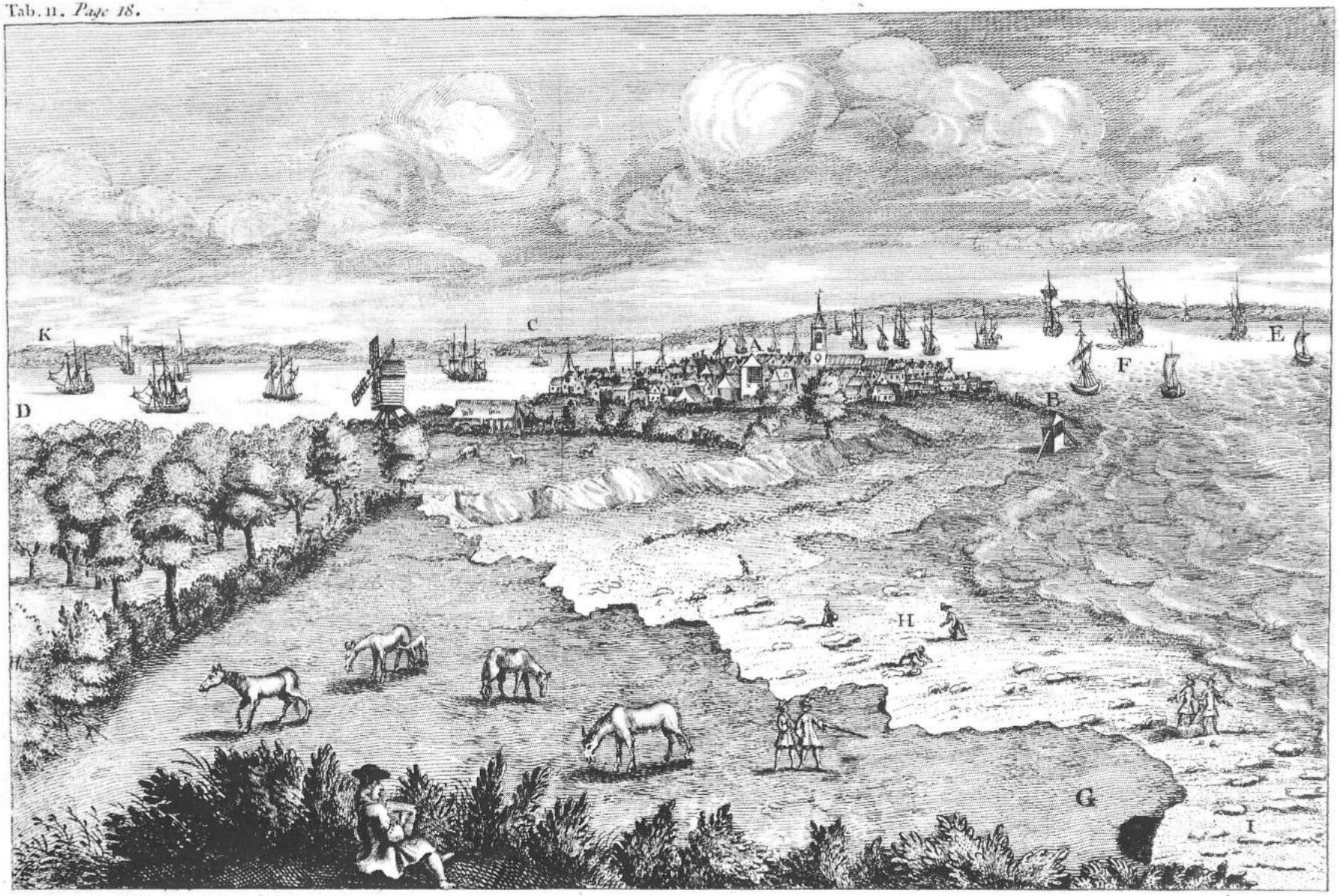

Plate 1 View of Harwich from the Cliff. From the *History and Antiquities of Harwich and Dovercourt* by S. Taylor and S. Dale, 1730.

Camden's *Britannia* (1695).[10] Dale also lists several local histories for places outside Essex. Among them are White Kennett's *Parochial Antiquities of Ambrosden* (1695), a notable pioneer work which may have served as a model for *Harwich*; John Lewis's *History of the Isle of Thanet* (1723) and *History of Faversham* (1727); and John Morton's *Natural History of Northamptonshire* (1712).[11] Older works include Sir Richard Baker's *Chronicle of the Kings of England* (1643), John Weever's *Ancient Funerall Monuments* (1631), and Dugdale's *Monasticon Anglicanum* (1655).[12] Dale's footnotes to the text cite many sources additional to those in the Bibliography.

Samuel Dale, though he never resided at Harwich, had often visited the town[13] and was able to describe recent events like the 'great tide' of 1723, when men rowed up West Street to the 'Spread Eagle' alehouse and drank beer sitting in boats, and the thunderstorm of 1728, which shattered the windmill.[14] He provided information on local government and Parliamentary representation,[15] and on the local water-supply.[16] He sturdily defended Harwich's good name, for example in refuting Defoe's criticisms, in the *Tour through Great Britain*, of the town's inns and packet boats.[17] But he was not himself uncritical. He complained that some of those from whom he had sought local information had been unhelpful, and added:[18]

> Nor am I alone herein, it being the complaint of divers antiquarians that when they have waited on certain gentlemen to enquire some things relating to their ancestors, predecessors, or something about their estates, they have been looked upon as persons that had some ill design upon them.

While much of Dale's information on recent events may be second hand, he also writes from personal experience. When describing coastal erosion at Beacon Hill, he adds:[19]

> This I was an eye-witness to in the summer of 1698, when having with two gentlemen been viewing the said cliff, we were but a little removed from the place where we were, but a great quantity of earth fell down: and within the compass of about forty years, since I first viewed this cliff, there have been some acres of land fallen down.

Dale fully acknowledges Silas Taylor's part in the *History of Harwich*. Besides naming him on the title page and distinguishing his original contribution from the new material, he reprints (pp. viii-xii) the excellent memoir of Taylor, by his friend Anthony Wood, from *Athenae Oxonienses*. Taylor's narrative grew out of an intimate knowledge of the town during one of the most eventful periods of its history, when it was a naval base and dockyard during the North Sea Battles of the Dutch Wars. While officially designated as the storekeeper he was also a prize agent, recruiting officer, military engineer, commander of the local defence force, and, not least, intelligence officer, reporting directly to Whitehall. He recalls (p.100) the dramatic view from Beacon Hill, on 22 July 1666, when the Dutch battle fleet sailed past, pursued by the English fleet. He describes the dockyard, lists the warships built there between 1666 and 1674, and mentions the postal services to London, and the packet-boats to Holland (pp. 236-41). In 1673 he had become a capital burgess of Harwich — a member of the governing body — and thus had ready access to the borough records. In chapter four of the *History* he provides information on local government, including the borough charters, and the building, in 1674, of the new town hall in Church Street. He devotes several paragraphs (pp. 231-2) to the heraldry of the municipal fire-buckets. It was then the custom for a newly-elected freeman of Harwich to present a leather bucket, suitably inscribed, to hang in the town hall. Taylor proudly describes his own bucket, along with those of Christopher Monk, duke of Albemarle, and Col. Sir Charles Littleton, Bt., governor of Landguard Fort.[20]

Taylor, like most local historians before the 20th century, devotes much space (in chapter three: 'Despotical and Dynastical Concerns') to the manorial descent, starting with Domesday Book. Since the manor passed in a succession of noble families, it was easily traced through such works as Dugdale's *Baronage* and Camden's *Britannia*, which are quoted. But Taylor also refers occasionally to unpublished sources, including (p. 147) 14th-century court rolls then among the borough records. His first chapter ('Topography') includes a valuable perambulation of the town, with its walls, gates, streets, quays, bulwarks, beacon, lighthouses, and principal buildings, as well as sections on St. Nicholas's chapel (where the sepulchral monuments are described in detail), and Dovercourt parish church. In these church sections some information is drawn from the 16th-century churchwardens' accounts. In chapter one, and also in chapter two ('Natural Accidents and Productions'), Taylor makes some interesting observations. He notes (p. 27) that the people of Harwich have 'a great conveniency ... by the situation of our port, to purchase Newcastle coal at indifferent rates.'[21] He mentions (p. 87) Dovercourt elms 'strong, knurly, and knotted and crooked ... famous for their several uses in husbandry, which with using wear like iron ... it is said they will not grow out of this place.' The blue clay from Harwich Cliff, which dries rock-hard, has been used to build the town walls and pave the streets (pp. 101-2). The Cliff also yields copperas, which is processed locally (pp. 110-11)[22]. Harwich kitchens are well supplied with both fowl and fish, including 'a dish of well-ordered sturgeon' (p. 113). On this last reference Dale comments: 'What the Harwich sturgeon was or how it was well-ordered, is not at this day known there.' In his last chapter ('Historical Concerns'), Taylor mentions several royal visits to Harwich (pp. 249-50), including those of Henry VIII, Elizabeth, and Charles II. He does not mention in the *History*, what is known from his official dispatches[23]: that he himself played host to Charles II, whose visit

took place on 3 and 4 October 1668.[24] That was probably Taylor's finest hour, and his *History* ends there.

At Harwich, as elsewhere, a good parish history has inspired later writers, who have been particularly concerned with naval and maritime affairs. J.H. Leslie, whose *History of Landguard Fort* appeared in 1898, was a soldier who had himself served in the fort. Frank Hussey's *Suffolk Invasion: the Dutch attack on Landguard Fort, 1667*, published in 1983, makes use of Dutch as well as English sources. Mr. Hussey's history of the *Royal Harwich Yacht Club* appeared in 1972, and B.C. Hughes's *History of Harwich Harbour* in 1939. Harwich's development as a seaside resort goes back at least to 1753.[25] This aspect of the town's history has received relatively little attention, probably because Harwich was eventually overshadowed by neighbouring resorts like Felixstowe and Clacton. But it has produced one unusual and charming book, W.H. Lindsey's *A Season at Harwich* (1851). This might be described, in modern terms, as a 'drama documentary'. It is the story of a fictional family party which visits Harwich on holiday, samples the local recreations, and receives instruction from a learned acquaintance on the antiquities of the district. At that time the railway was about to be extended to Harwich[26] and Lindsey probably hoped that his book would appeal to a new generation of visitors.

In 1932 Harwich borough council published a *Calendar of Muniments of the Borough*, with recommendations on the custody, arrangement, and repair of the records. This owed much to expert help and advice from the Suffolk historian Lilian J. Redstone, who had received her early training on the staff of the Victoria County Histories.[27] The muniment committee which produced it included Mr Leonard Weaver, a young history teacher from the high school. He later published *The Harwich Story* (1975) and *Harwich: gateway to the Continent* (1990). He was the last mayor of the old borough before it was merged in Tendring district, and in 1994 was still active as honorary archivist to the town council.

A mid-Victorian parish historian who deserves to be better known is William Palin (1803-82), author of **Stifford and its Neighbourhood** (1871) and **More about Stifford and its Neighbourhood** (1872). A graduate of Trinity College, Cambridge, he had come to Stifford in 1833 as assistant curate, and was rector from 1834 until his death.[28] He was founding editor of the *Churchman's Magazine* (1854-8), contributed to other church periodicals, and published several devotional books and works on hymnology and church history. He restored Stifford church, and served as a justice of the peace. He is described as 'a little peppery old man'.[29]

Palin seems to have planned his history as a single volume, but to have divided it into two at a late stage. In the following account the combined work is referred to simply as *Stifford*, and as volumes one and two respectively. It was printed privately by the author for some 250 subscribers, who included, among many clergy, the bishops of London and Rochester, the archdeacon of London (William Hale, the antiquary) and the archdeacon of Essex (Carew St. John Mildmay); among nobility and gentry, Lord Rayleigh, Sir Antonio Brady of Stratford, Edgar Disney of Ingatestone, George H. Errington of Lexden Park, Andrew Johnston, M.P. for South Essex, Lewis Majendie of Hedingham Castle, and Sir Thomas B. Western of Kelvedon. Subscribers from the Essex Archaeological Society included the Rev. E.L. Cutts, our first honorary secretary, James Round, M.P., honorary treasurer, and Frederic Chancellor, a future president. Also subscribing were the London Library, the London Guildhall Library, and the Liverpool Corporation Library. The first volume was dedicated to Richard B. Wingfield Baker, lord of Stifford manor and patron of the rectory, and the second to the bishop of Rochester (Thomas L. Claughton) whose diocese then included most of Essex.

Stifford is much wider in scope than its titles suggest, for it deals with no fewer than twenty parishes (twelve in Barstable hundred and eight in Chafford hundred), in a region of south Essex extending from Rainham to Corringham. Palin explains in the Preface to volume one his original motive in undertaking the work.

> 'Burn 'em! What good?' said two official persons connected with Little Thurrock some years ago (neither there now) as they leaned over the well-stored parish chest. And they did 'burn 'em.'[30] This is possible elsewhere, and suggested the present volume, the author wishing to be beforehand in looking over parish chests, as he has been kindly permitted to do.

Stifford volume one (pp. xvi + 184), contains a 'General View' of various topics for the whole region. Then follow accounts of Stifford and thirteen other parishes, and an appendix listing the rectors of Stifford. Volume two (pp. xi + 167) contains six more parishes; supplementary notes on the original fourteen parishes; an essay on the geological history of the region; an account of the ancestry of Launcelot Andrewes, bishop of Winchester (1555-1626) and his connexion with Horndon-on-the-Hill; and a history of the Lennard family of Aveley. The volumes are mainly concerned with the churches and their clergy, the manors and their owners. Information on other matters is scrappy and superficial. The indexes are useful only as tables of contents. There are many illustrations, some excellent (Plate 2).

Stifford contains many contributions, printed verbatim, from writers other than Palin himself. Thirteen churches were described by Henry W. King, honorary secretary of our Society, from his notes made between 1854 and 1859.[31] Up-to-date accounts of three churches, including Stifford, were written by

Alfred Heales. For three other churches Palin prints no description, but refers his readers to George Buckler's *Churches of Essex* (1856). For North Ockendon church he reprints part of Alfred Suckling's account of *Memorials of Essex* (1845), adding ingenuously 'We reluctantly omit much of it for want of space.'[32] Notes on the descent of New Jenkins in Mucking (i. 114; ii. 49) were supplied by George E. Adams, then Lancaster Herald, who, under his later name of G.E. Cokayne, was compiler of the *Complete Peerage* and a close friend of Horace Round.[33] 'Feudal notes of Stifford and the Thurrocks' were written by Katharine, daughter of the well-known Elizabeth Fry.[34] She was a member of our Society and contributed three papers to early volumes of the *Transactions*.[35] She was also an artist, and two of the illustrations (ii, facing pp. 97 and 132) were taken from her sketches: one of them, depicting South Ockendon church, had been made in 1820.

An account of Essex cottages (i. 43-5), by E.S. Corrie, was reprinted from our Society's *Transactions*.[36] James Blomfield's *Charities and Antiquities of Orsett* (1864) was quoted at length (i. 156-8, 160-4). Edward J. Sage furnished transcripts of Aveley wills (ii. 85-8). He was the noted antiquary whose Collection is now in the Essex Record Office.[37] Roman remains at West Tilbury, and deneholes at Little Thurrock, were described by Lloyd Williams of Grays, solicitor and amateur archaeologist (i. 106; ii. 38-9). The pedigree of Poyntz of North Ockendon (ii. 127) was supplied by George Harrison, Windsor Herald. An ancient funeral custom in that parish was described by a former curate there (ii. 116). An account of British and Roman remains in the same parish (ii. 118) was quoted from our *Transactions*.[38] A list of Roman remains from Grays came from the Geological Museum in Jermyn Street, London, to which they had been presented by Richard Meeson, former owner of the brickfields (i. 80).[39] The 'History of the Lennard family,' (ii. 13-22) and notes on Belhus in Aveley (ii. 81-4) came from a manuscript written by Thomas Barrett-Lennard, Lord Dacre (d. 1786), and lent to Palin by Henry Barrett-Lennard.

The essay on geological history (ii. 1-8) was written by Henry Palin Gurney, then a young fellow of Clare College, Cambridge. He was later a partner in the well-known London firm of Wren & Gurney, examination crammers, and principal of Armstrong College, Newcastle-upon-Tyne (now the University). He was probably related to William Palin.[40] Among the illustrators were the author's daughter Frances E. Palin[41] and his son William Long Palin. Frances Palin probably did much more than this, for according to William Palin's biography the *Stifford* volumes were compiled by him and his daughter.

The *Stifford* volumes are embellished with poems by the Rev. William E. Heygate, describing the Essex landscape, history, and village life. Most of them had previously been published in his collection entitled *The Fugitive* (1870).[42] Heygate was probably well-known to William Palin. He came of an old Essex family which had prospered as London bankers and merchants. William's grandfather, James Heygate, bought property at Southend.[43] His father, another James, settled at Porters, Prittlewell. William graduated from St. John's College, Oxford. He served as curate at Great Wakering, later at Hadleigh and Leigh, before becoming rector of Brightstone, Isle of Wight in 1869. He wrote many theological and devotional books and historical novels, and contributed to our Society's *Transactions*.[44] Among his novels is *Sir Henry Appleton, or Essex during the Great Rebellion* (1880), a copy of which is in our Society's library.

Most of Heygate's verses are pleasant, if commonplace (e.g. 'Laindon Hill', i.13-16; 'Essex', ii. 162-3). One, entitled 'Ye Moane of Mary of Billericai', (ii. 62-3), is pure bathos; it relates to the Peasants' Revolt, and is written in fake Middle English.[45] More original is 'The Old Essex Farm Labourer', which discusses, in Essex dialect, changes in village life during the narrator's lifetime, for example (i. 17):

> When I wor a boy, there wor one board for master and men,
> But I doan't count ever to see them back agen.
> If any lad then, what lived in the house, wor to break out
> Master had his eyes open and know'd what we wor about.
> If we wor steady, he'd say 'Here's a sixpence for you, my lad.'
> But now a young chap goes his own way, and that's to the bad.
> Yer works on the land;
> Yer nit a servant now-a-days, but what they calls a hand;
> Jist like a spade or a harrow, when they's holly worn out,
> Chucks 'em away for another tool, when they's good for nowt.

Equally effective, in similar style, is Heygate's 'Old Essex Church Clerk', from which Palin quotes a few verses, e.g. (i. 11):

> Our church was holly choked up, and every pew was a box,
> And every box had Jacks in it, as there are fleas in a fox;
> For all the gals was peeping over the side at the boys,
> Like bees in a bottle the church kept buzzing with their noise.
>
> The churchwarden he heerd nothing, for he war sound asleep;
> He never minded the boys, least they was keeping his sheep.
> First come my desk, then the parson's, the pulpit top o'that
> Like yer neck, then yer face, and then all over yer hat.
> We sang then in the gallery, with fiddle and clarionet;
> If yer'd once heerd our band, Sir, tain't likely you'd forget.
> If the parson should wish they'd change the tune by next
> Lord's day,
> They pops flute and fiddle in bags and goes right clean away.
> Bless yer, I could tell o' things yer would never think true,
> How they put their hats in the font and in the communion too;
> And how when the Westry met they took the old table out,
> Put on ink-horn and books, and sat the chancel round about.[46]

The part played by outside contributors in writing the *Stifford* volumes was so great that it would have been appropriate for William Palin to figure on the title-pages as editor rather than author. But his personal contributions are important. He knew the area well and he had wide interests. He had strong views and did not disguise them. While he was often out of his depth as a historian, he was a thoughtful, if sententious

Plate 2 Stifford: Bridge over the Old Ford, and Stifford Place. From *Stifford and its Neighbourhood*, by William Palin, 1871.

commentator on the changes that had occurred in south Essex during the past forty years.

One of Palin's main concerns was to defend the Church of England against the threat of disestablishment, then much discussed under a Liberal government which had just disestablished the Irish Church. He emphasises this in the preface to volume one (pp. v-viii). He claims to be 'of no party, or rather of all parties, sympathizing heartily with whatsoever things are true and honest, and of good report in all,' but asserts that the Church of England is part of the Constitution, and that disestablishment would be 'a heavy blow and discouragement to the highest interests of the nation.' He goes on:

> To mention one probable result, half of the country villages or more would relapse into heathenism, and become a terror to their neighbours. Religious nonconformists *cannot* desire this, *cannot* fail in the name of our common Christianity to resist it with all their heart and soul.

While resisting nonconformist attacks on the Church, Palin is staunchly Protestant, giving prominence to the sufferings of such Marian martyrs as Thomas Higbed of Horndon-on-the-Hill (i. 138-9; ii. 65), and Henry Wye of Stanford-le-Hope (i. 122). Like other topographical writers, including Arthur Mee in his 'King's England' series, he had found Foxe's *Book of Martyrs* a useful handbook. But Palin does not hesitate to criticise the failings of the Church of England. He notes (i. 19) that in the 18th and early 19th centuries many south Essex parishes had no resident clergy, and their pulpits were filled by itinerant curates. He goes on:

> Fifteen is the number of parsons estimated to have gone out of Billericay every Sunday morning for the services, such as they were, throughout the Rochford hundred. Our neighbourhood (except Stifford and some other parishes), and the hundreds of Barstable and Chafford generally were served by roving bands of clergy galloping out of Brentwood and Romford on Sunday morning.

Palin quotes in particular (i. 20) the case of the Rev. Henry Ellis (d. 1802), who served for about forty years as a curate, mainly in the Rochford hundred, before obtaining a small living. He also points out that a parish whose incumbent was long absent, for example Stanford-le-Hope (i. 121), tended to neglect its church building; and that such neglect might be aggravated by the indifference of the impropriator, as at Aveley (i. 169), where the Dean and Chapter of St. Paul's were slow to give financial aid.

Palin provides, for each parish, lists of incumbents, with biographical notes, and the names of patrons.[47] In no case is the list as complete, up to 1700, as that printed in Newcourt's *Repertorium*. But all the lists are brought up to date, and the biographical notes are valuable, especially for Stifford (i. 176-80), where they incorporate much research. In some parishes assistant curates are listed. For Stifford and a few other parishes there are extracts from parish records, mainly registers. In many parishes important funeral inscriptions are described, and in some, transcripts of wills.

William Palin was interested in the social condition of his parishioners, including pauperism and crime. He discusses these matters, with recent statistics, both in his 'General View' and in the Stifford parish section of the book. Writing before the agricultural depression of the later 1870s, he was optimistic, though not complacent.

> The tenant farmers are a thriving class at different rentals, averaging about 30*s*. per acre. The labourers are well paid at from 12*s*. to 15*s*. a week by the day, but earning very much more by piece-work ... and are generally as provident as, under the temptation of parish pay at all times to fall back upon, however drunken or otherwise improvident and vicious their habits, they can well be expected to be ... In consequence of the change in farming from fallows to winter crops, these wages are to be had, with few exceptions, throughout the year, besides the £6 or £7 for the harvest month (i. 16-17).

Palin points out, however, that more intensive agriculture was producing larger farms, and was destroying the close relationship between master and man described in William Heygate's 'Old Essex Farm Labourer', quoted above. He suggests that this might lead to militant trade unionism, rural depopulation, and the disappearance of local tradesmen and craftsmen, the classes from which parish officers were recruited. At the same time higher wages were making the farm labourers more independent and ambitious, and susceptible to the influence of agitators like the lads from the workhouse schools who had received 'an education far above the station they are to occupy, as well as beyond that which the honest, independent labourer can secure to his children, going to work much younger; and, thrown upon the labour market without any industrial qualification, take the lead generally in unbecoming assumption and insubordination' (i. 18). This is not the only passage in the book in which Palin criticises the Union workhouses as over-indulgent to paupers. He deplores especially the relief given to 'young harlots, who are made in every way to fare better in the Union House than the honest labourer's cottage,' and even suggests that prostitutes who become a burden on society should be punishable by law (i. 64 and note).

As a clergyman William Palin was more liberal-minded than he seems to have been as a magistrate. In describing the seating arrangements in Stifford church he notes that, before recent changes, the poor sat on old benches at the west end, while their masters occupied draught-proof box-pews. He comments: (i. 61)

> The Church has little hold on the lower class? How could it be otherwise? It will take generations to wear out the memories of such insults as those offered to them from the Reformation downwards in, of all places, the House of God. The iron has entered into their soul.

The *Stifford* volumes contain a little information on rural industries other than traditional farming: market gardening, supplying London, at West Tilbury, Horndon-on-the-Hill and Stanford-le-Hope; chalk quarrying at Stifford, West Thurrock, and Grays (i. 27-8, 70, 80); pottery and tile-making at Stifford (i. 65 note).

Markets are mentioned in some parishes. Palin disapproved of the market as 'a badge of villeinage' (since it usually belonged to the lord of the manor), and as liable to degenerate into a disorderly pleasure fair (i. 28-9). The latter objection was not uncommon among the governing classes at that period.[48]

Palin's remarks on the origin of place-names are of no value, since they merely repeat the unscientific guesses of Morant. His information on the sea-defences of south Essex comes mainly from Sir William Dugdale's *History of Imbanking and Drayning*,[49] but also includes material supplied by the local Commissioners of Sewers (i. 41-3, 46-7). Under Grays he states that the local gas supply was 'withdrawn from Lady Day to Michaelmas, moon or no moon' (i. 83). From his own memory Palin is able to recall the location and the disappearance, long ago, of Stifford Heath (i. 64).[50]

In his preface to volume one (page v), William Palin confesses that he had not originally appreciated that it would have taken half a lifetime to exhaust sources of information for twenty parishes. He has not attempted this. 'He has given more than his whole leisure of two years. There it must end.' It is a pity that he could not devote a few more months to editing the book and to making a proper index. But he was an old man, and fell seriously ill while completing the second volume (i, p. viii).

Stifford lacks the depth and the humour that make Philip Benton's *Rochford Hundred* a classic, but it is a lively reflexion of the author's personality and convictions. It is also notable as a work of collaboration. To recruit such a strong team of outside contributors shows that Palin was highly respected; to manage them and bring their work into print must have involved great labour. The book was well received. Some time after its publication William Palin wrote to a prospective purchaser:

> *Stifford and its Neighbourhood*: out of print, but I happen to have a copy at home, which may be had for 7*s*. 6*d*. and to correspond. Selling in London 10*s*. secondhand. *More about Stifford*: also out of print, but I have pleasure in giving a spare copy (having 2 or 3 left) to Sergeant Green.[51]

In spite of their faults and limitations the *Stifford* volumes have been very useful to later writers, including those engaged on the Chafford hundred parishes for the *Victoria County History*,[52] and Doreen Dean and Pamela Studd, whose *Stifford Saga* (1980) contains a note (pp. 154-7) on William Palin and his family, and depicts his memorial window in the church.[53]

The expansion of London into Essex in the later 19th century stimulated interest in the history of the places that were being so rapidly transformed, and provided a growing market for local studies. Katharine Fry, besides assisting William Palin, also wrote a *History of East and West Ham*. It was revised and published in 1888, after her death, by Gustav Pagenstecher, a local land agent, who received help, in East Ham, from Walter Crouch.[54] Miss Fry's book is a somewhat old-fashioned antiquarian study. More up-to-date is the *History of Leyton* (1894) by John Kennedy, a young local vicar.[55] William Chapman Waller's *Loughton in Essex*, a work of great learning and industry, was published serially in the parish magazine of St. Mary's, Loughton (1889-1900); a few bound sets were later made up. Waller was for many years a leading member of the Essex Archaeological Society.[56]

A History of Dagenham by J.P. Shawcross (Skeffington & Son, 1904, pp. xiv + 327) deals with another growing parish near London. John Shawcross (*c*. 1863-1929) was the son of a west-country parson.[57] He went up to Oxford as a non-collegiate student, and took a First Class in Theology in 1886.[58] After serving as curate of Holt in Worcestershire (1887-93) he came to Dagenham in 1893 as curate-in-charge of St. Chad's, Chadwell Heath, a new church serving the northern end of the parish. He became the first vicar of Chadwell Heath in 1895, and remained there until 1904. From 1901 to 1904 he also served as chaplain to Goodmayes mental hospital, which housed patients from West Ham. That work may have stimulated his interest in working with the poor, for his next appointment was as chaplain to the Winchester Union (1904-17). His last ministry, back in Worcestershire, was as vicar of Bengeworth, in Evesham (1917-25). He was elected a Fellow of the Royal Historical Society in 1916, and in 1927 published a *History of Bengeworth*.

Shawcross's *Dagenham* originated in a list of the vicars of the parish which he compiled for the *Chadwell Heath Church Monthly*.[59] Going on to further research, he examined the parish records and advertised for information.[60] Edward J. Sage, who had contributed to *Stifford*, allowed Shawcross to consult his large collection of manuscripts relating to Dagenham, including wills, court rolls, and a description of Parsloes manor house written in 1872 by H.W. King, another of Palin's contributors.[61] In designing and producing the book Shawcross owed much to A. Bennett Bamford, who furnished most of the illustrations and maps, helped to correct the proofs, and wrote an account of the Comyns family. Bamford (1859-1939) was a member of the Essex Archaeological Society already well known as a topographical artist and antiquarian.[62] Several of his Dagenham drawings were made especially for Shawcross's book. Of the others at least two had been made many years earlier: the Church interior before the restoration of 1878, and the Vicarage (1879).

In his preface (p. xiv) Shawcross quotes some words of Bishop Stubbs on the value of local history. William Stubbs had still been a professor at Oxford when Shawcross entered the university. Earlier, as vicar of Navestock, he had been one of the founders of the Essex Archaeological Society. Shawcross's quotation comes from a lecture on the study of history

given in 1889 to a university extension class at Reading.[63] In the preface to his collected lectures Stubbs says that his first experience of delivering such 'quasi-popular' addresses had been in Essex.[64] His belief in local history is encouraging. It was shared by two of his friends, both distinguished historians, E.A. Freeman and J.R. Green.

Shawcross's chapters on the parish church (pp. 36-122) contain much original information, including an account of the rebuilding of 1800-05, after the tower had collapsed onto the nave. Of particular interest is the local Act of Parliament by which the work was financed. The list of vicars, besides supplementing Newcourt, provides many new biographical details, for example on William Butler, vicar 1719-36, who was a popular preacher, in London as well as Dagenham. He specialized in funeral sermons. Says Shawcross (p. 86):

> More saints and worthies departed this life during his vicariate than at any other period in the annals of the parish — in one year fourteen persons were honoured with sermons of this character. Whether this was a mere coincidence, or whether Mr Butler had the rare faculty of detecting the hidden virtues of his flock, we cannot at this point of time determine.

The details of Butler's career are particularly welcome, since he does not figure in the *Dictionary of National Biography*.

Shawcross lists many assistant curates, from the 16th century onwards, in a chapter that must have required much research in the parish records. The most notable was John Langhorne (1735-79, curate 1761-4), poet and classical scholar.[65] From Dagenham he moved to London 'for the convenience of his booksellers.' A chapter on the church monuments records several 16th-century inscriptions which disappeared in the rebuilding of 1800-05. Among those surviving are the altar tomb of the Yorkist grandee Sir Thomas Urswick (d. 1479), of Marks;[66] the mural of James Harvey (d. 1627) of Wangey House; and the fine marble monument of Sir Richard Alibon (d. 1688), one of the judges at the trial of the Seven Bishops, who lived in Dagenham village.[67] All these worthies, and many others commemorated in the church, had business connexions with London. Among them was Jacob Uphill (d. 1662), whose eldest son, Antony 'was killed on board the *Royal Katherine* with the Earl of Sandwich.' That refers to the battle of Southwold Bay in 1672. One of Antony's brothers had 'dyed a-coming from the East Indies where he had lived 22 years a merchant.' Another had 'died a-going to the East Indies.' The third, Richard Uphill (d. 1718) prudently stayed at home, became standard bearer to William III and Queen Anne, and founded a valuable apprenticeship charity for Dagenham.[68]

In describing the descent of the manors (pp. 172-221) Shawcross was faced with two difficulties. Philip Morant's *History of Essex*, often so useful, falls below its normal standard in dealing with Dagenham, as with some other south Essex parishes; and the manorial structure of Dagenham, linked with that of Barking, is unusually complicated.[69] It cannot be said that these difficulties were fully overcome. Shawcross's medieval descents are jejune and almost useless. Those from the 16th century onwards are more detailed, but sometimes misleading; and Wangey (chapter xx) is hopelessly confused with a neighbouring manor of the same name. But the manorial chapters contain some of the best illustrations.

Chapters on the Parochial Charities (236-45), Dagenham Breach (246-61), Chadwell Heath (262-74), and Hainault Forest (282-93) are well-constructed. The largest charity was that founded in 1826 under the will of William Ford, who left £10,000 to endow a free school for the parish. 'Billy' Ford's wealth came from sheep-farming, then extensive in that part of Essex.[70] Oral tradition recalled him as a miserly bachelor, personally unattractive but devoted to the good of the parish.[71] It adds:

> He [was] a stern man, possessed of a disagreeable temper and a raucous voice. He used to drive to market and church in a 'tumble cart', i.e. a cart with a chair in it, on which he sat, which prevented him from offering, and others from asking, a lift. On Sundays he was most regular in his worship at church, when he always wore a smock-frock, and sat at the back with the men who worked for him (also in smock-frocks) immediately in front of him.

Ford had quarrelled over tithes with the vicar, Thomas Fanshawe, and directed that no one of that surname should act as a trustee of his charity.

Shawcross's Dagenham Breach chapter gives a good account of flooding and sea-defences from 1376 onwards, including the catastrophic breach of 1707. While based mainly on Sir William Dugdale's *History of Imbanking and Drayning*, John Perry's *Account of the Stopping of Dagenham Breach* (1721), and other printed sources, it adds information from the parish records. The Chadwell Heath chapter is particularly interesting. The heath was an ancient common beside the London-Colchester road, inhabited until the 19th century mainly by 'a poor, thriftless set of people, who lived in small log cabins, thatched, one story high and gained a precarious livelihood by cultivating patches of land, lopping trees, and breeding cattle, colts, donkeys, swine and geese.'[72] Shawcross prints a photograph of two of these squatters' cottages, demolished in 1895.[73] He also illustrates and describes Whalebone House, a fine building recorded from the 17th century, at the eastern end of the heath.[74] That took its name from two whales' jawbones overhanging the gates of the house.[75] The house was destroyed by bombing during the Second World War.

In discussing the name Chadwell Heath, Shawcross writes (p. 266):

> Chadwell Heath means the heath adjoining Chad's Well. This well is in Billett Lane, which marks the southern boundary of the forest. The spring was held in great veneration, partly because St. Chad was supposed to have baptised his Saxon converts to Christianity there ...

This statement, for which no source is quoted, seems to have been an amalgam of local tradition and antiquarians' guesswork. The old well in Billett Lane, which lay west of Chadwell Heath, in Chadwell Sreet ward of the ancient parish of Barking, was known locally as the Brick Well, or the Wooden Well.[76] The name St. Chad's Well was probably concocted in the 19th century on the authority of Morant, who, after suggesting that Chafford hundred derived its name from 'Ceadda, otherwise Cedd, the famous bishop of the East Saxons', went on:[77]

> In the parish of Barking there is Chadwell Street and Chadwell Heath, undoubtedly so called from St. Cead, or as vulgarly styled, Chad; that bishop having been in great repute, and sainted, for bringing the inhabitants of these parts again to Christianity, after their apostasy. He was the second bishop of London ... and erected several churches in the county ... particularly at Tilbury.

In 1886 the new church at Chadwell Heath was dedicated to St. Chad, in the belief that he was the East Saxon bishop. Shawcross, arriving seven years later as vicar-designate, could hardly dispute the dedication, but as a scholar he had his doubts. St. Chad (alias Ceadda) was bishop of York and later of Lichfield, and had no connexion with Essex. He has often been confused with his brother St. Cedd (Cedda), who was the East Saxon bishop.[78] To add to the confusion, Chadwell Heath church had been dedicated on St. Chad's day (2 March) and not on St. Cedd's day (7 January).[79] Shawcross tries to get over the difficulty by arguing that Chad and Cedd were interchangeable names, borne by both the brother-saints. That is incorrect; but in any case there remains the crucial question that Shawcross did not consider. Is there any evidence for Morant's statement that Chadwell Heath took its name from the bishop of the East Saxons? None is known; and modern place-name scholars interpret Chadwell simply as 'the cold spring'. P.H. Reaney comments that 'St. Chad's Well in Billett Lane is clearly a late hagiological invention, now strengthened by the dedication of the modern church to St. Chad.'[80] He points out that the name Chadwell, or its variants, occurs in at least four other Essex places: Chadwell (St. Mary), Chadwell farm in Birdbrook, Chardwell in Arkesden, and Shadwell wood in Ashdon; and that in both Chadwell St. Mary and Birdbrook there is a well re-named, without ancient authority, after St. Chad.[81] It is amusing to add that Morant, writing of Chadwell St. Mary,[82] suggests that its name 'if not derived from St. Chad ... might be from the Saxon "ceald", cold, and "welle", a well or spring. Some derive the first part of the name from "ceale", chalk, thinking it occasioned by the great chalk wells or pits', that is, the deneholes. The lesson for the reader is clear: do not always believe what you read in a county history.

Shawcross's chapter on Hainault Forest is based mainly on W.R. Fisher's *Forest of Essex*, but contains valuable information on the gipsy colony in the forest, from whom, he suggests 'are probably descended the plebeian natives of Chadwell Heath whose dark eyes, tawny complexion, and short, black, curly hair all point to foreign descent.' He quotes, also, information from an old inhabitant who died in 1894:[83]

> His grandfather, when a boy, saw a wolf killed in Hainault Forest. He could not give the precise date, except that it was 'before George III had become king.' My informant also said that his father had in his time killed two wild cats in the said forest.

The grandfather's story cannot be true, since the wolf was extinct in England by the 18th century. The wild cats may have been martens.[84]

In a chapter on the parish workhouse (pp. 222-35) Shawcross uses an account book of 1814-27, now missing. The vestry showed enlightened self-interest in helping paupers to obtain employment, particularly when this took them out of the parish, and thus off the rates. In 1816 William Barratt was allowed 25*s*. 'to get his things out of pawn' so that he could join a ship bound for the East Indies, and in 1822 Benjamin Heath, who had lost a hand, received 30*s*. to buy a donkey and goods to trade as a huckster (p. 227). To provide medical care for the poor the vestry contracted with a local doctor, but occasionally called in specialists like Sir Astley Cooper of Guy's Hospital (pp. 223-4).[85] In 1815 a widow, Mrs Oliver, whose son was 'afflicted with the Evil', was allowed 2*s*. 6*d*. a week to visit 'Burrel and his wife of Bethnal Green, who professes to cure cancers' (p. 229). The workhouse matron, Lucy Chapple, was a forceful character. On one occasion, when reprimanded for accepting gratuities, she went on strike for several days, until the vestry begged her to return (p. 232).

Four chapters of *Dagenham* (pp. 123-71) consist of extracts from the parish registers, thoughtfully selected, and particularly useful for the social historian. Until *c*. 1870 May Day was a public holiday in Dagenham, when 'the children went round the village carrying a gay garland suspended on a pole, and sang a short ditty. This custom is still (1904) observed, but scantily' (p. 27). Idle or inefficient farm lads in the early 19th century were thrashed by their masters, or sometimes tethered for hours to a gatepost. 'An old inhabitant remembers as a child seeing his father release one such who had been ... left out all night by his harsh master, and was found half dead with exhaustion and exposure to the cold' (p. 31). About thirty per cent of Dagenham surnames found in lay subsidies of the 16th and early 17th centuries 'still linger in the neighbourhood, especially among the poor' (p. 14). In the 17th and 18th centuries 'widows constituted about one fourth of the total number of brides, while nearly the same proportion of the fair maidens of Dagenham were woo'd and wed by lovers who lived outside the parish — a fact which supports the tradition that the women here were extremely handsome, personable and eligible' (p. 137). The illegitimacy rate was nine per cent in the 17th century

Plate 3 Valence House, Dagenham. Drawing by A.B. Bamford 1903, from original now in Valence House Museum. Previously reproduced in *The History of Dagenham*, by J.P. Shawcross, 1904.

and fourteen per cent in the 18th (p. 127). In the 17th century the 'nurse children' of Londoners often occur in the burial registers (pp. 147f.). Between 1754 and 1760 many children from the Foundling Hospital, London, sent out to foster parents in Dagenham, were buried there (p. 157).[86]

Shawcross does not quote his sources systematically or precisely. His manorial descents are inadequate; much of his material, though valuable, is undigested; and his index is highly selective. But his *Dagenham* is a genuine work of scholarship, enhanced by Bamford's charming drawings (Plate 3), and ranks high among Essex parish histories. A 'second and cheaper edition', issued in 1908 by the same publisher, is a reprint of the first edition with eight additional pages of corrections and additions.

'In a few years time', John Shawcross writes in his preface (page vi), 'Dagenham will lose its rural individuality and be drawn into the relentless vortex of London, and the fields, woodlands, and greenswards will disappear, never to return.' When that happened twenty years later, with the building of the great Becontree estate, Shawcross's book acquired a new and wider readership, and inspired further research. John G. O'Leary (1900-86), Chief Librarian of Dagenham from 1929 to 1965, was keenly interested in local history, and became a driving force in developing the subject, not only in Dagenham but throughout Essex, in his work for the Victoria County History, and many other bodies.[87] In 1937 he published *The Book of Dagenham* (2nd edn. 1949, 3rd edn. 1964). This book is much less detailed than that of Shawcross, but is more coherent and properly annotated, while covering a wider range of topics, including the urban development of the town. After the Second World War O'Leary opened a local history museum at Valence House, and built up a substantial collection of transcripts and photocopies of original documents. During the 1950s he mounted an annual exhibition of Essex history, and in 1958 he published

Dagenham Place Names, a survey on the lines laid down by the English Place Name Society. He also contributed the article on Dagenham to *V.C.H. Essex* volume five (1966). In these local history enterprises he was assisted, as he warmly acknowledged, by the late James Howson of his library staff; and he did not forget John Shawcross, of whom he wrote 'no one can work on the history of Dagenham without being deeply in his debt.'[88]

Acknowledgements

I am grateful to Mr Leonard Weaver, Honorary Archivist of Harwich, Mr Mark Watson, Deputy Curator of the Valence House Museum, and Mrs Pamela Studd, for kind help in supplying information and lending books. Mrs Studd also put this paper onto computer disk.

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Notes

1. Printed in quarto, with some copies on larger paper. The 1732 edition has a slightly different title-page.
2. *Essex Arch. and Hist.* xxv. 174.
3. S. Taylor and S. Dale, *Hist. Harwich and Dovercourt*, intro. p. i. For the date of compilation see e.g. p. 18.
4. See *E.A.H.* xxiv. 158f.
5. M. Christy, 'Samuel Dale of Braintree ... and the Dale family', *Essex Naturalist*, xix. 49-69; *D.N.B.*
6. *Hist. Harwich*, intro. p. ii.
7. For Sloane (1660-1753) see *D.N.B.*
8. For Sheppard (fl. 1730-40) see *D.N.B.*
9. The Bibliography has 175 items, of which 83 had been published since Taylor's death in 1678. At least 115 items relate to natural history.
10. For Thomas Gale (1635?-1702); Thomas Madox (1666-1726); Arthur Collins (1690?-1760); and Edmund Gibson (1669-1748), later bp. of London, see *D.N.B.*
11. For White Kennett, later bp. of Peterborough (1660-1728); John Lewis (1675-1747); and John Morton (1671?-1726) see *D.N.B.*
12. For Sir Richard Baker (1568-1645); John Weever (1576-1632); and Sir William Dugdale (1605-86) see *D.N.B.*
13. *Hist. Harwich*, 99*n*, 102*n*.
14. Ibid. 255*n*.
15. Ibid. chap. IV.
16. Ibid. 26n.
17. Ibid. 241-2*n*. Defoe's *Tour* was first published anonymously.
18. *Hist. Harwich*, pp. iii-iv.
19. Ibid. 99*n*
20. None of these three buckets survived in 1728, when Dale was writing, though he mentions others.
21. Taylor's official reports on coastal shipping often mention the Newcastle colliers, e.g. *Cal. S.P.Dom.* 1667-8, 14; 1672-3, 269.
22. Cf. *V.C.H. Essex*, ii. 411.
23. *Cal. S.P.Dom.* 1668-9, 9-10.
24. In the *History* Taylor gives the impression that Charles II's visit occurred in 1666, but 1668 is the correct date.
25. L. Weaver, *Harwich: gateway to the Continent* (1990), 14, 103; *Universal Brit. Dir.* (1793), iii. 239.
26. D.I. Gordon, *Regional Hist. Railways of G.B.* v (Eastern Counties), 74. The Harwich branch was opened in 1854.
27. For Miss Redstone (1885-1955) see *Suffolk Rec. Soc.* i (1958), 7-13; *V.C.H. General Introduction* (1970), 280.
28. For W. Palin see: *D.N.B.*; *Stifford and its Neighbourhood* (1871), 179-80; H.E. Brooks, *William Palin and his School* (1928), 72-4; 164-5; D. Dean and P. Studd, *Stifford Saga* (1980), 154.
29. Brooks, *William Palin and his School*, 73.
30. For surviving parish records of Little Thurrock see *Essex Parish Records* (1966), 209.
31. For H.W. King (1816-93) see *V.C.H. Essex, Bibliography* (1959), 102. For his church descriptions see E.R.O., T/P 196.
32. For Suckling (1796-1856) see *D.N.B.*
33. For George E. Cokayne (1825-1911) see *D.N.B.* For his letters to J.H. Round see London Univ. Libr. I.H.R. MS 628. New Jenkins had belonged in the 18th century to the Adams family.
34. For Katharine Fry (1801-86) see: J. Vansittart (ed.), *Katharine Fry's Book* (1966); *V.C.H. Essex Bibliography* (1959), author index.
35. *E.A.T.* **o.s.** v. 101, 173; **n.s.** i. 33.
36. *E.A.T.* **o.s.** iv. 63.
37. *Guide to E.R.O.*, 202.
38. *E.A.T.* **o.s.** ii. 238.
39. For the Geological Museum see *London Encyclopedia* (1983), 530. For Meeson's discoveries see *V.C.H. Essex*, iii. 188-9.
40. For H.P. Gurney (1847-1904) see *D.N.B.* His mother was Eleanor Palin. He is mentioned in the obituary of his grandson Henry Collis, a distinguished headmaster: *The Times* 6 June 1894.
41. See Plate 2.
42. For Heygate (d. 1902) see: P. Benton, *Rochford Hundred*, 390, 509; *Essex Review*, ii. 131; iii. 23; xii. 45 (obit); *Crockford's Cler. Dir.* (1900); J. Foster, *Alumni Oxon. 1718-1886*, ii. 654; *Burke's Peerage &c.* (1967), p. 1246.
43. J. Smith, *The Origins and Failure of New South-End* (1991), 12.
44. *E.A.T.* **o.s.** i. 161; ii. 75; iv. 120, 170.
45. W.E. Heygate also wrote a novel, *Alice of Fobbing*, based on the Peasants' Revolt.
46. 'The Old Essex Clerk' is printed in full in *Essex Review*, xii. 62-4, and the quotation given is from that version.
47. The Stifford list is in volume I (Appendix). The other lists are in the parish sections in volume II.
48. E.g. *V.C.H. Essex*, iv. 167; viii. 97.

49. First published 1662. Revised edn. 1772.
50. See also *V.C.H.Essex*, viii. 30.
51. MS note in copy of *More about Stifford* in Grays Central Library. Today (1994) each of the Stifford volumes fetches about £50.
52. *V.C.H. Essex*, viii (1983) contains the following Chafford hundred parishes also included in Palin's *Stifford* volumes: Aveley, North Ockendon, South Ockendon, Stifford, Rainham, Grays Thurrock, West Thurrock, and Wennington.
53. *The Stifford Saga* (1980, reprinted 1981) was published by the Rector and Parochial Church Council of Stifford.
54. *Essex Review*, xxvii. 139.
55. Cf. *V.C.H. Essex*, vi. 226.
56. *E.A.T.* **n.s**. xiv. 356.
57. For J.P. Shawcross see: *The Times* 6 June 1929; *Dagenham Digest* July 1951, p. 190 (note by J.G. O'Leary); J. Foster, *Alumni Oxon. 1715-1886*, p. 1283; *Crockford's Clerical Dir.* (1926).
58. For the non-collegiate students see *V.C.H. Oxfordshire*, ii. 338. H. Hensley Henson, later vicar of Barking and eventually Bishop of Durham, was a non-collegiate contemporary of Shawcross: cf. H.H. Henson, *Retrospect of an Unimportant Life*, i (1942), 4.
59. Shawcross, *Dagenham*. preface, page v.
60. For Shawcross's acknowledgements see page vi.
61. *Dagenham*, 174.
62. C.J. Whitwood, 'Alfred Bennett Bamford, *Romford Record*, vii (1975), 30; *E.A.T.* **n.s**. iv. 226; v. 79, 255; vii. 372; viii. 114.
63. For the quotation see W. Stubbs, *Lectures on Medieval and Modern History* (3rd. edn. 1900), 473.
64. Ibid. page xi.
65. *Dagenham*, 94; *D.N.B.*
66. *Dagenham*, illus. by A.B. Bamford f.p. 103.
67. For Alibon see *D.N.B.* For the monument see *V.C.H. Essex*, v. f.p. 229.
68. *Dagenham*, 105, 238; *V.C.H. Essex*, v. 301.
69. Cf. *V.C.H. Essex*, v. 190f; 272f.
70. Cf. Ibid. 216.
71. *Dagenham*, 243.
72. Ibid. 262.
73. Ibid. facing p. 266.
74. Ibid. 270-1.
75. See Reaney, *Place Names of Essex*, 92; J.G. O'Leary, *Dagenham Place Names* (1958), 95-6.
76. M. Christy and M. Thresh, 'Mineral Waters of Essex', *Essex Naturalist*, xv (1910), 235-7.
77. P. Morant, *Hist. Essex* (1768), i. 76.
78. *D.N.B.* s.v. Ceadda (d. 672) and Cedd (d. 664).
79. *Dagenham*, 267-8.
80. Reaney, *P.N. Essex*, 91-2.
81. Ibid. 150, 412, 517, 504.
82. Morant, *Essex*, i. 228.
83. *Dagenham*, 286*n*.
84. W.R. Fisher, *Forest of Essex*, 191; *V.C.H. Essex*, i. 256.
85. For Sir Astley Cooper (1768-1841) see *D.N.B.*
86. For the Foundling Hospital, Guilford Street, WC1, see *London Encyclopedia*, ed. B. Weinreb and C. Hibbert, (1983), 291.
87. For J.G. O'Leary see: *Essex Jnl.* xxi (1986), 30; *Library Assoc. Record*, Feb. 1986, 55.
88. *Dagenham Digest*, July 1951, p. 190.

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A brief description of the life and work of Frederic Chancellor 1825-1918

by Anne Holden

Introductory note

Frederic Chancellor was a founder member of the Essex Archaeological Society (now the Essex Society for Archaeology and History) and President from 1908-1911, remaining a member of its Council until his death and contributing many articles to its Transactions. *Late in life, he led popular day visits by carriage to churches, or groups of churches, where he would read a paper on the subject and members would be shown points of architectural and historical interest. The day would often be broken up with lunch at Chancellor's pleasant early nineteenth-century house, Bellefield, in New London Road, Chelmsford. One of his friends wrote after his death:*

> *"It is no exaggeration to say that the success of many of our excursions was due, not only to the interest imparted to them by his papers, but also to his genial personality and his readiness to give information to any who might seek it."* [1]

Frederic Chancellor was a hugely influential and well-known figure in his time. In reporting his death[2] *the* Essex Chronicle *of 4th January 1918 wrote, "The deceased gentleman's record of public service must be unique in the country for its length and variety." He is now almost totally forgotten, except in the name of the uninspiring 1960s' hall which replaced his Chelmsford Corn Exchange of 1857 and, very recently, in the name of a new office development in Chelmsford. This article, and the student thesis from which it derives, seek to redress the balance.*

Frederic Chancellor was born in Chelsea on 27 April 1825. He was educated in Kingston upon Thames and later at London University under Professor T.L. Donaldson, described by Girouard as "the Nestor of English architecture"[3]. Chancellor's architectural education seems to have been unusual for the time in that he took a degree. He continued his studies as a student of the recently formed Royal Institute of British Architects[4] and served his articles with A.J. Hiscocks in the City and Southwark, and with Ewan Christian, the well-known architect of the Church Commissioners. He was elected an Associate of the Institute in 1864 and a Fellow in 1870. In that year he also became a Fellow of the Royal Institution of Chartered Surveyors.

He was contemporary with Sir Arthur Blomfield (1829-1899), G.F. Bodley (1827-1907), William Burges (1827-1881), Sir Edward Burne-Jones (1833-1878), William Butterfield (1814-1900), Ewan Christian (1814-1895), Joseph Clarke (1819-1888), G. Somers Clarke (1825-1882), Benjamin Ferrey (1810-1880), William Morris (1834-1896), W.E. Nesfield (1835-1888), J.L. Pearson (1817-1897), A.W.N. Pugin (1812-1852), John Ruskin (1819-1899), Sir George Gilbert Scott (1811-1878), R. Norman Shaw (1831-1912), G.E. Street 1824-1881), S.S. Teulon (1812-1875), Sir Alfred Waterhouse (1830-1905), Philip Webb (1831-1915) and William White (1826-1900) and outlived them all.

Frederic Chancellor was born at a time when architecture was beginning to emerge as a profession. Before this, architects were usually amateurs or builders. Both Frederic Chancellor and his son Wykeham were excellent draughtsmen. In 1846, at the age of 21, Frederic Chancellor came to Chelmsford and worked for the architect and surveyor James Beadel and Son. Within three years the name of the firm was Beadel, Son & Chancellor. In 1860, Chancellor set up his own firm in London and in Chelmsford. By 1896 the firm was Fred Chancellor and Son.

Historian and archaeologist

Chancellor's work as an architect and surveyor enabled him to pursue his private interest in ancient buildings and artefacts. At the age of 24, Chancellor became the first person in Chelmsford to organise an archaeological "dig" and publish a report on the Roman bath complex in Chelmsford, the findings of which were set out later in the *Transactions of the Essex Archaeological Society*[5]. At the age of 82, he undertook the excavation of the motte at Pleshey Castle with the aid of the owner and local squire, J.J. Tufnell[6].

In 1890, Chancellor published "Ancient Sepulchral Monuments of Essex", illustrated by his son Wykeham and others, which not only shows all the important church monuments of the county but gives historical outlines of the leading Essex families. This mammoth work was published by Edmund Durrant, founder of the *Essex Review*, to which Chancellor submitted several articles on church building.

The public man

At one time, if he had wished, Chancellor could have boasted that he was at the head of the civil, military, and ecclesiastical life of the Borough of Chelmsford —

being Chairman of the Local Board, Commandant of the Volunteers, and Churchwarden of the Parish Church.

In 1854, aged 29, he was elected to the newly-formed Chelmsford Board of Health. He was to remain a member or servant of the town's ruling body for over 60 years. In 1879 he was elected Master of the Coachmakers and Coach and Harness-Makers' Company of London[7], having made major alterations to their hall in Noble Street, now demolished, some years before[8]. From 1882 he was Chairman of the Board of Health and remained so until 1888, when he was elected Chelmsford's first mayor[9]. He was to serve in that capacity a further six times[10], a unique achievement in a profession where political ambitions are seldom encountered. In 1891 he was made an Alderman of the Borough and also a Justice of the Peace, becoming Chief Magistrate in 1897 and 1902. In 1907, at the age of 82, he was elected to the County Council and served on the Chelmsford and District sub-committee of the Education Committee[11]. Chancellor was the first to enlist in the Chelmsford Volunteers in 1859, and in 1902, with his son Wykeham, built the Drill Hall (the former T.A. Centre in Victoria Road) for the 2nd Volunteer Battalion of the Essex Regiment in Chelmsford.

K. Dixon Box has described Frederic Chancellor as a great personality, prominent in his profession, well known and respected in a society that placed much importance on integrity and respectability. T.H. Curling wrote:

> "I should like, as one who was honoured by his friendship, to pay my tribute to his splendid uprightness of character and his loyalty to those who were fortunate enough to be amongst the number of his friends."[12]

He was the father figure in an age when a beard and formal clothes were the indispensable attire of the successful businessman. One who knew him in his prime described him as an autocrat, and a person who was not easily approached. Inevitably clothed in a frock coat, top hat and red carnation, he was a stickler for etiquette. He was a familiar figure around Chelmsford in his horse and trap with driver, and his expeditions into the country were carefully planned manoeuvres. Moreover his arrival at the job was in the nature of a parade-ground inspection with everyone literally standing to attention. No-one would dare approach him unless requested, and he spoke only with the foreman or the master builder himself, who was usually there to receive him.

All the more baffling therefore is his choice of the modest Fred, in place of Frederic, as the signature at the bottom of all his drawings. A glimpse of the lighter side of his character is to be had in an old photograph of him on a river barge heavily loaded with members, on the summer ramble of the "Chelmsford Odde Volumes", a society set up in 1888 "to encourage archaeology, science, literature, music and the fine arts." In 1899 the summer ramble was in "the good ship Nancy Bell, bound from the port of Chelmsford on a Voyage of Discovery and Research in the (comparatively) Unknown and Perilous Waters which lie between Moulsham and the distant shores of the Blackwater."[13] The "waters" referred to flow in the peaceful 18th-century canal which joins Chelmsford to the sea.

The practice

Frederic Chancellor's practice was prolific, even more so than that of Gilbert Scott: he is known to have been concerned with over 730 works, 570 of which are in Essex. However, it is believed that many other plans were destroyed in the London offices during the First World War[14], and these probably related to work outside Essex. This large body of work encompasses the building and restoration of more than 90 churches; nearly 80 parsonages; approximately 40 farms and farm buildings; 50 banks and 45 schools. Apart from these, there were workhouses, almshouses and asylums, and Chancellor was a leader in the field of public housing in London. He built new mansions and imposing residences in an era of prosperity and also cottages and lodges for wealthy landowners. Chancellor seemed to be fluent in both Italianate and Gothic styles. He was ready to adopt the style of the day. Churches were invariably in the Gothic, parsonages in the "Queen Anne" movement style, whilst for banks and commercial buildings he used the classical orders, or what was referred to then as the Italianate style.

In 1860, Chancellor set up a London office at Pinners Hall, 25 Old Broad Street. This date coincides with the beginning of his work for the London & County Bank. Probably his most important works in London however were the large public housing projects.

Having an office close to Liverpool Street Station (the station for Chelmsford, where he lived) would have been important because, apart from discussing the design of public housing and new banks with staff at headquarters, numerous visits had to be made all over the south-east of England to discuss alterations to and the maintenance of existing bank premises. Later the office moved to No. 8 and then No. 20 Finsbury Circus, still within easy reach of Liverpool Street Station.

With such a large body of work, it is to be expected that Chancellor would have had assistants. The most illustrious of them was George Sherrin (1843-1909), who was managing assistant for ten years until leaving to start his own practice in 1877[15]. Other assistants were Charles Pertwee (ARIBA 1881), who left Chancellor in 1862, Henry Mann, who was an assistant until 1912, subsequently killed in the First World War, J.S. Corder, H. Thomas[16], Frederick Oliphant, who was expelled from RIBA in 1896, and

Chancellor's son Wykeham. James Low, Walter Ross and George Clare give their addresses as the Chancellor office, 74 Duke Street, Chelmsford, but it is not known whether they were working for Chancellor or using rooms at the same address. Many of the plans were witnessed by Ernest Chancellor.

Wykeham Chancellor became a partner in the practice in 1896 at the age of 31, having gained his early training in his father's office following graduation as an MA at Oxford[17]. The partnership lasted until the death of his father in 1918, at the age of 93. Since Frederic Chancellor was over 70 when the partnership began, and heavily involved in public work, it is likely that by the beginning of the next century Wykeham would have taken over much of the responsibility for the day-to-day business. Nevertheless, a letter written in 1902 concerning the Drill Hall in Chelmsford shows Chancellor senior still very much in charge, warning his son that the steel reinforcement was out of perpendicular.

Frederic Chancellor's presentation of drawings varied little over many years: they were done in ink on an Imperial size sheet of stiff Whatman's paper, a difficult medium to master, to a scale of 1/8 in. to 1 ft. These drawings would often be colour washed and many, especially the church drawings, present an extremely attractive appearance. Chancellor would also use cartridge and yellow tracing paper. Measurements and details taken on site would be written down in thin notebooks measuring approximately eight inches by three inches, covered with imitation soft red leather.

Chancellor was involved in many different spheres of life, which must have made him a well-known figure and been good for business at the same time. As honorary Diocesan architect in the late 1850s he would have made important ecclesiastical contacts. As a Justice of the Peace and member of the local volunteer corps he would have met the increasingly wealthy landed gentry and landowners who gave him commissions for mansions, model farm buildings and estate cottages, and also the newly rich who wanted prestigious houses to reflect their wealth and status. Contacts with the aristocracy, gentry and clergy would have been reinforced through research for his only known book, "Ancient Sepulchral Monuments of Essex", which concerned itself in part with the genealogy of leading families, and the Essex Archaeological Society. Local business contacts would have been made through Chancellor's long service with the Chelmsford Board of Health and later the Borough Council Commissions for schools would have been facilitated

Fig. 1 Quaker Lodge and Meeting House, Broomfield House, Chelmsford, 1855.

by membership of school boards. In London, membership of the coachmakers' livery company would have been a good source of city contacts.

Farms and cottages

Throughout the 1850s, Frederic Chancellor was designing model farmhouses, homesteads and farm buildings for landowners all over the country. The Essex Record Office holds a bound folio of beautifully executed bird's-eye-view perspectives and plans[18] drawn throughout the 1850s and early 60s. The cottages designed for housing the employees of wealthy landowners give rise to some of the most attractive of the Chancellor drawings. One of his model farms in London (Regents Park Road) is still in existence as such.

Amongst his works in this field are the following: the **Quaker Lodge and Meeting House** in Broomfield Road (Fig. 1), and a **cottage in Rectory Lane**, Chelmsford, **farm cottages** for C.G. Round (a fellow founder member of the Essex Archaeological Society) at Birch *circa* 1860 (Fig. 2), **cottages at Tillingham Hall** for the Dean and Chapter of St Paul's (1862-1907), **cottages at Audley End** for Lord Braybrook, 1865, a **farm and a lodge** for J.J. Tufnell at Langleys, Great Waltham, *circa* 1865 and **villas on the Southwood Lawn Estate** in Highgate 1875 (Fig. 3).

Schools

The Foster Act of 1870 produced a system of non-compulsory state schools as a supplement to the existing voluntary schools, most of which were run by one or other of the religious denominations. The Act resulted in hundreds of School Boards and in the building, within a few years, of thousands of new schools all over the country. There are drawings for works concerning 34 schools in the Chancellor collection. Before 1870, they are for church schools, or for clergymen or private benefactors, or for trustees of charities. After 1870, there are works for school boards and, at the turn of the century, for many substantial grammar schools. The late drawings for these are often in Wykeham Chancellor's hand.

Frederic Chancellor's first commission to build a school came from the trustees of **Felsted Grammar School**[19], as a result of a competition held in 1854

Fig. 2 Farm cottages built originally for C.G. Round at Birch, *c.* 1860.

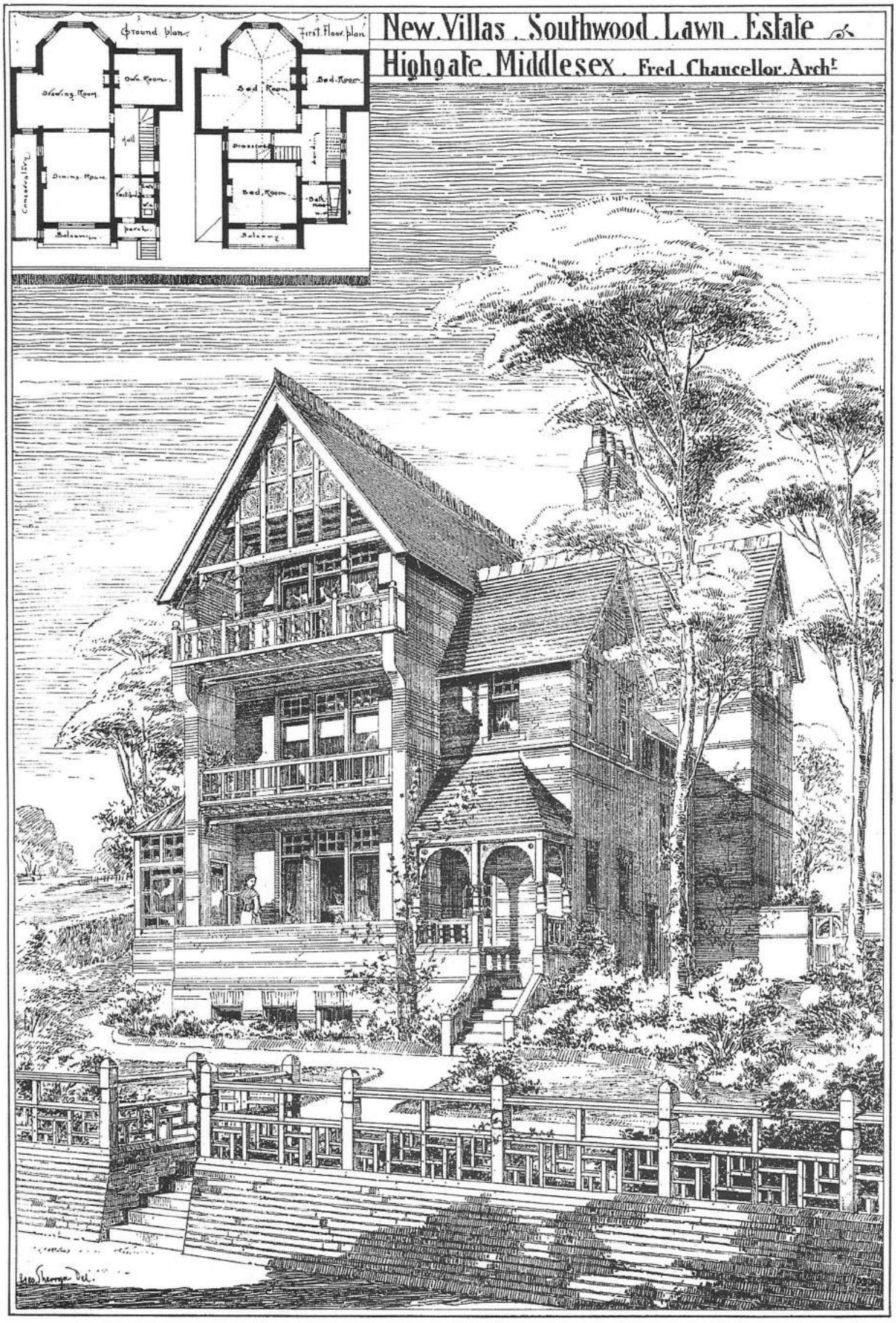

Fig. 3 Villas for the Southwood Lawn Estate in Highgate, London, 1875.

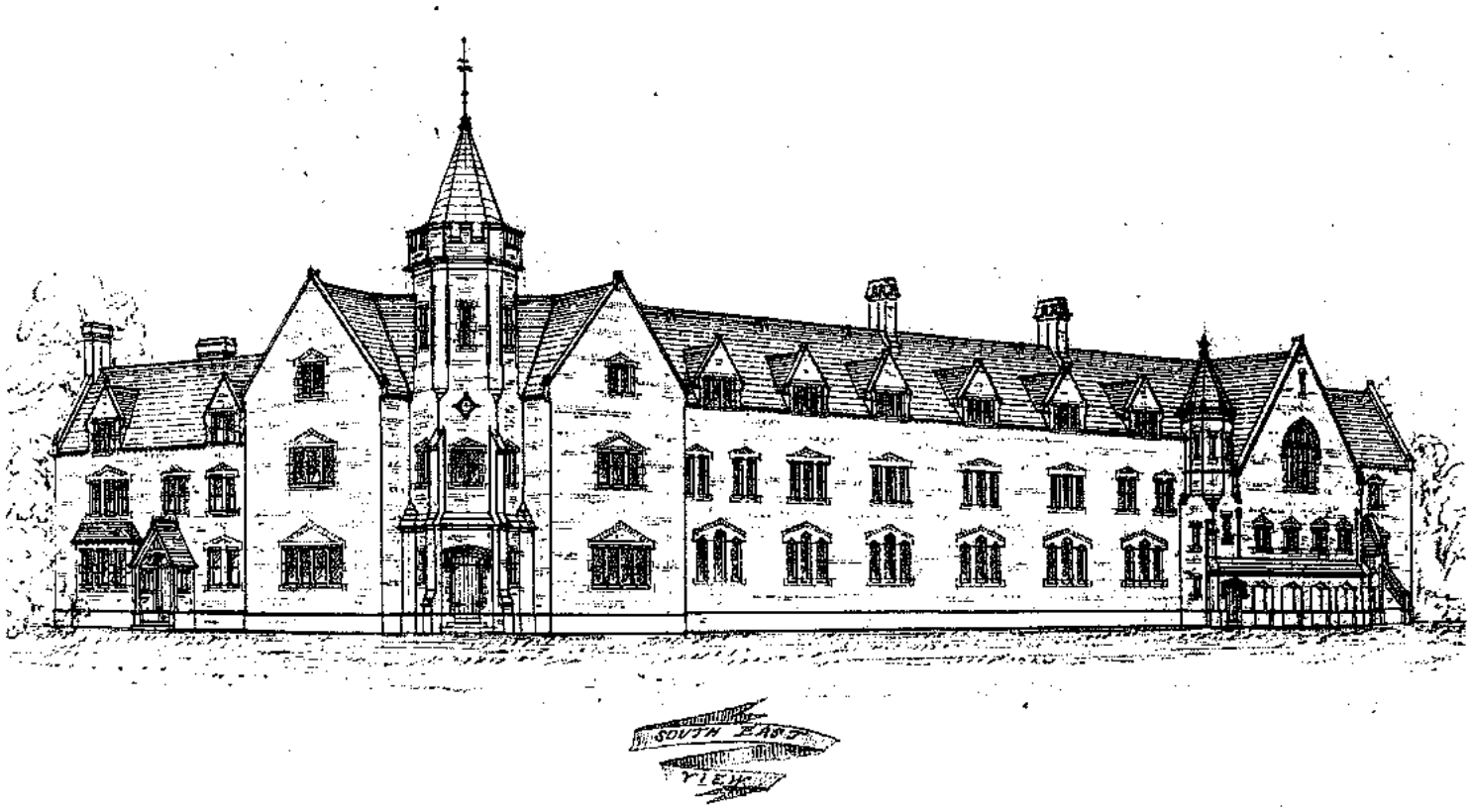

Fig. 4 Prize-winning drawings for Felsted Grammar School, 1854.

(Fig. 4). Many of the later school buildings were designed by Fred and Wykeham Chancellor, including the prep school[20], which opened in 1895[21].

Shortly afterwards (1860), Chancellor designed the **St John's National Schools** in Moulsham Street, Chelmsford[22]. These buildings have recently been cleaned and repaired for commercial use and make a pleasant nineteenth-century contribution to an ancient street. From 1870 Chancellor was involved in a flurry of school building: small schools include that at **Langford** (1870) and **Little Dunmow Priory School** (1871), both now private houses. **Chelmsford National Schools for Boys** (1872-1885)[23] in Church Street consisted originally of the 1872 classroom, with polychromatic brickwork decoration in the style of the Felsted school. The 1885 part was built for 384 pupils, accommodated in five schoolrooms, and reflects the influence of the "Queen Anne" style of the London Board Schools (Fig. 5). Chancellor would have seen several of these under construction on his journeys to work in London by train.

The main buildings of **Brentwood Grammar School** (1884-1910)[24] (now a public school) in the Ingrave Road were designed by Fred and Wykeham Chancellor. They form an impressive collection of buildings over a large site close to the centre of the town. The Chancellor part of **Woodbridge Grammar School,** Suffolk (1892-1897)[25] is now known as School House and used as accommodation for boarders. The school history book describes it as big and ugly, but a comparison of the original two sets of plans with the school as it was actually built shows major changes.

Frederic Chancellor had worked hard for years for the establishment of better facilities for self-education in Chelmsford, which eventually resulted in the building of the **Library, Museum and Art School** (1902-1911)[26] (now Anglia Polytechnic University), giving his services as architect free and collecting donations. In his seventh term of office as Mayor, in 1906, when it was at last funded by Carnegie[27], his most treasured possession was said to be the casket given to him by the students. There are drawings for the same project dated 1876, 1889 and 1892. The 1903 plans appear to be in Wykeham Chancellor's hand.

Chelmsford High School for Girls[28] (1904-1911), of which Frederic Chancellor was one of the first governors, is a pleasant "Queen Anne" style building close to the Grammar School. It has stone dressings and rusticated quoins in brickwork, as does **Braintree Secondary School** in Coggeshall Road (now used by the Social Services Department), which was built between 1905 and 1907. This is possibly the most ornamental of the late nineteenth or early twentieth-century Chancellor schools, and might have been funded by local benefactors, the Courtauld family, who owned the silk mills in the town and built the town hall.

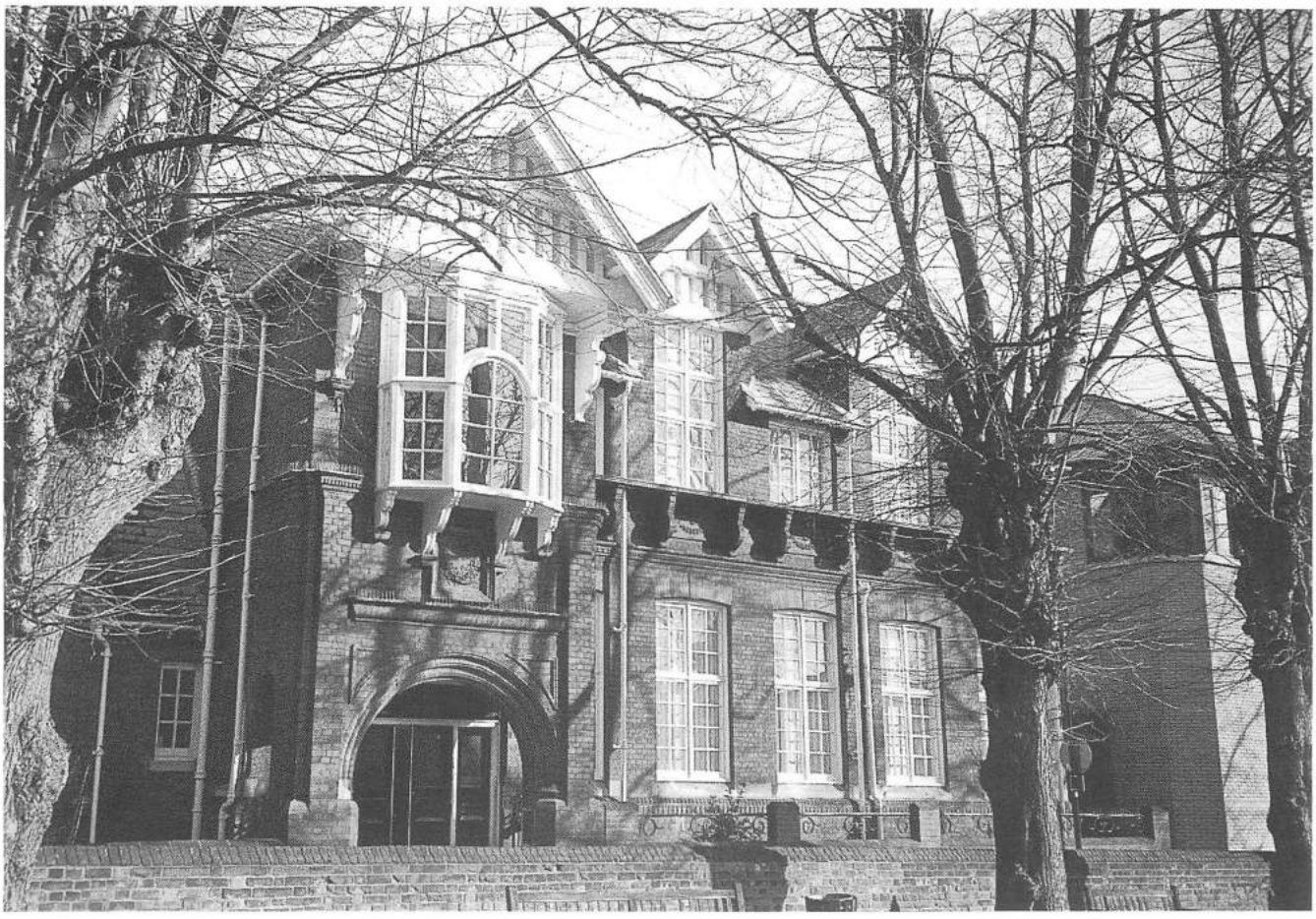

Fig. 5 Former Chelmsford National Schools for Boys, Church Street, Chelmsford, 1872-1885.

Public housing

In the 1870s Frederic Chancellor was a leading figure in the movement to solve the appalling problem of housing the poor in London. His designs were much admired for creating good basic housing at high density levels with the minimum cost, and were still being copied 20 years later[29]. The Metropolitan Association for the Improvement of the Dwellings of the Industrious Classes employed Chancellor from 1866[30] on a series of schemes which gave him an authoritative position during this period[31]. The first scheme was the building of **Gatliff**[32] **Buildings** in Chelsea for 149 families, on land made available by the Duke of Westminster at a nominal charge[33], and which were considered a vast improvement in appearance compared to most contemporary work (still in existence). After this, Chancellor converted the **Spicer Street**[34] lodging house for 300 men in Spitalfields to family tenements, but the most impressive scheme of the buildings was in the **Farringdon Road** in Clerkenwell, London. There, in 1874, five blocks, 67 feet high with 20 feet between blocks, were designed to hold 260 families at a density of 1,500 per acre. Despite the need to make the buildings pay for themselves, the self-contained flats had two or three rooms with sculleries and lavatories. When the blocks were first opened they were described as "spacious" and "of entirely novel design".

Other schemes designed by Chancellor are 164 cottages in **Beckenham**; additions to the **Howard Buildings**, Mile End New Town, creating housing for 490 families, and a small block of single and double-roomed tenements in **Carrington Mews**, Mayfair (1878)[35], again for the Metropolitan Association for the Improvement of the Dwellings of the Industrious Classes.

Workhouses, hospitals and almshouses

The system of workhouses began in 1601 but only became universal with the introduction of the Poor Law Amendment Act in 1834[36], by which paupers were taken into institutions rather than provided with outdoor relief. As a result many more workhouses were needed by the "unions", or groups of parishes who were responsible, until 1867, for the sick and elderly and for those incapable of supporting themselves. Building of these institutions reached its zenith in 1836 when 127 were built[37].

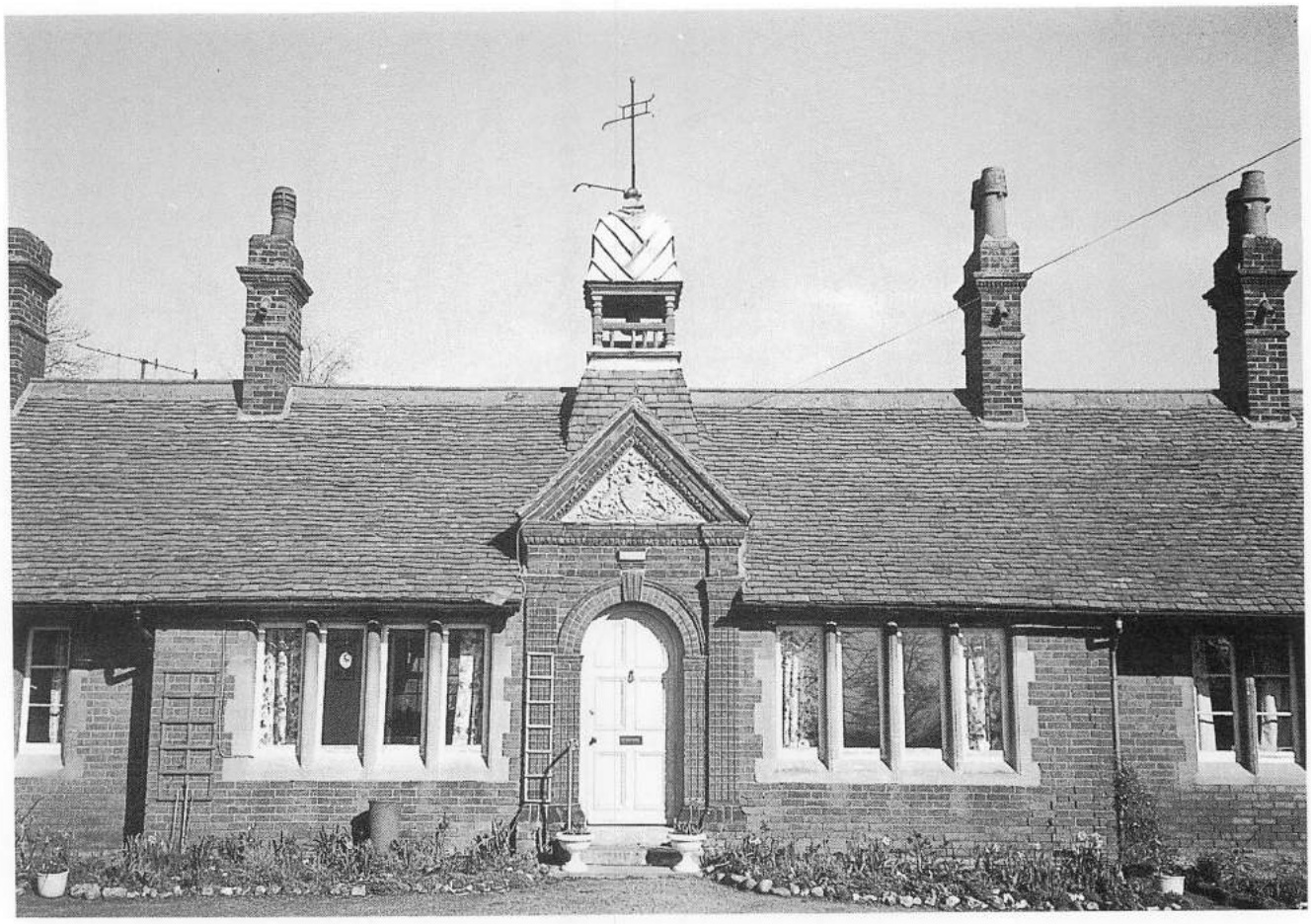

Fig. 6 Almshouses at Felsted, 1878.

Gilbert Scott's 1838[38] workhouse for the **Great Dunmow Union**[39] in Essex, built in Tudor style, was provided with a new infirmary and a separate infectious diseases ward by Chancellor in 1871. **Chelmsford Union Workhouse**[40] (now St John's Hospital), at the top of a hill overlooking Chelmsford, stands on the site of what was once a Napoleonic Wars barracks, and subsequently the red light district of the area. Chancellor added the chapel, administration block, girls' school, women vagrants' receiving wards, wash-house, bell turret, girls' ward, able-bodied women and married women's ward, old men and able-bodied men's block, boys' ward, lavatory blocks, dining-hall and entrance lodge over the period 1851-1911. At **Maldon Union House** (now St Peter's Hospital), Chancellor added a school and new buildings for infants between 1869 and 1880, which were sited close to Spital Road. Some of this appears to have been demolished.

Between Chancellor's **Felsted School** and the main road lie his **almshouses** of 1878[41] (Fig. 6), an attractive group of single-storey dwellings forming three sides of a courtyard and facing onto the main street, with a public house on one side and a Non-conformist chapel on the other. There are no plans in existence for the **Great Waltham almshouses** or "Church Housen" of 1896, but they bear all the trademarks of Chancellor architecture, in a village which contains so many other examples. As is usual with Chancellor's work, there is a moulded brick plaque bearing the date and tall decorated chimneys.

The **Chelmsford Infirmary and Dispensary** (1883)[42], now known as the Chelmsford and Essex Hospital, is still used for medical purposes although most of its medical outbuildings have been sold off to commercial enterprises, including Fred Chancellor's last home, Bellefield. The site was bought in New London Road in 1882 and the hospital built at a cost of £5710. Plans were drawn up by Fred Chancellor with Charles Pertwee, a former pupil. It was opened by Lady Brooke, later Countess of Warwick, in 1883[43].

These large public-housing projects must have both lucrative and prestigious for Chancellor, whilst the workhouses must have brought in bread and butter money on a regular basis over a long period.

Commercial buildings

Commercial work undertaken by Chancellor ranges from cattle markets and corn exchanges, shops, offices and banks, to maltings and mills. From the evidence

available, it would appear that the largest body of commercial work was that done from 1860 for the London & County Bank, now part of the National Westminster Bank, as one of its architects and surveyors. Chancellor was responsible for erecting about 30 new banks in London and the suburbs and various provincial towns, and carried out alterations to many others. The work included negotiations for the purchase, hire and letting of various properties, questions of light and air, and current building legislation and compensation[44]. Banks were also built for the Bank of British North America, the London and South Western Bank, the Agra Bank and the Sparrow & Tufnell Bank, later amalgamated with Barclays.

The first purpose-built banks in Great Britain were erected in the eighteenth century but, since banking was often the sideline of a trader, banks could take the form of private houses, shop counters or even rooms in the local inn, open only on market days. There were often conversions of existing buildings[45], and managers of the London & County Bank in the mid nineteenth century were expected to live over the shop.

A brief survey of the London & County Bank Minute Books gives a good impression of Frederic Chancellor's work in the service of the bank: numerous journeys, presumably by train, all over the south-east to places as far apart as Andover, Winchester, Hastings and Halstead. The rewards were obviously worthwhile. Bearing in mind that the bank manager at Watford was paid £25 per annum and that at Brighton £10, Chancellor received one guinea together with travel expenses for reporting upon repairs or alterations to banks in London, two guineas in the provinces and between three and five per cent commission on new work, depending on the size of the contract. On the other hand, the architect J.L. Pearson was charging five guineas a day for his time at about the same period, in 1871[46].

Although much of Chancellor's work is influenced by the Gothic revival and, despite Pugin's rule that all civil architecture should be Gothic[47], all his known banks are designed in the Classical or Italianate style, a style which conveyed safety and respectability and referred to the origins of banking in fifteenth and sixteenth-century Italy. Typically, the banking hall at ground level has large round-headed windows between columns of stone or marble, or square-headed if there is rustication. Above this there are tiers of windows with a different treatment to each storey: paired Corinthian columns under a frieze and entablature as at **Shoreditch**, London (1884) with pedimented windows above and smaller round-headed windows with balconies above that. Most of the banks have heavy bracketted cornices under low pitched slate roofs. Perhaps the grandest is at **Hastings**[48] (1862), where rustication is taken up to the fourth storey of the bays which flank a central section of giant orders of Ionic columns enclosing three bays of windows. There are balconies with stone balustrading at first-floor level; ornamental iron balconies at higher levels. The work undertaken by Chancellor for the London & County Bank must have been a good basis for the new practice.

Perhaps the most famous of Chancellor's known London work is **12-13 Poultry** (1875), part of the Mappin and Webb terrace demolished in 1994, which was built for hosier Charles Sadler as a block of shop and offices. It was described at the time as an attempt "to reproduce an old City shop, in brick and stone, timber being no longer admissible"[49]. Four terracotta panels, by Joseph Kramer, between each floor depict the processions of four monarchs through the City. The terracotta panels were acknowledged to be the only particular architectural features of interest that it was desirable to preserve should consent be granted for the demolition of the listed buildings. Since consent has now been given, the panels have been removed from the building and will be re-used somewhere on the new buildings.

Away from London, one of Chancellor's earliest commercial buildings (1853) still standing is that built for the Essex Provident Society[50], at **66-68 Duke Street**, Chelmsford (Fig. 7), the street where Chancellor began his architectural career in the offices of Beadel, Son & Chancellor, together with so many of the local architects. The loss of Chancellor's Chelmsford Corn Exchange[51] in 1969 is still mourned by older residents. It opened in the centre of the town for business in 1857[52], and was used for all the major functions and for entertainment from then onwards. A student thesis[53] on the subject of the Corn Exchange gives some insight into the way in which business came to a local architect such as Chancellor, who was aged just over 30 when he designed the building. The principal figures on the initial committee were Edmund Round (see cottages for the Round estate in Birch) and deputy chairman James Beadel, described as an estate agent and who was also Chancellor's partner. W.M. Tufnell was amongst the trustees and the Tufnell family were partners in the Sparrow Bank. Chancellor designed many buildings for the Tufnell estate, Langleys, in Great Waltham. Money to build the Corn Exchange was borrowed from Sparrow, Round & Co. Chancellor built several Sparrow banks. Shareholders included the Ridleys and the Marriages, both brewers, for whom Chancellor also designed maltings and mills.

The Corn Exchange used to stand close to the **statue of Chief Justice Tindal** which still occupies a central space. Frederic Chancellor designed an elaborate setting for it in 1850 surrounded by four lamp standards and fountains, which was severely modified in the execution[54]. However, the **Corn Exchange** of 1865 at Rochford still survives and, though described as modest in size and ugly in looks by Pevsner[55], is very much loved and cared for by the local Women's Institute who bought it in 1922. Next door is

Fig. 7 66-68 Duke Street, Chelmsford, 1853.

Chancellor's **Rochford Bank**[56], which used to be linked to the Corn Exchange at basement level.

Apart from this, various maltings (Grays, Chelmsford and Great Baddow) and mills (Grays, Marriages and Hoffmans, Chelmsford and Langford Mill) survive in adapted form. One of them, at Great Baddow, has recently had its yellow and red brickwork cleaned and looks startlingly bright, which is how these buildings must have looked initially.

Private houses and mansions

During his long career, Frederic Chancellor built many large houses, mainly in Essex, often for those who had benefited financially from one of Britain's best periods of prosperity for many years, and for many years to come. Being a man much involved in public life, he must have had good contacts. The houses are splendidly fitted out for every comfort and would have employed many servants — there were 39 at Whilton Lodge at the time of the 1881 census. As well as water closets, drainage and septic-tank filtration systems, there was usually an underground collecting tank fed by the rainwater downpipes. A servant would pump the water from this tank up to storage tanks in the roof from whence the water would flow by gravity.

Pondlands[57], now a country club and hotel called **Pontlands Park**, Great Baddow, is a good example of the requirements of a wealthy family, at this period. Apart from an imposing porch, entrance and staircase hall, there are large drawing and dining rooms with bay windows, a library, the master's own room with a safe, a butler's pantry and serving room, servants' hall, kitchen, scullery, dairy, larder, pantry and store. Beyond a small yard, as well as earth closets for the servants (the masters had water closets), there were rooms for coal, wood and knives, in an age where knives had to be sharpened and cleaned regularly to stop them going

Fig. 8 Farleigh, New London Road, Chelmsford (formerly called Spergula), 1858.

rusty. Below this, down a flight of stairs, was a beer cellar and a separate wine cellar. The architect's initials can be found, opposite those of the client, carved on the porch surrounding the front door.

Other commissions include a house for Mr Woodhouse[58], in Writtle (1873) now known as "**Longmeads**"; Spergula[59], New London Road, Chelmsford (1858), now called **Farleigh** (Fig. 8); **St Mary's Abbey**[60], East Bergholt, Suffolk (1866-1890), now a commune. **Whilton Lodge**[61], Whilton, Northants was built for J.A. Craven in 1867 for £60,000. Mr Craven, a train enthusiast, chose the site because it overlooked the London to Birmingham railway which passes the house on a viaduct at this point. Close to the house is a spacious stable block arranged in a courtyard, together with servants' cottages.

At **Durwards**[62], Rivenhall, a four-storey service wing was added in 1885 for A.W. Ruggles Brise whose family are still influential local landowners. **Creeksea Place**, Creeksea, 1901[63] has Chancellor north and east wings. Bricks for the new additions were copied from the originals and made on site, as was the joinery which was invariably of oak. The house achieved a brief moment of fame after the war as Miss Havisham's house in the 1950s' film of Dickens' *Great Expectations*. A few years later in 1905, the Chancellors made many additions to a house of slightly earlier date, **Layer Marney Towers**, and in 1908 remodelled the south front of another sixteenth-century mansion, **Leez Priory**, a rebuilding of an earlier Augustinian priory by Lord Rich.

Chimneys have proved to be a good identifying feature of Chancellor buildings. They often project from the walls of the buildings (a practice recommended by Pugin for its excellent practical nature); are invariably tall which makes for a more efficient draught and are usually decorated with bands of vertical brickwork which pass through notional loops to end in a V-shape, as in a leather strap.

Parsonages

The nineteenth century has been described as the golden age of the country parson.[64] The rise in status already notable in many places towards the end of the eighteenth century continued until the parson became the equal of the squire. Squire and parson together ruled the parish, and both sat on the bench, as did Frederic Chancellor from the early 1870s.

Alongside his work with churches came the creation of new parsonages and the expansion and alteration of existing ones, as the population grew to an unprecedented degree and clergymen were obliged[65] to reside in their livings. **Hatfield Broad Oak Vicarage** had a third storey added by Chancellor in 1874 so that the vicar could run a small coaching establishment.[66]

Alan Savidge has described the Victorian parsonage as a monument to the patrons and clergy of family livings, and to the cheapness of bricks and domestic labour, rather than to the improved value of benefices or even to grants from the Ecclesiastical Commissioners.[67]

Frederic Chancellor first worked on a parsonage, **St Giles** in Colchester[68], in 1869. The following year he designed the parsonage at **Ford End**[69] (Fig. 9), to accompany the imposing new church he had built the year before (see section on churches). The interior is distinctly divided between servants' quarters (on the north side) and those of the parson. On the north side, the walls and doors are thin and the architectural details basic. In the main quarters, there is a sturdy staircase of wooden members arranged to form diamond shapes and pegged into the handrail and stringer with visible wooden pegs. There are marble fireplace surrounds on the ground floor and specially designed wooden ones elsewhere with cast iron grates and marble slips. In 1874, a new vicarage was commissioned by the Rev Hart in **Takeley**.[70] Here Chancellor uses the moulded brick string courses; those at ground floor ceiling height are filled with moulded brick floriated panels, including sunflowers, favourite motif of the Queen Anne movement. The property is now in semi-institutional hands and in poor condition; the adjacent stable block is even worse. The porches of these parsonages are invariably constructed as a church porch would be, with heavy timbers set on brick or flint plinths.

Plans for the **Curate's House**, Great Waltham (1876), do not bear much resemblance to what was actually built. However, all the familiar details are there: tall chimneys with crosses in moulded brick-

Fig. 9 Parsonage at Ford End, 1870.

work, steep gables, windows arranged in groups, date plaque and even a diagonally set buttress in the manner of a church. Moulded brick details are used again for **Salcott Rectory**[71] (1880), a remote marshland parsonage, now a private house. Here the original plans were faithfully carried out.[72] Pierced and crested ridge tiles made by Coopers are to be found frequently in Chancellor's work, both secular and ecclesiastical. The small porthole window in the north gable of Salcott Rectory can also been seen at **Brick House Farm**, Peldon,[73] another Chancellor house with views over marshland, where a new shell was provided for an earthquake-damaged eighteenth-century house.

Purleigh Rectory[74] (1883) has perhaps the most impressive site, at the top of a (relatively) steep hill just below the church. In an age where it was thought that every person should be lodged as became his station and dignity,[75] the parsonage built for the Rev Dr Hatch in 1883, by N. Saunders & Son, contains an enormous amount of accommodation and survives almost in its original state. In the same year Chancellor designed a vicarage at **North Shoebury**.[76] This is an attractive house of yellow brickwork with red rubbed and gauged headers, string course, tile-hung gable ends and the usual date plaque, rather over-improved by the addition of a classical porch, conservatories and green shutters.

Chancellor built several parsonages for new outer London parishes, amongst them **All Saints Vicarage** (1886) at Blackheath[77], at present the home of ex-hostage Terry Waite. There is another extremely large outer London vicarage in **Hartley Road, Leytonstone** (1894)[78], red brick with white painted windows in a similar configuration to Blackheath, and tile-hung gable ends.

Potsgrove Rectory, Bedfordshire[79] was built in 1889 for the Duke of Bedford[80]. Towards the end of Chancellor's working life, a large new parsonage was designed for **St Peter's Church** (1907) in Bocking[81]. This small sample of Fred Chancellor's many parsonages suggests that the majority of them are in good condition and much appreciated by their owners. This is perhaps because they are almost all in the style influenced by the "Queen Anne" movement, a style in reaction to the severity of High Victorian Gothic; a move away from massiveness and medievalism. Typified by eclecticism and by tall, asymmetric red brick buildings with prominent roofs, gables, decorated chimney-stacks, mouldings of cut and rubbed brick and small-paned sash windows irregularly disposed, the aim of the movement's protagonists was to create "sweetness and light". The later parsonages become simpler in form, more symmetrical, with less ornament. This could be the influence of Wykeham Chancellor, who was responsible for many of the later drawings.

Ecclesiastical work

Frederic Chancellor was renowned for his work on Essex churches. Made honorary architect to the Diocese of St Albans in 1859, from 1871 to 1902 he was Surveyor to the Archdeaconries of Colchester and Essex, then in the Diocese of Rochester[82], later in the Diocese of St Albans which, from 1877, included Essex. During his career Chancellor built, expanded or restored over 90 churches.

Frederic Chancellor's way of life would appear to have equipped him to be the perfect nineteenth-century church builder, according to the creed of the Gothic revivalists. Known for his genial personality, generosity, benevolence and willingness to help those in need, he held all the most important offices of the place in which he lived, including that of churchwarden, for many years. In response to concerns about the lack of places of worship for the rapidly expanding population, the Church Building Society was constituted in 1818, and later Incorporated by Parliament in 1828. But this society found no more than a quarter of the funds needed for church building and restoration[83]. Many of the Chancellor plans bear the seal of approval of the society, but the remainder of the cost was often borne either by the incumbent himself or raised by public subscription.

By the mid nineteenth century, a significant proportion of the county's ancient churches were in need of rehabilitation, particularly in the Colchester area after the earthquake of 1884[84]. Cathedral establishments were cut down to size along with bishops' incomes; the boundaries of dioceses were adjusted to serve the rapidly changing and expanding pattern of population, and new sees, such as St Albans, were created. An Act of 1843 reformed the procedure for forming new parishes. The Ecclesiastical Commissioners were charged with the duty of applying the moneys saved from the diocesan and cathedral reforms, and from the estates now vested in them, to correct what Bishop Blomfield described as "the unequal distribution of resources, inflicting upon the Church at once the discomfort of being extremely poor and the discredit of being extremely rich."[85]

Throughout the 1840s, the period when Chancellor was forming his initial architectural ideas at London University and as a pupil with Ewan Christian and others, arguments were being put forward in publications which were to have a major influence on ecclesiastical architecture. Gothic, the true native form and spirit of British architecture, was in the ascendant[86].

The work of Ewan Christian, to whom Chancellor was articled, must have influenced his early ideas on architecture. Christian pursued a strong tendency to "massiveness" and "horizontality".[87] Study of Frederic Chancellor's work reveals how wholeheartedly he embraced the reforming zeal of prophets of the Gothic such as Pugin and Ruskin. It is also evident that frequently the initial design had to be scaled down, presumably

because of lack of finance. The following is a selection of the more interesting examples of Chancellor's ecclesiastical work, all in Essex.

Church of St Mary, Broomfield (1867)[88]
Church of St Andrew, Wormingford (1870)[89]
St Martin's church, Little Waltham (1868-1887)[90]
St John the Evangelist, Ford End (1869)[91]
Church of St Mary, Ramsden Crays (1869)
St Mary the Virgin, Little Dunmow (1871)[92]
Church of St Mary, Ulting (1871)[93]
Church of St Andrew, Althorne (1878)[94]
All Saints, Springfield (1881)[95]
Church of St Peter, South Hanningfield (1883)[96]
Church of St Mary, Maldon (1885)[97]
Church of St Edmund, Greensted-juxta-Ongar (1889)[98]
All Saints, Rettendon (1894)[99]
Church of St Thomas the Apostle, Navestock (1898)[100]

Magdalen Laver (1872)[101], a modest church set in a lonely position in rolling farmland, is mainly of interest to this study because of the detailed specification which exists for its restoration, giving a good insight into Chancellor's methods.

Towers, spires and belfries

Essex has a wonderful collection of timber-framed towers and belfries, so often restored or remodelled by Frederic Chancellor. There are many detailed drawings of these in the Chancellor Collection at the Essex Record Office. Perhaps there is no finer example than that of the church of **St Lawrence at Blackmore**[102].

The builders

Gothic depends on detail, and the individual architect, however gifted, is powerless without a body of good craftsmen. For the work on churches, Chancellor mainly used the following builders: Grimes of Colchester, Letch of Braintree, Dobson of Colchester, Gozzett of Woodham Walter, Sanders of Dedham and James Brown of Braintree[103]. The latter is of particular interest in that he also had a brickworks which specialised in the sort of moulded brickwork beloved of the "Queen Anne" movement. James Brown employed George Sherrin (Chancellor's managing assistant for ten years till 1877) to produce the drawings for his (undated) catalogue for this type of brick.

Conclusion

The approach to church restoration practised by Fred Chancellor would be unimaginable today. The parameters of this present study did not permit a thorough search for Chancellor's early influences as an architect, such as the written works of Professor Donaldson, if such exist, but it would be interesting to learn the approach advocated at London University during Chancellor's time there. Whatever that may have been, the Gothic revivalists had few doubts over the moral righteousness of their cause, and there was a large body of current literature available to the young architect from which to draw ideas.

Chancellor appears to have embraced the tenets of the Gothic revival wholeheartedly as far as ecclesiastical work. There is no sign of "pagan" (classical) architecture in the examples studied so far. Indeed, he seems to have removed all existing traces of it in his restorations, a practice that would be unheard of today. It must be remembered that his restoration schemes had to be approved by a panel of architects working for the Incorporated Church Building Society and, less formally but perhaps more stringently, the Cambridge Camden Society, or Ecclesiologists, who would publish their views on a piece of work to the world. The limits of this study have only permitted a superficial review of the "Ecclesiologist", and the architectural literature of the day, and has not revealed any papers or letters published by Chancellor, although some of his works were illustrated in "The Builder".

From the examples described above, the effect of Chancellor's work on churches has been to enlarge and elaborate and to improve the quality of the fabric and the church's potential for survival in the future. Chancellor seems to have had an extremely sound grasp of building techniques and high standards and few of the churches he worked on are in a poor condition today. In making space for growing congregations, internal height and grandeur has been gained; large and elaborate windows with pointed heads and flowing tracery were substituted for much simpler versions; heavy timber-framed porches standing on flint and stone bases replaced rustic boarded porches. Small-scale accretions were swept away or tidied up to create a more massive and simplified outline; a more dignified whole. Although this approach would be controversial in today's climate of thought, and it is disappointing to find hard Victorian work where there might have been soft weathered medieval masonry, it can be seen from the examples chosen that there were often good practical reasons for replacement and renewal.

Conclusion

Frederic Chancellor is almost unknown today. But in his time, and in his immediate sphere of influence, this was not the case. After what would appear to be a flying start with a first-class degree in architecture as a science from London University, studying under the eminent Professor Donaldson, he arrived in Chelmsford to start his new career at the age of 21. From then onwards, he threw himself into carving a name and a place for himself before returning to London to start up his own practice there at the age of 35, although he continued to live and work in Chelmsford.

Obviously a man with a great business sense, allied to a charismatic personality, he was the perfect embodiment of a Victorian man of substance. His output over an exceptionally long working life is likely to have surpassed even that of Sir Gilbert Scott. But there is no mention of him in the initial work on the Gothic Revival by Sir Charles Eastlake in the 1870s, or in any subsequent works on the architecture of the age studied by the author, except for a relatively recent work on Victorian public housing. Was this because, although his works were illustrated the the architectural press of the time, as far as this study has been able to ascertain, he did not publish any articles or books on architecture? Was he amongst those architects blacklisted by the Ecclesiologists? Was his work not thought worthy of comment? There are many questions yet to be answered.

This relatively short and superficial study was prompted by the knowledge that there were many plans available to students at the Essex Record Office, and that Fred Chancellor was unknown and forgotten. As mentioned before, it has to be assumed that many of Chancellor's drawings for work in London and in other counties have been lost, and for this study time has not allowed a thorough search of archives held in London.

Taking a broad view of Chancellor's work as a whole, the early work consisted of agricultural buildings, cottages and schools. Commercial work, such as banks and office premises, occupied much of the 1860s. From the late 1860s, as well as being the start of his major church restoration period, Chancellor was building numerous parsonages and private houses, and designing major public-housing schemes. The end of his career saw the construction of grammar schools, usually in partnership with his son Wykeham, together with important additions to three sixteenth-century mansions.

Most of Chancellor's surviving work is in good condition today. If there are structural faults, it is usually due to subsidence, a continual problem in Essex. From the notes and specifications it appears that he understood the technical implications of the task well. In the preliminary notes made on site, an estimate of the cost is often written against the description. It is probably no coincidence that Chancellor gained a first-class degree in architecture as a science, but a second-class in architecture as a fine art.

As far as originality is concerned, Chancellor seems to have adopted new styles quickly. There must have been plenty of time to read current publications on those innumerable train journeys. He was certainly a leader in the field of model farms, and in public housing, where high standards of accommodation were provided for many at minimum cost. He was also using the moulded brick details of the "Queen Anne" movement on chimneys by the early date of 1853, perhaps understandably as Essex has many excellent examples of early brickwork. It was K. Dixon Box's opinion that Chancellor's work as a restorer was far superior to his new work.

What was exceptional about Chancellor's life and work as an architect was the amount of buildings he produced and his involvement in public life. Perhaps the two are linked. As described previously, his membership of so many boards, committees, groups and societies must have given him a wide base of friends and acquaintances from which to derive commissions.

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The full text of a thesis on the same subject, recently completed for the Architectural Association diploma in building conservation, is held at the Essex Record Office. A separate gazetteer of the works can be obtained from the author.

Footnotes

1 Essex Archaeological Society, list of articles written by Fred Chancellor, in *Transactions of the Essex Archaeological Society*, Vol XV New Series, 1921

2 In his will he left £38,752.12.6, approximately three quarters of a million pounds in today's terms. The executors were Frederic Wykeham Chancellor and Frank George Moon Chancellor, both architects.

3 Girouard, Mark, *Sweetness and Light*, the "Queen Anne" Movement 1860-1900, Oxford, Oxford University Press, 1977, p 58

4 1834, Royal Charter received 1837

5 Jarvis, Stan, Chancellor Hall — called after town's number one citizen, in *Essex Chronicle*, 17 May 1971

6 E.R.O., D/F8.391B

7 *The Builder*, 11 January 1918

8 E.R.O., D/F8.A43

9 The mayoral badge and chain was designed by Chancellor (Information from Oaklands Museum)

10 1894, 1895, 1896, 1901, 1905, 1906

11 The Chancellor Memorial Scholarship Fund was set up, by public subscription, after his death to assist King Edward VI Grammar School students to continue their education at university or institute of higher education.

12 *Transactions of the Essex Archaeological Society* (1921)
13 *The World of Fred Spalding*, p 63
14 George Bragg, a pupil of Wykeham Chancellor and later his partner, wrote: "When I first came to this office ... in 1925, I was given to understand that a considerable number of old papers and plans were destroyed during the First World War". (E.R.O. D/F8.W213)
15 Bettley, James, A Checklist of Essex Architects 1834-1914, p. 181, in *Essex Archaeology and History* 24 (1993). Sherrin (ARIBA 1882, FRIBA 1898) had his own practice from 1877 at 105 Moulsham Street, 33 Finsbury Circus and 44 Finsbury Square in London. He died in 1909 aged 66 and was succeeded by Frank Sherrin.
16 Described as assistant to FC in 1870 — did measured drawing of Coachmakers' Hall, London
17 Box, K. Dixon, The Chancellor Collection of Architectural Drawings, E.R.O., Chelmsford, Review and Appreciation, in *Transactions of the Essex Archaeological Society*, 3rd Series, Vol 5, 1973, 22
18 E.R.O., D/DQn 29
19 E.R.O., D/F8.122, 685, 622, 669, 729, 388, 673, 438, 304, 667
20 E.R.O., D/F8.W587
21 Craze, Michael, *Felsted School 1564-1947*, p 224, Cowell, Ipswich, 1955
22 E.R.O., E/P 23
23 E.R.O., D/F8.361
24 E.R.O., D/F8.345
25 E.R.O., D/F8.A62/32/80
26 E.R.O., D/F8.233
27 Oaklands Museum, Chelmsford, "Essex Pride"
28 E.R.O., D/F8.375
29 Cressey Houses, Hannibal Road, Stepney Green, 1895, by Davis and Emmanuel
30 Chancellor, Frederic, *Letter to the Governors of the Harpur Trusts*, Bedford, 24 May 1882
31 Tarn, J.N., *Working-class Housing in 19th Century Britain*, p. 19, Architectural Association Paper No. 7, 1971
32 Gatliff, the Association's secretary, had pointed out in his *Practical Suggestions for the Improved Dwelling for the Industrious Classes*, that central London housing was necessary for artisans, who had to be near their workplace
33 Tarn (1971) p 11
34 Tarn (1971)
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71 E.R.O., D/F8.585C
72 The builder was Alfred Diss
73 E.R.O., D/F8.37
74 E.R.O., D/F8.597
75 Pugin (1841) p 50
76 E.R.O., D/F8.623, built by Sam and Wm Darke.
77 E.R.O., D/F8.B16
78 E.R.O., D/F8.355
79 E.R.O., D/F8.A67
80 By Webster and Cannon of Aylesbury for £2000. The 16" hollow external walls were faced with red hand-made sand-faced kiln bricks. The staircase was of pitch pine, varnished with Manders best copal flatting varnish. Window arches are of a rubbed and gauged brick from Lawrence of Bracknell.
81 E.R.O., D/F8.504
82 Chancellor (1882)
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84 His granddaughter, Margaret Wardrop, possessed an illuminated scroll thanking him for his services at the time of the great London.
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92 E.R.O., D/F8.651
93 E.R.O., D/F8.131
94 E.R.O., D/F8.461
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96 E.R.O., D.F8.606
97 E.R.O., D/F8.339, W135 and D/CF.24/8 of 1885
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The Society is extremely grateful to Essex County Council for a generous grant towards the cost of publishing this article.

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Work of the Essex County Council Archaeology Section, 1994

edited by A. Bennett

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 larger excavations, evaluations and intensive watching briefs can be found elsewhere in this volume (pp. 238-58).

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 museums and individuals who have allowed finds to be published here. The illustrations are by the following: Caroline Ingle (Fig. 5), Stuart MacNeil (Figs 2, 6, and 7), Nick Nethercote (Figs 1 and 3), and David Strachan (Figs 4, 8, and 9).

Full details of all sites can be found in the County Sites and Monuments Record (SMR).

Barling Magna, Barling Marsh (PRN 14815-14831)

Alec Wade

An archaeological watching brief was carried out along the construction route of a quarry haul road between Great Wakering and Barling Magna. This has revealed a wide range of features in eight different areas (A-H). Five sites were known to be on or in the vicinity of the proposed haul road and fieldwalking in 1991 (Germany 1991) recovered artefactual evidence from two of these: Site 2, which is near Area A, produced fragments of burnt flint and several sherds of Late Bronze Age pottery; Site 5, which is next to Area F, revealed traces of marine mollusc. The evidence from the different areas indicates that the haul road appears to run through an area of complex landscape development from the Bronze Age onwards.

Area A revealed various features, some of which were probably prehistoric. One pit produced fragments of Roman pottery, a probable Late Iron Age quernstone fragment, and animal bone. An area of pits and ditches may relate to Site 3, a moated site. Some of the ditches may represent medieval strip field systems. Unstratified finds included fragments of daub, prehistoric pottery and Roman pottery.

Area B contained four small features, all possibly postholes. No dating evidence was recovered but they may possibly be prehistoric. One ditch possibly represents a post-medieval field boundary. There was also a wide spread of mainly oyster shell fragments.

Area C revealed two possibly post-medieval field boundaries and an undated feature.

Area D is in the area of Site 4, a post-medieval prison, but no associated activity was identified. Undated features contained fragments of burnt or fired clay. Unstratified finds consisted of undiagnostic prehistoric pottery and a flint blade. A sherd of Early Saxon pottery of the 6th-7th century was also found.

Area E contained various features including a feature with fired clay/daub inclusions, ditches possibly representing post-medieval field boundaries, and a pit whose fill contained rare small stones and charcoal flecks, together with undiagnostic prehistoric pottery and two tiny fragments of burnt bone. It is possible that these may represent a prehistoric cremation.

Area F revealed a disturbed area of subsoil characterised by a spread of post-medieval debris including oyster shell and tile fragments.

Area G contained many features. At least 31 ditches entered or crossed the exposed area. Twenty-two ditches were orientated east-west and appeared to cut 6 undated ditches orientated north-west to south-east. They were cut by 2 large ditches orientated north-north-west to south-south-east. The east-west ditches were generally similar in character to the parallel ditches recorded in Area A and may be interpreted as medieval strip fields. The southernmost 2 ditches of this system were associated with one of the larger ditches and may form part of an enclosure or paddock. Other features included one containing Late Bronze Age pottery, a small pit or posthole containing charcoal fragments and sherds of prehistoric pottery, a layer which produced Roman pottery, a pit or posthole which contained fragments of Beaker pottery, and a large oval pit which had post-medieval pottery on the surface. A sherd of 6th to 7th-century Anglo-Saxon pottery was recovered from the surface of one of the ditches. Unstratified finds included a Late Bronze Age or Early Iron Age flint tool, prehistoric pottery and Roman pottery.

Area H contained a ditch which produced Early Saxon pottery of the 6th-7th century from its surface.

Bocking (PRN 14832)

Louise Austin

A Palaeolithic handaxe was found by Mr Norman Scott, a resident of Bocking. It was of dark grey/black

flint, and rolled with some patination on one surface. Another flint was possibly a Palaeolithic flaked piece.

Finds: in private possession

Brightlingsea, Brightlingsea Rising Main (PRN 2164)

Stuart Foreman

A watching brief was carried out by the Field Archaeology Group for Anglia Water Ltd following topsoil stripping of an area 1.49km long and 7-9m wide. Archaeological features were identified in two areas. Area A included a single, shallow, irregular cut with several charred fragments of root. This probably represented the burnt-out remains of a tree stump of relatively recent date.

Area B contained a group of features which represented the remains of a red hill site, identified as red hill 49 in the gazetteer of red hills (Fawn *et al.* 1990). This is one of a group of four known sites on the north-east bank of the Colne estuary. The distinguishing feature of the site was a patchy deposit of reddish purple clay which extended in a band, 12m wide, across the full width of the trench. In places this material formed a solid crust of baked clay, varying in thickness from 0.01m to 0.04m. The burnt layer was very thin and patchy in comparison with other excavated red hill sites, which suggests that it has been severely eroded by ploughing. A few fragments of briquetage were recovered from this clay. Underlying the clay was a layer of greyish white silty clay which appeared to be the burnt surface of the natural subsoil.

Two cut features were associated with the red hill. One was a shallow, irregular oval, bowl-shaped depression, the other was a shallow, sub-circular, bowl-shaped depression in the reddish purple clay. Both were filled with a grey silty clay material with few natural inclusions and no finds. These features may be interpreted as the truncated remains of settling tanks, or as open hearths. There was no evidence for baked clay walls, flues or stoke pits that are associated with enclosed hearth sites.

Twenty-two fragments of baked clay, probably all salt briquetage, were recovered. A few pieces survived to their full thickness and are from straight-sided vessels, possibly used to hold brine during the salt evaporation process. The remainder could also be from vessels.

Ardleigh, Elm Park (PRN 3339, 3341, and 3349-3351)

Steve Wallis and Kathy Horsley

Elm Park has revealed Iron Age and Roman material, and a Late Iron Age burial, and is within the Scheduled Ancient Monument of the Ardleigh cropmark complex. Scheduled Monument Consent was granted for the construction of an extension to the house and the laying of a drain, on condition that a watching brief was carried out.

No features or finds were noted during the building of the extension, but three features were recorded during construction of the drain. The earliest was probably a pit, one edge of which was cut by the drain trench. It was U-shaped in profile, and up to 3.65m wide and up to 1m deep. The fill was a greyish-brown sandy loam and produced Roman pottery of the late second or early third century. Sherd fabrics included Colchester colour coat, fine romanising ware (beaker), Hadham/fine grey ware, Black-Burnished (dish base), romanising grey ware (narrow necked jar), and sandy grey ware (jar, bowl, small dish or bowl).

The other two features were post-medieval quarries. These were visible as depressions in the ground before the drain trench was dug. Quarry A was bowl-shaped and 40m in diameter. It was not bottomed, but the ground surface was 4m deeper than the surrounding ground. The fills of both quarries were greyish-brown sandy loams.

Unstratified Roman sherds recovered from the spoil elsewhere along the trench consisted of a rim from a romanising grey-ware necked jar, a rim from a grog-tempered ware jar, and bodysherds of sandy grey ware.

Maylandsea (PRN 12075-8 and 13622)

Colin Wallace

Further to finds previously noted (Bennett 1994, 227), 156 sherds of Roman pottery were lent to the Field Archaeology Group for recording, by their finder, Mr. Blaney. The pottery was mostly Early Roman (1st/2nd centuries AD), Romanising and sandy grey wares. This was of similar date to material recovered from here in the past.

New from the recent material were some sherds of Late Roman (3rd/4th centuries) pottery, from a sandy grey ware dish, a Oxfordshire white-slipped ware mortarium, a late shell-tempered ware jar and a Hadham oxidised ware dish. Post-medieval pottery also occurred among the material.

Finds: in private possession

Stock (PRN 14835-14837)

Owen Bedwin

Finds were recovered, mostly of Roman date, from a field by the landowner and two metal detectorists. These consisted of pottery, metalwork, coins, and tegulae.

96 sherds of pottery (identified by Colin Wallace) were lent to the Field Archaeology Group for recording. These were mostly sandy grey wares of the second/third centuries AD, plus some early Roman pottery (first to early second centuries), early shell-

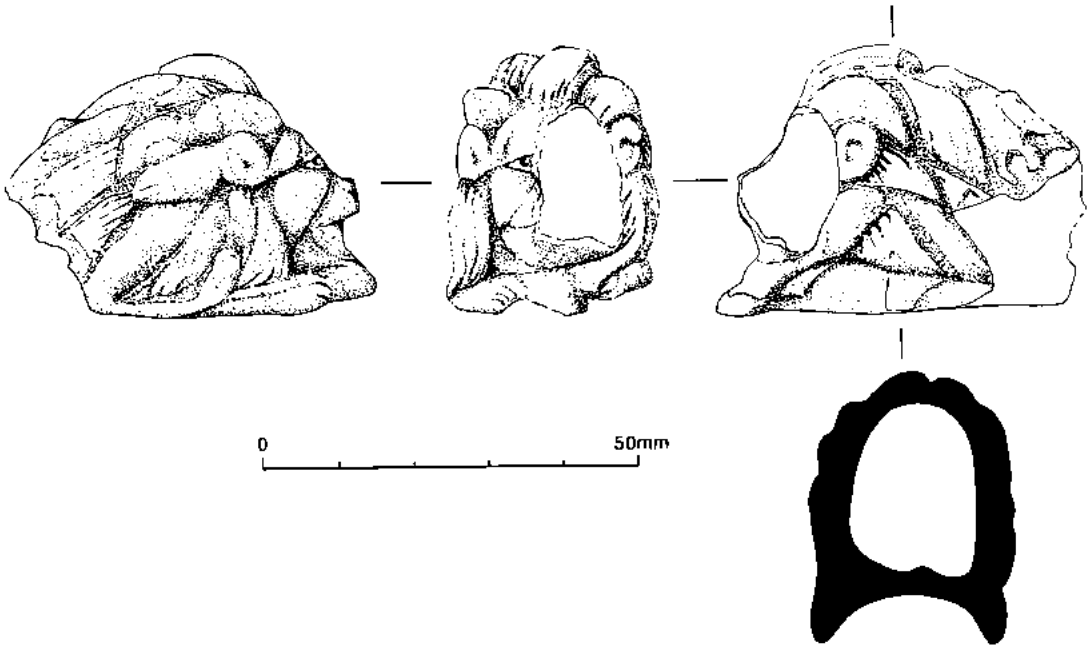

Fig. 1 Moulded head of a lion, of Roman date, from Stock.

tempered ware and Romanising ware, and a Late Roman rim from a black-surfaced ware dish. There was also a sherd of Saxon pottery and a sherd of medieval pottery.

The metal work (identified by Hilary Major) consisted of three objects, two of which were modern. The third is a moulded head of a lion (Fig. 1), of copper alloy. It is rather damaged, with most of the face missing, though with one eye and both ears surviving, and the surface of the mane has lost most of the finely-moulded line detailing. It is likely that it was a decorative element from a piece of furniture, such as a small table. The lion's head would have sat at the 'knee' of the wooden leg, with, no doubt, matching lion's paw feet at the bottom of the leg. No parallel from Britain has been noted yet, but Richter (1966) illustrates examples in marble from Italy.

Bardfield Saling, Church of St Peter and St Paul (PRN 1209-1211)

D.D. Andrews

This church is 14th century in date, comprising nave, south aisle, chancel and round tower. It was consecrated in 1380/81. This may have marked the termination of a rebuilding programme as the church is documented in the 13th century as a chapel of ease dependent on Great Bardfield. It is clear that the consecration does not mark a new foundation. The round tower is usually thought to be one of the latest examples of its kind, but is probably of 12th-century date.

In June 1994, the cement gutter was removed along the south and east sides of Bardfield Saling Church and replaced with field drains covered by shingle, exposing temporarily the foundations of the 14th-century building (Fig. 2). These have a moulded plinth in oolitic limestone. Beneath the plinth are a few peg tiles which serve to level up the rubble foundation. The bottom limestone course of the plinth must have been at original ground level. The depth of the foundation was not ascertained, but it is at least 350mm. Unusually, the exterior ground level seems to have hardly risen since the 14th-century rebuilding of the church.

900mm from the south-west corner of the south aisle, the trench cut through the remains of a buttress about 800mm wide. The existence of this buttress makes it possible to reconstruct the south elevation of the aisle with buttresses at regular intervals symmetrically framing a 14th-century window. As it exists today, there is no buttress in this position and this western window is off-centre in the west half of the aisle wall. Immediately west of the missing buttress, the aisle foundation is differently built, being made of ashlar below ground level. This ashlar is to be explained by the former existence of a large porch, as will be explained below.

Extending at least 560mm from the west side of the modern porch were found the remains of a rubble foundation for the medieval porch, extending 1.27m to the south of the existing porch, bringing it in line with the south aisle. The porch would have been of grand proportions, standing immediately adjacent to the south aisle. A semi-octagonal base of dressed oolitic limestone found projecting out below ground level

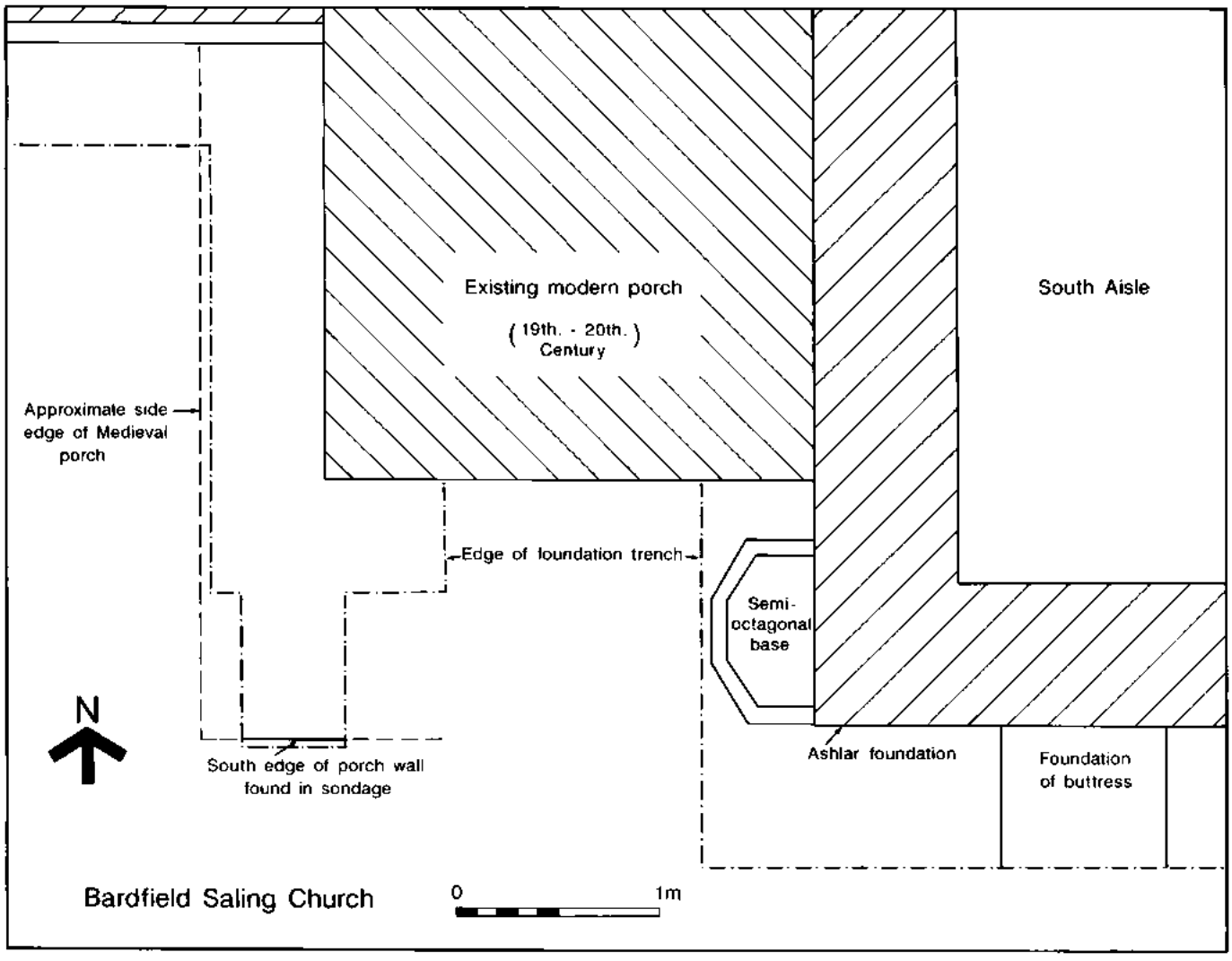

Fig. 2 Plan of features found at Bardfield Saling Church.

west of the aisle must have been the foundation to the reveal on the east side of its door. The demolished buttress seems to respect the position of this porch and the east side of the porch seems integral with the aisle. This suggests that the porch and aisle were contemporary. Alternatively, the porch could pre-date the aisle. The corner between the porch and the aisle has been rebuilt incorporating dressed and moulded oolitic limestone blocks, some of them with mouldings identical to those of the chancel arch. The church architect, Mr H. Mathew, argues that the moulded stones come from a second chancel arch beyond the existing one, the chancel today being shorter than its original length.

Four paving stones of Purbeck marble, laid on the ground outside the existing porch, had to be removed. They are 40-45mm wide and of varying lengths. These must be the remains of either small altars or, more probably, seats either from sedilia or the porch. A similar piece of stone is in the *lapidarium* at the back of the south aisle.

The buttress at the south-west corner of the nave is founded on a massive boulder like that which today lies just outside the churchyard. It could be seen that the foundation of the spiral stair is a different build to that of the round tower, and an addition to the latter.

The chancel foundation has no plinth or offset, its masonry extending an uncertain depth below the finished level of the drain. It is clearly a different build to the aisle and looks earlier, probably 12th-13th century. At the southern end of the trench, part of an *in situ* medieval tile pavement was detected in the side of the trench only 200mm below turf level. A small portion of these tiles was uncovered and one was removed. The tiles are identical to those with the arms of Tyrell found in the blocking of the base of the easternmost window of the nave in 1993 (Bennett 1994, 230 and fig. 4). It can be inferred that the chancel was paved with these heraldic tiles, and the nave with the obliquely divided brown-glazed and cream-slipped ones of which a fair number survive inside the church and to

which Drury (1976) first drew attention. It is however unlikely that the paving schemes were contemporary: the heraldic ones are larger and thicker than the others, and may be provisionally dated to the 15th century. The connection between Bardfield Saling and the Tyrell family remains elusive.

Great Chesterford, Church of All Saints (PRN 13890-1, 14814)

D.D. Andrews

In the course of re-excavating an old drain run and a soakaway on the south side of the chancel, a well was found, situated 1.7m from the chancel wall and just west of the door. The domed capping, perhaps one hundred years old, was broken through by the builders. The well lining, visible to a depth of 1.2m below ground level, the level to which the earth and gravel filling the shaft had subsided, was made of red bricks laid to rat-trap bond. The bricks were regular with square arrises, measuring 228 x 110 x 68mm. They are probably late 18th to early 19th century in date.

The well is very likely older than the brickwork, which could be a re-lining of the upper part of the shaft. Wells have also been discovered at Hadstock church, and at Little Chesterford (see below). Another Essex church which seems to have a well is Rawreth, where inside the tower there is a grille covering a hole filled with water.

A small amount of Roman pottery was found in the trench. It included a Going C20 bowl in fine grey ware with a carbonised deposit on the rim, and a sherd of Central Gaulish samian (identifications by Colin Wallace).

Harwich, 4 Church Street (PRN 14838-14839)

Steve Wallis

A watching brief was carried out on the construction of an extension at the rear of the building. Part of the extension was to use existing foundations but a new foundation trench 11m long had been excavated running south west from the house wall. A disused cellar had removed all archaeological deposits over a length of 1.7m. The natural subsoil was sand. This was directly overlain by topsoil (context 1) near the house. To the south-west of the cellar there was a layer of extremely mixed material (context 2) under the topsoil, *c.* 0.2m deep, consisting of dark clayey sand with inclusion of peg tile, unfrogged brick, clayey patches, oyster shell and random septaria fragments. The eastern 2m included a layer of large septaria blocks, resting on natural. 1m from the western end of the trench were 2 large septaria blocks, at a depth of between 0.55 and 0.80m, possibly part of a north-south wall. West of this the layer (context 3) between the natural and topsoil had far fewer inclusions. Where the house foundations were exposed, the present brick house seemed to be resting on earlier foundations of stone, which were underlain by further brick.

The pottery was identified by Helen Walker, and included 2 sherds from Raeren stoneware bulbous jugs of the first half of 16th century, 1 sherd Frechen stoneware of mid 16th to later 17th century, and 1 sherd ?Low Countries red ware of 15th/16th century from the topsoil (1). Context 2 produced 5 sherds of post-medieval red earthenware of 16th to 19th centuries, 1 sherd of Nottingham/Derby stoneware of 18th to 20th centuries, and 1 sherd of modern stoneware drainpipe. Context 3 produced 2 sherds of late medieval sandy orange ware. Context 2 also produced 3 animal bones and a couple of iron objects, one a nail.

Context 2 is interpreted as a former surface of the house's backyard, the septaria representing the original surface, with a build up of repairs and rubbish. Context 3 may be a continuation of that surface, or a rubbish deposit. The ceramic evidence indicates that it may be of medieval origin.

Hempstead, Church of St Andrew (PRN 14840-14841)

Owen Bedwin

A builder's trench was dug by hand to a depth of *c.* 30 cm below the brick floor of the 17th-century Harvey vault, along its western edge. Part of a small pit was observed, cut *c.* 25 cm into the natural. This contained a skull and limb bones (not articulated) of a least 2 adults. (This material was given to the incumbent for re-burial.) Full dimensions of the pit were not established because of the limited size of the trench, but if slumping in the adjacent brick flooring was any guide, it would have been circular and at least 1 metre in diameter. The human bone is most plausibly interpreted as deriving from burials, formerly in the churchyard, which were disturbed by the construction of the Harvey vault.

Little Chesterford, Church of St Mary the Virgin (PRN 4834-4836)

D.D. Andrews

The earliest feature of this church is of the 13th century, but the structure may be earlier. The chancel was possibly rebuilt towards the end of the 14th century, and the north porch added in the 15th century. The church was restored during the 19th century (RCHM 1916).

The foundations of the church were inspected on the east and north sides where a French drain had been dug. A conspicuous feature of the foundations was a large roughly squared boulder of glacial origin, positioned at the division between the nave and chancel. This is marked by a slight crack in the wall visible internally. The boulder marks a change in the character of the foundations, being very compact and firmly mortared west of the boulder and less compact and

well mortared to the east. The boulder seems to have formed the foundation at the north-east corner of the nave, and subsequently the chancel was rebuilt to the same width as the nave. To the west of the porch, the foundations to the nave had a mortared offset which projected up to 180mm. This seems to be an earlier wall line. The wall above is slightly misaligned. This indicates that there must be several phases of rebuilding in this part of the fabric.

Re-excavation of a drain run uncovered a well about 6m north of the north-west corner of the nave close to the church wall. It had been capped with a dome made of white bricks, probably flooring bricks. The well was said to be filled to within about 1m of the ground surface. It had previously been used as a soakaway, and it was intended that this use would continue.

Orsett, Orsett causewayed enclosure (PRN 14842)

Hilary Major

A whetstone (Fig. 3) was recovered from the surface after ploughing. It is made from a fine grained schist of unknown provenance, but possibly Norwegian ragstone. It is tapering, perforated at the wider end, and broken at the narrower end, with a rectangular section. The sides in particular are well worn. It has several transverse lines scratched below the perforation, one of which continues round both sides, but not the back. These lines are unusual and are probably rather crudely applied decoration, possibly by the owner as a means of identification. There were probably more transverse lines originally, but they have been smoothed away by use, leaving only a few traces. There are also nicks visible along one edge, and transverse grooves on the side, by the perforation. Its length is 80mm, section ranges from 20mm by 8mm to 12mm by 8mm.

The shape, stone type and presence of the perforation suggest that this is a medieval whetstone.

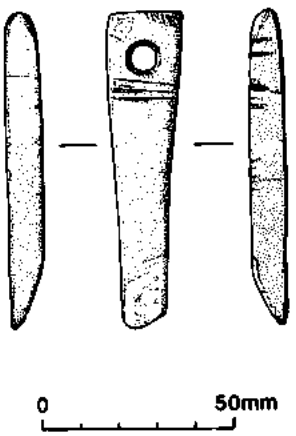

Fig. 3 A medieval whetstone from Orsett.

Identification of the source stone may help in dating. Norwegian ragstone was imported into Britain in the Middle Ages, specifically for use as whetstones.

Thurrock, Grey Goose Farm (PRN 14843)

Louise Austin

A watching brief was undertaken in the gardens of Grey Goose Farm during the construction of a swimming pool. To the north and north-east of the farm is a cropmark complex which has revealed features dating to the Late Bronze Age through to Saxon (Wilkinson 1988, 15-17).

When the site was visited three quarters of the pool had been excavated out, the northern part to a depth of *c.* 1m. One cut feature was visible in the western section running north-south which contained a number of distinct fills, including various faunal and floral remains consisting of quantities of oyster shell, mussel shell and animal or bird bones, and burnt organic material, plus a sherd of Early Medieval ware cooking pot and shell-tempered pottery from a small cooking pot dating to the 12th to 13th centuries. The feature is interpreted as a medieval domestic rubbish pit.

Writtle, Parish Church of All Saints (PRN 705-8)

D.D. Andrews

The church is mostly built of ragstone rubble with some flint and ironstone. The nave is 13th century and the chancel is probably of the same date with its walls containing some Roman brick. The aisles were rebuilt in the 14th century and the north and south chapels added to the chancel. The porches were added *c.* 1400, and the north and south chapels added to the nave aisles in the early 16th century. The west tower was rebuilt in 1802 (RCHM 1921, 271-2).

Prior to excavation of a dry area along the south side of the church, three test pits were excavated adjacent to the tower, the west end of the nave, and the chancel.

At about 800mm below ground level in test pit 1, a projecting footing was found at the bottom of the tower. The footing seems to be of a different build to the masonry above it and to represent the remains of an early (?11th to 12th century) tower which was totally rebuilt later in the Middle Ages. This tower in turn collapsed and was rebuilt in 1802.

Test pit 2 was excavated to a depth of about 1m against the west end of the south aisle. This revealed that the plinth at the base of the wall seems to be an addition. It is possible that the plinth represents a late medieval remodelling of an existing wall i.e. the church could have had an aisle before the 14th century, the date assigned to the present aisle.

Test pit 3 was excavated to a depth of about 500mm, adjacent to the chancel. Because of the shallowness of the trench, it was not possible to determine

whether there are foundations below this offset; probing suggested there are not, in contrast with the situation in trench 2 where the foundations continued to the bottom of the trench.

Harlow (PRN 14844)
Phil McMichael

A copy of a Roman coin was lent by the finder to Epping Forest District Museum and then lent to the Archaeology Section for identification. The obverse side of a gold 'Quinarius' of the Emperor Tiberius had been copied in gunmetal or pewter. The British Museum has examples of genuine Roman intaglios and cameos reused in the Georgian period. This item may have been produced for insertion in jewellery, for English "followers of fashion" of the mid 1700s onwards.

Saffron Walden, Audley End House (PRN 7296)
Stuart Foreman

A watching brief was carried out by the Field Archaeology Group during cable trenching in the grounds of Audley End House. Two trenches were dug. Little of interest was seen in trench A. However a buried road surface of unknown extent and alignment was identified underlying the modern gravel path.

Trench B revealed a number of features shown on the 18th-century estate maps. The west wall of the store yard or brewhouse yard was identified, and a smaller foundation probably representing the west wall of a building which was backed against the yard wall. The light yellow colour of the mortar used in these limestone walls may be an indication that they belong to the original Jacobean building phase. The probable width east-west of the brewhouse yard is 58m. The foundation of a brick wall, probably of later date, was also identified. It seems to correspond to a wall line shown on the 18th-century estate map as running along the east edge of a large pond to the north-west of the main house. A black sandy silt deposit at the eastern end of the trench may represent backfilling material at the west end of the 'Great Pond'. The base of a Frechen stoneware jug, probably a bellarmine, of later 16th to later 17th century, was recovered from the eastern end of this trench.

Aerial survey 1994
David Strachan

The objectives for the year were to continue reconnaissance with the primary aim of locating and recording new cropmark sites in the county, while developing reconnaissance in the coastal area, and the inter-tidal zone in particular. Given the variable nature of cropmark development, and the problems associated with inter-tidal photography (essentially in the difficulty of combining good photographic weather with low-tides), it was planned that funds should be channelled from one area to another according to these variable factors. A total of 8 flights were carried out over the year, details of which were produced in an internal report in December 1994 (Strachan 1994).

Intertidal zone

One flight was dedicated to gaining familiarity with the inter-tidal material of the Blackwater estuary; four sites were recorded, including one (PRN 9971) which had previously only ever been photographed on the ground (Plate 1). Two flights covered the entire coast with the aim of assessing the potential for SMR enhancement of the coastal zone generally. This was considered as the area from low water mark to around half a kilometre inland of the modern sea-wall. Two flights looked at both cropmark development and coastal sites along the River Roach and Crouch.

Results from the coastal zone confirmed the assumption that aerial reconnaissance is a rapid and cost-effective method of assessing the archaeology of the area. While unfortunate tide times and weather conditions did not allow advantage to be taken of the low-tides in August and September, a large number of extant sites along the coastal zone generally were recorded. These included Red Hills, numerous wrecks, and numerous remains of the oyster cultivation industry (eg. PRN 14845, Plate 2) in Essex. Significantly, only a very small percentage of these remains had previously been recorded on the SMR. This reflects that certain site-types, in this area in particular, have largely been ignored in the past. In this way the aerial survey is rapidly enhancing the database for the post-medieval industrial heritage of the coast. The problem of salt-marsh and general coastal erosion pose an immediate threat and indicate the need for continued work in this area. Much of the recording in this area was made on 35 mm colour slides, as colour is an important aid to visibility, and hence interpretation, of sites. With the National Mapping Project set to map the entire coast in 1995, it is intended to continue to concentrate recording here. This will provide complementary low-level colour coverage to the black and white high-level verticals which would otherwise be the only source for mapping.

Cropmark Reconnaissance

Two flights early in the season monitored the cropmark development, while recording extant sites, including various coastal sites. A flight, at the height of the cropmark season, over the NE of the county

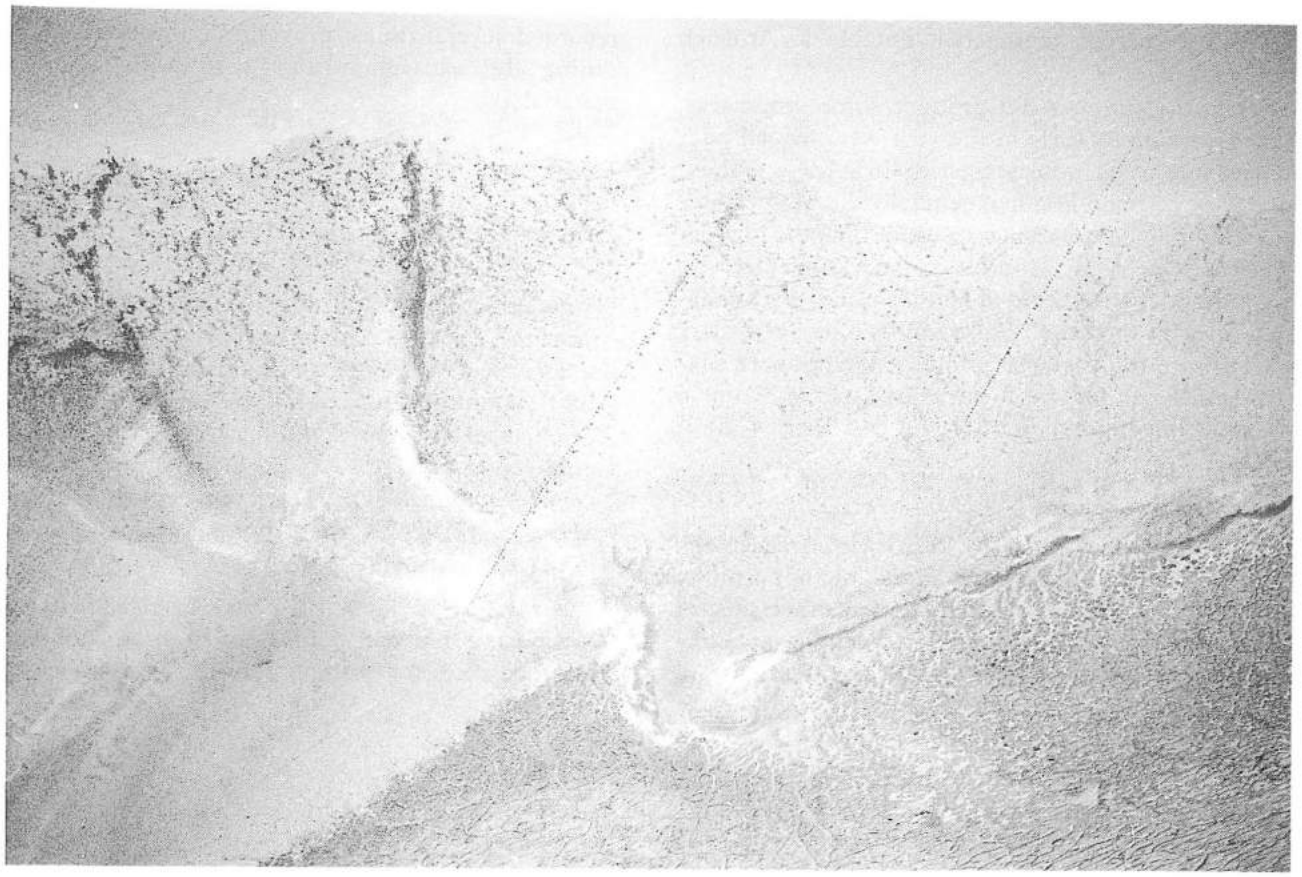

Plate 1 Aerial view of timber structures on the foreshore in St Lawrence Bay. (Photo D. Strachan)

Plate 2 Aerial view of oyster pits at Mayland Creek, Steeple. (Photo D. Strachan)

produced numerous cropmarks, notably at Ardleigh and Langford.

While the summer did produce some cropmarks, weather conditions early in the year were overall poor and few new sites were recorded. In addition, those which were re-photographed generally did not produce any additional features. As a result of this, the boulder clay areas, which only produce cropmarks in extremely dry conditions, were avoided and resources were channelled towards the coast. Full analysis of the cropmark material from the year, including new crop mark sites around Ardleigh, will be fully realised as the National Mapping Project progresses.

Excavations

Two flights were funded by the Field Archaeology Group to record ongoing excavations, the opportunity was taken on both occasions to record other sites of interest *en route*. The ongoing excavations at Elms Farm, Great Holts and Downhouse Farm were recorded several times, providing information to staff during the excavation and also useful illustrative material.

Essex Mapping Project 1994

Caroline Ingle and David Strachan

Work has continued throughout 1994 on the Essex Mapping Project as part of the Royal Commission on the Historical Monuments of England's National Mapping Programme (Ingle and Strachan 1994, 233-237). The 30 sheets mapped during 1994 bring the total completed to 40 (Fig. 4). A further 2946 records have been added to the MORPH database bringing the total number of entries to 4640. Ninety per cent of these records are cropmarks.

A total of 507 new sites have been added to the SMR during the year. A range of site types continued to be identified; for example for the project as a whole

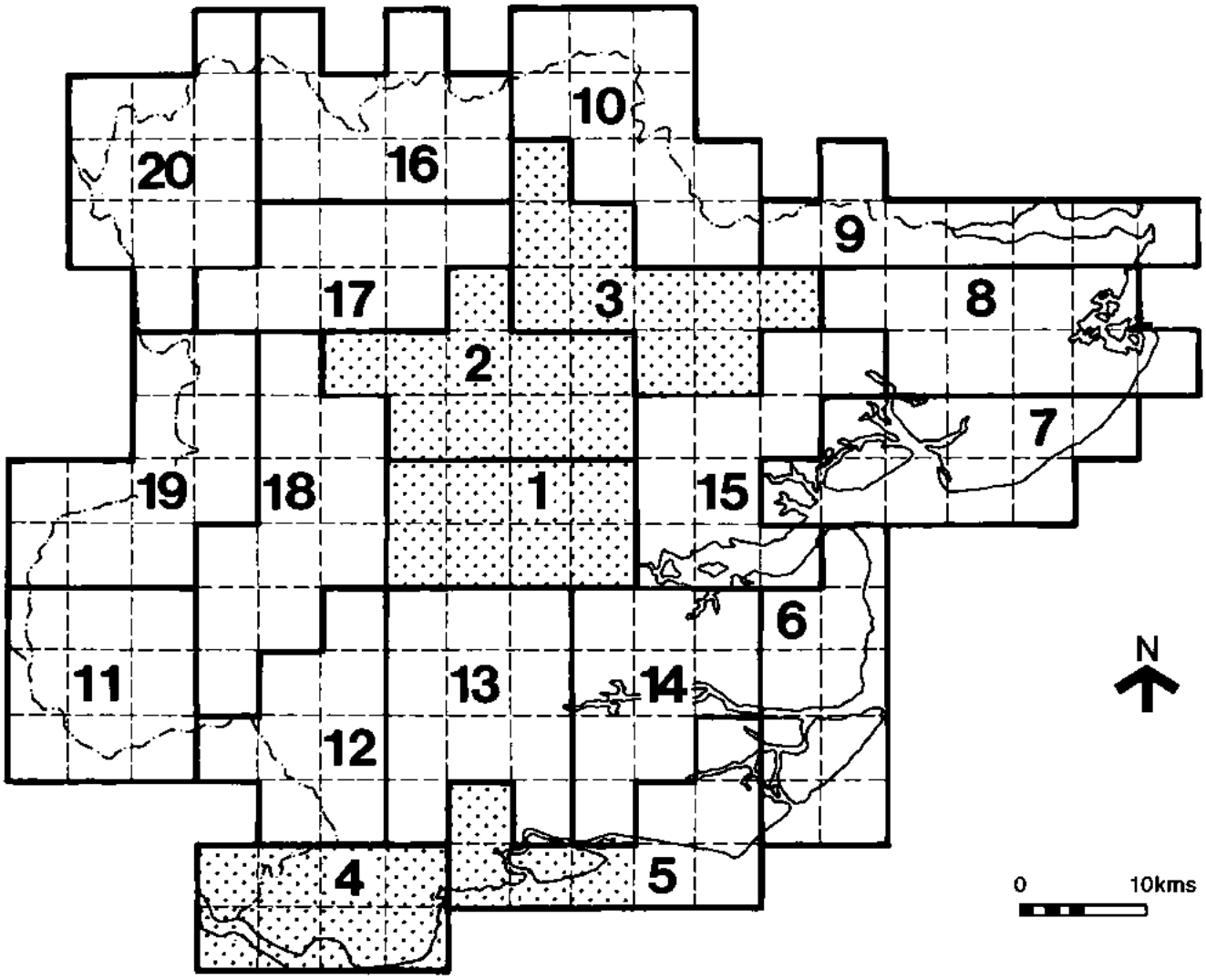

Fig. 4 National Mapping Programme blocks and progress to date.

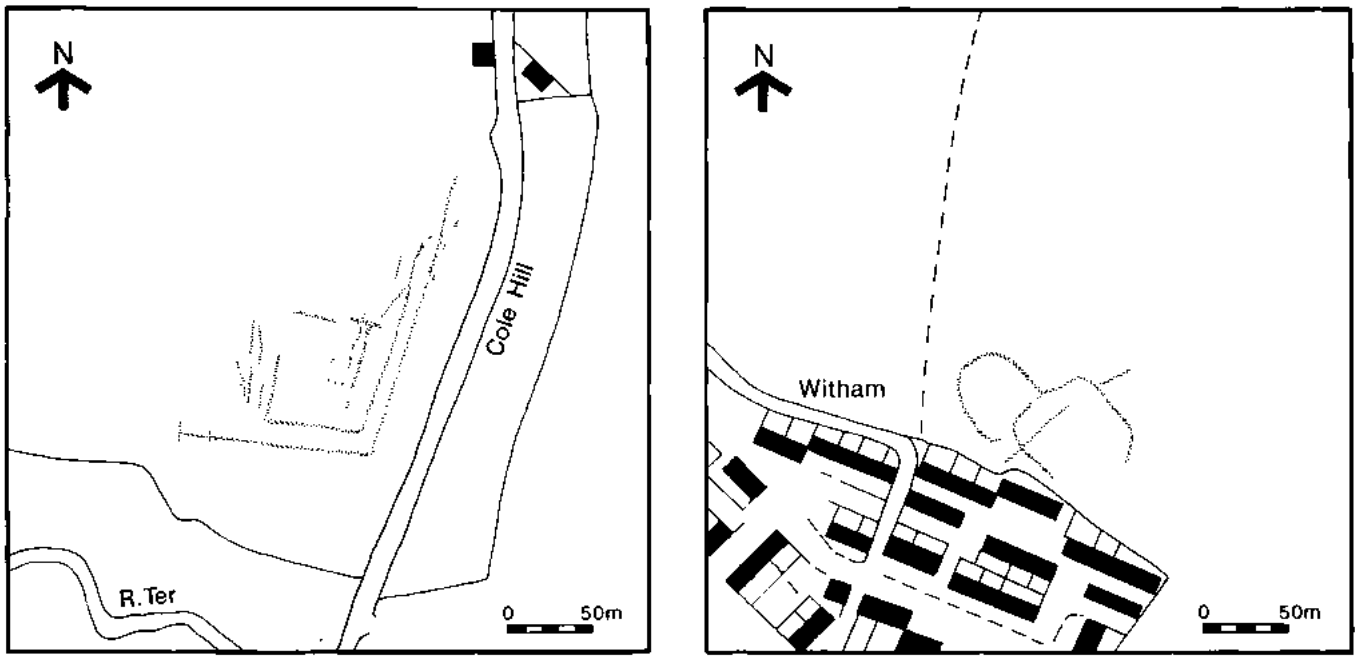

Fig. 5 Cropmark enclosures at (left) Great Leighs; (right) Witham.

to date, new sites include 53 ring ditches, 17 other curvilinear enclosures, over 30 rectilinear enclosures and some 20 lengths of trackway. The project is also recording a significant number of sites dating to the post-medieval period, including water meadows and oyster pits, and to the Second World War, in particular anti-aircraft batteries, other gun emplacements and anti-aircraft ditches.

The maps completed in 1994 cover parts of two of the landscape zones defined for the project, the dissected boulder clay plateau and the coastal zone. The differences in topography and geology is reflected in both the nature and density of archaeological features which have been recorded.

Blocks 2 and 3 (Block 1 was completed in 1993) fall within the boulder clay plateau (Allen and Sturdy 1980) cut by river valleys, including those of the Chelmer, Blackwater, Brain, Colne and Pant, which contain a variety of deposits of glacial origin including sands and gravels, brickearths and alluvium. The mapping project has reinforced the existing distribution of sites in which the greatest density of sites are to be found in the river valleys. Given that cropmarks are the predominant form in which sites are seen from the air, it is recognised that this distribution is as much, if not more, a reflection of the geology than the true archaeological pattern. For example to the west of Dunmow, prior to topsoil stripping, the Late Iron Age/Roman site excavated at Buildings Farm (PRN 9991) was invisible from the air, although in the same vicinity, at Folly Farm (PRN 14078) to the south of the A120, cropmarks of a similar rectilinear field system are seen on a small patch of glacial sand and gravel which here overlies the boulder clay. New features include rectilinear enclosures at Cressing (PRN 14190), Great Leighs (PRN 13969, Fig. 5, left), and Witham (PRN 14122, Fig. 5, right). The project has also added new features to known cropmark complexes, for example the addition of new ring ditches, enclosure, trackways and other linear features in the vicinity of the long mortuary enclosure near Rivenhall (PRN 8296, Fig. 6). The possible line of 5km of Roman road to the west of Colchester has been plotted from RAF vertical photographs taken in 1959. In another area, the previously projected course of a stretch of road was corrected. A good example of reinterpretation of a site is shown at a cropmark complex at Birch to the west of Colchester. As a result of mapping, the site has, by comparison of size, morphology and spatial relationships, been recognised as being similar to a complex at Stanway (PRN 12552), *c.* 3 km to the north-east. The Stanway site originally consisted of two 1st-century BC enclosures, probably a small settlement and stock enclosure. The larger of these enclosures was subsequently reused as a burial place towards the end of the 1st century BC. This was followed by the construction of two sub-square enclosures. These appear to have been specifically constructed as burial enclosures. The largest of these contained an important high status "warrior" burial dated to around 20-30AD, which was contained within a sunken chamber, the site of which clearly appears as a cropmark. Comparison with the Birch site, which also includes a large pit feature within one enclosure, would suggest another of these important burial enclosures (Fig. 7).

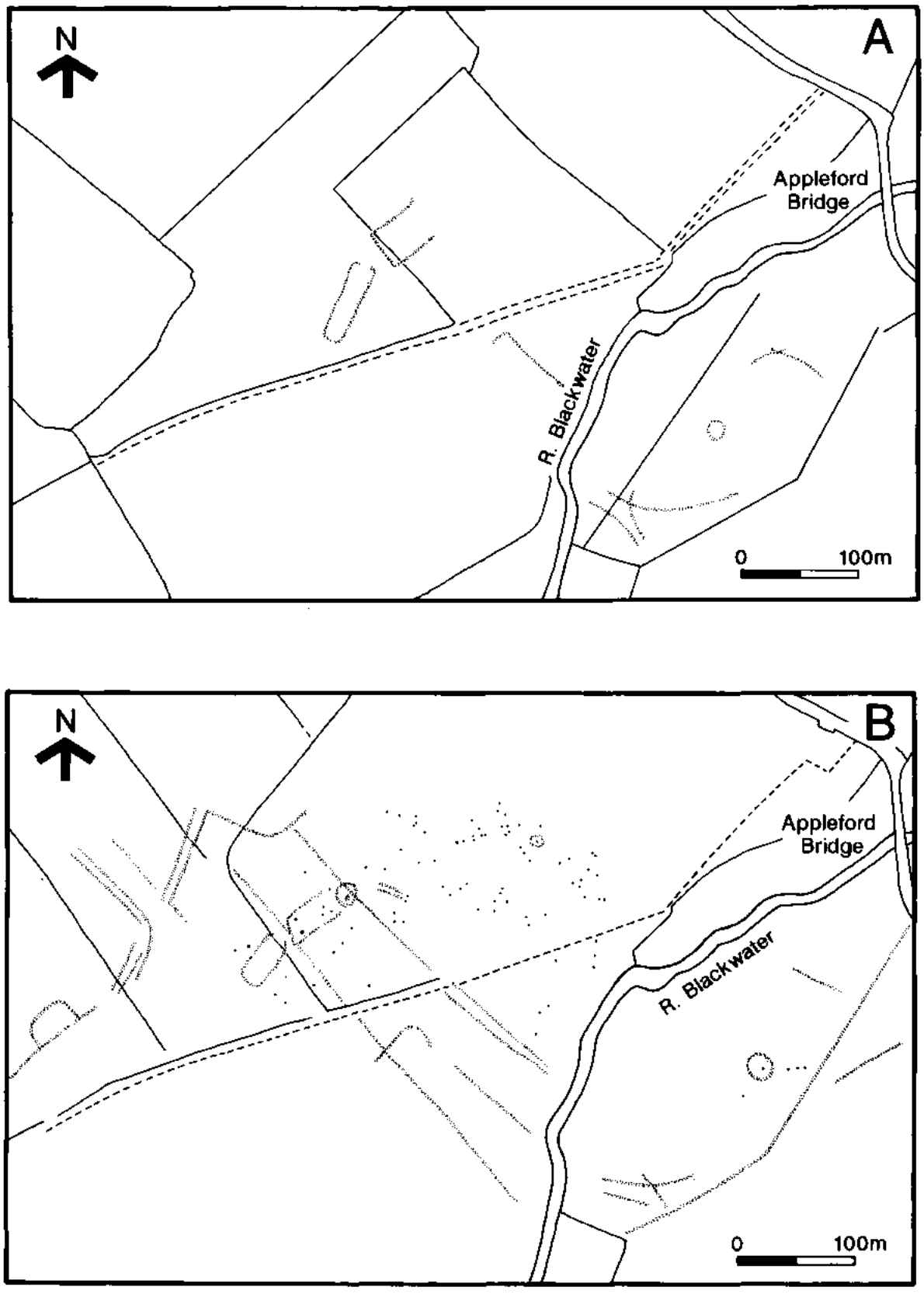

Fig. 6 Cropmark features near Rivenhall as depicted on: A original SMR plot; B new NMP plot.

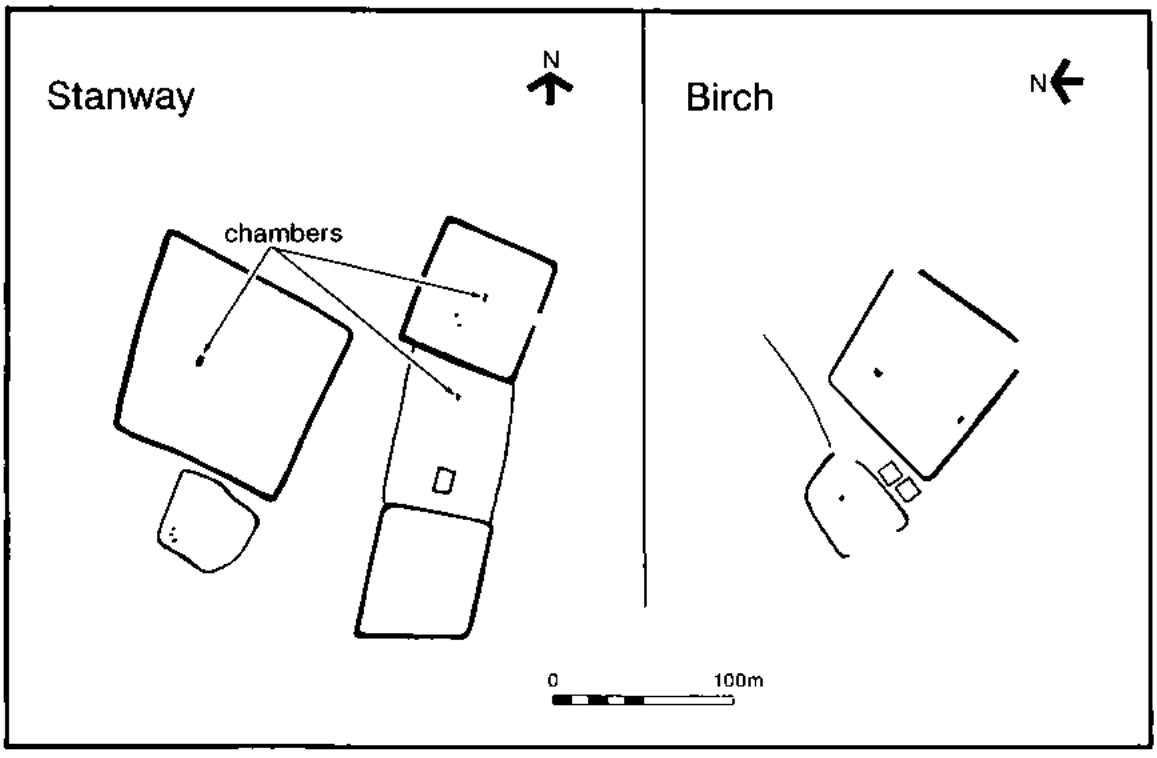

Fig. 7 Comparison of rectangular enclosures at Stanway and Birch.

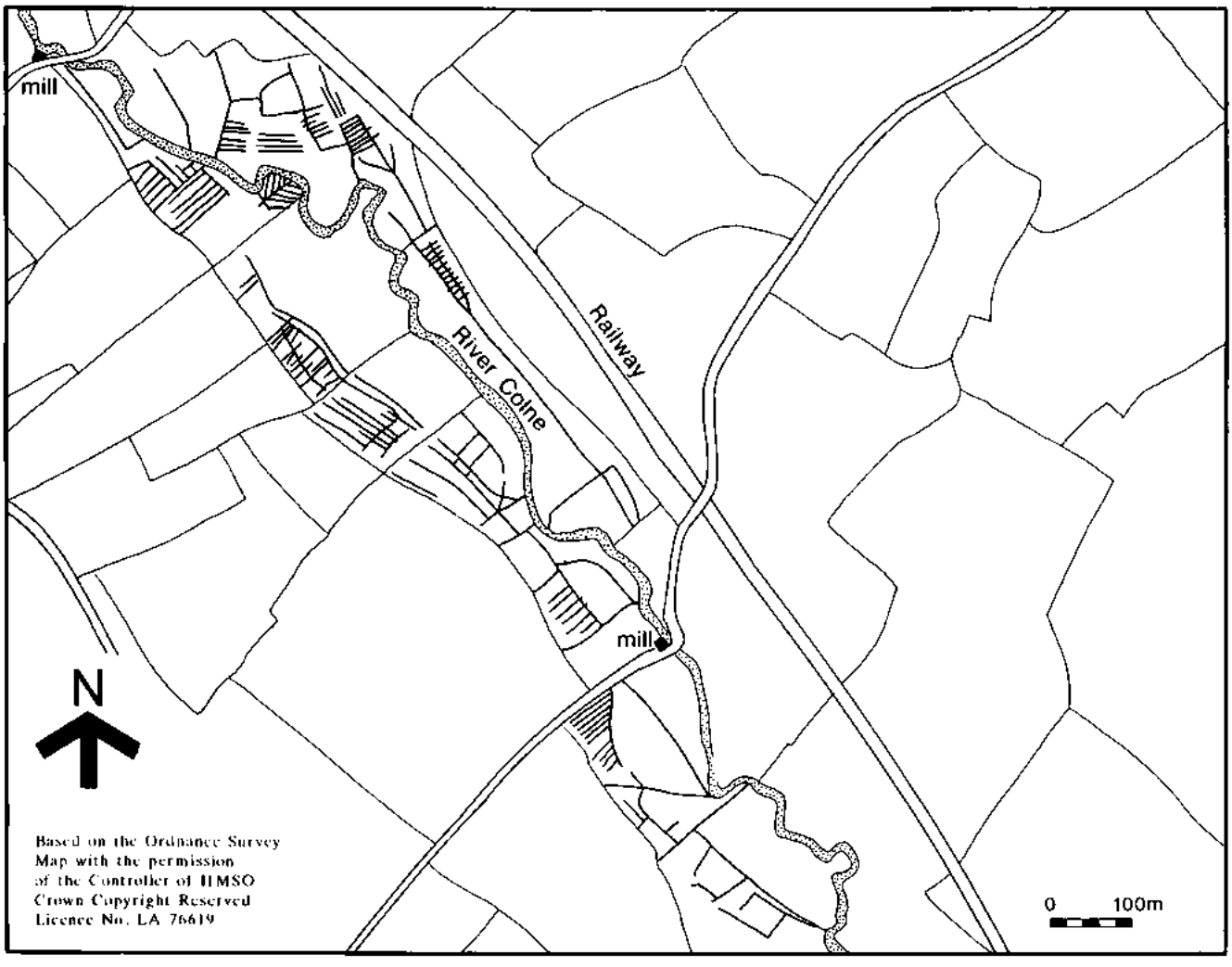

Fig. 8 Water meadows south-east of Sible Hedingham.

In the areas between the river valleys, the predominant features recorded are former field and woodland boundaries, but they also include the county's World War Two airfields, of which 7 fall within these two blocks.

A number of earthwork features have been identified and plotted, many of them from the RAF photographs of the 1940s and 50s. A large number of these are water meadows and other water management features which are seen along many of the river valleys, e.g. the Ter, near Leez Priory (PRN 13958), the Colne, east and north-west of Halstead (PRNs 14434, 14437), the Pant, north-west of Braintree (PRN 14160), the Blackwater, south-east of Coggeshall and including the water meadows at Coggeshall Abbey (PRNs 14250, 14251), the Colne, south-east of Sible Hedingham (PRNs 14290-14292, Fig. 8) and the brook east of Rivenhall church (PRN 8420).

At Leez Priory, RAF vertical photography from the 1940s provided evidence of additional banks, which have been destroyed by agriculture and are no longer visible from the air or ground, around the surviving scheduled fishpond system associated with the priory. Also visible from the air is the cropmark of the circular enclosure around the Wilderness, a woodland plantation dating to the post-medieval period.

Blocks 4 and 5A cover the first part of the coastal landscape zone, as defined for the project, to be mapped which cover landscape types as identified by Allen and Sturdy: salt-marsh, terraces and London Clay. The distinctive geographical character of each is again reflected by the archaeology; extensive and complex cropmark evidence for dense settlement on the Thames gravel terraces, relatively few sites visible from the air on the London Clay, and features predominantly of post-medieval and 20th-century date on the marshes. One of the major challenges of mapping this area of Essex has been the difficulty in correlating geographical control features between the photographs and the present landscape, which has undergone drastic changes in the post-war period, mainly due to industrial and housing development and gravel extraction.

Mapping in this area has included the replotting of the major cropmark complexes at Mucking, Orsett and Grey Goose Farm. As with the river valleys in the boulder clay, this has mainly added further detail and enabled more accurate sketch plotting of known features rather than identification of major new sites. The early photographs, in particular the RAF material from the 1940s, has added some sites subsequently lost to development. However, one notable new cropmark site, which actually falls within Greater London, was recorded at Hornchurch. This comprises part of a triple-ditched sub-square enclosure, comparable to the Late Iron Age hill fort 3 km to the south-east at Moor Hall Farm (Greater London SMR 60058-60062, Fig. 9, left), which was excavated prior to gravel extraction. The cropmark was visible only in one year, 1947, and now lies within a playing field at Brittons School (Fig. 9, right).

The areas of marsh show quite a dense but very distinct pattern of features, many of them dating to the Second World War and including anti-aircraft batteries and anti-glider ditches, in particular on the marshes between Fobbing, Shellhaven and Canvey. None of these are now visible from the air or on the ground, and for this period the results of the mapping project for this period are complementing those of the field survey of World War Two defences currently in progress (see p. 256, this volume).

Two of the extensive sites mapped in Block 5A are late 19th-century explosives factories. One of these, Kynochtown (PRN 7239), lying between Holehaven and Shellhaven creeks, has been almost completely destroyed by post-war expansion of the oil-storage depot at Coryton and Shellhaven. The second lies on Pitsea Island (PRN 14749), now the Pitsea Island (formerly Wat Tyler) Country Park. The British Explosives Syndicate began production here in 1894 and ceased in 1920. Detailed analysis and mapping of individual features within these sites does not fall within the scope of the National Mapping Programme but the main features have been plotted and these sites will be further researched as part of the industrial survey of the county.

Other features relate to exploitation of the marsh itself and date to the post-medieval and modern periods. They include a number of oyster pits at Pitsea Island (PRN 14745) and Hadleigh Ray (PRN 14737), the latter including some circular pits, the first example of this shape recorded during the project. A series of rectangular ponds (PRN 14770), perhaps for fish storage, appear to the south of Fobbing village on the edge of the marsh. Similar features, used for storing fish until required for market, have been described at Leigh, near Southend and it is hoped that it will be possible to identify these from the aerial photographs when this area is mapped.

During 1995, the project is set to work along the coast from the south to the north. The results of the Archaeology Section's aerial survey programme (Strachan, above) and mapping of Blocks 4 and 5A, would suggest that this will produce a significant number of new sites for the SMR relating to oyster cultivation, salt extraction, shipping and fishing activities.

Industrial archaeology survey

Shane Gould

The Archaeology Advisory Group of Essex County Council has recently started a systematic survey of all the county's surviving industrial remains. Industrial archaeology is currently under-represented on the

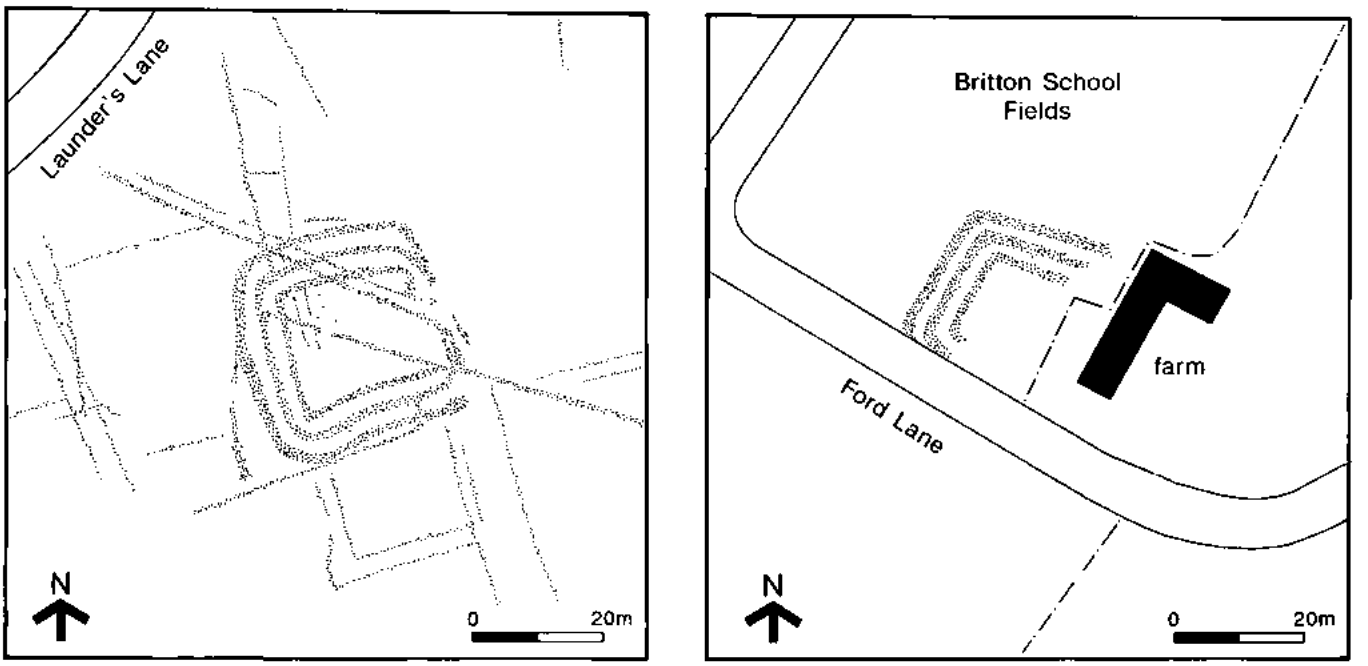

Fig. 9 Comparison of triple ditched enclosures at (left) Moor Hall Farm; (right) Britton's School.

County Sites and Monuments Record (SMR) and the survey aims to redress this imbalance by identifying sites of major regional importance. Exemplars which are not already protected will be recommended for possible Listing or Scheduling and the recording priorities for each industry will be identified. The survey works at three inter-related levels:

I Comparative surveys. The field remains for each industrial site type will be investigated and details of their form, condition and importance will be recorded on the SMR. When they become threatened, it will be possible to deduce their comparative importance and the need for any further recording.

A survey of lime kilns has recently been completed. Of the four known examples only one was of sufficient importance to merit further recording in advance of any proposed works; this site will also be recommended for possible Scheduling as part of English Heritage's Monuments Protection Programme.

Fifty-seven malt houses have also been identified in Essex and the survey has already shown inconsistencies in the criteria for Listing. Many of the larger sites have been demolished and a large number have been converted without record. The survey will be completed in March 1995 and several additional sites will be recommended for possible Listing.

II Detailed site surveys. The comparative survey will identify sites where a more detailed record will be required in advance of any proposed works. These buildings may contain important structural and/or technological information and it is important that these features are properly recorded. Planning Policy Guidance Note 16 and Planning Policy Guidance Note 15 places the responsibility for funding such projects with the developer, although in certain circumstances the Archaeology Advisory Group may have to undertake the necessary work.

Surveys have recently been completed for two sites:

A. Mortimer Sawmills Ltd (PRN 15010)
This is a small sawmill in Brentwood. Here a rather modern building was found to contain a rare example of a steam-driven horizontal saw (Plate 3); steam power had been replaced by electricity, although the belt drives survived *in situ*. The saw was to be cut up for scrap on completion of the survey.

B. The Atlas Ironworks, Earls Colne (PRN 15005)
The Atlas Ironworks had a profound impact on the development of Earls Colne and an architecturally ornate group of late 19th-century buildings survive at the entrance to the works; these include the water tower, machine shop, stores and part of the foundry. The survey discovered that although the original building facades survived, most of the internal detail had been modernised, and unfortunately no machines survived.

III Sites will also be identified as part of the development control process. These vary greatly in form and type and recent examples include an 18th-century stench pipe (PRN 15000) in Belhus Woods Park, a

Plate 3 'Kirchner' horizontal saw from the west. (Photo S. Gould)

lock-keeper's cottage beside the Stort navigation and a superb example of the international modern movement architectural style at Rochford hospital. The stench pipe was recently Listed Grade II.

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Archaeology in Essex 1994

edited by P.J. Gilman and A. Bennett

This annual report, prepared at the request of the Advisory Committee for Archaeology in Essex, comprises summaries of archaeological 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 78 projects were reported to the County Archaeological Section (Fig. 1).

Sites are listed by category of work and alphabetically by parish; the directors of excavations, organisations involved and information regarding the location of finds and places of final report are listed, where known. Projects continuing from previous years are indicated by reference to previous summaries in the relevant 'Excavations in Essex 19 '.

Contributors are once more warmly thanked for providing information. The illustrations are by: S. MacNeil (Fig. 1) and M. Germany (Fig. 2).

The original summaries, and any associated limited circulation reports, have been added to the County Sites and Monuments Record held by the Archaeology Section at Essex County Council, Planning Department, County Hall, Chelmsford CM1 1LF. For details of sites in the London Boroughs, contact the Newham Museum Service, Archaeology and Local History Section, 31 Stock Street, Plaistow, Stratford, London E13 0BX.

Progress in Essex Archaeology 1994

Introduction

The number of summaries (78) is rather higher than for 1993 (57), probably due to improvements in the overall economic situation. It is also possible that the increase is due to greater awareness on the part of developers and planning authorities of the importance of dealing with archaeology at a sufficiently early stage in the planning process. This may account for the increase in the number of evaluations. This growth in activity indicates that the threat to archaeology in the region from development is higher than ever. An additional potential threat in the coastal zone has arisen in the form of 'managed retreat', whereby the sea is allowed to inundate areas behind the existing sea wall (cf 32) in the hope of re-creating salt marsh. However, if this proves successful, then many coastal sites will gain additional protection from erosion.

The practice of competitive tendering for archaeological projects has continued to grow and it is becoming normal procedure for developer-funded projects. This has resulted in situations, as at Little Bentley (27, 50) where different archaeological units work on evaluation and subsequent excavation. At Heybridge (47, 48) two units have been working, effectively, on parts of the same archaeological site. In these circumstances, communication between the units involved is crucial and, to date, has been achieved. However, it is possible to imagine future scenarios where the demands of commercial confidentiality may cause problems.

As in previous years, there are only a few contributions from amateur organisations. This does not lessen the value of their work, as is shown by the summaries notably for Chigwell (39) and Waltham Holy Cross (52). The establishment of a Field School at Cressing (42) may, in providing training for amateur archaeologists, help to reverse the recent decline in activity.

Prehistoric

Apart from a few finds, no Palaeolithic remains were investigated, although evaluations on the A13 (2) and at Great Wakering (20) uncovered geological deposits from this era. Interesting environmental evidence has come from East Ham (17, 44) and North Woolwich (28), where stratified alluvial deposits were found, including peat deposits. Both sites at East Ham had fallen yew trees preserved within the peat, probably part of a yew forest that grew along the Thames in the prehistoric period.

At Brightlingsea (9), a ring-ditch proved unusually to date from the earlier Neolithic. Also of interest were Beaker burials from Heybridge (48) and Little Bentley (27), and a red hill at Tollesbury (32) dating from the Middle Iron Age. An Early Iron Age settlement was investigated at Harlow (46), and Late Iron Age to Early Roman settlements were investigated on the A13 at Aveley (2) and at Ilford (49).

Roman

The investigation of the Roman 'small town' at Elms Farm, Heybridge (47) has continued to be the most significant project for the study of this period in Essex. Rural sites have also produced interesting results, such as at Boreham (38) where the farmstead buildings including an interesting bath house have been revealed, and at Harlow (45). An unusual enclosure at Hatfield Peverel (22) has been investigated and then preserved *in situ*, thanks to the positive attitude of the gravel company involved.

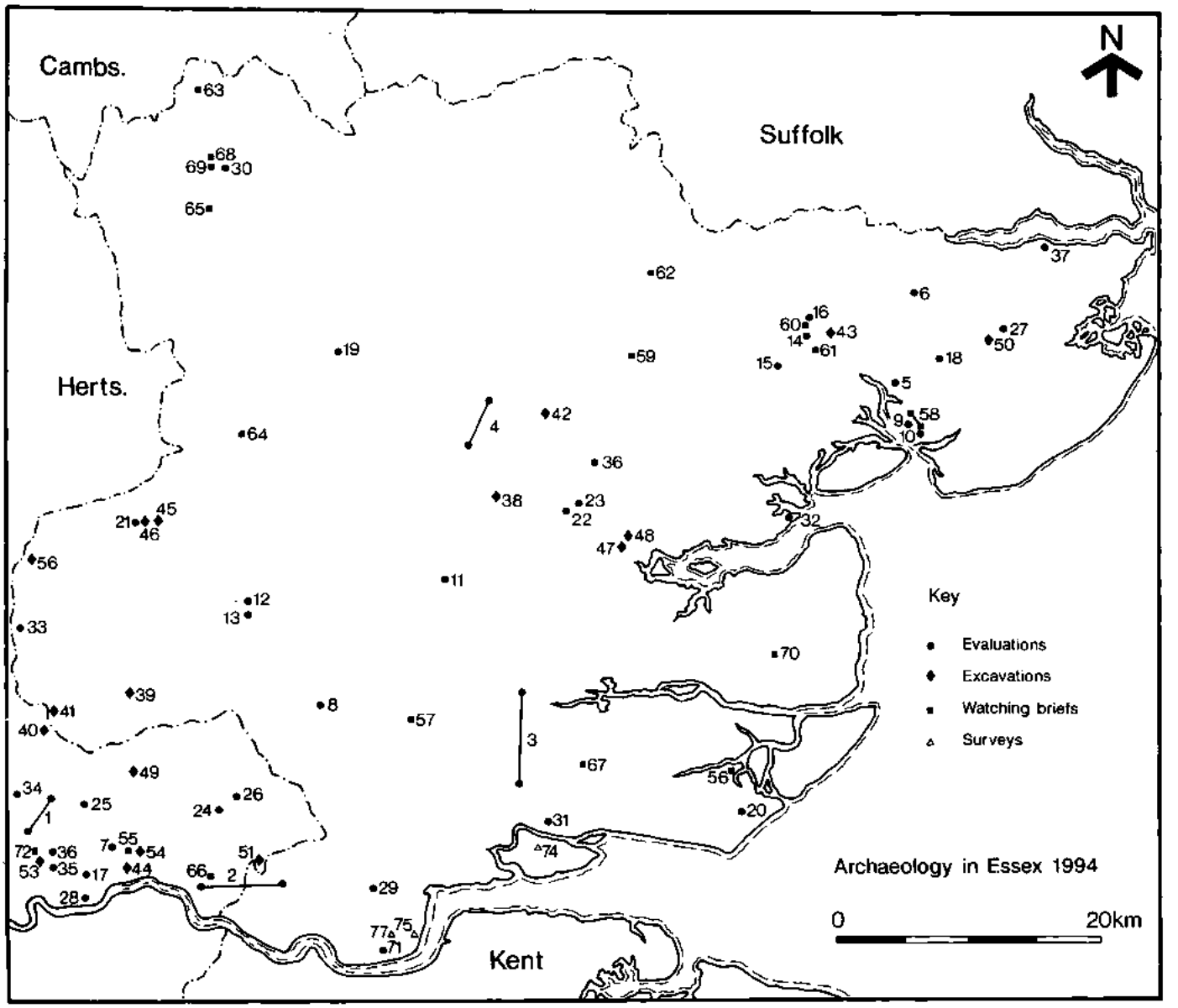

Fig. 1 Locations of archaeological projects in Essex 1994.

Saxon

Saxon sites are, as usual, conspicuous by their relative rarity, although Elms Farm (47) provided evidence for several Early Saxon features, including three sunken-floored buildings and a well. Saxon features were also found at Chipping Ongar (12, 24) and Upminster (51), and two child burials were found at Waltham Holy Cross (52).

Medieval

As for last year, the majority of activity concerned rural settlements. Moated manors were investigated at Walthamstow (34) and Rainham (66), and investigations continued at Cressing Temple (42). Religious houses were investigated at Barking (7), Waltham Holy Cross (52) and West Ham (53). Urban sites were investigated at Chipping Ongar (12, 13), Rayleigh (67) and Saffron Walden (30). The two sites at Chipping Ongar in particular provided useful information, both in terms of the town's development and for the study of early medieval pottery in this area.

Post-medieval

As was reported last year, the R.C.H.M.E. office at Cambridge has provided an extremely useful addition to the survey capabilities in the region. Work in 1994 concentrated on sites within the proposed Thames Gateway area in Essex, and of the three summarised here two are from World War II (75, 77). The survey of defences from this era being carried by the County Council has continued to make good progress (78). It is hoped that this will continue during 1995, as part of

the commemoration of the 50th anniversary of the end of the War. In 1994 renewed emphasis was placed on the county's Industrial Archaeology, with the commencement of a programme of survey (76), described elsewhere in this volume (see pp. 236-7).

Evaluations

1. A12 M11 Link Road

(TQ 3739 8550-TQ 3956 8789)

F. Meddens, N.M.S

Archaeological evaluation was conducted by means of trench excavation and by the use of auger surveys. The evaluation revealed the presence of deeply buried medieval remains in the vicinity of Ruckholts Manor, Leyton, indicated by sherds of Colchester-ware pottery. Also discovered were the remains of post-medieval horticultural land-use, evidence of extensive land consolidation on the floodplain of the River Lea, and traces of nineteenth-century mineral extraction and building activity on the gravel terraces forming the edge of the River Lea Valley. Much of the archaeology which may have once been present would undoubtedly have been destroyed in the nineteenth-century building boom in the area. It was also discovered that many areas potentially rich in archaeology have been buried underneath land consolidation and land-fill schemes.

Finds: N.M.S.

2. A13 Wennington-Mardyke Road improvement scheme, Aveley (TQ 546 811-TQ 574 801)

M. Germany/S. Foreman, E.C.C. (F.A.G.)

The proposed route of the A13 road improvement scheme is a 24km stretch, *c.* 100m wide, which loops to the south of Aveley, and crosses Thames gravel terraces. The road corridor is situated on a gentle south-facing slope overlooking the Mar Dyke. A large part of the route has been quarried; only 6.5ha was under arable cultivation and hence available for fieldwalking. Fieldwalking was carried out during January and May 1992, whilst a geophysical survey of the remainder of the route was undertaken in October 1994.

The road corridor is located on the Corbets Tey gravels, close to the bluff edge of the Mucking gravel terrace. These deposits are of great importance due to the high occurrence of palaeolithic and palaeontological material. Two areas of potential interest were identified: Ponds Cottages, Purfleet Road and Ship Lane. Seven test pits were dug at these locations. Although no archaeological finds were made, important fossiliferous Thames sediments belonging to the Mucking formation were found to be present.

Fieldwalking during January and May 1992 identified concentrations of prehistoric flintwork and Roman pottery and tile from TQ 566 793 to TQ 572 797 (either side of Ship Lane, Aveley). The geophysical survey did not locate any additional sites, although the remains of a possible ancient field system and several tentative pit-type anomalies were encountered to the south-west of Ship Lane at the same location as the finds retrieved during the fieldwalking. Evaluation of this site during November and December 1994 revealed the remains of a settlement occupied from the Late Iron Age through to the Roman period and possibly into the early Saxon period. Activity on the site continued into the medieval period although it is unlikely that there was a settlement on the site at this time.

Features located included a series of substantial boundary ditches enclosing an area with structural features such as post holes, pits and gullies. The features and finds are suggestive of a small-scale rural settlement with its most intensive period of occupation during the Late Iron Age/early Roman period.

Previous Summaries: Gilman (ed.) 1993, 197.
Finds: T.M.

3. A130 By-pass, Stage II

(TQ 774 943-TQ 768 898)

K. Reidy, E.C.C. (F.A.G.)

The total land-take of the proposed route is 58ha. To date fieldwalking has been undertaken on 25% ha of the route and geophysical survey on a further 15ha of the route. Additional geophysical survey was carried out on six possible sites identified by the fieldwalking survey. The evaluation work is not yet complete.

The first phase of fieldwalking identified three probable sites: two prehistoric sites at TQ 773 901 (North Benfleet) and TQ 772 938 (Wickford), and a Saxon site at TQ 774 904 (North Benfleet). There was also a significant scatter of burnt flint at TQ 775 907 (North Benfleet) which may indicate prehistoric activity in the area.

A further phase of fieldwalking in January 1994 identified four probable sites: one prehistoric site at TQ 775 922 (Rawreth), one Saxon site at TQ 773 928 (Rawreth), and two medieval sites at TQ 774 926 (Rawreth) and TQ 773 930 (Rawreth).

Trenching work on five of these sites took place in September 1994. Trenching of the findspots of Saxon pottery (TQ 774 904 and TQ 773 928) did not locate any buried archaeological remains. The burnt flint scatter at TQ 775 907 and the possible prehistoric site at TQ 773 901 were also evaluated by trenching. Again, no buried archaeological deposits were found. Trenching at one of the possible medieval sites TQ 773 930 revealed part of a medieval field system and features consistent with those that might be found on the edge of a small settlement.

Previous Summaries: Gilman (ed.) 1992, 100; 1994, 241.
Finds: Ch.E.M.

4. A131 Great Leighs Bypass (TL 722 159-TL 741 198)
N. Lavender, E.C.C. (F.A.G.)
An evaluation by trial-trenching was conducted on part of the proposed route of the A131 Great Leighs Bypass at Youngs End. Four trenches were excavated where fieldwalking results suggested that prehistoric and medieval activity might be expected. In the event, no indications of archaeological activity were observed.

An evaluation by trial-trenching was conducted on part of the proposed route of the A131 Great Leighs Bypass in the field to the south of the present A131 and Goodman's Lane, in Little Leighs. Five trenches were excavated with the double objective of confirming the line of the Roman road identified from aerial photographs, and investigating a concentration of worked and burnt flint located during fieldwalking in 1993.

The road was identified by the location of the eastern road-side ditch in three trenches, and also the western ditch in one of these trenches. Fragmentary remains of metalling were also located. No dating evidence was recovered from these features, but they are assumed to be of Roman date.

The trenches excavated in the area of the flint scatter located no features at all, but south of these were found two features which produced Late Bronze Age pottery. One of these was clearly a pit, containing approximately 200 sherds including rims and a pierced lug. The other was more irregular and its shape was not fully identified due to the confines of the trench; it contained only two bodysherds of pottery.

The concentration of the flint and the presence of Late Bronze Age features suggests that there is a prehistoric settlement within the evaluated area.

Previous Summaries: Gilman (ed.) 1994, 241.
Finds: Ch.E.M.

5. Alresford, Church Farm (TM 0615 2060)
H. Brooks, H.B.A.S.
An archaeological fieldwalking evaluation took place in two stages (in April and October 1994), over a 6.68 hectare block of land south of the now ruinous St Peter's Church (ESMR 2382-3).

Fieldwalking method was the standard 10% sample over 20-metre stints on 20-metre transects. Prehistoric flints, burnt flint, Roman? tile, post-medieval tile, post-medieval pottery, modern pottery and modern glass were collected, but none of the material was in significant concentrations.

Finds: H.B.A.S., then to C.M.
Final report: Essex Archaeol. Hist.

6. Ardleigh, Elm Park Nursing Home, Station Road (TM 056 289)
H. Brooks, H.B.A.S.
Elm Park Nursing Home lies on the western side of an archaeologically sensitive area — a nationally important cropmark complex lying in the triangle of land between Home Farm, Martell's Farm and Vince's Farm, Ardleigh (a large part of which is designated as Scheduled Ancient Monument).

An evaluation on the site of the proposed north extension to the nursing home, Station Road, Ardleigh in October 1994 revealed no significant archaeological deposits. The only feature in the evaluation trench was a large 20th-century pit. However, the pit did contain six residual Romano-British grey-ware sherds. This may hint at the previous existence of Romano-British deposits on (or near) the site.

Finds: H.B.A.S., then C.M.
Final Report: Essex Archaeol. Hist.

7. Barking, Barking Church of England Primary School (TQ 4402 8401)
K. MacGowan, N.M.S.
The earliest phases of activity were associated with the Barking medieval abbey, and included a chalk wall footing with a blocked entrance. Its internal angle was later faced with brick. A large chalk-floored building which later had its walls robbed out was detected by robber trenches. The next phase was the construction of a wall demarcating different but unknown land uses within the abbey. Some time after this a masonry culvert with arched roof, aligned east-west, was constructed. The dissolution of the abbey was shown by the robber trenches of the walls of the above buildings and the build-up of layers. Post-medieval horticultural soils then accumulated and a furnace of an unknown industry was built. In the late 19th century the Victorian school was built on the site and the footings for the infants' department were recorded.

Finds: N.M.S.

8. Brentwood, land near St Mary's Church, Shenfield (TQ 606 951)
M. Ingram, E.C.C. (F.A.G.)
Nine trial trenches were excavated within the limits of the proposed extension to the burial ground of St Mary's Church, Shenfield. Archaeological deposits were identified in three of the trenches, although unstratified Roman pottery was retrieved from all trenches.

Two of the trenches containing archaeological remains were in the easternmost part of the development area. The features identified comprised a gully in one trench and a pit in the other. The gully produced no finds, whilst the pit contained Roman pottery dating from the mid 3rd to early 4th centuries AD.

Archaeology was also encountered in the westernmost trench where a natural hollow had been infilled with a buried loam containing fragments of Roman tile. The unstratified pottery collected from the surface of the trenches ranged in date from the mid 2nd century to the early 4th century AD.

Finds: Ch.E.M.

9. Brightlingsea, ring-ditch at Moverons Pit (TM 070 183)

N. Lavender, E.C.C. (F.A.G.)

Evaluation of a cropmark ring-ditch showed it to be of earlier Neolithic date (*c.* 3500-2500 BC), and to be segmented. It was more D-shaped than circular, and up to 1.7m deep. During excavation seven recuts were observed in the ditch, including a late shallow one which had continued across the only causeway identified, and made the ring-ditch appear continuous in its unexcavated form. A deposit of large fragments of Mildenhall-type pottery was recovered from the base of the fifth recut. Within the circuit of the ditch, and with edges parallel to it, was a shallow area filled with charcoally material and a large quantity of broken pottery. The whole enclosure was bisected by a later field-boundary of unknown date. (Further work was undertaken in 1995.)

Finds: C.M.

Final Report: Essex Archaeol. Hist.

10. Brightlingsea, Springmead, Ladysmith Avenue (TM 0843 1717)

M. Germany, E.C.C. (F.A.G.)

Topsoil from 4 trenches (A to D), to the immediate north and west of the stream and spring in Springmead garden, was removed by machine. Trenches A, C and D exposed extensive deposits of silty sandy loam (contexts 5, 8 and 9 respectively). These deposits (>90cm thick) contained large amounts of modern debris. Deposit 5 in trench A also contained large quantities of Roman brick, the occasional piece of Roman tile and box-flue tile, and the occasional piece of septaria. No archaeological features or finds were discovered in trench B.

It was evident from the modern debris in deposits 5, 8 and 9 that a large proportion of the Springmead garden had been disturbed by modern development.

The fragments of Roman brick, tile and septaria in deposit 5 were residual and may have originated from the Roman villa complex to the immediate north (ESMR PRN 2132-3).

Finds: E.C.C.; to go to C.M.

11. Chelmsford, Laurel Grove (TQ 700 055)

K. Wilkinson, Cw.A.T.

Field evaluation on behalf of Bermac Properties of an area close to where Roman cremations have been recorded revealed no features earlier than the 19th century.

Finds: Ch.E.M.

12. Chipping Ongar, Library site, Pleasance Car Park (TL 552 031)

R. Clarke, E.C.C. (F.A.G.)

A T-shaped trial trench located 19 archaeological features which represent activity during the Saxon, medieval and post-medieval periods. Fourteen of the features were post holes; the remainder included a small ditch or beam slot and several features of uncertain function.

This evaluation produced evidence which suggests that the production of shell-tempered ware continued in this area into the 13th century. Previously it had been thought that the date range for this type of pottery was limited to the 11th and 12th centuries. The animal bone assemblage was small, although certain species were identified, namely cattle and pig.

Finds: E.F.D.M.

13. Chipping Ongar, former School site, Bransons Lane (TL 551 030)

R. Clarke, E.C.C. (F.A.G.)

A total of six trial trenches were excavated, all of which were found to contain early medieval through to post-medieval occupation. Two of these trenches were placed across the projected line of the medieval town ditch (to the east of Cripsey Brook). The town ditch was located and planned, but not excavated. The other four trenches were located within the town enclosure to investigate the medieval settlement. Of these, the two trenches placed around the demolished school building and closer to the High Street, produced structural features dated to the early medieval period. These consisted of post holes and a possible beam slot. The two trenches located nearer to the town defensive ditch contained pits, probably for rubbish disposal, and ditches which may have been used for drainage and property demarcation.

Some residual Roman pottery was also found in some contexts, suggesting that there may have been some earlier, Roman, activity in the nearby area.

The pottery from this site has provided new information about trade patterns in the region. Of particular interest is the occurrence of early London-Type Ware. This previously had only two find spots in Essex: Harlow and North Weald. It is possible that London-Type Ware was transported via the Roding valley which formed a major north-south routeway to London. Both this evaluation, and the evaluation on the Pleasance carpark, Chipping Ongar, provided evidence that the production of shell-tempered ware continues into the 13th century in this area. Previously it had been thought that the date range for this type of pottery was limited to the 11th and 12th centuries.

The animal bone assemblage was small but informative. Species identified were cattle, sheep/goat, pig, dog, hare and deer (probably roe). Some of the bone fragments showed signs of butchery marks.

Finds: E.F.D.M.

14. Colchester, Freda Gunton Lodge, Balkerne Gardens (TL 9943 2523)
H. Brooks, C.A.T.
In advance of an extension to the Balkerne Gardens Rest Home, two evaluation trenches were excavated in September 1994.

Trench 1 was located 13 metres east of the east face of Freda Gunton Lodge and close to the gate giving access to Balkerne Close. The top 0.6 m of stratigraphy consisted of modern topsoil cut by a pipe trench. Below this, medieval and Romano-British deposits were revealed between 0.6 and 1.75 m below modern ground level) as follows (from earliest to latest): late 1st- to mid-2nd century gravelly clay and clay (floor?); mid- to later 2nd-century dumped deposits; medieval robber trench cutting Roman deposits.

Trench 2 was located 9 m north of the north-west corner of Freda Gunton Lodge. This was a reopened engineering test pit, rather than a freshly-dug trench. In confirmation of test pit results, 2.2 m of recently dumped topsoil, certainly Victorian or later, was observed. This points to a very considerable depth of made ground along the north edge of the garden of Freda Gunton Lodge.

Finds: C.A.T., then C.M.

15. Colchester, Gosbecks Farm (TL 971 229)
H. Brooks, S. Benfield and S. Garrod (C.A.T.).
See this volume, pp. 261-4.

16. Colchester, rear of 21 North Hill (TL 9939 2542)
H. Brooks, C.A.T.
A 1 x 1 m evaluation trench was cut in advance of proposed development. Two Roman floor levels were revealed — an abraded mortar floor at 0.45 m below present site level, and a clay floor at 0.8 m. Each was covered by a layer of demolition debris. These were sealed by post-medieval topsoil, itself disturbed by the construction of a recent retaining wall and a car park surface.

Finds: C.A.T., to go to C.M.

17. East Ham, Beckton Nursery (TQ 4247 8202)
P. Moore, N.M.S.
The site was located at the former Beckton Nursery, Newham Way, North Beckton. Two trenches were dug revealing a 3 m depth of peat overlying a silty clay; both trenches contained evidence of cultural activity. Two staked brushwood structures were found in Trench 1, one of these being a substantial NE/SW trackway. Trench 2 contained several brushwood features, some of which were probably trackways but others had unknown functions. There was evidence of woodworking in the form of waste wood chips. Also of interest, lower down in the peat deposits of Trench 2, were several fallen yew trees.

Above the peat, a 2 m depth of alluvial clay was observed in both trenches. In Trench 1 at this interface were two natural north-south water channels. In the middle of the alluvial clay of Trench 2, a north-south ditch of an uncertain dating probably between the Roman and medieval period was found. Above the clay was a soil horizon, 20th-century features relating to World War II, and layers of made ground associated with modern redevelopment of the site.

Finds: N.M.S.

18. Great Bentley, Frating Green Business Park (TM 096 236)
S. Foreman, E.C.C. (F.A.G.)
Fieldwalking of a cropmark site to the east of Frating Green identified one prehistoric site (a concentration of burnt flint), two post-medieval sites, and a post-medieval trackway associated with the boundaries of Great Bentley and Great Bromley.

Finds: C.M.

19. Great Dunmow, Church End (TL 629 229)
H. Brooks, H.B.A.S.
Evaluation in advance of residential development revealed the following: a group of Mesolithic and Neolithic/Bronze Age flints; a pair of Romano-British ditches; 11th to 12th-century pottery; 13th-century pottery associated with a timber structure of that period; and finally, a few late medieval features.

Finds: H.B.A.S., to go to Saffron Walden Museum.
Final report: Essex Archaeol. Hist.

20. Great Wakering, Alexandra Road (TQ 940 870)
D. Bridgland (Earth Sciences Consultancy)
K. Reidy, E.C.C. (F.A.G.)
Two test pits were excavated to investigate the nature of sealed Pleistocene deposits and recover contemporary, Palaeolithic flint tools. Test Pit 1 revealed 2 m of well-bedded waterlain sand and gravel overlying London Clay, identified as the Barling Gravel, deposited by a proto-channel of the Thames-Medway river system about 300,000 years ago. Test Pit 2 revealed 2 m of brickearth above the gravel, interpreted as a wind-blown loess. Analysis of stone size/content particle size allows the Alexandra Road deposits to be compared in detail with records of the Barling Gravel and the overlying brickearth at other sites nearby. No

Palaeolithic artefacts or animal or plant remains were recovered, although they have been found in the Barling Gravel elsewhere in the area.

Elsewhere on the site, trial trenches showed that the majority of the area proposed for development had been disturbed by quarrying and the concrete foundations of a Second World War gun emplacement. To the south of the gun site, finds were recovered from a Middle Bronze Age site which had been destroyed by quarrying. Excavations to the east of the gun site revealed two phases of field boundaries: one dated to the Middle Bronze Age, and the later phase to the Late Iron Age/Early Roman period.

Finds: S.M.

21. Harlow, 48 Potter Street, The Laurels (TL 4715 0892)

E. Heppell, E.C.C. (F.A.G.)

Despite the recovery of late medieval Harlow ware and 18th-century Metropolitan slipware, no archaeological features were encountered.

Finds: H.M.

22. Hatfield Peverel, Sandford Quarry

R. Havis, E.C.C. (A.A.G.)/K. Reidy, E.C.C. (F.A.G.)

During a watching brief on gravel extraction an area of Roman occupation was discovered. A small-scale excavation was carried out to plan this and recover dating evidence. Four phases of occupation were found, all of Roman date. The main phase consisted of a rectangular enclosure, measuring 24 m by 13 m, dating from the 2nd-late 4th centuries. This was reconstructed at least once. A small flue was found within the enclosure and a piece of iron-working slag. The enclosure appears to have suffered burning at the south-eastern end, where the upper fills of the ditches were rich in charcoal. At a later date a post hole structure, *c.* 12 m by 7 m was built, which was associated with two linear ditches. These features appear to be part of an agricultural system laid out on a markedly different alignment to the earlier enclosure. Another enclosure was visible on a different alignment, but this was not investigated. The site is to be re-covered with topsoil and protected *in situ* with the co-operation of the gravel company.

Finds: Bt.M.

23. Hatfield Peverel, Smallands Farm (TL 821 108)

K. Reidy, E.C.C. (F.A.G.)

Four linear trenches were excavated across the line of a linear cropmark, one of which also crossed the line of a circular feature to the south. The trenches were positioned in order to confirm the line of the ditch, and investigate any features associated with it. Only two trenches contained features. The trench crossing the circular cropmark did not produce any evidence of a feature that could have produced the cropmark, although three shallow gullies were located. One of the trenches was enlarged towards its northern end to expose a 12m length of ditch orientated approximately east west, along the line of the linear cropmark. Four segments were excavated across the ditch but no dating evidence was retrieved. Two gullies, five shallow pits and a possible unurned cremation were also found in this larger trench. Four of these features contained prehistoric pottery although the sherds were too small and abraded to give a precise date. One of the pits was cut into the ditch and contained the remains of a large globular jar, probably of 6th-century AD date.

Finds: B.M.

24. Hornchurch, Hornchurch Road, Bus Garage (TQ 5277 8735)

F. Meddens, N.M.S.

Evaluation at the Hornchurch Bus Garage revealed a number of post holes, a pit, two ditches, a shallow insubstantial feature, and a feature extending beyond the southern and eastern extent of excavation. All these features were cut into natural sand or brickearth. Three of the features yielded pottery, which has been spot-dated to the Early Iron Age and to the Early/mid Saxon period. In addition, it is possible that part of the site may have been exploited for brickearth in the 17th century.

Finds: N.M.S.

25. Ilford (London Borough of Redbridge), Beehive Lane, Beehive Public House (TQ 4275 8860)

P. Moore, N.M.S.

An evaluation excavation at the Beehive public house in Ilford revealed post-medieval agricultural activity in the form of ploughsoil and ploughmarks. A linear feature running north-south across the site contained substantial quantities of building material which could only be broadly dated in the range 16th-19th century. A piece of Flemish floor-tile could be more specifically dated to the late medieval period, although it had been re-used in this context.

All other features found on the site could be dated to the 20th century.

Finds: N.M.S.

26. Leyton, Leyton Green Road, Livingstone College Tower (TQ 5382 8884)

P. Moore, N.M.S.

The evaluation consisted of four trenches in the grounds around the tower block, nos 1-3 located to the west and no. 4 to the south-east of the tower. All trenches produced evidence, in the form of perimeter walls and a cobbled surface, of the late 18th-century building which later became Livingstone Medical College.

Several trenches produced evidence of earlier activity on the site, with deposits containing material from the medieval period up to the earlier 18th century.

Subsequent work included the first phase of a rescue excavation to the west of the tower. One trench was excavated and stepped-in at the base. The trench was located in the proposed building footprint near to trenches 1 and 3 of the evaluation.

The western wall and part of the cellar of the late 18th-century building were located in the eastern side of the trench. This had been remodelled and extended in the 19th century. A series of drainage features occupied the centre and western side of the trench and ranged in date from the earlier part of the 18th century to the 20th century. Some of the bricks used in the construction of the 18th-century drains were Tudor in date, indicating the possible survival of features of that period or the preservation of drain alignments originating in the 16th century.

A wall base of 17th-century date was visible in the southern (north-facing section) part of the trench. This sat on a "raft" of material dating to the 16th and 17th centuries which itself was laid across the fill of an earlier pit. The fill of this pit was soft and cess-like in composition. The limited investigation of this deposit recovered a considerable quantity of ceramic material, the greater part of which was medieval in origin along with a few sherds of 16th-century pottery. The deposit through which this pit was cut was not excavated but produced a couple of sherds of medieval date.

The second phase of work is due to commence in early 1995, during which it is hoped that structural remains from the sixteenth century and earlier may be recovered.

Finds: N.M.S.

27. Little Bentley, Hall Farm (TM 136 244)

A. Barber, Cw.A.T.

A programme of archaeological fieldwork was conducted in advance of aggregate extraction. The development area contains part of an extensive cropmark complex of putative archaeological origin (ESMR 3091) and a major cropmark palimpsest (ESMR 3092) lies immediately to the south and west. Following the production of a computer-rectified aerial photographic plot, trenching revealed a clear archaeological origin for a series of major linear cropmarks.

The ring ditch and central burial pit of a ploughed-out round-barrow were examined which appeared to overlie earlier prehistoric pits. The burial pit produced a cremation within a complete Beaker vessel dating to *c.* 1700 BC. Also examined were ditches which probably date to the earlier Bronze Age and enclosure ditches from the late 1st-century BC/early 1st-century AD. No features of Romano-British or later date were encountered. A Lower Palaeolithic flint flake was recovered from the fill of one of the ditches.

Whilst no certain evidence for occupation was encountered, the presence of extensive pitting and concentrations of charcoal/burnt clay within several ditch fills suggests prehistoric occupation nearby, although its location and focus is unknown. A watching brief carried out along the line of an associated haul road, routed to avoid the densest areas of cropmarks, revealed no significant archaeological features.

Finds: Cw.A.T.; to go to C.M.

(see also p. 251)

28. North Woolwich, Royal Docks Drainage Scheme (TQ 4345 7985)

P. Moore, N.M.S.

An auger survey was undertaken on the site of the proposed Royal Docks Drainage Scheme at North Woolwich. Fourteen boreholes were driven along a stretch of land in the immediate hinterland of the north bank of the Thames. A complex series of stratified alluvial deposits and preserved organic remains were revealed, including a significant series of stratified peat deposits which contained preserved timber.

29. Orsett, proposed Tilbury Fire Station site (TQ 655 813)

D. Boden, E.C.C. (F.A.G.)

Although the site lies in an area rich in prehistoric and Saxon sites, no archaeological features or artefacts were found.

Soon after fieldwork commenced, it became apparent that any archaeological evidence would probably have been destroyed by groundworks and borrow-pits associated with construction of the adjacent A13. At this point full topsoil stripping of the site was abandoned and a series of parallel linear trenches were cut. The site had been previously cleared of topsoil and a large borrow-pit had been excavated within it. It is likely that the topsoil encountered on the site has been imported from elsewhere.

Finds: T.M.

30. Saffron Walden, land adjacent to 11 Park Lane (TL 534 383)

A. Garwood, E.C.C. (F.A.G.)

The medieval town defensive ditch known historically as the *Magnum Fossatum* was located within and towards the western side of the development area. No other features were located within the line of the town defences other than post-medieval post holes. These probably relate to the existing outbuildings situated along the east and southern boundaries of the site. A post-medieval and modern landfill deposit infilling a large hollow was also present. No other remains were encountered.

Finds: S.W.M.

31. South Benfleet, land to the rear of the Hoy and Helmet Public House (TQ 7777 8610)
A. Garwood, E.C.C. (F.A.G.)
Three trenches were excavated. A base of a 16th-century green-glazed jug/bowl was found in the western-most trench (Trench A), closest to the church and in the southern part of the development area. The vessel was not contained within any perceptible cut and its position is probably the result of random deposition. Other features located in this trench were two parallel gullies dating to the 18th century and a shallow, modern pit. A substantial late post-medieval landfill was located to the west of Trench A. It could be suggested that the landscaping deposits were used to build-up and consolidate the ground over an area of low-lying marshland extending along the western side of the site. It is also possible that quarrying activity in the form of the extraction of London Clay for local brick and tile manufacture, and the subsequent backfilling of the quarry in the 18th century, could account for this landfill.

Finds: S.M.

32. Tollesbury, Tollesbury Creek, Managed retreat scheme (TL 9610 1140)
M. Germany, E.C.C. (F.A.G.)
Geophysics and trial trenching were carried out to assess the nature, extent, survival and potential of the archaeology within the 20m-wide construction corridor of a new counter wall and borrow dyke as part of a pilot 'managed retreat' scheme by English Nature. A magnetic susceptibility and gradiometer survey of the 20m-wide construction discovered a previously unrecorded Middle Iron Age salt-extraction site (or 'red hill') at TL 95920 11295.

Five trenches (A-E) were excavated: the purpose of trench 'A' was to expose a linear feature picked up by the geophysical survey; trenches B to E were sited to investigate the red hill. They exposed a large expanse of burnt red earth more than 22 m wide and over 26 m long. This earth contained fragments of briquetage and the occasional sherd of Middle Iron Age pottery. The red hill was cut by three ditches. These ditches, it is believed, were part of a small square enclosure. This enclosure appears to have surrounded the centre of the red hill in its later stages. It was evident from two small box sections that the burnt red earth was nearly 0.40 m thick. It had developed in layers and sealed a thin layer of distinctive grey clay and several fire pits.

Find: C.M.

33. Waltham Holy Cross, Royal Ordnance Works, Area P (TL 377 008)
J. Ecclestone, E.C.C. (F.A.G.)
Evaluation of the archaeological deposits did not, as had been anticipated, identify the remains of a 17th- or 18th-century horse mill. However, extensive timber remains were identified which were part of 19th-century workshops and stores, documented in many sources. The timbers comprised eight lines of paired posts orientated north-south, and running at right angles to the edge of a canal, one of the many waterways within the gunpowder factory complex. The timber used was a softwood, possibly alder, as this was grown on site for making charcoal and was also well suited for use in waterlogged conditions. Brick foundations found on part of the site suggest that the timber posts were set on brick foundations which required timber floats for stability in the silts found at this level.

Finds: MOD (Royal Gunpowder Factory archive)

34. Walthamstow (London Borough of Waltham Forest), Low Hall Depot (TQ 3635 8806)
P. Moore, N.M.S.
The evaluation at Low Hall consisted of excavation and a radar survey. The evaluation, along with earlier work on the site, has successfully identified the location of the moat and internal buildings of a moated manor dating from the 14th century. Excavation revealed alluvial deposits within a feature, identified by cartographic evidence as the eastern side of a moat. A number of layers associated with the later backfilling of this feature, drainage and landscaping activity were dated to the late 19th-early 20th century. Other layers associated with the post-1945 demolition of the site and transformation of the site into a works depot were also revealed. The radar survey indicated the presence of outbuildings, garden features and manorial buildings, possibly dating back to the medieval period or even earlier.

Finds: N.M.S.

35. West Ham (London Borough of Newham), Stratford, 14-18 High Street (TQ 3795 8319)
K. MacGowan, N.M.S.
Evaluation revealed four possible phases of factory construction, dating from the 18th century to the 1950s. It also revealed post-medieval deposits, as well as evidence of flooding by the Bow Beck River.

Finds: N.M.S.

36. Witham, 32 Mill Lane (TL 8189 1430)
S. Foreman, E.C.C. (F.A.G.)
The evaluation identified a small pit of late medieval date, close to the frontage of Mill Lane. No other medieval or earlier features were found, due largely to extensive modern building activity and service trenches. The foundations of an 18th- or 19th-century building were identified underlying modern made ground close to the frontage of Mill Lane.

The only finds of interest were a rim and a handle from a large sandy orange ware jug or cistern and a sherd of slip-painted sandy orange ware. Both were of 15th- or 16th-century date.

Finds: Bt.M.

37. Wrabness, Hall Farm (TM 172 321)
H. Brooks, H.B.A.S.
A project which combined cropmark plotting and archaeological fieldwalking was carried out on land to the north and west of Hall Farm, Wrabness, in advance of the use of the land for a 'green' cemetery.

Potential locations for the cemetery were identified at a distance from the archaeologically sensitive cropmark area, and an area of 8.6 ha was fieldwalked in the non-sensitive area to check for unknown sites. Prehistoric flints, post-medieval pottery and post-medieval tile were collected, but none of the material was found in significant concentrations.

Finds: H.B.A.S., then to C.M.
Final report: Essex Archaeol. Hist.

Excavations

38. Boreham, Great Holts Farm Phase II (TL 7515 1190)
M. Germany, E.C.C. (F.A.G.)
The topsoil from 3.5 ha of arable land to the immediate west of Great Holts Farm was removed by the developer, prior to the extraction of gravel. This action uncovered the remains of a Late Roman farmstead, situated to the immediate north of a corresponding network of Roman ditches and fields. These ditches and fields had been excavated by the Field Archaeology Group between November 1992 and June 1993 (Great Holts Farm Phase I).

The remains of at least 4 Roman buildings were discovered: a large 4th-century timber farmhouse (15 m x 28 m) and its late 3rd-century timber predecessor (12 m x 22 m), a small, attached bath house (6 m x 8 m) and *praefurnium* (2.5 m x 3.5 m)(Fig. 2), and a small subsidiary structure (5 m x 8 m) to the immediate north of the Late Roman storehouse which was excavated in 1992. The remains of a small medieval timber building (4 m x 9 m) were also discovered. Other finds included two Roman wells, a large Roman pond, one Roman cremation, and an extensive network of Roman fields, enclosures and ditches. A prehistoric ring ditch/barrow and a small number of Late Bronze Age 'pot-pits' were also uncovered.

The Late Roman buildings were situated in the centre of a large square compound or 'farmyard' approximately 140 m square. This compound was linked, by a ditched droveway/trackway 12 m wide and more than 250 m long, to a regular and well-structured network of rectangular fields, both arable and pastoral.

Previous Summaries: Gilman (ed.) 1992, 100; 1994, 247.
Finds: Ch.E.M.

39. Chigwell, Little London (TQ 457 963)
P.J. Huggins, W.E.A.G.
Resistivity survey, trial trenching and excavation were carried out to trace the line of the Roman road from London to Great Dunmow, south of the River Roding. It was found that much of the road had been removed by a flash flood. However, the full width, 10.5 m, of metalling was established to the side of the flood channel. On two sides, the road surface had up to 5 remaining layers of packed gravel in clay but with only a single layer in the middle. The width over the flanking quarry ditches was 14.6 m. The ditches were discontinuous as if to provide gaps for access to the road. Evidence nearer Abridge, beyond the line of the flash flood, included flanking ditches but with only a little remaining metalling to suggest that the road veered slightly to the north-north-west. It would thus seem to follow gently down the slope to cross the Roding to the west of the village.

There was a single identifiable coin of Marcus Aurelius (161-181 A.D.). A cremation in a poppy-headed beaker was set into an already silted ditch; there was an unidentified coin above. Pottery under the cremation suggested the ditch was silting up in the 1st or 2nd century; other sections of ditch contained 3rd- or 4th-century pottery.

Finds: W.E.A.G.; to go to E.F.D.M.

40. Chingford, Heathcote Lodge (London Borough of Waltham Forest) (TQ 3910 9390)
P. Moore, N.M.S.
Excavation revealed three layers of flood-washed alluvium dated between the 14th century and the post-medieval period; one layer of late medieval marshy vegetation and two 20th-century layers associated with the construction of the nursing home. Finds dated the alluvial layers to pre-13th century, 13th-15th century and post-15th centuries.

Finds: N.M.S.

41. Chingford, Queen Elizabeth's Hunting Lodge (TQ 3972 9477)
P. Moore, N.M.S.
Excavation exposed original Tudor foundations to the standing building known as Queen Elizabeth's Hunting Lodge, Chingford. Subsequent repairs and alterations to the foundations were also exposed, as well as dumping, levelling and pitting across the site.

Finds: Queen Elizabeth's Hunting Lodge

42. Cressing, Cressing Temple (TL 799 187)
T. Robey, E.C.C. (F.A.G.)
Since the last summary two new fieldwork projects have commenced at Cressing Temple. The first was an evaluation of the relatively modern barn adjacent to the public car park, a crudely cobbled structure of

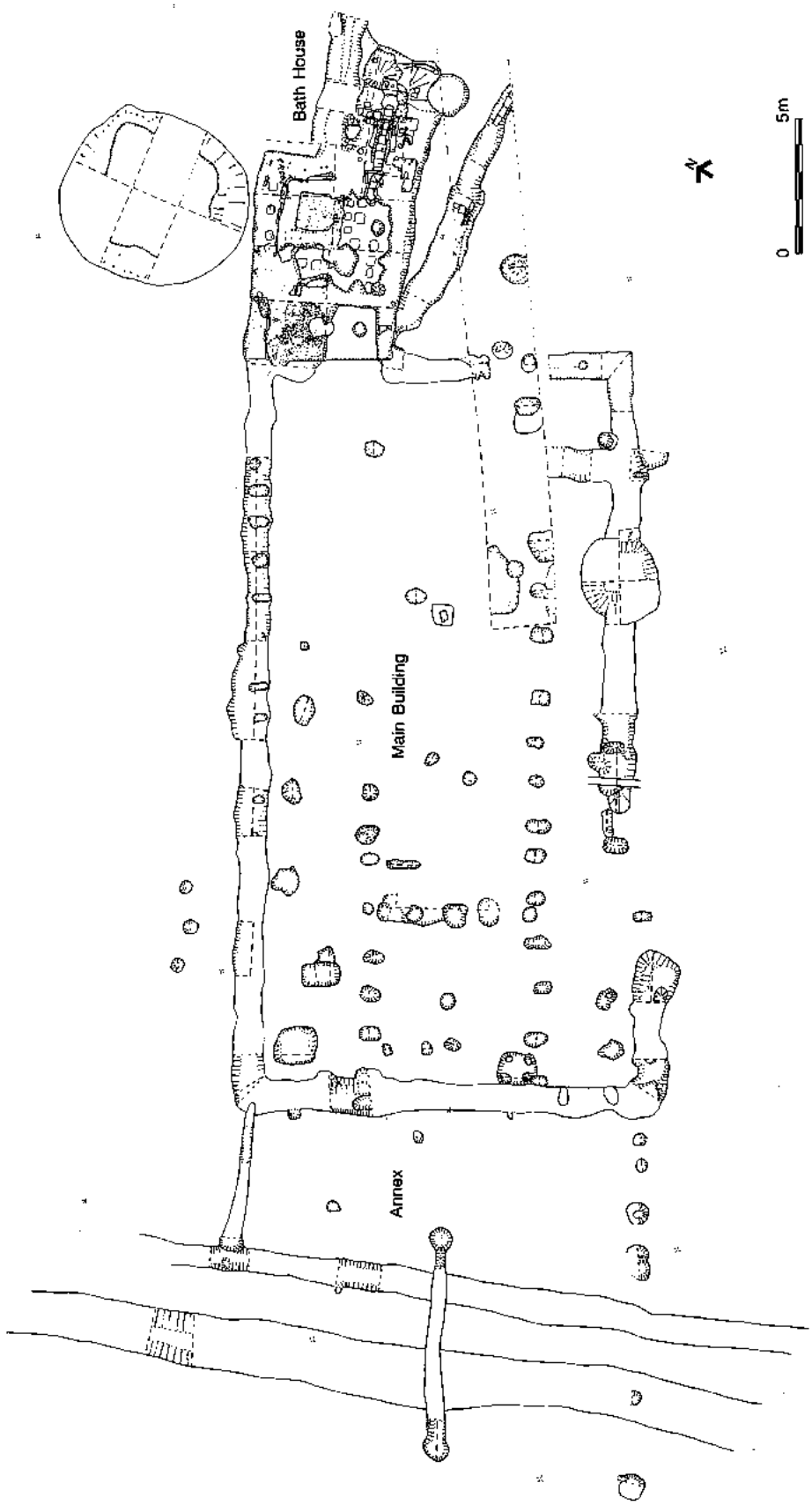

Fig. 2 Plan of the main domestic building and adjacent bath house at Great Holts, Boreham.

several styles and periods christened "the DIY Shed". Initial indications are that, contrary to expectations, the footprint of the present building dates back to at least the 18th century, although little now remains of the original structure. Further work may be necessary when plans for the Visitor Centre are finalised.

The first Cressing Temple Field School and Training Excavations were held during the summer. This educational project was based around the excavation of a medieval building discovered in 1978 and the adjacent remains of the Tudor manor house. The latter structure, demolished early in the 18th century, was considered "lost" until 1993, when a resistivity survey confirmed a growing suspicion of its whereabouts.

The excavations revealed the full dimensions of the medieval house, as well as part of a large brick-built cellar adjoining the south side of the earlier building. The brickwork of the cellar suggests that it is broadly contemporary with another next to the remains of the Templar Chapel and also with the Walled Garden. Clearly the Tudor mansion was constructed by linking the existing medieval buildings together to form a greatly enlarged living complex which would better reflect the status of the new secular owners of the manor.

In 1995 the trenches are to be re-opened and enlarged to allow full excavation of the cellar, and the examination of a number of medieval pits nearby. This will form the core of the archaeological training provided by Essex County Council staff at the Field School.

Previous Summaries: Gilman (ed.) 1989, 61-2; 1990, 130-31; 1991, 153; 1992, 103; 1993, 204-5; 1994, 249; Brown and Flook 1990; Robey 1993a, 1993b.
Finds: Cressing Temple

43. Colchester, 79 Hythe Hill (TM 0133 2468)
H. Brooks, C.A.T./H.B.A.S.
In advance of the building of the Colchester Eastern Approaches Road, excavations have commenced at the above address (which was recently the Colchester Tractors showroom).

Two phases of building are evident on the same site. Both have stone plinths (originally supporting timber frames), sand or clay floors and internal hearths, and together span the late medieval and post-medieval periods. A chimney breast was inserted into the later house *circa* the 17th century. There is some evidence of blacksmithing activity on site in the later phases. Industrial activity of this kind was no doubt generated by the nearby Hythe (port), which lies 250 m to the east.

Finds: C.A.T., to go to C.M.

44. East Ham, Beckton Sewage Works, East London Sludge Incineration Plant (TQ 4507 8200)
P. Moore, N.M.S.
The site is situated within a deeply stratified alluvial landscape lying along the northern foreshore of the Thames. Trench I revealed part of a north-south river channel, filled with fluvial clays. Other features were modern. Trench II contained deposits of peat lying on silty sand, at a depth *c.* 7 m from ground level. At the interface between these layers a water-worn burnt flint was found, probably in a residual context. Higher in the peat were the remains of four yew trees, all naturally fallen, probably part of a great yew forest that grew alongside the Thames in the prehistoric period.

Finds: N.M.S.

45. Harlow, Old House (TL 4832 0960)
S. Foreman, E.C.C. (F.A.G.)
A Roman settlement site of the 1st to 4th centuries AD was identified during a watching brief on the Church Langley housing development. The site was partially exposed and recorded during three excavation seasons in 1991, 1993 and 1994. Three phases of development were identified, the earliest represented by a substantial barn (measuring 26.5 m x 10.25 m, internally). This was demolished in the early-mid 2nd century AD to make way for a system of substantial boundary ditches. From the late 2nd century these ditches were filled in and replaced by a series of rectangular ditched enclosures which apparently continued in use until the late 4th century. This later phase included a kiln or oven of indeterminate function and an associated group of pits and gullies. A fieldwalking survey of the surrounding area indicates that the main settlement focus is located within and to the south of Old House Wood, which is also known to contain the site of a medieval and post-medieval farmstead. A second site located by fieldwalking *c.* 200 m north of Old House Wood has not been excavated, but may represent another Roman building.

Previous Summaries: Gilman (ed.) 1992, 106; 1993, 198; 1994, 253.
Finds: H.M.
Final Report: Essex Archaeol. Hist.

46. Harlow, Perry Spring Wood (TL 4733 0955)
M. Medlycott, E.C.C. (F.A.G.)
The site at Perry Springs Wood, Church Langley, Harlow (TL 4733/0955) was discovered during a watching-brief on the development area by Harlow Museum. A full excavation was undertaken by the ECC Field Archaeology Group. The site can be subdivided into three main phases of activity, the Early Iron Age occupation phase, the post-medieval ditches and the post-medieval dumping layer.

The Early Iron Age phase consists of the three ring-ditches and a number of shallow gullies and ditches and irregular depressions. The function of the ring-ditches remains unknown, indeed it is possible that they are not man-made features as such, but the remnants of tree-root bowls. The majority of the finds,

88% of the pottery and 57% of the worked flint, come from the area examined in 1991 by Harlow Museum. The evidence suggests that the focus of the Early Iron Age settlement was to the east of the excavated area (and presumably destroyed by the construction work).

In the post-medieval period, two large ditches were dug, as well as a number of shallow bowl-like depressions and a couple of gullies. These features are datable to the 17th-18th centuries, and there is some evidence in the form of saggars for pottery production in the vicinity of the site. Also in the 17th-18th century, a layer of re-deposited clay (containing 88% of the post-medieval pottery found on the site) was dumped, effectively sealing the underlying features. This pottery included one kiln-waster sherd. It is suggested that this layer derived from the dumping of waste material from the clay-extraction pits dug for the Harlow pottery industry, possibly from those excavated at the nearby site at Fullers Mead.

Finds: H.M.
Final Report: Essex Archaeol. Hist.

47. Heybridge, Elms Farm (TL 847 082)
M. Atkinson, E.C.C. (F.A.G.)
An area of *c.* 13 ha was investigated to the south of the Stage I area excavated in the previous year. Excavation focused upon the core of the undefended Roman small town and revealed a far more complex sequence of Late Iron Age, Roman and Early Saxon remains than was anticipated (Fig. 3).

Numerous Late Iron Age pits and ditches yielded large quantities of pottery including a significant proportion of pre-Roman imports, reinforcing the long held belief that Heybridge was an important trading port during this period. Several hut circles have been identified along with a Romano-Gallic style temple complex.

This temple complex also appears to be the focal point of the Roman small town with 1st-century metalled roads respecting its precinct which was maintained for much of the Roman period. The major north-south thoroughfare, probably laid upon the line of a prehistoric trackway, has three 'side streets' running off at right angles to its east. These define distinct zones of activity within the core of the settlement, with an area of manufacture and pitting occurring to the south, the temple precinct occupying a central position, a possible public open space centred upon a large well to its north, and apparent domestic activities further to the north, west and east.

Large expanses of metalled surfaces were also laid at the same time as the establishment of the roads. It was on these, and on subsequent dump deposits designed to raise the land surface, that vestiges of wooden buildings were discerned. Though the town was almost exclusively built of wood, demolition rubble in later pits suggests the existence of a 1st-century brick-built building, perhaps a *mansio*.

The occurrence of mould fragments and many iron, lead and copper-alloy objects indicate metal working alongside pottery production — five well-preserved kilns have been found to date.

The wooden shafts of four Roman wells were found to have been preserved by the high watertable and have yielded a range of leather and wooden objects along with good environmental remains.

The ceramic evidence suggests that the settlement had its heyday in the 1st century BC to 1st century AD, after which date the frequency of imports steadily diminishes. However, occupation spans the whole of the Roman period and a small number of Early Saxon features have been identified, including three sunken-floored buildings and a well.

Previous Summaries: Gilman (ed.) 1994, 250.
Finds: E.C.C.; to go to C.M.
Final Report: East Anglian Archaeol.?

48. Heybridge, Langford Road (TL 584 208)
B. Langton and N. Holbrook, Cw.A.T.
Following earlier evaluation by Essex County Council's Field Archaeology Group, excavation of a 0.9 ha site on the periphery of the Roman small town at Elms Farm was undertaken. The main feature encountered was a NW-SE aligned stream channel; all occupation evidence lay on the rising ground to the north of the stream. The earliest activity found was two Bronze Age pits, one containing a complete all-over cord-impressed beaker dating to the period 2,100-1,800 BC. A pit also containing a complete beaker was found on the adjacent Elms Farm Stage I site in 1993 adjacent to a Middle Bronze Age barrow. Three prehistoric structures were examined: a round-house, only half of which lay within the excavation area, had a diameter of 11m with an external drip gully, and showed evidence of repair. Further north a pair of adjacent post-built structures were found (diameter about 6 m), accompanied by flimsier structures. These structures are not well dated, and could be either Bronze or Iron Age. In the late Iron Age, a pair of parallel ditches aligned with the stream course were dug.

In the early Roman period (pre-mid 2nd century) one of the Iron Age ditches was utilised to form one side of a 10 m-wide trackway. To the north of the trackway little Roman occupation was found, and this area was presumably agricultural. To the south, between the track and the stream channel which by now appears to have almost completely silted-up, much greater activity was apparent. A post-built timber building, 6 m wide by in excess of 9 m long was constructed, although it seems to have been quickly abandoned and a ditch cut across its site. Intensive pitting (for gravel extraction?) occurred, and an early 2nd-century cremation contained within an oval or D-shaped mound was found. Nearby a crudely timber-lined well was dug.

At some point in the 2nd century the pattern of land-holding was reorganised, with a new ditch being dug which blocked-off the trackway and ran on north-south alignment before turning to run alongside the silted-up stream channel. The ditch was subsequently recut, perhaps no later than the late 2nd or early 3rd century. Further cremations dating to the same period were buried adjacent to the new ditch. Small pits were cut and complete pots placed in the base of them, some of which may have been contained within wooden boxes to judge from the distribution of nails; the cremated remains were then placed in large pots above the pits, and presumably covered with earthen mounds. Six cremations were found in all in this area.

Late Roman material was almost entirely absent, although a small number of pits concentrated to the south of the site produced early Saxon pottery, as did the uppermost filling of the well. No Saxon settlement features were found, and virtually no medieval material.

Previous Summaries: Gilman (ed.) 1994, 242.
Finds: Cw.A.T.; to go to C.M.

49. Ilford, Hainault Road, Fairlop Quarry (TQ 462 899)

F.M. Meddens, N.M.S.

This site was originally identified from aerial photographs of a field known as cell 6 of Fairlop quarry and consisted of a rectangular enclosure with internal divisions and a "tail" ditch running from the north-east corner of the enclosure. Other features were also visible to the north, north-east, and north-west of the enclosure.

A resistivity survey was carried out over the northern part of the field. Machine stripping of the topsoil was carried out to reveal the western third of the enclosure. This uncovered evidence for structures, in the form of post holes and penannular ditches, and also cremation burials within the enclosure. Considerable quantities of ceramic material were recovered from the enclosure ditch and from internal features. Some metalwork was also recovered, including a knife or other agricultural implement. Preliminary analysis of environmental samples from within the enclosure pointed to the survival of carbonised grain. Samples were also taken from the lower enclosure ditch fills which were waterlogged.

The evidence recovered from this excavation pointed to the enclosure being the focus of settlement for a rural community exploiting Fairlop Plain (which has a number of cropmarks across it recorded from the air); later, as part of the hinterland of Roman London. The ceramic material dates the duration of activity on this site from the Early/Middle Iron Age on into the early 2nd century AD. It appears that there was an early settlement on the site which may have declined and been abandoned in the Late Iron Age, prior to a renewed occupation from the Late Iron Age and lasting through to the early Roman period into the 2nd century AD. The cremations represent the latest phase, after the final abandonment of the settlement. The last burials were deposited in the upper fill of the enclosure ditch.

Finds: N.M.S.

50. Little Bentley, Hall Farm (TM 136 244)

N. Lavender, E.C.C. (F.A.G.)

A number of post holes were located in the area of those previously identified during evaluation (see summary 27, p. 245), though no real pattern indicative of a building plan was readily apparent. Certain other features found during the evaluation were relocated and planned, though not excavated. A pit containing large quantities of burnt clay (loom-weights etc.) was excavated, and found to be of Middle Iron Age date. Certain other features were seen, when observed over a larger area than had been possible during evaluation, to be natural in origin.

Finds: C.M.
Final Report: Essex Archaeol. Hist.

51. Upminster, Hunts Hill Farm (TQ 566 831)

P. Greenwood, N.M.S.

Work in 1994 at Hunts Hill Farm consisted of the rescue excavation of Area E, the fourth phase of the gravel extraction, and a field evaluation of Area C, the fifth phase and the zone with extensive cropmarks. The final stage of excavation should begin during 1995 prior to the extraction of Area C.

Post-excavation work on the results of work in Area E is at a preliminary stage and any conclusions are, therefore, tentative. The main phases of activity are prehistoric, Saxon and Saxo-Norman. A number of features, at this stage, can only be attributed to the prehistoric period, but are likely to be Middle Bronze Age or Early Iron Age, phases which are represented in this area. Middle Bronze Age evidence can be securely attributed to a pit with half a small tub-shaped vessel of a type common in the Lower Thames valley. A pit with only the base of a large coarse jar and a piece of quartz probably belongs to this phase. Numerous other features with flint-gritted pottery and a poor-quality flint industry may well be further evidence of Middle Bronze Age activity.

The Early Iron Age is primarily represented by a well on the southern edge of the field. This contained waterlogged deposits with pottery similar to that from the wells found in the adjacent field, Area D, in 1993. It may be possible that one of the round-houses and other small features belong to this phase.

Most of the early settlement and activity identified so far belongs to the Middle Iron Age and includes round-houses and a sub-rectangular enclosure, probably a workshop area, with evidence for bronze

working in the form of cuprous material and fragments of a crucible. The phase represented might be later than that identified in Areas A and C in previous years.

Occasional small sherds indicate a low level of Roman activity or movement of sherds; no major features of this period were found. Evidence for the early Saxon period comprises a well and probably some post-fast structures. Further work on the archive should identify more features of this phase. It is likely that a number of ditches date from the Saxo-Norman period, some of which are major boundaries. There is also some evidence of activity of this period on the extreme eastern edge of the site. Faint traces of north-south running ridge-and-furrow were also identified, but the dating is uncertain, though it runs parallel to some of the main ditches on the site. A Saxo-Norman building and area of activity was excavated the previous year in Area D to the west.

Area C was evaluated prior to considering the final phase of rescue excavation on the site. The main periods identified were Iron Age and Roman. Here the ridge-and-furrow, still surviving as an earthwork, ran east-west at right angles to the ploughmarks/furrows in Area E; it yielded no useful dating evidence. The earliest material found was a possibly deliberate deposition of pottery which is provisionally dated to the later Early Iron Age and which may well have continental parallels. Further Middle Iron Age evidence included a round-house. In the Late Iron Age the focus of activity and possibly settlement was a rectangular enclosure and associated well. Evidence of early Roman settlement was found to the immediate east of the Late Iron Age enclosure. There were also traces of later Roman activity, but its nature is not clear at this stage.

Previous Summaries: Gilman (ed.) 1991, 159; 1992, 108; 1993, 207; 1994, 252; Greenwood 1986; 1992.
Finds: N.M.S. or suitable repository
Final report: N.M.S. monograph.

52. Waltham Holy Cross, Vicarage Garden (TL 3810 0066)

P.J. Huggins, W.A.H.S.

A small excavation, to investigate ground subsidence, was 7 m north of the west end of the church. The ground level had been built up over the centuries by 1.3 m, originally by the deposition of flood loams. Two Saxon child burials had been inserted into the Romano-British ground level. A deep stormwater ditch was excavated when the first timber church was in use and had finally silted up by *c.* 1100 A.D. Rubble masonry foundations were seen from a stone building which had been recorded in 1859. This probably measured *c.* 15.5 m by 9.8 m and lay along the north side of the present church (this is Church 4 of *c.* 1090-1150). It had a direct entrance through the north door into the church. A date in the first two decades of the 14th century is suggested. The building appears to be the 'Deanes House', mentioned in 1572 as being in the cemetery. Before 1540 the duties of parish priest were carried out by one of the Augustinian canons who was called the Dean of Waltham. The House probably survived until the early 17th century when the present Vicarage was built nearby.

Finds: W.A.H.S.

53. West Ham (London Borough of Newham), Stratford Market, retaining wall (TQ 3899 8323)

K. MacGowan, N.M.S.

Evaluation and rescue examined the north transept, north aisle and part of the nave of the church of the Cistercian Abbey of Stratford Langthorne, founded in 1135 AD. Eighty inhumation burials were discovered within the church and graveyard. Prior to the construction of the Abbey, a Roman ditch and a number of early-medieval post holes had been dug in the area. The Roman ditch is comparable to similar discoveries of this date to the north of the site. The post holes, containing some Saxon pot, may have been Saxon in origin, or may represent a wooden precursor to the masonry-built church. A clear phase of construction of the Abbey church was identified including a lime kiln (dated to 1130-1170 by archaeomagnetism), a lead-smelting pit, and numerous post and stake holes associated with scaffolding. The Abbey church existed in a simple form prior to the addition of an aisle wall, and what appears to be a period of abandonment signified by about 20 domestic refuse pits being cut into the graveyard. Thereafter, the site was re-occupied and the Abbey church was re-floored. An extension was built to the north transept and a late phase of burials has been identified as associated with this.

The dissolution of the Abbey occurred in 1538, and has been identified in the ground by series of post and stake holes again associated with scaffolding. Post-dissolution, a 16th-century dwelling was erected at the west of the graveyard. This was demolished and robbed out at the same time as the majority of the Abbey walls — in the mid 18th century. A clear stratigraphic sequence survived on this site, and the quality of recovered material was very high.

Finds: N.M.S.

54. West Ham (London Borough of Newham), West Ham bus garage, phase II, Greengate Street, Plaistow (TQ 4066 8299)

F. Meddens, N.M.S.

An earlier assessment of the site had revealed part of an 18th-century building. The purpose of the second excavation was to determine the extent of the building and retrieve further dating evidence. Excavations at the West Ham bus garage revealed an 18th-century house, and the northern wall of an 18th-century market garden. Evidence of occupation into the 19th century, in

the form of additional outbuildings, was also recorded.

Finds: N.M.S.

Watching Briefs

55. Barking, Eastbury Square, Eastbury House (TQ 4572 8380)
K. MacGowan, N.M.S.
During a watching brief on building works, a possible 16th-century brick lintel support was located. The 18th and 19th centuries were represented by brick floors, a possible dirt floor, an external brick wall, and a foundation for an internal brick wall. Also located were a number of post holes, two pits, a drain, a bricked-in doorway, and a cobbled floor surface. The majority of these features were not excavated, but left *in situ*.

Finds: N.M.S.

56. Barling, Barling Marsh (TQ 935 903 and TQ 939 903)
A. Wade, E.C.C. (F.A.G.)
See this volume, p. 222.

57. Billericay, 71 Western Road (TQ 6741 9473)
S. Godbold, E.C.C. (F.A.G.)
Several features were located, mostly of the post-medieval period, including the remains of a building erected *c.* 1700 and a boundary wall built *c.* 1800. Also recorded were earlier boundary ditches, possibly reflecting earlier medieval alignments; and a large cut feature, possible a ditch or hollow-way, immediately south of Western Road. The ditches and possible hollow-way had been backfilled during the 19th century.

Further watching brief work was carried out by the Field Archaeology Group on another part of this site in August 1994. No further remains were encountered during this work.

Finds: Ch.E.M.

58. Brightlingsea, Mains Pipeline replacement (TM 072 178-TM 081 166)
S. Foreman, E.C.C. (F.A.G.)
See this volume, p. 223.

Finds: C.M.

59. Coggeshall, Kings Acre (TL 849 226)
H. Brooks and A. Harris, H.B.A.S.
A watching brief during construction of a new road and housing on this site in August and September 1994 recorded remains primarily connected with the construction and recent demolition of the former Kings' warehouses.

Earlier remains were confined to a single, short stretch of pre-warehouse (Victorian?) brick walling. The only find of intrinsic interest, recovered loose during site clearance but certainly from the southern part of the new road, is a worn and abraded corner fragment from a possibly chip-carved recessed panel of probable 12th-century date. Given the proximity of the site to Coggeshall Abbey — a known 12th-century foundation — it seems reasonable to assume that the stone derives from some part of the monastic buildings.

Finds: H.B.A.S. to go to Bt.M.
Final Report: Essex Archaeol. Hist.?

60. Colchester, 22 and 22A Northgate Street (TL 9953 2551)
C. Crossan, C.A.T.
Removal of adjoining basement floors prior to underpinning works revealed a 7.6 m length of Colchester's town wall, including the eastern part of an interval tower aligned with the north-south street between *insulae* 2 and 3 of the Roman town. Augering indicated that this section of the truncated monument may survive to heights of between 0.55 and 1.2 m above the wall's base offset.

61. Colchester, Kirkee and McMunn Barracks (TL 988 231)
C. Crossan, C.A.T.
Observation and limited excavation during a watching brief at Colchester Garrison revealed widespread Roman features, including a series of ditches, evidence of timber structures associated with an oven, and a building with a hypocaust. These indicate occupation during the 1st to 3rd centuries in a previously unrecorded locality.

Finds: C.A.T.; to go to C.M.
Final Report: Essex Archaeol. Hist.

62. Earls Colne, Earls Colne Priory (TL 864 289)
E. Heppell, E.C.C. (F.A.G.)
A bank aligned approximately east-west across the area to be investigated, was visible prior to stripping. Excavation showed the bank to be only slight with a hollow on its northern side. The base of this hollow was not uncovered. The hollow had been filled with demolition rubble containing brick dating to the 17th and 18th centuries. It seems likely that these deposits represent the partially levelled remains of what may have once been a substantial bank. No other archaeological features were observed.

Finds: Bt.M.

63. Great Chesterford, Carmel Street Close (TL 5078 4295)
P.E. Dey, G.C.A.G.
A trench dug for a new pipeline revealed a wall

foundation of large flints and stones set in white mortar. The top of the wall foundation lay at a depth of 0.2 m from the surface and was 0.4 m wide. The full depth of the wall foundation could not be established. Immediately adjoining the wall foundation on the north side, packed chalk extended for 4.8 m, terminating in what seemed to be a filled gully 0.3 m wide. The surface of the chalk was level at a depth of 0.5 m. As the trench was only 0.4 m wide, it was difficult to establish the alignment of the wall, but it appeared to cross the existing road at right angles. It was not possible to establish the full depth of the gully, the chalk or the wall foundation, nor were dating materials found. However, in view of the depth of the features, they are probably Roman.

64. Hatfield Broad Oak, Cock Public House (TL 5459 1657)

H. Brooks and A Harris, H.B.A.S.

Observation of limited trenching in advance of the construction of new cottages to the rear of the Cock Public House revealed a number of wall fragments and a large area filled with brick fragments and loose soil, the latter probably the remains of a cellar, originally Tudor but with Victorian additions, which had been demolished and grubbed out within the last century.

The only finds were a group of eleven architectural fragments, in hard creamy white or pale buff yellow shelly limestone. The group consisted of dressed ashlars, a possible pavior, and a moulded string course. Some of the pieces showed 12th-century tooling. Given the close proximity of the site to Hatfield Priory (a 12th-century foundation) it is extremely likely that this material was obtained in the post-dissolution period from the dismantled remains of the Priory buildings. However, as the pieces have mortar on the wrong faces, they have clearly been reused, possibly within the Priory, and certainly later in the now demolished structure on this site.

Finds: H.B.A.S., then S.W.M.

65. Newport, Land adjacent to Paragon Cafe (TQ 5220 3370)

M. Ingram, E.C.C. (F.A.G.)

Recording of sections exposed in foundation trenches revealed at least 1.2 m of archaeological strata. The earliest deposits and the natural strata were not exposed. Extensive levelling and, in some areas, ground reduction had taken place, mainly in the post-medieval period. Two post-medieval features were recorded: a flint-lined cess-pit and a brick boundary wall. Other, probably earlier, archaeological deposits were recorded, notably a chalk floor or construction surface, but due to the absence of dating evidence it is not possible to determine whether stratigraphy relating to the medieval town survived on the site.

Finds: S.W.M.

66. Rainham, Dovers Corner (London Borough of Havering) (TQ 52118 8268)

W.S. Tamblyn, N.M.S.

A watching brief was undertaken as the area was one of known archaeological significance, being in the vicinity of the medieval moated manor of Dovers (a small section of moat is still visible in the grounds of the public house). A watching brief took place at the site of flood defence works on the River Ingrebourne at Dovers Corner, Rainham, on the north side of the A13, and adjacent to the Albion public house. The works involved the stripping of topsoil prior to the construction of an embankment and the excavation of three associated drain runs.

The remains of structures were exposed in four areas of the site. During the machine stripping of the topsoil the traces of a building of late 19th\early 20th-century date on the southern margin of the known medieval moat.

Chalk foundations were cut in two locations by drain excavation in the vicinity of the moat. The foundations encountered towards the northern end of the excavations were of medieval date (*c.* 1100-1500), constructed of roughly coursed and squared chalk blocks, bonded with sandy mortar. These foundations were robbed out subsequent to demolition of any associated structure (the back-filling of this robber trench contained post-medieval material). The less substantial chalk foundations encountered in the vicinity of the extant portion of moat could not be accurately dated.

Due to the nature of the deposits encountered it can be stated that remains of archaeological significance were evident on site.

Finds: N.M.S.

67. Rayleigh, Holy Trinity Church (TL 808 909)

H. Brooks and J. Hudson, H.B.A.S.

A watching brief was maintained on ground reduction in advance of the construction of a new church hall. In total, more than one hundred graves were noted, some forty of which were previously known (i.e. they had standing grave stones or monuments). Such human remains as were exposed were reburied on-site by the rector.

Grave types included brick-lined, brick-lined with corbels, and unlined. The graveyard was certainly in use from the mid-18th century onwards. The church itself is at least of 12th-century date, and one may infer that use of the graveyard started then. However there is only a medieval sherd, a possible medieval boundary ditch and a series of undated (but presumably pre-18th century) burials to bridge the gap.

Previous summaries: Gilman (ed.) 1994, 254.
Finds: S.M.
Final Report: Essex Archaeol. Hist.

68. Saffron Walden, Audley End House (TL 523 383)

E. Heppell/A. Garwood, E.C.C. (F.A.G.)

A series of watching briefs and trial excavations within the grounds of Audley End House confirmed that there was a pathway which ran along the front of the Parterre Gardens and then turned at 90° to run along the bastion wall. The route and make-up of the pathways in the Elysian Gardens were also established. Structural remains were located in a wooded area to the east of the Elysian Gardens. The remains consisted of the inner corner of a brick building, probably part of a late 18th-century cold bath known from documentary evidence. Investigations along the front of the 19th-century vine house revealed brick footings which are thought to be the remains of root beds to accommodate the roots of the vines. Three pathways, all contemporary with each other, were also uncovered in this area: one east and another west of the vine house, with the third running to its central doorway.

Finds: Audley End House

69. Saffron Walden, Audley End House (TL 523 383)

S. Foreman, E.C.C. (F.A.G.)

See this volume, p. 228.

70. Southminster, Southminster Sewerage Scheme (TQ 966 996)

J. Ecclestone, E.C.C. (F.A.G.)

The route of a sewerage rerouting scheme afforded inspection of the west end of a bank and ditch earthwork, part of Scheduled Ancient Monument Essex 212. A narrow trench effectively provided a cross-section across the projected course of the monument. No features associated with the bank were found, but one feature which appeared to be the terminal of the ditch was identified. No useful dating evidence was found.

71. Stanford Le Hope, STW Water Pipeline (TQ 654 762-TQ 685 816)

H. Cooper-Reade, E.C.C. (F.A.G.)

A watching brief was carried out along the length of the pipeline which stretched from a point to the north-east of Tilbury fort to the sewage works off Broadhope Road, north-east of Stanford Le Hope. No archaeological remains were encountered. The pipeline passed close by several sites of archaeological importance, in particular the prehistoric and Anglo-Saxon settlement at Mucking, the Bronze Age cremation cemetery south of Muckingford Road and Roman burials to the north-east of Low Street. In several places the topsoil strip revealed areas that had been heavily disturbed by modern activity. These included the stretches to the north-east of Low Street and north of Mucking Wharf Road where the pipeline route ran adjacent to the railway track. Heavy plough disturbance was also noted along the stretch of pipeline running between Walton Hall Road and Butts Lane. No evidence was found of the Bronze Age cremation cemetery known to exist adjacent to the pipeline route, south of Muckingford Road. Although occasional flecks of charcoal and some "smears" of probable degraded pottery or daub were observed in the ground surface along this part of the route, no retrievable pottery sherds or cut features could be found. The quality of the flint in this area appeared to be better than that noticed elsewhere but no struck flakes or worked pieces were found.

72. West Ham (London Borough of Newham), Stratford Market (TQ 3880 8365)

K. MacGowan, N.M.S.

The remains of an 18th-century dwelling with associated middens was discovered at the southern end of a cable trench. This structure had been built using a chalk raft to support its foundations, the chalk being robbed from the remains of the nearby Stratford Langthorne Abbey.

Finds: N.M.S.

Survey

73. Aerial Survey

See this volume, pp. 228-35.

74. Canvey Island, red hill south-east of Russell Head (TQ 7795 8425)

P. Topping, R.C.H.M.E.

This, the last known surviving red hill site on Canvey Island, was surveyed in June 1994. The mound was first identified as a red hill by auger borings in 1970. Subsequent excavation was limited to establishing the extent of the site, but also showed it to have been first established in the Roman period with subsequent re-use in the Middle Ages. The site was scheduled in the 1970s, and is the only one of its type in Essex to have received such protection.

The red hill is situated on low-lying ground near Dutch Village. In its present form, the mound is roughly square, but this is largely the result of later land use, principally ridge and furrow cultivation. The summit is a relatively flat platform with a raised area to the north; no internal features were recorded. Outlying elements of this very disturbed site lie to the north and east of the main mound.

75. East Tilbury, Bowater's Farm anti-aircraft battery (TQ 6786 7707)

P. Topping, R.C.H.M.E.

In May 1994 the RCHME recorded one of the best-preserved Second World War anti-aircraft battery sites

in Essex, located at Buckland, near East Tilbury. The prominent spur which commands views over the Thames and Tilbury Docks was an obvious location for a gun site. The standard half battery of four concrete emplacements for 4.5-inch heavy anti-aircraft guns is remarkable for its completeness, with a number of the fittings and even painted signs surviving, although the guns were removed before the end of the war. The wartime history of the site, known officially as N13, is well known from the war diaries of the units which served there; the guns saw frequent action during the Blitz, and later against the vengeance weapons known to the gun crews as "divers". After the war, Buckland was one of the few sites which was retained by the military for the deployment of the new 5.25-inch heavy anti-aircraft guns. Although aerial photographs show that work began on the new emplacements late in 1944, and that they lasted well into the 1950s, the documentary history of this period remains shrouded in secrecy. Buckland, along with two other sites on the north Thames shore, changed its name to "Igloo 2" (derived from the shape of the emplacement). Again, although the guns themselves are gone and the emplacements are becoming overgrown, the interiors of the concrete structure of the power house and the gun pit preserve some of their original fittings.

76. Industrial Archaeology Survey

See this volume, pp. 236-7.

77. West Tilbury, Spigot Mortar Pits

(TQ 662 777)

R.C.H.M.E.

Two Second World War Spigot Mortar Pits, at West Tilbury, Essex were recorded in September 1994. The Spigot Mortar was a Home Guard weapon, a heavy mortar designed to disable enemy armoured vehicles and also to have an anti-personnel role. The weapons could be deployed on the move or in a specially constructed weapons pit.

The two Spigot Mortar Pits are situated within 10 m of each other to the west of St James Church, West Tilbury. The first, at TQ 6620 7771, is the better preserved, placed on the verge of Church Street near the crest of the hill looking eastward to cover approaches along the road. The surviving pit is decagonal, comprising a vertical brick lining carried outward into four rectangular ammunition alcoves, each capped with a single concrete slab roof. In the centre of the pit is a circular, gently domed concrete pedestal, crowned by a stainless steel pintle, which provided a pivot for the weapon. The pintle is itself set into a flat iron plate. The second site lies at TQ 6619 7770 and is situated in a corner of a field, built into the edge of the churchyard, with extensive views to the south over Tilbury Marshes. It is of the same design as its partner.

78. World War II Defences Survey

F. Nash, E.C.C. (A.A.G.)

Early in 1994 the survey of World War II fortifications concentrated on two areas of the county's main line of defence — the GHQ (General Head Quarters) Line. From Springfield to Sandon the line followed the natural anti-tank barrier offered by the River Chelmer and pillboxes were constructed at 200/300-metre intervals along its west bank. From Great Chesterford to Wendens Ambo the River Cam served the same purpose and pillboxes were similarly sited at regular intervals. Both infantry and artillery pillboxes have been recorded, the latter designed to have either a 2-pounder anti-tank gun or a World War I 6-pounder gun of the type originally mounted in the Mk IV "male" tank.

In addition to pillboxes, particularly interesting discoveries included three Home Guard 29 mm spigot mortar bases at Great Chesterford and demolition chambers built into the bridges of the Audley End estate, which were also protected by substantial anti-tank obstacles (Plate I). Overall, 102 sites were recorded in the two areas, more than double the total of previously known sites (Wills 1985).

Later, the survey moved to the region north of the Thames from Thurrock to Coryton. Prior to this survey a total of eight WWII defences had been recorded (Wills 1985) for an area containing major road, river and air approaches to London from the east and including docklands, oil refineries, power stations and industry. The survey recorded over a hundred sites, of which 23 are extant. These included pillboxes (Plate II), anti-aircraft gun sites, tank traps and spigot mortars, plus vital installations at Tilbury where Mulberry Harbour caissons and PLUTO Line "drums" were designed and constructed.

The survey of the Outer London Defence Ring was also completed, following the initial pilot study in 1993, and the exact path of this line was traced. From Epping Upland the defensive anti-tank ditch proceeded southwards through Debden Green and Loughton to Chigwell Row where it left the county. In Epping Forest a long section of the ditch and embankment can still be seen. Forty-five sites were recorded in this area although just six remain extant.

Previous Summaries: Gilman (ed.) 1994, 256-7.

Plate I Anti-tank blocks astride the Stable Bridge at Audley End (a heavy steel cable was originally stretched between them and anchored at each end).

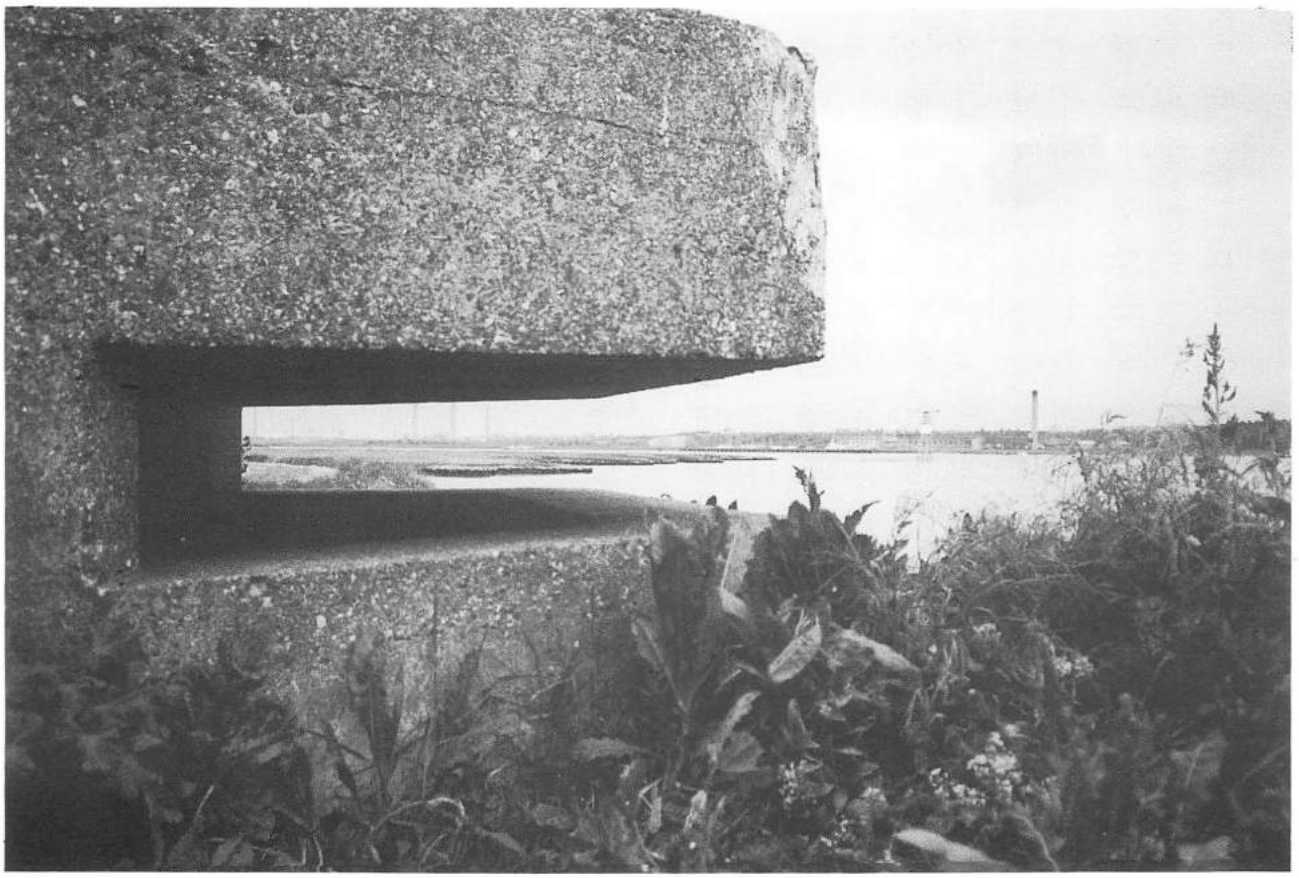

Plate II Pillbox overlooking the Thames at Stone Ness, Thurrock.

Abbreviations

B.M.	British Museum
Bt.M.	Braintree Museum
Ch.E.M.	Chelmsford and Essex Museum
C.A.T.	Colchester Archaeological Trust
C.M.	Colchester Museum (formerly Colchester and Essex Museum)
Cw.A.T.	Cotswold Archaeological Trust
E.C.C. (A.A.G.)	Essex County Council (Archaeological Advisory Group)
E.C.C. (F.A.G.)	Essex County Council (Field Archaeology Group)
E.F.D.M.	Epping Forest District Museum
G.C.A.G.	Great Chesterford Archaeological Group
H.B.A.S.	Howard Brooks Archaeological Services
H.M.	Harlow Museum
N.M.S.	Newham Museum Service (formerly Passmore Edwards Museum)
R.C.H.M.E.	Royal Commission on the Historical Monuments of England
S.M.	Southend Museum
S.W.M.	Saffron Walden Museum
T.M.	Thurrock Museum
W.E.A.G.	West Essex Archaeological Group
W.A.H.S.	Waltham Abbey Historical Society

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Shorter Notes

A Late Bronze Age hoard from Stumps Cross

N. Brown

The hoard was recovered by Mr K. Fondwell, with the aid of a metal detector. The objects were loaned to the Archaeology Section for recording in April 1994.

Three pieces were found scattered in the topsoil (Fig. 1, nos 1-3); the other four lay close together (nos 4-7). All the objects were recorded as seen, with some dirt adhering, and unconserved.

Catalogue

1. Blade fragment of socketed axe. Sides flare evenly to expanded cutting edge. Trace of casting flash on one side; sub-rectangular socket with pointed base. One face is much thinner than the sides and other face. Patches of smooth, even patina survive on both faces and sides. There is active corrosion on one side. Probably part of a south-eastern type axe (Butler 1963; Needham 1986 Class A). Wt 71g.
2. ?Fragment of socketed axe. No trace of socket survives and the fragment appears solid. There is a hole on the surviving face and the object may be a miscast piece. The broken edges are obscured by dirt. Wt 45g.
3. Blade fragment of ?socketed axe. No trace of socket survives and the fragment is solid. Blade slightly expanded. Slight trace of casting flash on surviving side. Even patina on both faces and surviving side. Broken edges are obscured by dirt. Wt 43g.
4. Socket fragment of socketed axe. Bulbous mouth moulding, with a second slight moulding below from which springs a side loop. Surviving socket face has a small rod-like extrusion, which may be part of an internal rib of Ehrenburg type 4 (1981). There is a marked casting flash on the surviving side. Broken edges of face are bent inwards. Both faces are heavily pitted; the surviving side has an even patina. Probably south-eastern type (Butler 1963; Needham 1986 Class A). Wt 94g.
5. Blade and socket fragment of socketed axe. Sides straight with widely expanded cutting edge. Prominent casting flash on both sides markedly off-centre. Damage to blade, particularly on one side. Socket has been pinched together in antiquity; one face has a deep dent. Both faces and sides are somewhat pitted and dented with corrosion. Both faces have very faint traces of what appear to be the bottoms of vertical ribs. Two small fragments of metal, possibly pieces of copper ingot, have been wedged into the socket. South-eastern type (Butler 1963; Needham 1986 Class A). Wt 120g.
6. Edge fragment of plano-convex copper ingot. Gas cavities visible in broken edges. Edges and one face partly obscured by dirt. Wt 118g.
7. Fragment of plano-convex copper ingot. Gas cavities visible, and one edge shows columnar growth. Surface and one edge partly obscured by dirt. Wt 275g.

Discussion

These objects appear to represent a small scrap hoard typical of the Ewart Park phase (Sealey 1987). The possibility that some objects (Fig. 1, nos 2 and 3) may be miscast, and the presence of ingot fragments, may indicate a founder's hoard (Needham 1990, 130-40 and fig. 42).

The collection is a small one, and it may be that not all of the objects originally present were recovered. It seems quite possible that the objects may all derive from a single deposit. However, the fact that the pieces scattered in the ploughsoil are all axe fragments, and, on the whole, smaller than the objects found 'close together', is of interest. It is possible that particular types/sizes of objects were separated into different caches as at Petters Sports Field, Surrey (Needham 1990) and possibly Wickham Bishops (Brown *et al.* forthcoming). Alternatively, a single deposit where ingot fragments were placed at the bottom and smaller fragments on top, as in the Great Waskett II hoard (Brown forthcoming), may have resulted in the smaller objects being dispersed into the ploughsoil, the larger fragments being left, more or less, *in situ*.

The Stumps Cross metalwork is an addition to a linear distribution of hoards in West Essex, running from the Thames to the Cambridgeshire border (Couchman 1980). The deposits are likely to represent hoards relating to a Late Bronze Age settlement pattern centred on the Lea, Stort and Granta. Similar distributions of hoards are known in the Chelmer/Blackwater river system and along the Thames in south Essex, and recent fieldwork has revealed extensive Late Bronze Age settlement in these areas. Settlements in the river systems of west Essex have not yet received the same attention (Brown and Bartlett 1992).

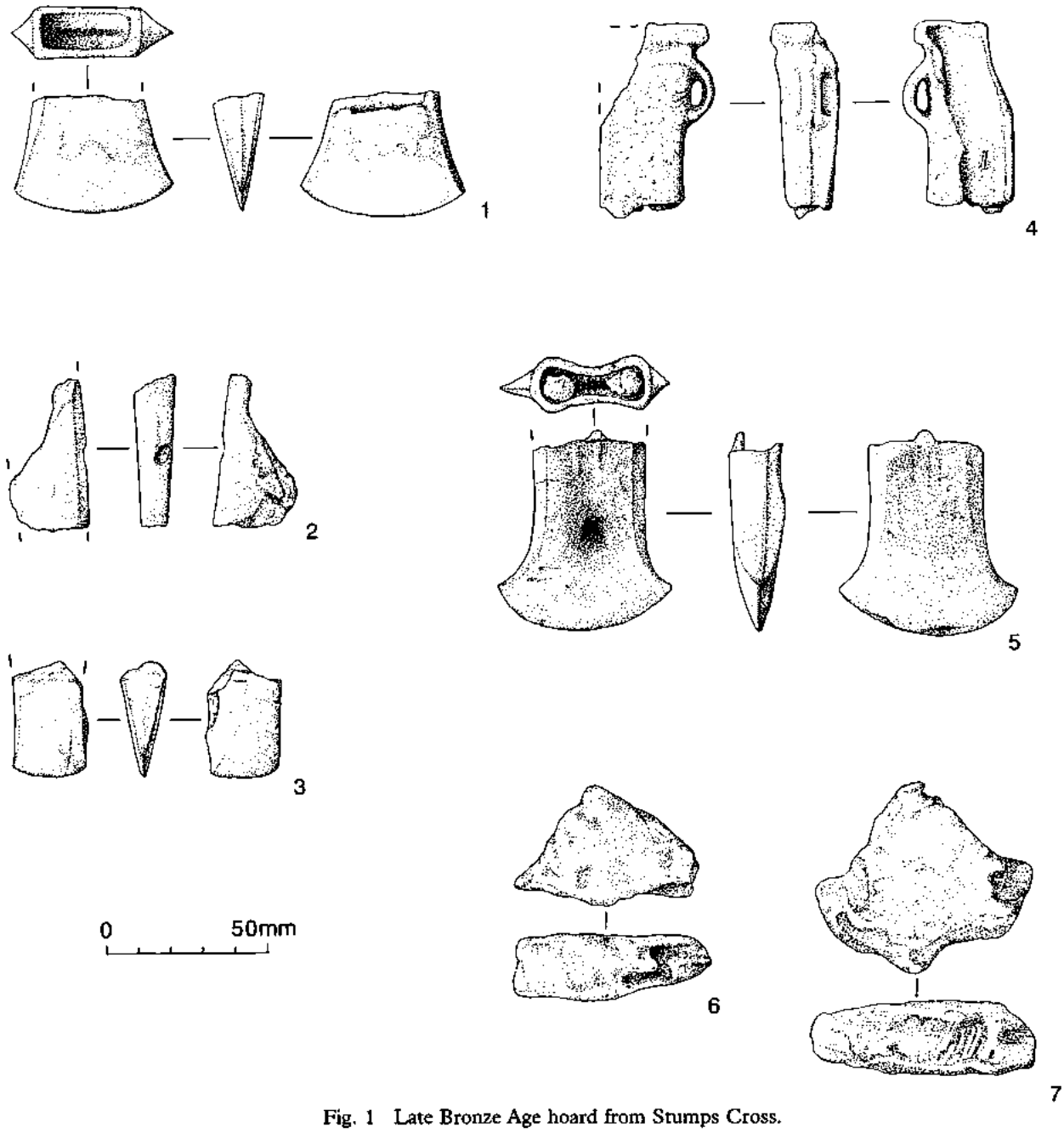

Fig. 1 Late Bronze Age hoard from Stumps Cross.

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Archaeological assessment at Gosbecks Farm, Colchester, 1994

H. Brooks, S. Benfield and S. Garrod

Introduction

Archaeological assessment was carried out in advance of the proposed residential development at Gosbecks Farm (on the south-western outskirts of modern Colchester) by Colchester Archaeological Trust Field Projects. This consisted of archive research, fieldwalking survey, sample trenching, and geophysical and metal-detector surveys.

The development site is part of the internationally important Gosbecks area, the focus of which is a Romano-British theatre and temple, surrounded by a native Iron Age and Romano-British settlement with associated ditches, field systems and trackways. Much of this area is a scheduled ancient monument.

A proposal for the creation of the Gosbecks Archaeological Park (incorporating a significant part of the area of archaeological importance) includes residential development and construction of an access road on its northern edge.

An evaluation was commissioned by the developers, Galliford Homes, to assess the condition, extent, date and importance of the archaeological deposits, so that an informed decision could be made on their future.

Methodology

The sample trenching was conducted in two stages during February/March 1994 and July/August 1994. Stage One trenches were situated to the west of Olivers Lane, on the proposed route of the new access road (T1-T7) and within the residential development area (T8-T16). The line of the new road to the east of Olivers Lane was examined for the first time in Stage Two (T20-T25) in addition to its amended route further west (T17-T19). In total, 1420 m of trenches were opened by machine stripping, equivalent to 2584 sq metres, or 2.6% of the development area.

The strategy adopted was to sample potential features indicated by aerial photography in addition to apparent 'blank areas' to provide a reasonable assessment of the archaeological remains likely to be disturbed. Concurrent with excavation, fieldwalking, geophysical and metal-detector surveys were undertaken. The fieldwalking was undertaken using a 20% sampling strategy and covered the whole of the proposed development area together with a substantial area beyond the southern boundary. The metal-detector survey covered all the trenches, a substantial portion of the south-western area, and an east-west transect across the site. The geophysical (resistivity) survey was undertaken over a 40 x 40 metre area, at the point where a Roman road is crossed by the proposed road line.

Results

Examination of cropmarks at Gosbecks, derived from over half a century of aerial photography, reveals a complex of ditched boundaries and trackways. In addition a Roman road running south-west from the Roman town to the Gosbecks complex crosses the development area to the east of Olivers Lane.

Over the central area two long sinuous ditches run on an approximately north-south alignment converging towards the north. The easternmost of these ditches was sampled in two places (T7 and T11), producing a small quantity of pottery datable to the late Iron Age/early Roman period. Further south this ditch crosses Olivers Lane and is abutted at right angles by a trackway which runs to the north-east. This trackway, represented by a pair of almost parallel field ditches, was sampled in five places (T21-T24) and shown to be post-medieval in date.

The south-western area contained a concentrated complex of cropmark ditches. These are bounded by a trackway beyond the southern limits of the development (running approximately along the northern edge of the small valley) and two parallel ditches to the north-east. Trenching in this area (T1-T3 and T12-T16) confirm these cropmarks as major ditches and date them to the late Iron Age/early Roman period. In addition several other smaller ditches of the same period were revealed together with a number of small pits. Several features produced surprisingly large amounts of pottery in relation to the limited areas of excavation, together with several large parts of individual vessels. Small amounts of light industrial slag and burnt building daub were also recovered. This concentration of material would tend to indicate settlement of the late Iron Age/early Roman period within the immediate area. No evidence was found to extend this activity much beyond the middle of the 1st century AD. Only a very small quantity of later Roman material has so far been recovered.

A single iron jointing collar covered with mineralised wood residue was recovered from a large flat-bottomed trench in the western end of trench 2. This was identical to a number excavated at Balkerne Lane (Crummy 1984, 115-17 & fig. 107) and indicates the existence of a water-main. This feature, which shows as a cropmark running across this part of the site, was further sampled in trench 14 where it cut through the fill of a late Iron Age/early Roman ditch.

Evidence of prehistoric activity was limited to the pottery contained in two features and surface finds of prehistoric worked flint. A possible ditch excavated in trench 20 produced three sherds of flint tempered pottery that could only be dated generally to the prehistoric period. Two Late Neolithic Grooved Ware sherds were found in the fill of a feature in trench 18. Due to disturbance of its upper fills it was not clear whether this was a linear feature or a pit.

Two further cropmark features were examined, a field boundary running east-west crossing the sinuous ditches, confirmed by excavation (T10 and T11) as modern, and (to the east of Olivers Lane) a ditch, running slightly south of the southern edge of Gosbecks Road, contained 19th century pottery (T23-T25).

The opportunity was taken during the assessment for an appraisal of the evidence for two specific features. The first, a record of a 'dark line on air photograph' (Hull 1958, fig. 113) just to the east of Maldon Road, could not be located despite the use of several photographs with good differential crop resolution. Secondly, the present line of Gosbecks Road has been claimed as fossilising the line eastwards of a major Iron Age earthwork, the Shrub End Dyke (Rodwell 1976, 343 & 344, figs 50 & 51.2). Examination of RAF photographs taken in 1933, before development along Gosbecks Road, showed no evidence of such an earthwork. Trench 8 was located to test this hypothesis. A recent roadside ditch was found, but there was no evidence for a dyke.

The distribution patterns produced by the fieldwalking support the results of the trial trenching. Although the conditions for the survey were generally good, the level of material recovered was very low, even in the south-western area, where the finds were more numerous.

The metal-detecting survey produced mainly recent or undated material, although there were a few finds of intrinsic interest. A worn copper-alloy coin, probably early Roman, and a lead cloth seal (with 15th-century parallels) came from the spoil next to trenches 23 and 20 respectively.

Discussion

The archaeological work undertaken at Gosbecks Farm, although limited to assessment and sample excavation, has allowed a preliminary interpretation of the archaeology to be made.

Activity predating the late Iron Age is indicated by surface finds of prehistoric flints and two features containing prehistoric pottery. Whilst this evidence may be significant, it is not substantial enough to speculate on the character of this activity.

The major period of archaeologically recognisable activity over the site probably spans a short period of about 60 years during the late Iron Age/early Roman period. This was concentrated in the south-west of the development area, and consisted of fields/paddocks, a trackway and probable settlement. Further details could only be elucidated by further excavation, although it is clear that some of the ditches had time to silt up, and be recut. The only direct relationship between two archaeological contexts is between the Roman water-main and a ditch abandoned before the main was constructed. Beyond this, there are almost no archaeologically detectable signs of use of the area into the Roman period. Roman pottery has a high survival rate in plough soil, and if the area had been used for settlement or cultivation involving the spreading of manure incorporating ceramic waste, this would normally have been evident in the fieldwalking results.

The impression therefore is of an area of settlement beginning in the late 1st century BC-early 1st century AD, with associated enclosures of fields/paddocks, and a trackway to the south directing movement through this area to more open land to the north and east. A substantial lump of slag (furnace bottom?) in the fill of a ditch may also indicate metal-working in this area. Some indication of the status of this settlement is obtained by comparison of the relatively large amounts of pottery recovered from this area to an equivalent assemblage from the Sheepen site at Colchester (Hawkes and Hull 1947; Niblett 1985). This later assemblage has been dated to the period AD 5-60 (Niblett 1985, table 1). The major contrast between these assemblages is the virtual absence at the Gosbecks site of mortaria and amphorae, fine vessels in samian and glass, and the limited amounts of other fine wares such as butt beakers and terra nigra. To some extent this may be the product of a limited sample, but it seems clear that the assemblages in use at these two sites were substantially different.

At some point in the early Roman period this area was abandoned as a focus of activity and a water-main was laid through it. The direction of the flow of water through the main is not clear. However it heads towards the spring which lies just to the north of the temple and portico in the centre of the Gosbecks site. This suggests that the main carried water northwards, and that there was a water-works at the head of the stream.

In relation to the proposed continuation of the Shrub End Dyke alongside Gosbecks Road, the evidence for this rests entirely on the interpretation placed on documentary sources concerning the perambulation of the bounds of the Borough Liberty, quoted by Morant in 1748 and summarised by Rodwell (1976). No physical evidence for such an earthwork exists along the line of this road. Philip Crummy has suggested that the interpretation of the documentary sources is in error, these having been misread, and actually referring to Gryme's Dyke at Lexden Heath, and not to a major earthwork on the line of Gosbecks Road (Hawkes and Crummy 1995, 170-71).

There is no evidence of further activity after the early Roman period until the post-medieval trackway ditches east of Olivers Lane were cut. These produced a single sherd of 17th-century pottery, but contained no peg-tile, which is common within the ploughsoil. This may indicate that the ditches had silted up before this material was spread across the area. The two north-south sinuous ditches are probably contemporary with this trackway, given the relationship between the easternmost ditch and the western end of the

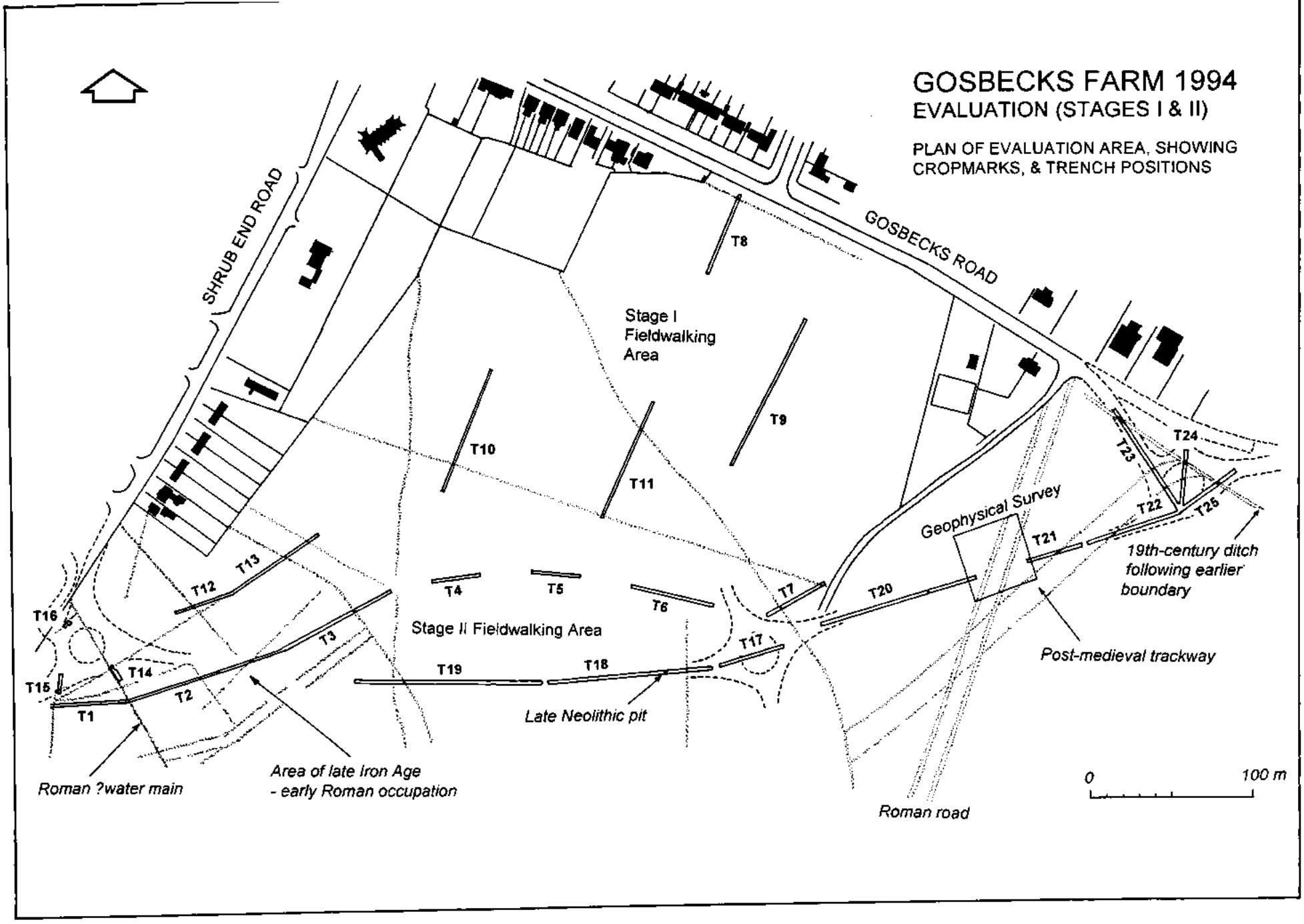

Fig. 2 Plan of archaeological evaluation at Gosbecks 1994.

trackway. Pottery and tile recovered from the ditch were Roman, but given the condition and quantity of this material it is almost certainly residual.

The roadside ditch to the south of Gosbecks Road was recut in the 19th century, since when that boundary has migrated further north; no dating evidence for the original cut of that ditch was recovered.

Acknowledgements

Thanks are due to: Galliford Homes for commissioning the work; David Barbour for his continued interest and support; Nigel Brown of Essex County Council Archaeology Section for his comments on the prehistoric pottery; and various members of Colchester Archaeological Group, especially Dennis Tripp, for their assistance. The geophysical survey was by Peter Cotts, and metal detecting principally by Pat Adkins, assisted by Francis Nicholls.

Site work for CAT was by S. Benfield, H. Brooks, D. Shimmin, N. Rayner, W. Clarke, J. Hudson, and D. Morris, assisted by members of the Colchester Archaeological Group. The original site archive reports were written by S. Benfield (stage one) and H. Brooks (stage two).

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A Roman rural shrine at Boreham? The Bulls Lodge excavation of 1990 re-interpreted

Colin Wallace

The purpose of this note is to put forward an alternative interpretation for the apsed Roman building found at Boreham in 1990.

The late Roman (?fourth century) building on the site at Bulls Lodge, Boreham is of no little interest regionally and nationally. Boreham Building A was a very distinctive building of unusual plan, unparalleled so far in Roman Britain. It had side wings and a prominent (9m wide) apse at the western end, and was oriented west-east (Lavender 1993, figs 6 and 7).

The building was poorly preserved, no floor surfaces survived, so deductions about function and date are limited, even though the site was fieldwalked and metal-detected before and after machine-stripping. Only thirteen coins were found, for example (Wallis and Winter, in Lavender, *op cit*, 9). The eight Late Roman coins came from features thought to be contemporary with Building A (Lavender, *op cit*, fig 6): a pit (F215, a later third-century radiate), the complex of features to the north-east of Building A (three unidentifiable coins, including one third-century and one fourth) and adjacent cobbling (three radiate copies and an unidentifiable coin).

While considering the possibility that it was a church, the discussion concluded that the 'most attractive' interpretation was that the building was an official audience-chamber, the *principia* of an imperial estate (Lavender, *op cit*, 19-20: a suggestion by E. Black).

There are problems with this interpretation which the report does not address[1], and it can be fairly said that not all possible functions were taken into account. This note sets out some disagreements on two grounds, architectural and contextual, and then puts forward an alternative interpretation.

Architectural

The parallels cited in the original report do not resemble late Roman Boreham Building A very closely.

That at Trier is a **rectangular early Roman hall**, oriented roughly north-south and attached to a substantial house (Goethert 1977, 151-3, Abb. 8). Stonea seems to have been a **tower**, with foundations deeper and wider than those at Boreham — 1 metre deep, footings 1.2 metres thick — with a vestibule and a relatively small apse at its western end, the whole demolished *c.* AD 200 (Potter 1989, 160-69, fig. 5; Potter and Whitehouse 1982; reconstructions in Potter 1986, fig. 57 [by S. James] and de la Bédoyère 1991, fig. 72).

The Trier building is in the tradition of other Early Roman apsed halls, eg that attached to the open-air sports ground or *palaestra* at Herculaneum (Maiuri 1958, figs 91 and 96) or the audience-chamber in the west wing of the Flavian-period mansion at Fishbourne (Cunliffe 1971, 87-8; figs 22, 23 and 42): that is to say, all were parts of greater building-complexes. By contrast, Boreham Building A was free-standing, as well as being later in date.

That an agricultural or domestic purpose for Boreham Building A cannot be ruled-out (*contra* Lavender, *op cit*, 19) is suggested by its resemblance in plan to two Early Roman buildings on villa sites (one previously mentioned by Lavender[2]). The first is the main building at Neerharen-Rekem in *Germania Inferior* (Van Ossel 1992, 297-300; fig. 105), which went out of use in the mid third century. Then there is the second-century Building IV at Roughground Farm, Lechlade: an aisled building with a prominent apsidal

room at its west end, on a similar alignment to that at Boreham (Allen *et al.* 1993, 182-3; fig. 111; cf also pp. 58-72), which can be compared in its original state (Allen *et al.* 1993, fig. 43) with the long rectangular structures with apsed western ends known from the working parts of several villa-complexes: eg Estrées-sur-Noye, *Gallia Belgica* (Agache 1978, fig. 14) and the Late Roman Building 3, with its suite of baths, at Dicket Mead, Welwyn (Rook 1987, 98-101; figs 1 and 18). Both Neerharen-Rekem and Roughground Farm are rather earlier in date than Boreham Building A, however.

With the parallel at Green Lane, Wanborough, Surrey, the grounds for comparison are less certain, it being a north-south oriented apsidal-ended structure (O'Connell 1983, fig. 2). However, this building is from the temple site of Late Iron Age and Roman date, with a Romano-Celtic temple and deposits of votive offerings (O'Connell and Bird 1994, fig. 2). We will return to the significance of its context later.

Contextual

There are no clearly defined or direct relationships between the latin term *principia*, an imperial estate, and the archaeological sites mentioned.

What is needed is a demonstration of the relationship of a *principia* to such an estate — for as Crawford has pointed out (1976, 36), the *principia* mentioned in an inscription from south-west England may have been connected with stone-quarrying or mining rather than imperial landholding — and a demonstration that a particular building-type can be identified as a *principia*. Neither exists in the published report[3].

It might be thought that the published description of the site at Combe Down south of Bath — of interest in this context because it has produced a re-used inscription (originally of the third century AD) recording the 'restoration' (*a solo restituit*) of a *principia* by an imperial freedman and assistant to the procurators (RIB 179) — would bear a resemblance to Boreham Building A, but this is not the case.

Instead, it seems to refer to rectangular ranges at right angles to each other, inside a courtyard: if anything, more like a unit-type villa than Building A (Scarth 1864, 115-18, esp. 117; Haverfield 1906, 309-312)[4]. It must be noted, however, that the inscription need not have come originally from the villa described by Scarth[5]. The only way a site could be confidently interpreted as a civil *principia* is by association with good epigraphic evidence: given how tenuous this is for Combe Down, then Boreham (lacking any such evidence) is an even less likely candidate.

Previous discussions in English have always accepted that a civil *principia* was a **place**, a complex of buildings rather than a specific building-type (Potter and Jackson 1982, 118-19; Potter 1989, 168). The obvious disagreement with this view inherent in the preferred interpretation of Boreham Building A does not find expression anywhere in the report, however. The report also ignores, for example, the ideas on administrative units put forward by Stevens (1966, 119).

Some alternative contexts — religious or social?

It is suggested that rural, pagan contexts in the north-western provinces may be of relevance in interpreting Boreham Building A.

In the original report, the only religious interpretation discussed for Building A was Dr Rodwell's suggestion that it might have been a short-naved basilican church (Lavender, *op cit*, 20; Rodwell 1993, 59; see also the discussions of the Late Roman ?church at Silchester: Frere 1976, 292-7; King 1983, 233): pagan alternatives were not considered[6].

For example, within the Roman small town and cult-centre at Grand in south-eastern *Gallia Belgica* (Wightman 1986, 569; Frézouls 1982, 177-234) was an apsed building (the apse *c.* 8 metres across, at the western end of the building) containing a third-century mosaic (Stern 1960, 75-8 [no 255] and esp. pl. XLVIII), richly-decorated with imported building-stones and similar in plan and alignment to Boreham Building A (Billoret 1965, 69; Frézouls 1982, 218-20).

A square building with a large (eastern) apse, in the small town of Vervoz in northern *Gallia Belgica* (Willems and Lauwerijs 1973, 163, 169-70 and fig. 2 (building 2); Hiddink 1991, fig. 5), may have been the meeting-place of whatever local administrative body existed or may have belonged to a local cult-group (or *curia*): no compelling evidence exists either way, save for the building's distinctive ground-plan[7].

At what seems to have been a rural sanctuary-site at Cars in eastern *Gallia Aquitania* was a small ?Early Roman temple on a podium, oriented west-east with an apse at the western end (Prieur and Delage 1947, 51-9; plan I)[8].

Rural shrines, *conciliabula* (like Ribemont-sur-Ancre: Wightman 1986, 567-8; Agache 1978, fig. 36) and *curiae* have tended to be overlooked in the study of Roman rural settlement in Britain. The last-mentioned were 'small territorially-organised divisions centred round a common cult' (Wightman 1975, 648-9), known from inscriptions (Rüger 1972: including *RIB* 1695 from the central sector of Hadrian's Wall, cf Rivet and Smith 1979, 317- 19), which ought to have had meeting-places.

In summary, what can be said about these comparable buildings from *Gallia Belgica* is that while not exactly the same as Boreham Building A, they share its orientation and the prominence given to an apse. It is suggested that an interpretation as a building with a pagan religious purpose or a meeting-place, perhaps within a small rural sanctuary or service-centre[9], is more credible for the Boreham building than that currently favoured, in the light of the objections and the comparisons set out above, and at least as credible as the building being Christian.

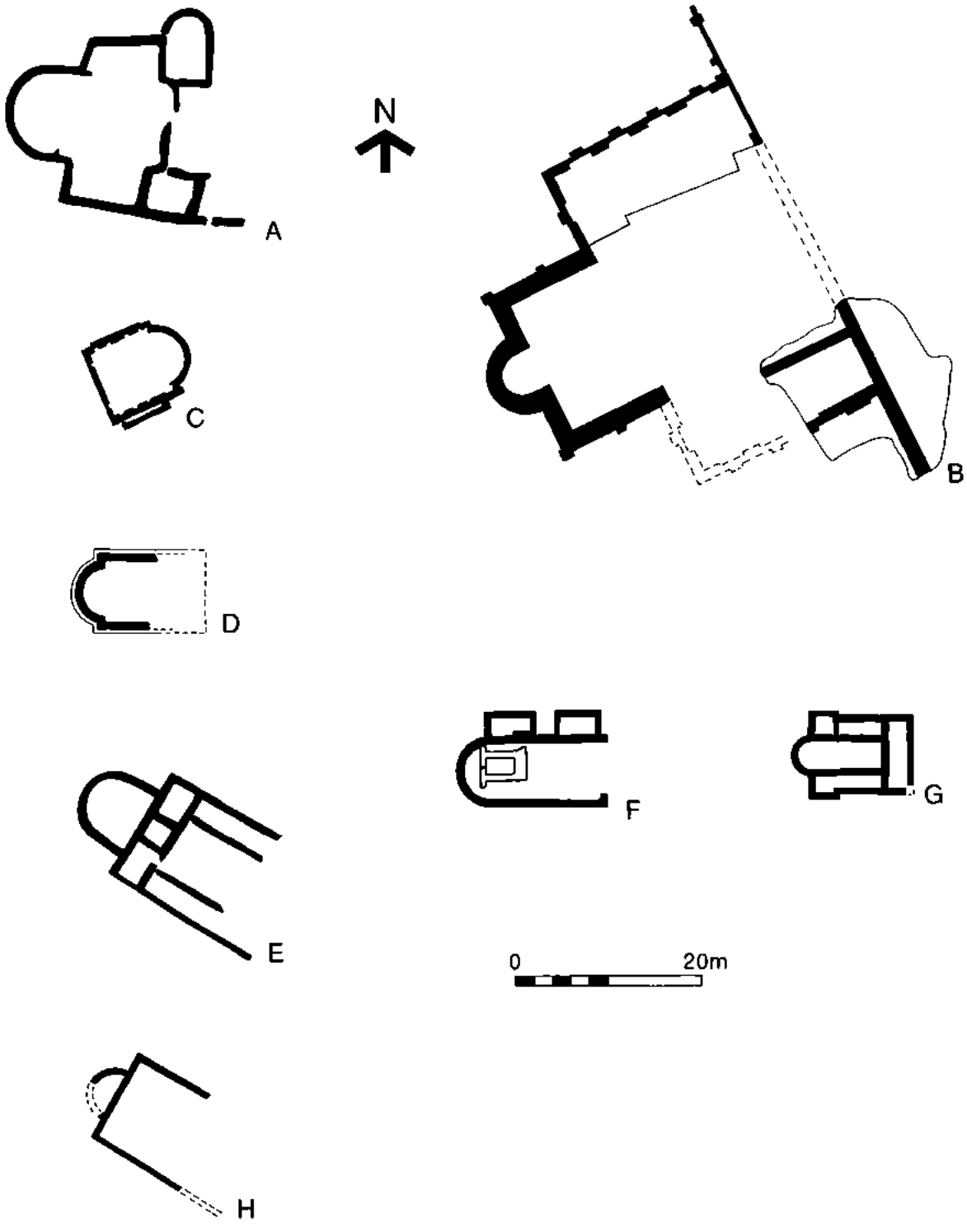

Fig. 3 Comparative plans of the buildings at Boreham (A), Grand (B), Vervoz (C), Cars (D), Roughground Farm (E), Nettleton (F), Silchester (G), and Verulam Hills Field (H), reduced to the same scale (after Lavender 1993; Frézouls 1982; Hiddink 1991; Prieur and Delage 1947; Allen *et al.* 1993; Wedlake 1982; Frere 1976 and Anthony 1968).

Perhaps the major objection to this interpretation of Boreham Building A is the absence of votive finds. The poor preservation of the site has already been mentioned: like Bulls Lodge, the early Roman site at Wood Lane End in Hertfordshire (interpreted as a rural sanctuary with a temple-mausoleum and several other buildings of distinctive/unusual plan) was also badly plough-damaged and produced hardly anything in the way of votive finds or coinage (Neal 1984, 208).

One can suggest that the sealing of the Late Iron Age and early Roman votive deposits at both Harlow and Wanborough by upcast from the foundation

trenches of the stone temples and by exterior metalled surfaces (France and Gobel 1985, 22-3; Selkirk 1988, 166; O'Connell and Bird 1994, 21-5) has been the key factor in preserving them for us to recover. Similarly, at Ivy Chimneys, Witham, further towards Colchester from Bulls Lodge, the site had a religious character from at least the second century and yet votive finds of second/third-century date were very scarce and later Roman ones owe their preservation to special circumstances: the large-scale filling in of the two deep depressions and a pond at the end of the site's use in the late fourth-early fifth century (Turner forthcoming). Thus it should not be readily assumed that **all** religious sites will produce, on excavation, deposits of votive material: specific action by the users of each site will have been necessary to protect them (cf Woodward 1992, 72).

Having suggested an alternative interpretation for Boreham Building A, it only remains to end by noting that, in the original report, the comparison with the building from the temple-site at Wanborough in Surrey may have been nearer the mark.

Acknowledgements

I am grateful to my colleagues Mr N.J. Lavender for checking some details for me in the excavation archive and Mr N. Nethercoat for drawing Figure 3. I would like to thank Mr R. Isserlin and the Editor for reading — and improving — earlier drafts of this note; but the opinions expressed and any remaining inaccuracies are my responsibility.

Notes

1 'Boreham is set in a villa-dominated landscape and it would be difficult to sustain a case for an imperial estate in this area of Essex, or for 'The Grove' as a likely administrative centre' (Rodwell 1993, 122).

2 Another comparable Romano-British building may be found at the rural wayside shrine-site of Nettleton Scrubb, Wiltshire: Building XXVII was oriented approximately west-east and had a wide apsidal west end (Wedlake 1982, 77-79; fig. 42; pl. XLVI.b). It was certainly later in date than the second century and may have been fourth century. The Roman building at Sarrat in Hertfordshire, some nine miles (fourteen kilometres) south-west of Verulamium, may also be a parallel for Boreham Building A — it is aligned west-east and has a large western apse (Branigan 1968, 140/156; Neal 1977, fig. LXVII.8) — but it may quite conceivably be just part of an apsidal-ended suite in a villa, or it may have resembled the building at Dicket Mead.

The small, apsidal-ended, west-east oriented Late Roman ?shrine behind the villa at Beddingham, East Sussex (Esmonde Cleary 1993, fig 31; pl. XIV.B) was reported too late to be noticed in the Bulls Lodge excavation report.

3 Haverfield was cautious about any link between the Combe Down villa, *RIB* 179's *principia* and an imperial estate (1906, 312), but this was taken for granted by Collingwood (1937, 15 and 80) and Applebaum (1972, 29-30), the latter even arguing that the description of the villa resembled that of a military *principia*! Frere seems to have been in two minds (1967, 196 (note 1) [for] and 275 [against]: unchanged in later editions).

4 The site was uncovered and destroyed by quarrying in the 1860s, without being planned: 'no proper plan having been made as the portions were laid bare, I am obliged to describe what remained from notes taken at the time...[which] give the idea that this Villa had been built around an open court and formed three sides of a square' (Scarth 1864, 116/117).

5 Although the villa-site has produced an official lead sealing (RIB 2411.37: *p(rovinciae) Br(itanniae) S(uperioris)*).

6 Distinguishing Late Roman pagan (urban) shrines from Christian churches has presented problems: eg at Silchester (King 1983). There seems to be a reluctance to accept the existence of pagan shrines that do not conform to a 'Romano-Celtic' plan, cf the discussion of the site at Cars in *Gallia Aquitania* (Prieur and Delage 1947, 59). The buildings at Silchester and Verulam Hills Field, Verulamium (Anthony 1968, 49-50; fig. II; pl. 12A) are shown on Fig. 3 for comparison with Boreham Building A.

7 A search for further parallels has shown that 'religious' buildings in the Roman north-western provinces tend to have strictly rectilinear plans and that rounded apsidal ends are rare (cf the surveys by Fauduet 1993, Follmann-Schulz 1986 and Rodwell 1980). For example, the apsidal-ended, approximately west-east oriented buildings in shrine-sites at Pesch and Fronhoven in Lower Germany — both associated with *curiae* by Rüger (1987, 18-20) — have **rectangular** apses (Follmann-Schulz 1986, Abb. 8 (Building B) and 14 (Building A) respectively). Those that do not conform generally have rather individual plans.

8 The poorly-understood rural ?basilica at Rom in *Gallia Aquitania*, set beside the junction of several Roman roads, may also be relevant (Grenier 1958, 491-5; fig. 166 [conjectural plan]).

9 The sort of site discussed by Blagg (1986, 20-21). No fieldwork has been carried out in the area south of the 1990 excavations, towards the Roman London-Colchester road, or in the area immediately to the east now occupied by the woodland called 'The Grove'. Dr O. Bedwin kindly drew my attention to the possibly significant fact that a spring-fed stream runs through 'The Grove', rising at the northern end of the woodland.

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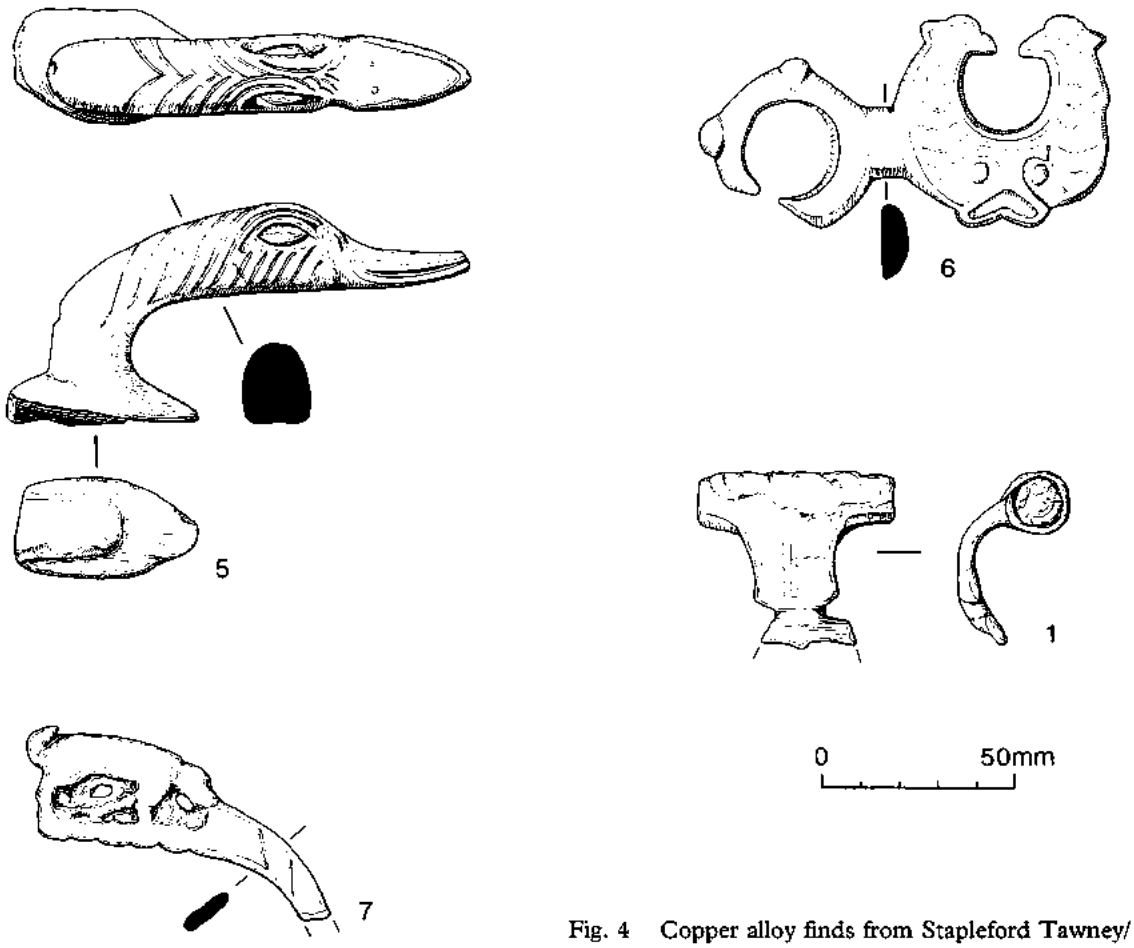

Fig. 4 Copper alloy finds from Stapleford Tawney/ Stanford Rivers.

Finds from Stapleford Tawney/ Stanford Rivers

Hilary Major and Phil McMichael

A collection of metal-detector finds from an area straddling the Stapleford Tawney/Stanford Rivers parish boundary was kindly lent for study by the finder. The group consisted of 108 coins (mostly Roman), 9 Roman brooches and a number of copper-alloy objects of Roman and later date. Most of the objects were in poor condition; their date range suggests occupation in the vicinity throughout the Roman period.

The coins

These range in date from the late 1st to the late 4th century, mostly from the Trier mint, plus one Iron Age coin of the last quarter of the 1st century BC/first quarter AD.

Roughly one quarter of the coins are 'Barbarous Radiates' of 260-300 AD. The rest are mainly Constantinian (*c.* 307-364 AD). There are a few earlier coins which may be Flavian (69-98 AD), and some later coins, possibly up to the 380s. Of note were coins (*c.* 324 ff AD) with both the Empresses Helena and Theodora (the mother and wife of Constantine I); a coin of 348 AD celebrating the 1100th anniversary of the founding of Rome; some coins of Crispus Caesar, Constantine's eldest son, who was executed in 326 AD; and nearly a dozen 'Gloria Exercitus', both full size and copies. Some of the coins also seemed to have the wrong reverse. These may be contemporary Roman forgeries of the 4th century.

Copper-alloy brooches

As is normal, the brooches are predominantly 1st century AD. Those not described in detail below were: a Nauheim derivative, the head of a Langton Down brooch, a Dolphin brooch, and a Colchester brooch with a decoration similar to that of Stead and Rigby (1989, 88, C8). An oval disc with traces of red and green enamel was probably a plate brooch, now incomplete and in very poor condition. The illustrated brooch fragment is shown in Figure 4.

1. Brooch head, from a brooch of Hawkes and Hull (1947) type XIII. The constriction of the bow has traces of transverse moulding, and there may have been longitudinal mouldings on the main part of the bow. The cylindrical spring cover is open at the ends. It is now obscured by a white metal concretion which is probably the remains of solder used to attach a decorative panel, as in an example from King Harry Lane, Verulamium (Stead and Rigby 1989, 95, type Lf). The date is probably mid-first century, perhaps pre-conquest.
2. (Not illustrated) A penannular brooch of Fowler's type E, somewhat distorted. It has a circular section with ribbing on the top, and flattened terminals, probably with two notches either side, a decorative style which can be regarded as a very degraded zoomorphic motif. The pin has a broad loop, with two transverse lines at the base of the loop. Cf Hattat (1985, 186, no. 656) for a similar brooch. Pin L 34 mm, brooch diam. *c.* 30 mm.
3. (Not illustrated) The head from a P-shaped brooch with a triple divided bow. The head is triangular, with a small moulded knob at the end, and a single ring-and-dot as decoration. The type is not particularly common in Britain. Feugère (1985, 41) cites it as a military form (Bohme type 27) found on the Rhine frontier in the late second and first half of the third century.
4. (Not illustrated) Part of a thin plate brooch, comprising a disc with a lug at one end and a strip, now bent and broken, at the other. The disc has a line around the edge, and probably had a central stud, and the strip has transverse lines. The original shape is uncertain. It may have been a double disc, or a more complex shape, such as the disc and crescent illustrated in Feugère (1985, pl. 148, 1856 [Type 24e]), with a suggested date of *c.* AD 30-70. Diam of disc 16 mm; W of strip 8 mm. Surviving L of brooch 24 mm.

Other copper alloy

Six other pieces of copper alloy were found. They included a probable piece of working waste, and part of a Roman ring-key, most likely to be third or fourth century. The post-Roman finds included a fragment probably from a D-shaped buckle. The following items are illustrated in Figure 4.

5. Swan's head mount, decorated with incised lines. This is probably Roman. The swan is thought to have been connected with solar cults, although Ross (1967, 304) notes that swan symbolism was used infrequently in Romano-British cult material.
6. Double-looped object probably of medieval date. The back is flat. The lugged ring was probably a complete circle originally, while the other ring was not. The moulded decoration is in poor condition, but is probably two fish, mouth to mouth. This could be a belt fitting (cf Margeson 1993, 32, no. 219, for a buckle with an integral shank), but lacks the rivet holes which might be expected.
7. Buckle fragment, possibly originally gilt, with a figure of a dog on one side. This is likely to be from an oval buckle, of late medieval or later date, perhaps somewhat like Margeson (1993, 28, no. 152).

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A supporting-arm brooch from Henham

Susan Tyler

Description (Fig. 5)

Rectangular head with four projections, decorated with four horizontal grooves. Three triangular notches on one side of head beneath the horizontal grooves. Fairly short, sharply curved bow, faceted at junction with head. Footplate triangular with curved edges and decorated with five horizontal grooves; end slightly upturned. In good condition. Copper-alloy pin spring in position but pin broken off; catchplate slightly damaged, in position. Slight damage to headplate. Length 34 mm. Max width of headplate 27 mm.

Discussion

The brooch is in good condition with only slight damage to the top edge of the headplate and the pin catchplate on the back of the brooch. The pin is missing, but the pin spring is in position and is copper alloy rather than iron. Using the classification devised for supporting-arm brooches, or 'Stutzarmfibeln' (Bohme 1974, 10-14), the Henham brooch falls into his 'Typ Mahndorf': brooches with a fairly rectangular head-

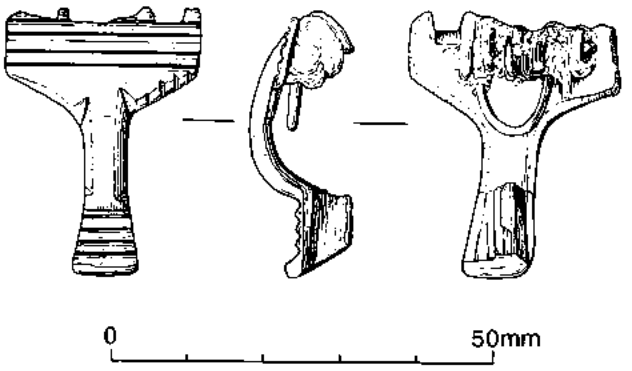

Fig. 5 Supporting-arm brooch from Henham.

plate, fairly short bow and triangular foot. The distribution of 'Typ Mahndorf' brooches on the continent is centred on the Elbe-Weser river valley in northern Germany. They are dated to the fifth century (Bohme 1986, fig. 54, 53), although it is now thought likely that production continued into the sixth century (M.G. Welch, pers. comm.)

Supporting-arm brooches are rare in England, but Essex has produced some examples: several from Mucking, Thurrock (Jones and Jones 1975, 161, fig. 55, no. 8; Bohme 1986, 527-42, fig. 52.7 and 10); one from Springfield (Tyler 1990, 144-6); and a very ornate example from Barling (K. Crowe, pers. comm.). In addition, a brooch from Pishiobury, near Harlow (Tyler 1994) can be seen as a short-lived transient form sharing characteristics with both equal-armed and supporting-arm brooches, and is similar to an example from Keymer (Welch 1987, 364-5). The Henham brooch is therefore an addition to a small but important group of supporting-arm brooches which demonstrate immigration and/or trading links with North Germany during the middle to late fifth century.

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The Barley Barn at Cressing — a possible method of construction

C.A. Hewett

'Medieval carpenters had special tools for large-scale woodwork, such as those involved in timber-framed buildings'.[1] These included; plumb-level, plumb-line, broad axes — right and left handed, twybill and wimble — now called a spoon bit. It was relatively easy to construct large barns, carpenters having been used to working on high timber buildings. Scaffolds were used mainly in the construction of stone buildings and towers; however, an illustration of 1519 shows a high timber building not scaffolded; instead, the 'carpenters' are standing or sitting on the top plate, cutting mortices.[2] Another Flemish illustration[3] of *c.* 1450 shows cranes being used for spires; also men on top of a scaffold and a crane is being used for the roof of another stone building.

Recently, the Barley Barn has been dated by Dr Ian Tyres; the tree-ring date of 1205-1230 is within the expected range. However, this is not as precise as one would wish and as yet the barn is not truly dated. The method of construction can be perceived by a study of its joints. Figure 6 shows a perspective of the barn, without a midstrey, and with two principal posts indicated A-A. The construction sequence was probably as follows:-

the complete aisle sills and post plates were laid down. Then four tall stanchion poles were set up, each with four support shrouds and tackles. After this, the post plates were morticed to receive the arcade posts' base tenons. In Figure 7, one arcade post is being lowered into position — slowly — two carpenters levering it into place. These oak posts, when green, would have weighed nearly one and a half tons each. Although Figure 7 shows two oxen, it could have been four; the post was pulled up to its full 15 foot height, then lowered about 6 inches to engage the foot of the tenon, and then secured by ropes.

The four central posts could have been set up in about three hours, employing only five carpenters. This time could have been halved if matching pairs of arcade posts were erected at the same time. The four central principal posts and the two associated top-plates could have been assembled using the same tackle, after which the eight arcade braces could be fitted. These arcade braces have triangular-shaped tenons enabling easy assembly by two carpenters, setting and pegging.

With the central posts assembled and stayed into position, the two tie-beams could then be fitted, using the same lifting tackle. To ensure a good fit, the dove-tail joints already cut on the beams were probably scribed and cut into the plates at this point. When the basic frames have been set up squarely, the straining beams (below the tie-beams) could be offered in. When in position and one end morticed and tenoned,

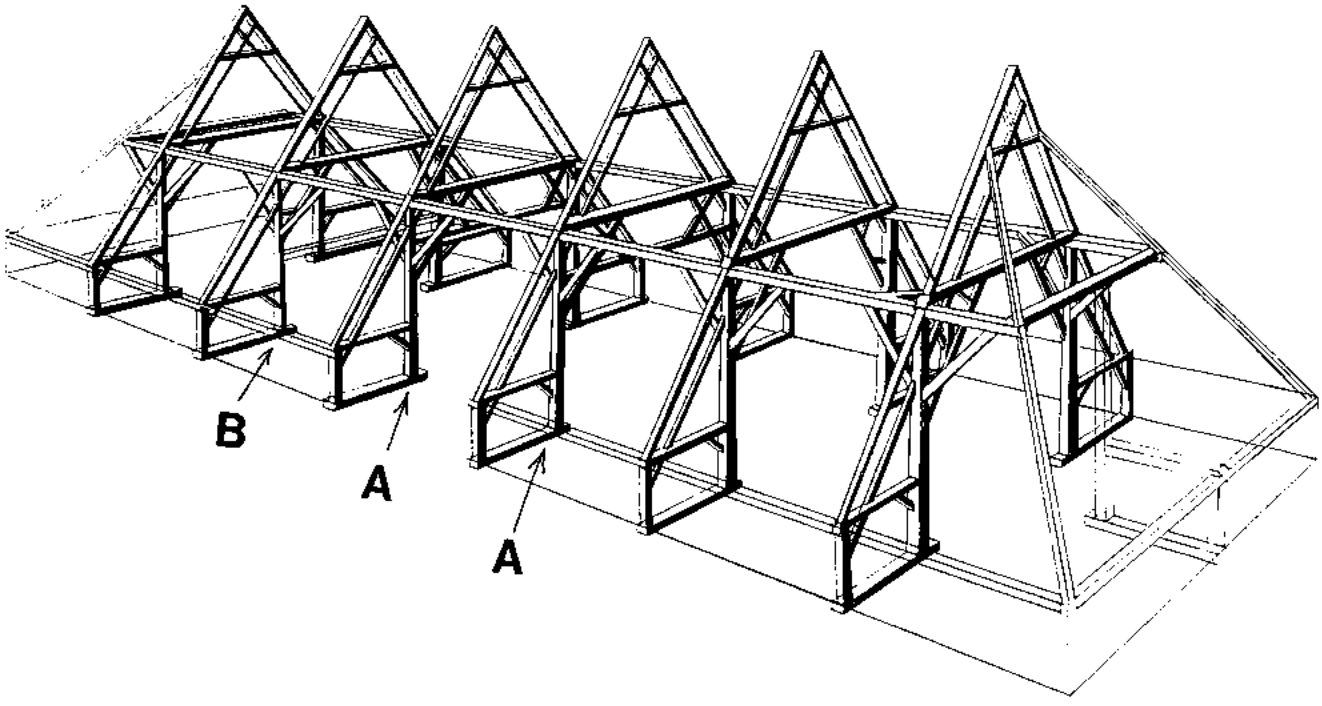

Fig. 6 Perspective view of the timber frame of the Barley Barn, from the south.

the other end could be secured by the pegged, barefaced loose tenons that were used.

After this, the four transverse tie-beam braces, with notched-lap top and bottom joints, could be clamped and scribed against post, tie-beam and strainer beam, and then cut to fit.

The central bay, using this suggested method, would have been erected true and square within one day.

Commentary

The principal posts are jointed to the other members by means of tenons. The northern posts have one tenon and four free, barefaced tenons, one of which has rotted away. The southern posts have four tenons and one set upon two later post plates. These tenons are original and show that the barn had sill-mounted posts. The date range of the barn, 1205-1230, is late enough for this technique to have been introduced, superseding the earlier pads system.[4] The posts all have rectangular lifting holes on both flanks, shown in use (Fig. 7), using wooden lifting bars. The following barns have similar holes in their posts; the Long Barn, Whiston, near Rotherham: the Great Barn, Manor Farm, Ruislip: and the Grange Barn, Little Coggeshall. However, they only employ a single hole in each post, as against the Barley Barn, with pairs of back-to-back holes.

This article only discusses of frames around the central bay, considered here to have been but one day's work. Working outward from the centre, the two ends would have been set up. The work was easier, but would have taken some time to complete the whole length. Following this, the aisles were probably constructed and raftered, stiffening the frame before the more difficult central roof was tackled. This was desirable as the arcade top plates were not fully scarfed, being only halved. There is at the moment no explanation for these weak joints. However, there are other examples; one at Crepping Hall, Wakes Colne, dating to *c.* 1170, and another at Lampett's Farm, an aisled hall of the early fourteenth century.

At the Barley Barn, there are three visible constructional mistakes: one is a big blocked mortice, above one of the principal posts at the north end. Two other posts (shown B in Fig. 6) have open mortices about 6 feet above the ground. All these unexplained joints appear to have been cut when the posts were originally fashioned.

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3. *ibid.*, frontispiece
4. C.A. Hewett, 'Evidence for an intermediate stage between earth-fast and sill-mounted posts', *Ancient Monuments Society* 33 (1989)

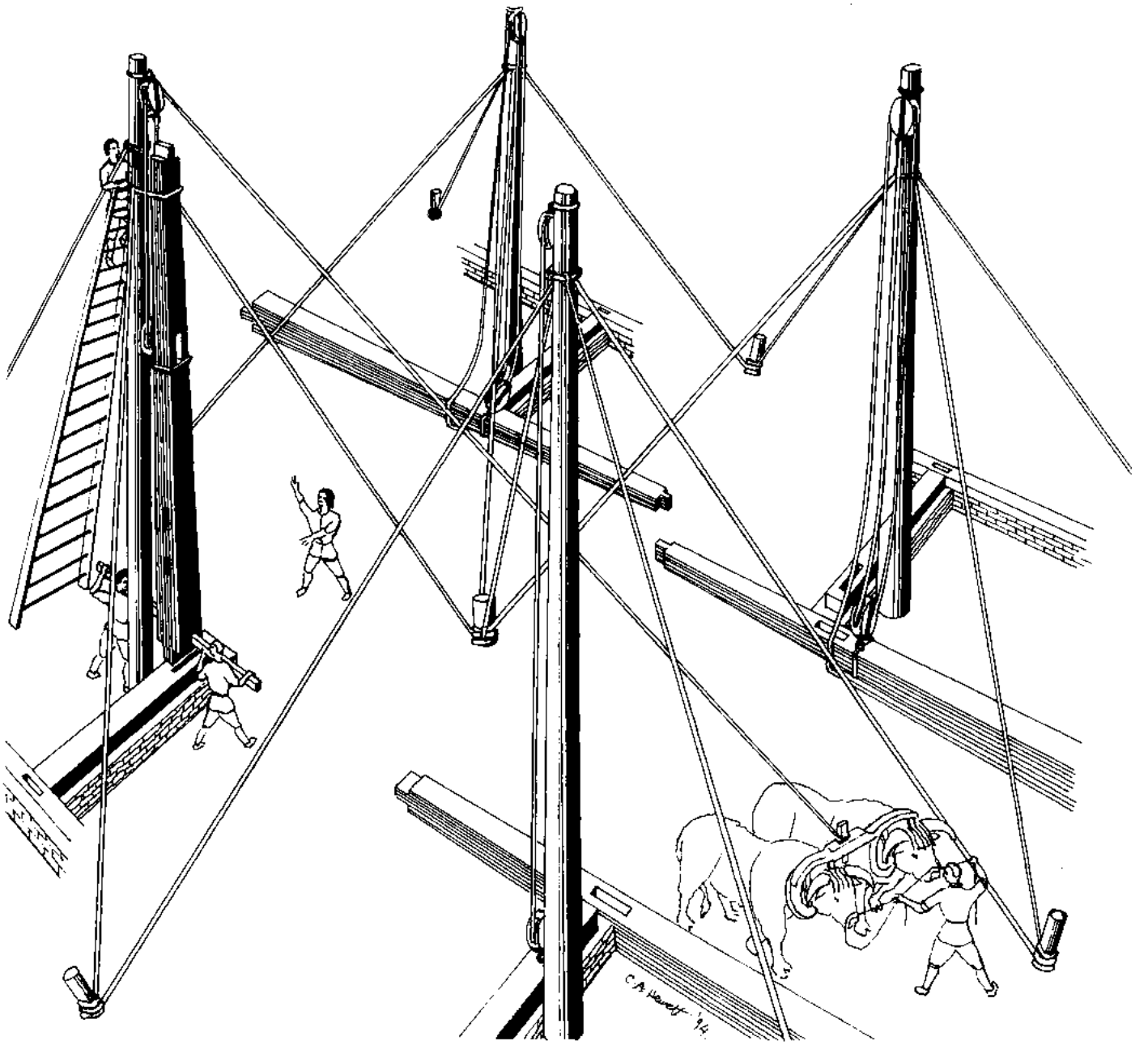

Fig. 7 Suggested technique for raising the arcade posts.

A medieval aisled barn at Fryerning

J.V.H. Kemble

Thirty yards north of Fryerning Hall, Ingatestone, a medieval aisled barn (NGR TL 639 002) has been the subject of a measured survey. The barn has features suggesting a 13th-century origin.

History

The church and the half-manor of Fryerning were given to the Knight Hospitallers of St. John by Gilbert Montfichet, lord of the barony of Stanstead Montfichet, for the souls of his parents, before 1186, and his son Richard granted the other half before 1199. A 12th-century charter records a grant by the Prior of the Hospitallers to Henry de Maldon, chaplain of Fryerning, of a dwelling house and a yard; it may be surmised that this refers to the predecessor of the extant Hall next to the church, and the yard between it and the barn, since the church seems to have been in the prior's possession (*Cal. Close Rolls*, 1283; Gervers 1981, 1994).

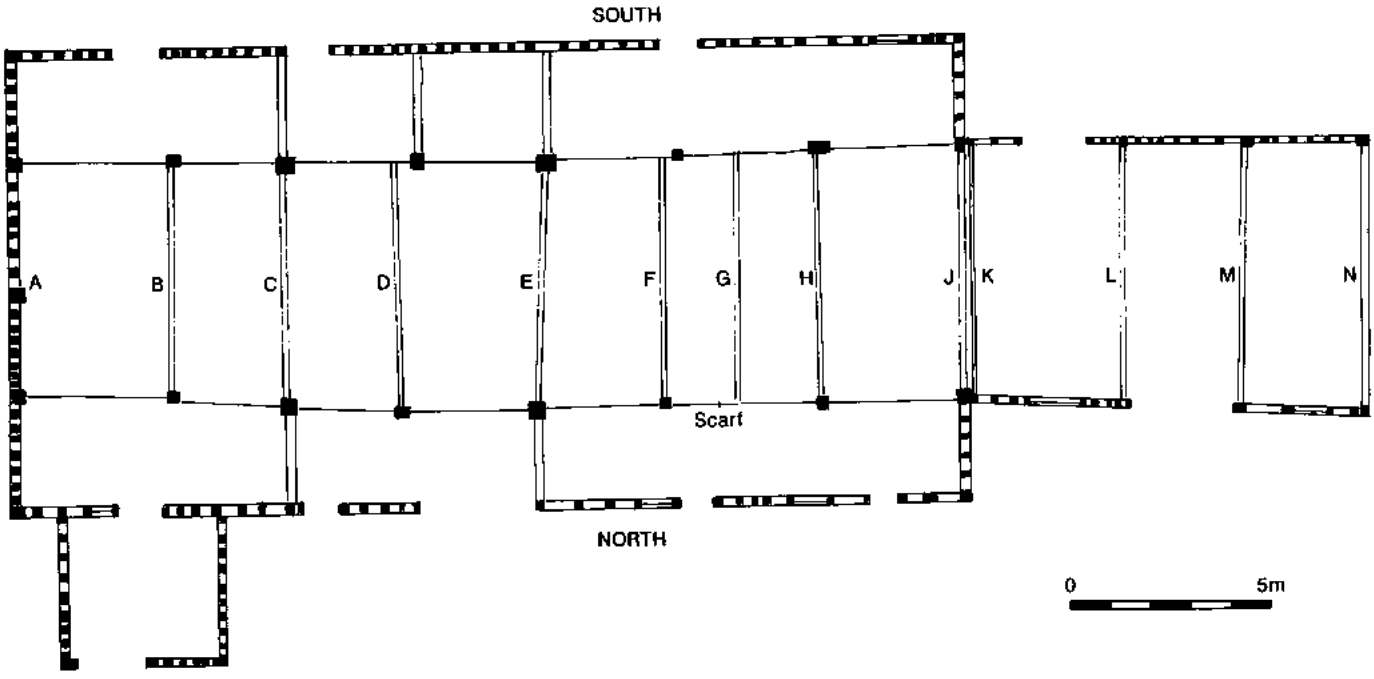

Fig. 8 Medieval barn at Fryerning; plan.

In 1388, a valuation records a house and a garden, and farm of 500 acres of land, pasture for 300 sheep and 20 cows, 40 acres of meadow, rents of assize worth £10, in all worth 40 marks (Larkin and Kemble 1857).

The manor continued as a camera, or smallholding, directly under the prior at Clerkenwell, until the order was dissolved in May 1540 by Henry VIII, who granted it to the Earl of Hertford (Palmer 1991). The same year it was purchased by William Berners who already held Thoby, and it continued in the family until 1607 when it was acquired by Sir Nicholas Wadham. After his death, his wife Dorothy, daughter of Sir William Petre of Ingatestone Hall, endowed the Oxford College which bears her husband's name with the manor and farm (*Cal. State Papers* 1610, 1611).

For the following 300 years, the estate was farmed by tenants for the College. The barn was used to billet 200 soldiers during the First World War, and the last tenant farmer was Mr George Rankin. In 1922, the College sold the farm to Mr Humphrey Pelly, who let it to his brother Captain Gilbert Pelly, R.N. During the Second World War, it was acquired by Mr Alfred Howgego and, in 1969, by the present owner, Mr Brian Green. The barn continued as a 'working' agricultural building until 1986.

The survey

The aisled barn, aligned east-west, is of eight unequal bays, but originally longer towards the west. Externally, it is boarded, hipped at the east end and roofed with red clay tiles. The Walker map of 1601 shows that in the early 17th century the west end was also hipped and the roof tiled. Three additional extant western bays (unaisled), 10 m by 5.8 m, have principal rafter trusses and tie-beams supported on posts with open notched-lap knee braces and tenoned raking struts rising to the collar. These western bays were probably constructed in the late 18th or 19th centuries, replacing the former hipped end. The west end elevation was renewed after the Great Gale of 1987. The eastern eight bays measure 23.7 m long by 11.1 m (77 ft 8 in by 36 ft 4in) to the aisle posts (Fig. 8).

Although there has been considerable alteration over the centuries and the roof, now of clasped purlin construction, renewed, the original structure is represented by two extant but now attenuated passing braces in truss J which rose, passing to the west of the arcade post, to the tie-beam with an open notched-lap joint. Four additional jowled arcade posts *in situ* (trusses C and E) retain grooves for passing braces, always on the west of the post (Fig. 11).

The height of the arcade posts is c. 4.7 m (15 ft 4 in), the tie-beam span 5.8 m (19 ft). The arcade posts are now supported on brick or wood stylobates, and the aisle posts on a ground cill of wood on brick, but probably originally timber only. The aisle ties show reversed assembly with the aisle plate. A reconstruction is shown on Figure 10.

A splayed scarf joint is present in the northern arcade plate between trusses F and G, the lower half on the west, and the tie-beam braces are offset from centre in the arcade posts in truss E and G. No certain evidence of lifting holes at the base of the arcade posts exists, suggesting that the main posts may still be in their original positions.

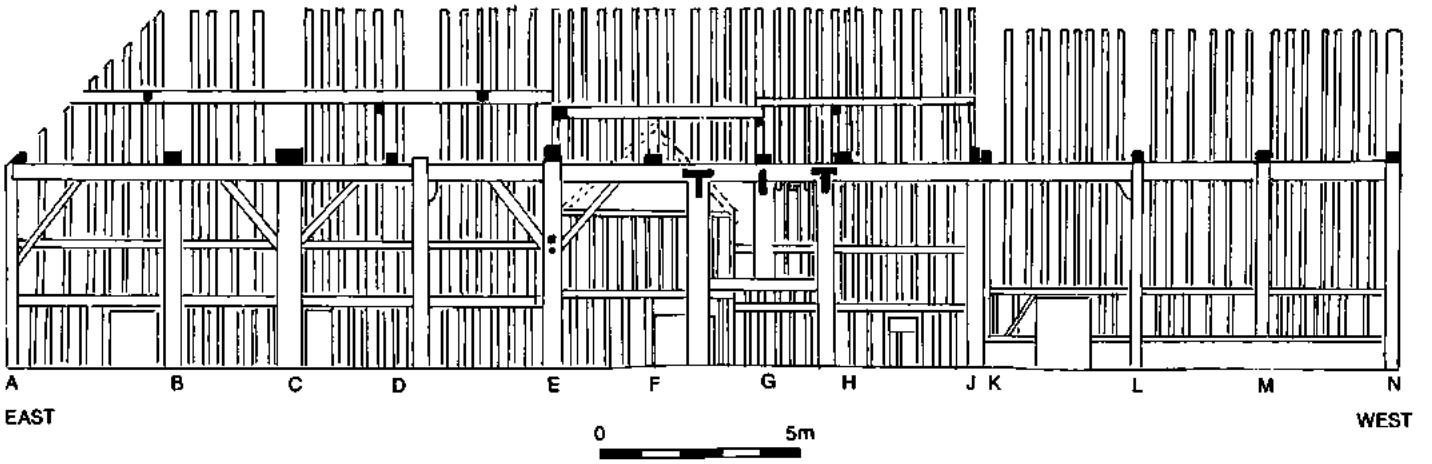

Fig. 9 Medieval barn at Fryerning; elevation.

Assuming that trusses C, E and J are in their original position, the arcade bay length is 6 m (18 ft or 1.2 poles). The arcade posts B, D, F and H have been inserted or re-organised, with truss G whose truncated post is now carried on an inserted wall plate, probably nearest to its original position (Fig. 9).

The extant passing braces (in truss J) with a slight double curve, the jowled arcade posts and the aisle assembly share some of the features present at Church Hall Farm barn, Kelvedon, but the side purlin and collar arrangement mirrors that in Cressing Wheat barn, though inclined in the plane of the roof, and without the strut or passing braces extending to the rafters required for the wider roof (Andrews 1993). There is no evidence of an earth-fast shore as at Belchamp St Paul, possibly of late 12th-century date, and the present structure lacks the little aisle ties found at the Grange Farm barn, Little Coggeshall, though it shares the reversed assembly construction of the aisle posts. Mr C.A. Hewett (1980 and pers. comm.) has suggested a late 13th-century date for

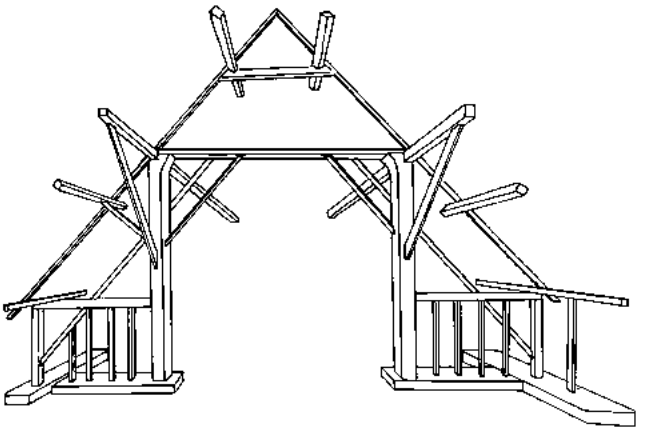

Fig. 10 Medieval barn at Fryerning; reconstruction.

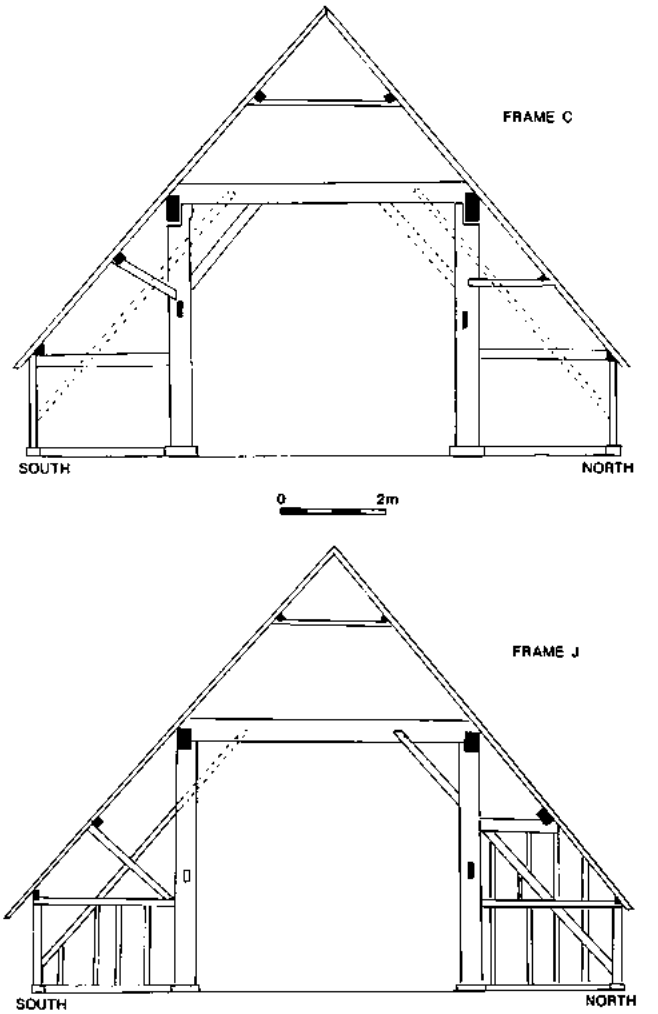

Fig. 11 Medieval barn at Fryerning; frames C and J (refer to Fig. 8 for position).

the Fryerning barn, based on the extant passing brace assembly in truss J, the grooves for passing braces in trusses C and E, and the assembly of the aisle ties.

Acknowledgement
The author wishes to express his grateful thanks to the owner Mr T.B. Green for permission to survey the barn and for his ready help.

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A lost Essex hospital: the College of St Mark at Audley End

D.D. Andrews

The College of St Mark is a complex of brick almshouses to the south of Audley End House erected by the earl of Suffolk *c.* 1600. They consist of two courtyards separated by a range containing the hall and chapel. The almshouses were dissolved for financial reasons in 1633, since when it was used as a farm, though the south quadrangle continued to serve in relatively recent times as an almshouse for women. The buildings were given by Lord Braybrooke to the Diocese of Chelmsford and were used as a home for retired clergy. They are now a youth centre.

A trench for a gas pipe was dug along the west side of the almshouses in 1993 (Fig. 12). For a length of *c.* 13 m between the two entrances in this side of the buildings, the trench ran along the edge of a mortared flint foundation six feet from the almshouses and parallel to them. The mortar was orangey-brown and looked typically medieval. The foundation was about 21 inches (530 mm) wide and ten inches (250 mm) deep, rather narrow for a rubble wall and of above average width for a timber-framed one. A patch of mortary debris in the side of the trench might have represented a robbed wall running off to the west.

Natural was present on the bottom of the service trench, which was only 300 mm wide and 700 mm deep. It consisted of sandy gravel. The almshouses occupy a knoll or terrace above a stream or streams, which have created a somewhat irregular and undulating terrain in this area, such that the ground slopes away on all sides from the almshouses. Above the gravel was a stiff orangey, dark brown clay. The foundation was just below the modern turf. In the trench with the foundation, the garden soil almost directly overlay the gravel and seemed to fill several suspicious-looking rectilinear cuts in it. To the north, in the area of the detached continuation of the trench, the stratigraphy was rather different, there being a mixed brown clayey deposit. This may be related to the fact that the natural is presumably dipping, following the slope on this side of the almshouses.

It was observed that the almshouses have no true foundations, their brickwork continuing only *c.* 250 mm below ground level. The bricks of which the almshouses are built measure 210-220 by 100 by 55-60 mm. They have creased surfaces and are irregular in shape. They tend to be well-fired, a minority of them being yellowish to purple, no doubt because of the presence of chalk in the clay.

The discovery of a medieval foundation raises the question of the origins of the almshouses. A sheet of paper on their history prepared for the Diocese by Canon J.L. Fisher identifies them with the site of a hospital belonging to Walden Abbey. The first reference to this hospital found by Fisher dates from 1258, when the parish church at Saffron Walden and the chapel of the hospital were consecrated by the Bishops of London and of Ely. He cites two other references: the fact that Humphrey de Bohun, Earl of Hereford and Essex, was found to be patron of the hospital on his death in 1373; and an Earls Colne deed of 1393 recording the release of lands in Wimbish and Thaxted which bears the endorsement *pro Domo dei de Walden.*[1]

This hospital seems to have escaped previous notice. It goes unmentioned in the list of religious houses in the Victoria County History. The medieval wall confirms Fisher's identification, and also his argument that the almshouses followed to some extent the plan of the medieval hospital.

Note

1. Fisher cites no references, but that Humphrey de Bohun held the advowson of the hospital of Walden is recorded in the *Calendar of Inquisitiones post mortem*, vol. **XIII**, Edward III, p. 145.

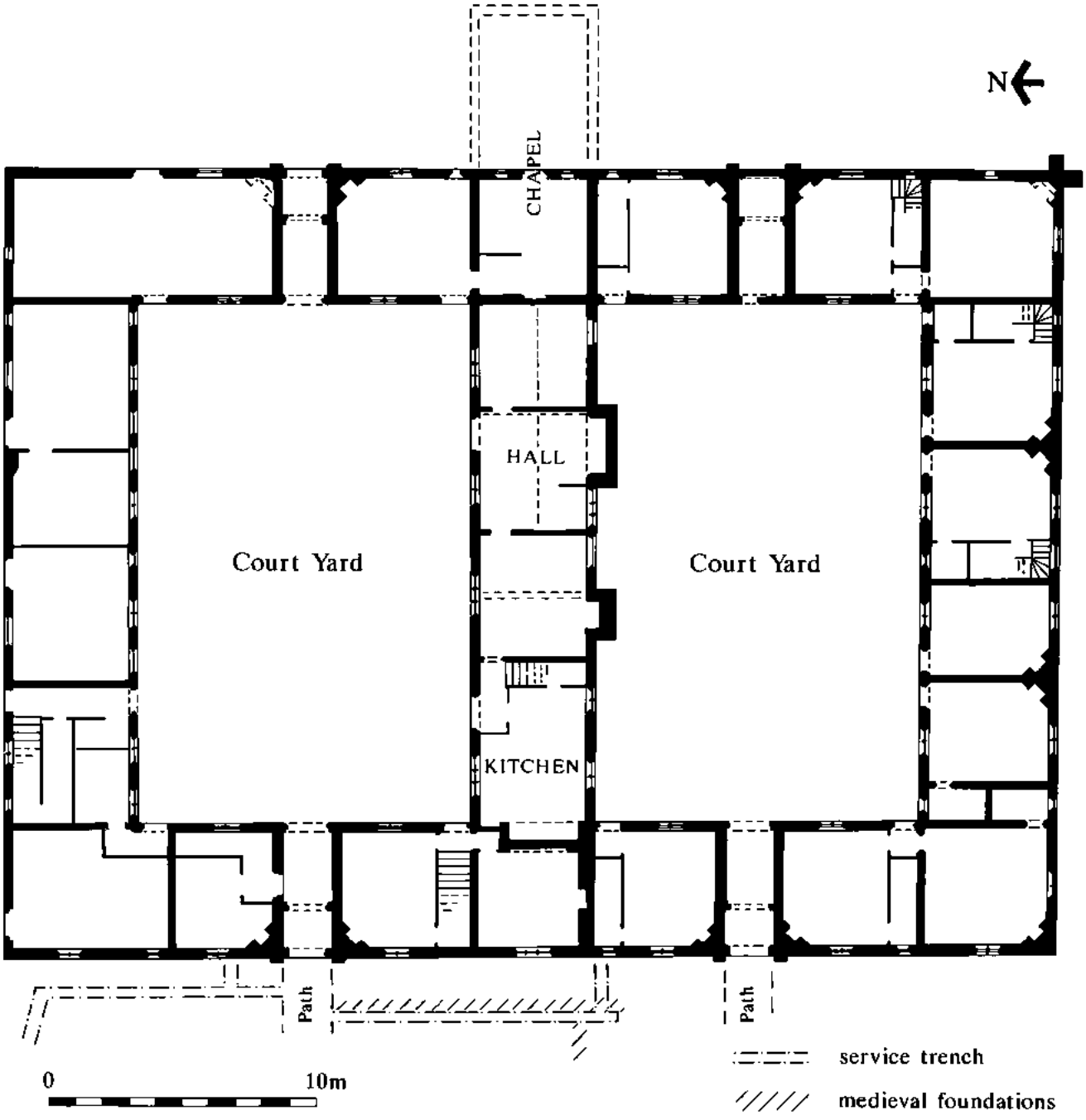

Fig. 12 The College of St Mark; plan showing observation of medieval footings.

St. Andrew's church, Hatfield Peverel

Richard Havis

Introduction

The Benedictine priory at Hatfield Peverel was founded in the reign of Henry I (1100-35) by William Peverel, who converted a pre-existing college of canons which had possibly been founded *c.* 1086-1100. Subsequent to the Dissolution in 1536, the priory church became the parish church. The site of the cloister, to the south of the church, became incorporated into a Tudor mansion. An engraving of 1765 (ERO D/DBr P2), showing the grounds of the priory with small-scale plans of both church and mansion, indicates that the two were physically linked, and that the house followed the line of the western side of the cloister and perhaps part of the southern side. A sketch of the west elevation made about 1760 (Hope 1930, 89) shows the western edge of the house continuing the line of the western end of the church to the south. The Tudor mansion was pulled down in 1768 and replaced by the existing house known as the Priory on a different site to the south. During the 19th century, the parish church was heavily restored, including the addition of a south aisle.

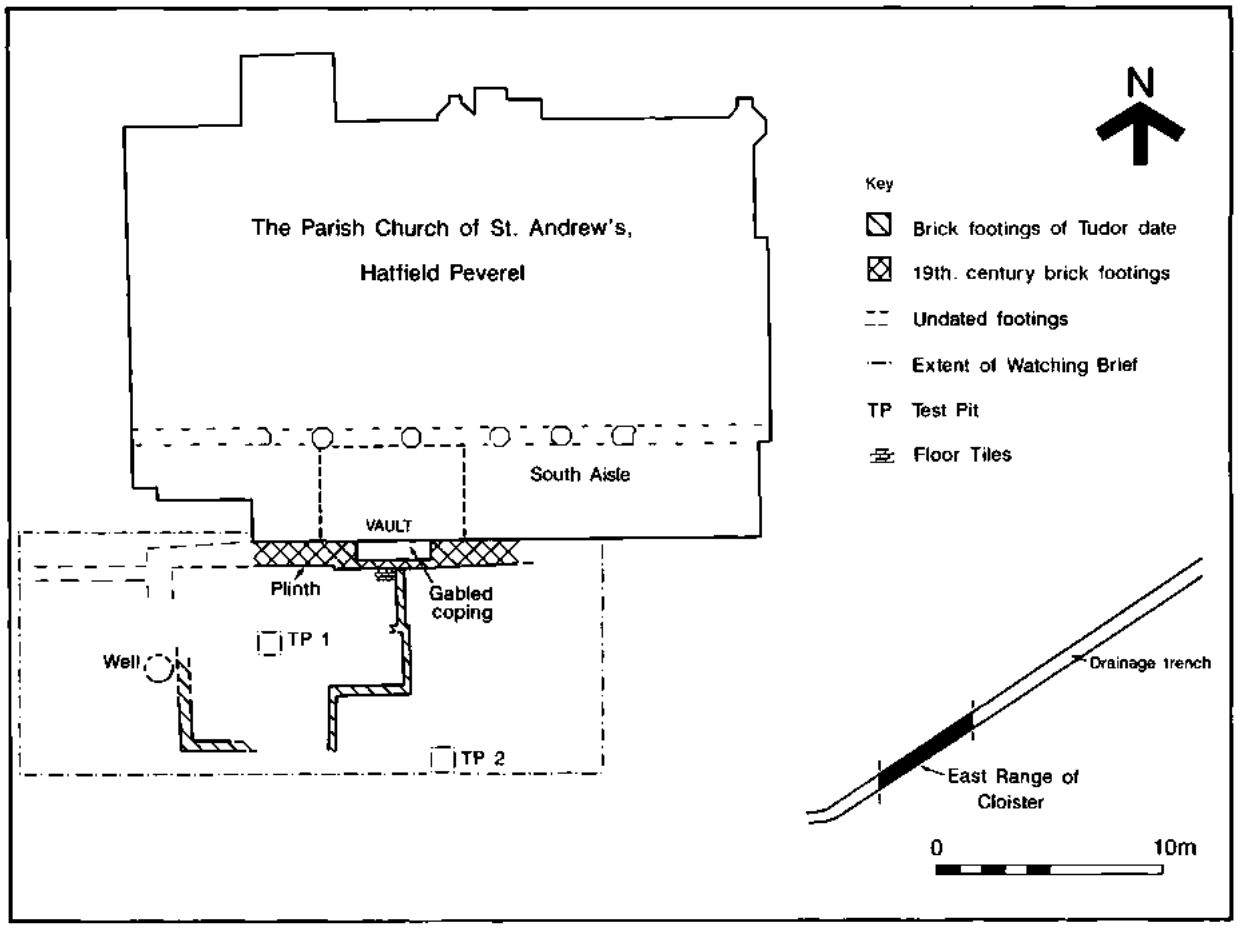

Fig. 13 St Andrew's church, Hatfield Peverel; plan of observations made in watching brief.

The area to the south and east of the parish church is a Scheduled Ancient Monument (Essex Sites and Monuments Record 6052-4). In response to an application for a church hall adjoining the south side of the church, an evaluation was undertaken by D.D. Andrews and S. Rippon in August 1989. Two test pits, each 1m square (TP 1 and 2 in Fig. 13), were excavated to the south of the church. Test pit 1 found evidence of substantial quantities of rubble approximately 1m below ground surface. This material was interpreted as demolition debris from the Tudor mansion filling a cellar. The second test pit was excavated down to gravel sub-soil, which was found at a depth of 1.10m.

The test pits showed that the mansion had cellars which had erased any priory remains in this area. Permission for the church hall was subsequently granted and a watching brief carried out during its construction. Scheduled Monument Consent was given by the Department of the Environment.

Watching brief

Prior to construction work, the top of a brick vault with a gabled coping was visible on the south side of the church, to a maximum height of *c.* 0.5m above ground level (Fig. 13). Machine excavation over an area of *c.* 260 sq. m revealed considerable rubble and a series of brick footings. The first of these to become visible was a substantial footing, *c.* 1.15 m wide, running along the south aisle of the church. Both the bricks of this and the vault wall were of 19th-century date, being contemporary with the addition of the south aisle.

Further removal of the rubble (to permit construction of adequate foundations for the church hall) revealed two narrower brick footings, running at right angles to the south aisle (Fig. 13). These had been robbed out, with only 2-4 courses remaining, but comprised Tudor brick laid to English Bond. These are interpreted as walls of the cellars associated with the original manor house. Their lay-out to some extent reflects the arrangement implied by the 18th-century drawings noted in the Introduction, above, of a house contiguous with the church.

Removal of the rubble also uncovered a small patch of Tudor brick floor in the north-eastern corner of the cellar (the remainder having presumably been robbed out). This floor was made with an unusual sort

of flooring brick, a double brick nine and a half inches square and two inches thick.

As building work proceeded, a brick well was located (Fig. 13). This only became visible at *c.* 1.5 m below ground level. The southern side retained several brick courses, whilst the northern side had been robbed or destroyed by later activity.

To allow the construction of a reinforced concrete base support for the parish hall, it was necessary to cut away sections of the wide brick footing along the south edge of the church. For the same reason, it was also necessary to break into the brick vault. At least 25 coffins were visible, some of which had to be moved to the north to make space for the new foundations. One contained a child within a lead coffin dated 1799. Another was black, of adult size with ornate brass fittings. Most of the coffins are single break, lead over wood shells. A few of the later coffins have wooden outer shells. The earliest dated to 1778. Name plates of the Wright and Firman families were noted. Inside the aisle, there are numerous monuments to the Wright family. Presumably the building of the aisle disturbed the Wright family vault which was reconstructed beneath it.

Further work was undertaken during the excavation of a drain leading eastwards from the new structure to the vicarage (Fig. 13). Evidence was found of a spread of mortar visible at a depth of 0.36m. At the north-western end of the spread an edge was clearly visible formed by a conglomerate of material. This seems likely to have formed the base of a wall with the spread of mortar representing a floor level or levels. One large fragment of worked green sandstone was visible, but was not removed. This feature represents part of the east range of the cloister of the original priory.

Acknowledgements

Thanks must be extended to Tim Hearne of Purcell Miller Tritton & Partners for contacting ECC Archaeology Section at all stages of the development to enable the watching brief to be carried out by the author, Sarah Gibson and Maria Medlycott. Also to R.G. Carter for the help provided on site. The finds will be held at Braintree Museum.

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A late 16th-century gentleman's house at Littlebury, Stanford Rivers

D.D. Andrews, P. Ryan, and D.F. Stenning

Introduction

Littlebury Hall in the parish of Stanford Rivers is about three miles south of the small Essex town of Chipping Ongar. The old manor house stands just above the flood plain of the river Roding, and is approached by a half-mile-long lane from the Ongar to London road. Adjacent to it is a working farmyard which includes a barn of much the same age as the house. Nearby, on the river itself, stands Littlebury mill.

Littlebury Hall was built in the late 16th or early 17th century. It is an unusual house for Essex as it has a brick ground floor and a timber-framed upper storey (Figs 14-16), and it is interesting as an example of a medium-sized gentry house. Remnants of what was probably a moat still survive to the west and south of the house. 19th-century maps show additional ponds to the east and north of the site. The field to the north was known as Brick Kiln Field in 1838 (ERO D/CT 327). Mr H. Padfield, the owner, believes that an area of darker soil in this field marks the site of the kiln in which the bricks for the house were manufactured. Some small fragments of vitrified brick are present in this part of the field.

History of the owners of Littlebury Hall

According to the VCH of Essex (vol. IV, 214-15), the manor of Littlebury, otherwise Littlebury and Rowenho, first appears under these names in the 13th century. It may have been the same as the manor of Little Stanford held by the father of Alvric in 1066. In 1260, Robert de Munteny conveyed one carucate of land and a mill at Littlebury to John son of Adam. In 1355, a John Muntney granted Richard de Salyng all his lands in Stanford Rivers. The manor remained in the Salyng family until 1553 when on the death of Alice, only daughter of Augustine Salying, it passed to her aunts Elizabeth Rolfe and Katherine Johnson. They conveyed it to Robert Geyre and John Poley. This may have been part of the procedure necessary for transferring Littlebury to William Attwood, the second husband of Augustine Salyng's widow.

William Attwoood died in 1600 but had settled Littlebury on his eldest son John on his marriage to Dorothy Walter in 1594. In 1701, their descendant William Attwood sold the property to John Bull. In the 18th century, a number of disputes concerning manorial rights arose between Lord Petre who held the manor of Stanford Rivers and Timothy Graves, the son-in-law of Mr and Mrs Bull who was listed as the owner of Littlebury Hall in the 1780 Land Tax. By the end of the 18th century, Littlebury had become the property of Joseph Waylet who conveyed it in 1811 to

Timothy Phillips, from whom it passed to John Kynaston. The manor was sold by William Kynaston in 1898[1]. The family of the present owner, Mr H. Padfield, acquired it in 1912.

To judge from its architectural features, the existing house was probably built by William Attwood, the second husband of Augustine Salyng's widow, or else by his son John Attwood. In his will of 1599/1600, William described himself as of Stanford Rivers, gentleman (Emmison 1990, 32).

Description of the house

Only a portion of the original house survives. Brick footings have been observed on several occasions demonstrating that the house originally extended further south (cf. RCHM II, 221-2). Today the building consists of the hall and northern cross-wing of the Attwoods' house (Fig. 14). The outline plan of the house on the tithe map of 1838 is the same as it is today (ERO D/CT 327). The opposed doorways in the hall immediately adjacent to the cross-wing represent a traditional cross-passage arrangement.

The ground floor The ground-floor walls are two bricks thick (460mm). The brickwork is typical of the late 16th or early 17th century. The bricks are 240-250 x 110-120 x 50-60mm in dimensions. They are orange in colour, and irregular in general form with rounded arrises, having creased faces and rough bases. They are laid to English bond; closers at the corners and window and door apertures keep the bonding correct. The lintels of the openings are formed by soldier course of brick directly above which is a moulded label. There are two original windows in the west wall of the hall, a 'great' window and a smaller one. The window frames are unusual for a brick house of this date, as they are not of brick but timber with ovolo exterior mouldings and cavetto interior mouldings. The height of the ground-floor rooms (about 3.5m) indicates that the house was built for a gentleman and not for someone of yeoman or lesser status.

The hall The floor above the hall is constructed of deep-sectioned common joists (12 x 3 inches), with central tenons with haunches and spur bearings housed into the binding joists. The soffits of the binding and common joists are at the same level and are not moulded or chamfered, evidence that the ceiling was plastered originally. Timber lacings in the walls would seem to be indications that this room was originally panelled, but in fact there are no traces of nails in these timbers. There is no sign of an original partition between the hall and cross passage, but in brick buildings timber partitions can be removed with little trace being left of their existence. Empty mortices in the main beams are proof that the present stairway and recently demolished chimney are not replacements but later alterations. It is inconceivable that the hall had no fireplace, and it is suggested that the only possible place for the chimney would have been against the east wall in the position of the existing inserted ground-floor window and renewed first-floor studwork (Fig. 15). The wall on the south side of the hall against which the 19th-century lean-to scullery has been built is original, with an original moulded door frame at its eastern end.

The ground floor of the cross-wing and cellar The ground floor of the north cross-wing consists of two rooms divided by a brick wall. The two rooms originally had doorways leading off the cross passage, and were interconnecting. The door from the passage to the west room preserves its original frame. Where they survive, the heavily moulded door frames are one of the interesting features of the house, as are the ledged doors. Below the eastern room is a brick-built cellar.

The original status of the two ground-floor rooms is uncertain. Their position in relation to the cross passage and the wide fireplace recently uncovered in the eastern room suggests that they were originally a kitchen and service room. However, if the traces of wall paintings discovered in the western room are of 16th or 17th-century date, as seems likely, then this room was probably a parlour. There are also indications that although the eastern chimney is original below first-floor level, the lower fireplace has been altered at least twice and the wide fireplace exposed in the recent unblocking is not the original fireplace to this room.

The cellar is spanned by a joist with empty mortices which looks reused. The mortices appear to be for central tenons, in which case the joist is late medieval and presumably came from the same building as the reused timber at the first floor. The existing common joists are lodged on top of this beam and are of relatively recent date.

The original entrance to the cellar was at the east end of the north wall, but this was blocked when the Georgian front was put on. Brickwork of late 17th or early 18th-century date forming a blocking to the left of the fireplace foundation in the east wall might mark the position of another former entrance.

The first floor The cross-wing is today divided into three bedrooms. The roof is of clasped purlin construction, somewhat rebuilt. The two eastern bays of the existing cross-wing are made from a re-used structure, with evidence of windows and a doorway, storey posts which have been cut down in length, and two tie-beams with braces. On one of the beams the braces are set low down indicating that it came from an open hall. The timber thus appears to be the upper half of an in-line hall house probably of 15th-century date, reconstructed to form a low-status room. The carpentry is characteristic of southern Essex with arched up-bracing.

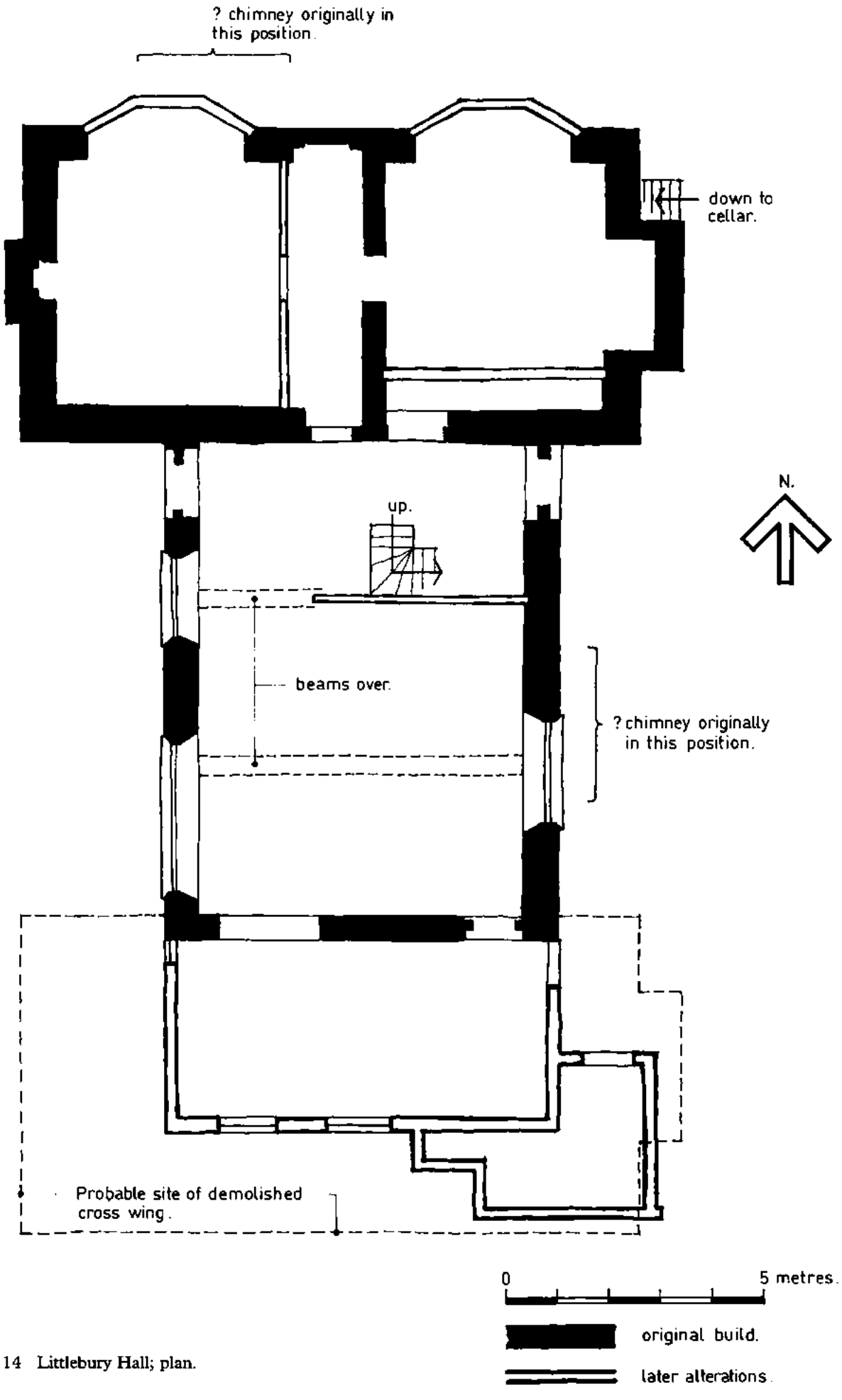

Fig. 14 Littlebury Hall; plan.

Fig. 15 Littlebury Hall; west (above) and east elevations.

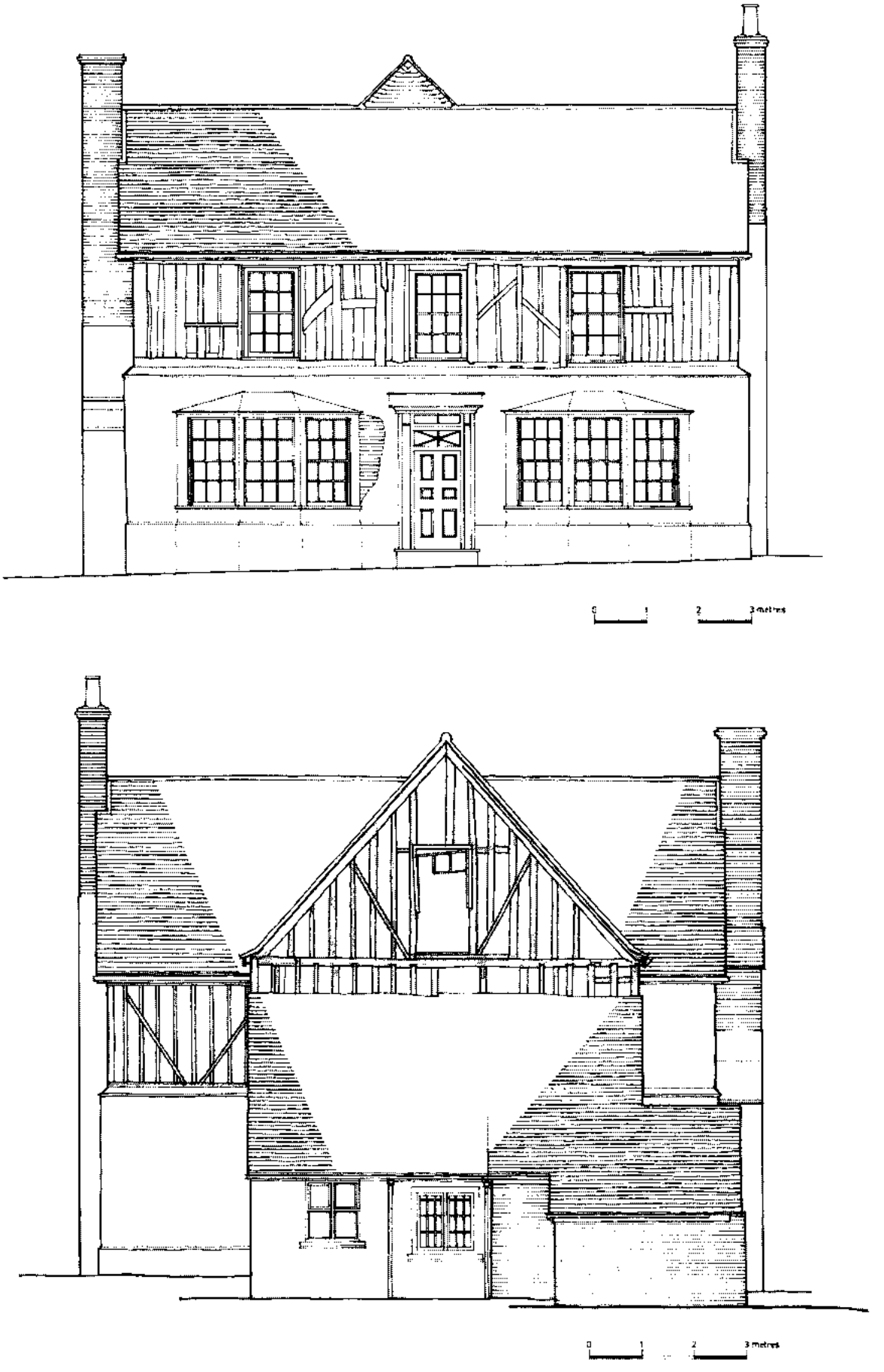

Fig. 16 Littlebury Hall; north (above) and south elevations.

The features of the carpentry of the new timber at the first floor are very close studding at intervals of about 200mm; serpentine bracing which occurs on the west side of the cross-wing; oriel windows (none surviving but originally two on the west side and one between the serpentine bracing on the west end of the cross-wing, now obscured by a later chimney); and horizontal rails dividing the studwork into panels between principal studs. The latter have weakened the frame, permitting outward bowing of the studwork. The framing is more impressive in appearance than construction, as the ordinary studs are only 2 inches thick. They do not have wattling grooves — indeed are not thick enough to have accommodated them — and from the first the walls must have been made with laths nailed to the inside of the studs, and then plastered inside and out. A rather crude detail is the way the studs are halved over the cills of the oriels and then nailed to them.

In the hall range, there is a studwork partition with a horizontal rail creating one large and one smaller room. This seems contemporary with the main build of the house, but strangely it does not coincide with a principal stud and the doorway at the west end of it lacks moulded jambs. The southern end wall of this range is another studwork partition. In the west end of it is a doorway with handsome moulded jambs. Over the door there was an opening in the studwork, apparently an internal window. This partition has been rebuilt at its eastern end where there may have been another door giving access to the accommodation to the south.

The roof of the hall range has been totally rebuilt in this century. Mortices in the tie-beams show that it was of queen-post construction.

The early 19th-century remodelling

A major programme of modernisation took place in the early 19th century. The north cross-wing was reorientated and its north wall given a Georgian facade with bay windows flanking a front door, with three sash windows above. It is probable that an original chimney on the north wall of the west room was pulled down and the windows in the west gable were blocked by a new chimney as part of this remodelling. The fireplace in the east room may have been reduced in size. Some of the bricks have shallow frogs which are typical of the early 19th century. An internal entrance to the cellar was constructed which necessitated the blocking of the door from the cross passage to the eastern room.

The cross passage was divided from the hall by a timber-framed and brick-nogged partition wall, and a staircase with thin stick balusters was installed in the new entrance passage. The hall chimney was replaced by a central chimney, which has recently been demolished. The south cross-wing was pulled down, the service functions contained within it being incorporated into the smaller house. The house was thus converted from a gentleman's residence to one more suited to a tenant farmer.

Littlebury Hall reconstructed

That the Hall extended further to the south is not in doubt. What is in question is the form and extent of the part of the building which has been lost. In the southern face of the southern brick partition wall exposed inside the scullery, there is a recess of the right size and at the right level to house one of the deep common joists. It is characteristic of buildings of this period that joists are not butted up against walls but recessed into them. There is also a hole that looks as if it accommodated a tiebeam. Such a tie-beam would have spanned a cross-wing at right angles to the hall, and the common joists would have run east-west into it.

This implies that what is missing is a cross-wing immediately adjacent to the surviving hall, a conclusion reinforced by the historical evidence. The Chapman and André map of Essex of 1777 suggests that the house consisted of a hall and two cross-wings. William Attwoood was assessed on ten hearths in the Hearth Tax list of 1671 (ERO Q/RTh 5). If the later studwork indeed marks the position of demolished stacks, then the surviving portion of the house had three stacks (one extant, two dismantled), which would have had six hearths allowing for one at each floor. If the missing cross-wing had two stacks like the existing one, then the deficiency of four would be made up.

There is no trace in the surviving timbers of an aperture for a stair to the first floor. It seems likely however that the door in the studwork partition at the first floor in the south wall provided access to a staircase in the adjacent cross-wing. If this were the case, the window for borrowed light over the first floor would have served to light the stair well.

A problem in this reconstruction is the position of the principal entrance, as the small cross passage doors seem unlikely to have been the main way into the house. The only possibility is that it was contained in the west side of the missing cross-wing. Perhaps, however, to suggest that there was a grander entrance is to misunderstand the character of the house, which although intended to impress is in many ways quite modest. If the financial resources of the owner had allowed it, there can be no doubt that it would have been built entirely of brick. The close-studded first floor looks impressive, but includes reused timber, presumably from an earlier building on the site. Nor is the studwork quite what it seems, as the timbers are half the normal thickness. This use of thin studs with a midrail is unusual in Essex but apparently typical of Sussex houses.[2]

Acknowledgements
This report is intended to inform a programme of emergency repairs to Littlebury Hall funded by English Heritage, Essex County Council, and Epping Forest District Council. We are grateful to Malcolm Starr of English Heritage who prompted and encouraged the work; to the owner, Mr H. Padfield, for his help and information supplied on the history of the building; and to Muriel Carrick for her observations on the wall paintings. Thanks are also due to Nicolette Hallett who took the rectified photographs, to Anne Holden for surveying the building before it was boarded up, and to Ken Sowman who prepared the publication drawings.

Notes

1 Sale catalogue in the possession of Mr Herbert Padfield.
2 Information from a paper given by David Martin on Sussex building construction at the 3rd Cressing Conference 1994.

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Archaeological assessment and monitoring of the construction of the Horndon, Essex to Barking, Greater London, Gas Transmission Pipeline 1991-93: the Essex section

Vaughan Birbeck and Ian Barnes

In 1990 Wessex Archaeology was contracted by Pencol Engineering Consultants, on behalf of Barking Power Ltd, to undertake an archaeological desktop assessment, and to co-ordinate subsequent field assessment, of the route of the 24 inch Horndon to Barking natural gas transmission pipeline.

The pipeline, with a total length of 18 km, was to run from an existing gas pipeline at Horndon (TQ 6610 8380) in Essex, to Barking in Greater London, to supply the new Barking Power Station (TQ 4920 8274). The pipeline followed an approximate east-west route, initially for 14 km as far as Rainham through open farmland on the fenland and gravel terrace and, thereafter, on the Rainham Marshes beside the Thames, through a mainly industrial landscape.

The desktop assessment, submitted in January 1991, highlighted a zone potentially of high archaeological interest between Dagenham and South Ockendon. Accordingly a project design for field evaluation, detailing in writing what work was required and how it was to be undertaken, was prepared allowing for mitigation measures to be taken in advance of construction. The fieldwork, coordinated and monitored by Wessex Archaeology, was undertaken by the Passmore Edwards Museum and Geophysical Surveys of Bradford Ltd during September and October 1992.

As part of the evaluation, 2.8 km of the gravel terrace to the west of South Ockendon, where a number of sites had previously been identified in close proximity to the pipeline route, were fieldwalked and geophysically surveyed, the latter comprising a magnetometer survey. A further 2.5 km of the route was augered to investigate peat deposits in the Rainham Marshes. It was planned to take an auger bore every 25 m along the surveyed section of route, giving a total of 100 bores, but after avoiding areas where it was not possible to auger due to hard surfaces, roads or problems with land access, a total of 80 auger bores were made. The bores were taken down to undisturbed natural silt/clay deposits, bores descending as far as 4 m.

The auger survey in the Rainham Marshes (Birbeck and Barnes forthcoming) confirmed the presence of peat deposits on the Rainham Marshes. These in general lay between 0 m and -2 m O.D. and were sealed by up to 1.8 m of alluvial and topsoil deposits. The recorded peat deposits were at a similar depth, and within a similar sequence, to deposits recognised elsewhere on the Rainham Marshes, namely at Brookway (Passmore Edwards excavation, pers. comm.) and Bridge Road (Meddens and Beasley 1990); these earlier recorded deposits incorporated remains dating to the Neolithic (Coles 1990), Bronze Age and Roman periods.

Fieldwalking to the west of South Ockendon identified small concentrations of artefacts in three locations where very small amounts of Romano-British and medieval pottery and tile were recovered. The evidence recovered suggested activity in the general vicinity rather then the presence of an archaeological site on the direct route of the pipeline.

The results of the fieldwork evaluation had shown that no major sites lay directly on the pipeline route. No pre-construction archaeological excavations were, therefore, required. However, in view of the significant number of known sites in the general area of the route and the general archaeological background identified during the evaluation, it was proposed to conduct a watching brief covering all topsoil stripping and trenching as part of the construction programme. This watching brief was undertaken by teams from both Wessex Archaeology and the Passmore Edwards Museum between May and September 1993.

Features identified during topsoil stripping were recorded and those threatened by imminent trenching excavated. No major finds were made but a number of isolated discoveries were recorded. Along the Essex

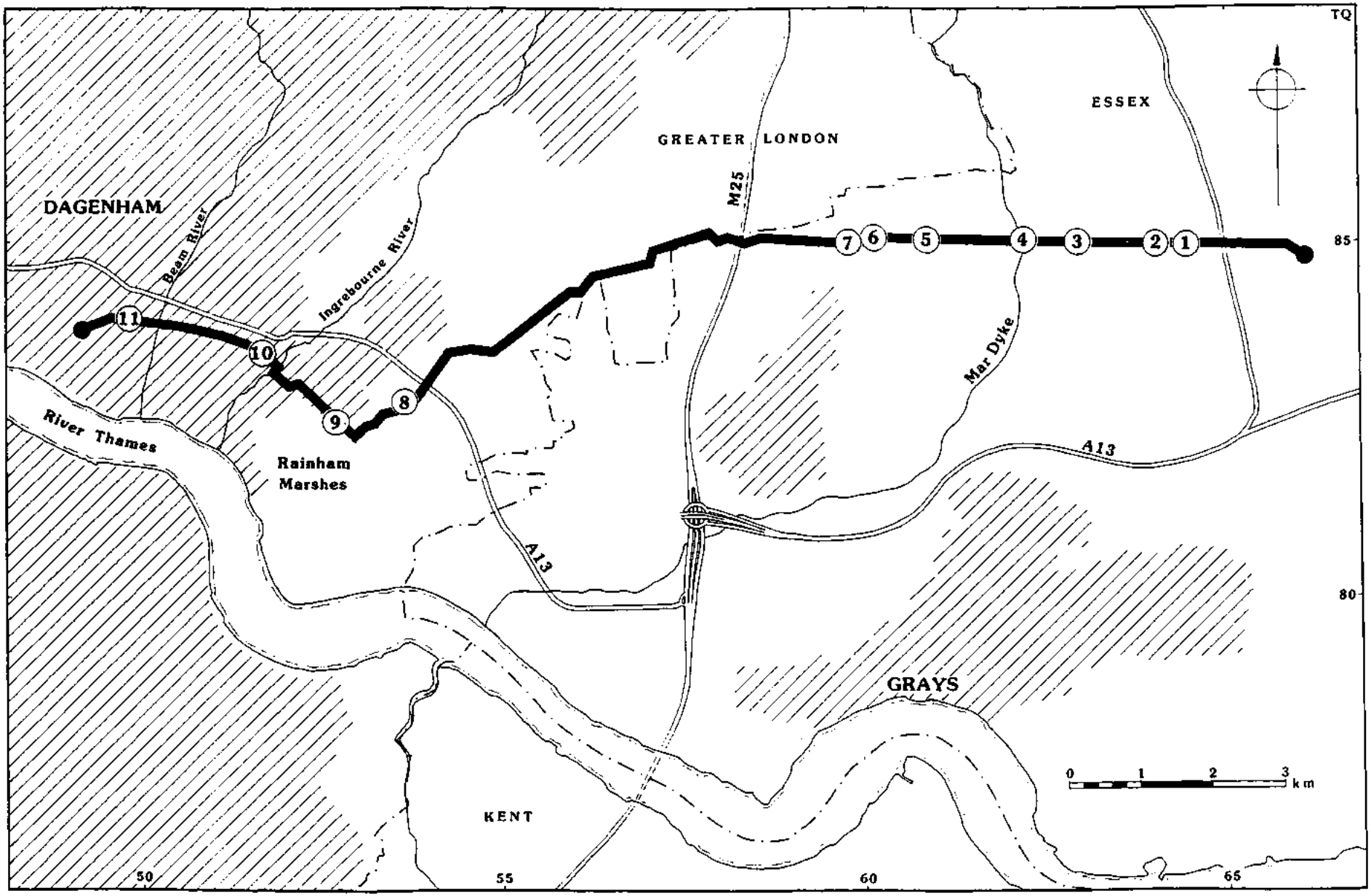

Fig. 17 Horndon-Barking pipeline; route showing the major concentrations of archaeological and palaeo-environmental material. 1) Undated ditch; 2) Conway's Farm; 3) Stringcock Fen; 4) Mardyke; 5) Grove's Cottages; 6) Grove's Farm; 7) the Wilderness; 8-10) Rainham Marshes peat deposits; 11) Barking power station.

section of the route, north of Thurrock, Late Bronze Age/Early Iron Age activity was represented by a pit, dated by pottery evidence, at Conway's Farm (TQ 6402 8399; Fig. 17, Site 2), which contained 360 fragments of animal bone representing at least three individual cattle. Also dated to this period on pottery grounds were three intercutting ditches to the east of the Mar Dyke (TQ 6210 8400; Fig. 17, Site 4) and another ditch at Groves Cottages (TQ 6069 8404; Fig. 17, Site 5). A further possible prehistoric find was identified at The Wilderness (TQ 5978 8403; Fig. 17, Site 7) where a human cremation burial of a female adult was found in a shallow pit but with no associated pottery vessel. The cremation was of a type and form typical of the Bronze Age and was located in an area rich in remains of that period.

No features dating to the Romano-British or early medieval periods were identified. A single ditch dating to the 12th-13th century, based on pottery evidence, was recorded on Stringcock Fen (TQ 6306 8399; Fig. 17, Site 3). A group of brick walls, probably of 19th-century date, although incorporating several 16th-17th century bricks, were recorded at Groves Farm (TQ 5996 8405; Fig. 17, Site 6), their form and alignments suggesting a rectilinear enclosure, probably a walled garden or yard. The reused bricks almost certainly come from the brick gateway at Groves Barns, a Listed Building, to the north of the pipeline route, now incorporated into a later farm building or, alternatively, from an associated, but now demolished, structure.

As well as the features identified along the route a number of deposits of palaeo-environmental interest were recorded during the trenching work. A layer of grey silty clay, 0.4 m thick, was encountered either side of the Mar Dyke (TQ 6210 8400; Fig. 17, Site 4). This extended for 460 m to the east of the Dyke and 130 m to its west. Unlike the underlying, more extensive, clay, this layer contained large quantities of burnt and worked flint and a single sherd of Late Bronze Age/Early Iron Age pottery was recovered. This clay deposit was cut immediately to the east of the Mar Dyke by three intercutting ditches, described above, also dated to the Late Bronze Age/Early Iron Age. Contemporary dating evidence was found in both the clay deposit and the ditch fills, the same wet conditions that caused the deposition of the clay deposit were probably also responsible for the need to continually redefine the course of the ditch.

The peat deposits identified on the Rainham Marshes (Fig. 17, Sites 8-10) during the auger survey in the Greater London section of the route were further recorded during the watching brief (*op. cit.*). By comparing the relative heights above sea level of the peat deposits with the wealth of previously dated deposits it was possible to place them within the limits defined for the Middle-Late Bronze Age Tilbury IV horizon (Devoy 1980; Wilkinson and Murphy 1988).

A moderate level of archaeological activity along the pipeline route is indicated by the results of the archaeological work. The positions of some of the archaeological features and deposits recorded suggest that they may be contemporaneous and directly associated with known sites or cropmarks in the vicinity.

On completion of the fieldwork a detailed report covering the watching brief was prepared by Wessex Archaeology for Barking Power Ltd and for the Sites and Monuments Records of both Greater London and Essex. In due course the archive for the length of the pipeline in Greater London will be deposited with the Passmore Edwards Museum and that for the Essex section with Thurrock Museum.

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Book reviews

The Battle of Maldon: Fiction and Fact, edited by Janet Cooper. The Hambledon Press, London (1993). xii and 265 pp. ISBN 1 85 285 065 5. £35.

This volume represents the published proceedings of "The Battle of Maldon Millennium Conference", organised by the Victoria County History of Essex, Essex Records Office, Essex County Archaeological Section and the Maldon Archaeological Group. A wide range of papers cover the continental, English and Essex background to the battle, as well as examining the poem itself which, as Janet Cooper observes in her introduction, is probably more famous than the battle.

James Campbell begins the volume with a paper on "England, *c.* 991". This focuses upon the upper echelons of society; the "aristocratic/monastic milieu". An enthralling picture is painted of a powerful and wealthy ruling class, on the brink of a major upheaval. Pauline Stafford's interesting paper on "Kinship and Women in the World of Maldon: Byrhtnoth and his family" also deals with social organisation in tenth-century England and might have been better placed here in the volume, rather than eleven very diverse papers later.

D. Scragg's paper "The Battle of Maldon: Fact or Fiction" provides an invaluable examination of the poem's historicity. He reminds us that though there are a range of other sources that contain information on the battle, the poem has demanded most scholarly attention. However, it is not a historical document, but a piece of heroic literature, with loyalty as its central theme. Interestingly, a difference emerges with the previous paper over the date of the poem; Campbell suggests that was a near contemporary writing, "before the full seriousness of the new wave of Viking invasions was apparent", while Scragg suggests that it may be several decades later.

Peter Sawyer turns our attention to "The Scandinavian Background". He stresses the wide range of sources that are available for this period, illuminating the emergence of royal power during the tenth century. His suggestion that the Danish king, Svein "Forkbeard", may have led the Maldon campaign only adds to the importance of that event.

Two papers offer detailed literary analysis of the poem, and shed much light upon the heroic nature of society. Paul Szarmach considers "The (Sub-) Genre of the *Battle of Maldon*", placing it "within a tradition of early medieval literature that describes Christian and Viking conflict". Ute Schwab's paper on "The Battle of Maldon; A Memorial Poem" also regards it as a fine example of European heroic poetry.

Continuing the admirably broad coverage of this volume, the next two contributions examine warfare in this period. Karl Leyser's paper "Early Medieval Warfare" concludes that "offensive war was... the most convenient and effective way to acquire a modicum of surplus wealth... It was also the basis of incipient political power". Niels Lund examines "Danish Military Organisation", in a detailed paper on the structure of the Danish army.

The next four papers deal specifically with Essex in this period. There have been few moments in British history when Essex was the focus of national attention; Claudius' progress to Camulodunum was one, the Battle of Maldon another. It was a pleasure to read a paper relating to a third; Warwick Rodwell's paper on "The Battle of Assandun and its memorial Church: A Reappraisal". This interesting disciplinary paper examines topographical, documentary, place-name and archaeological evidence to address the question of Assandun's location. This (former) resident of south-east Essex is now resigned to the fact that the great battle was indeed in the county's opposite corner at Ashdon. George and Susan Petty give "A Geological Reconstruction of the Site of the Battle of Maldon". This interesting and important contribution shows how landscapes are not static, and that rising sea-level in particular can cause profound changes in coastal topography. Unfortunately, the quality of the computer-generated illustrations is poor.

Cyril Hart's examination of "Essex in the Tenth Century" concentrates on how documentary sources illuminate the issue of change and continuity in the County during the late Saxon period. A few doubts may be raised regarding his ambitious attempt to show that "95% of Domesday settlements had been at least a century old at the time of the great survey". For example, the use of cemetery data is flawed as many of the early Saxon examples listed in Table 5 are far removed both in time and space from the nearest late Saxon settlements. It would also be wrong to say that "the large majority of these settlements had evolved into villages by the time of the Norman conquest"; parts of Essex appear to have had a strongly-dispersed settlement pattern at this time. However, this remains an important attempt to show how well developed the late Saxon landscape was, and serves to illustrate just how little archaeological evidence we have for the origins of our present settlement pattern.

D. Metcalf and W. Lean look at late Saxon minting at Maldon and Colchester in their paper on "The Battle of Maldon and the Minting of Crux Pennies in Essex: *Post Hoc Propter Hoc*?". The massive increase in

production during the early 990s is examined, which, in the case of Colchester, might be linked to its achieving borough status, an issue also raised by Hart. A convincing argument is put forward in both papers that it was the death of Byrhtnoth that gave the opportunity for the townsfolk to establish a legal borough.

In the final paper, Roberta Frank looks at "The Battle of Maldon: its Reception, 1726-1906". This shows how the poem has for long been a much-praised example of heroic literature, but that the battle has failed to receive popular interest.

This leads to the main general observation regarding this volume. It contains thirteen papers, all written to a very high standard. Specialists in literature, history and numismatics will all have reason to consult this book, yet nowhere is there a non-specialist introduction to the battle itself. This reader at least would also have liked a simple account of the events that led to the Scandinaviana presence, writing of that poem, minting of the coins and the battle of Assandun shortly after.

However, it is all too easy for a reviewer to say what should have been included. This should not detract from a volume of great scholarly and local value. Janet Cooper is to be congratulated on the prompt and high-quality publication of these papers.

Stephen Rippon

The Victoria History of the Counties of England: A History of the County of Essex, Volume IX, The Borough of Colchester, edited by Janet Cooper. Oxford University Press (1994). xxiv and pp. 439. ISBN 0 19 722 784 8. £70.

The Victoria Histories have come a long way in nine decades. The first ones published offered little more than a definitive revision of the classic county histories of the eighteenth and nineteenth centuries, such as Morant's *Essex*, with two of the normal four volumes allocated to topographical entries detailing descents of manors and other major properties, with brief architectural descriptions of ancient parish churches and a few other edifices of interest.

Other than distinguished commentaries on the Domesday record from the pen of that long-time pillar of this Society, the cantankerous and meticulous scholar J. Horace Round, the ever-widening scope of historical studies was represented only by rather perfunctory generalizations on ecclesiastical, political, and economic and social history, of which the best features were tables of population from the censuses and notes on religious houses. Only tardily, and very recently, did the individual parish section gain a concise summary of its economic and social history. The Essex History was always planned on a generous scale, and long gestation has allowed the volume devoted to Colchester to profit from the cumulative refinement of the basic V.C.H. format: it has been worth waiting for, indeed, on first reading, it outclasses those dealing with towns of comparable antiquity in other shires.

This is a difficult volume to assess; not that it is in any respect unattractively written or presented, but one only moves on with reluctance from Philip Crummy's lucid and lively account of the Iron Age and Roman communities (which improves our understanding of the celebrated Lexden dykes) to Janet Cooper's able re-creation of the medieval community, which in itself forms a notable contribution to urban history, even if whether the incoming Saxons violently expropriated the Romano-British community or took over a ghost town does not emerge as clearly as one would wish; however the evolution of the English community, the borough institutions and economy are satisfying. This is a far cry from the old-fashioned Town-clerk's history giving in full the borough's charters without relating the items to the community in action. Broadly, community development is examined by way of the conventional text-book periods. The problems of the Tudor and Stuart ages receive the treatment they demand, but, surely, an over-optimistic view is taken of the population in 1524-5, at which point the evidence tends rather to lend support to the contemporary panic over supposed urban decay, Colchester being one of those towns specified in the alarmist statute of 1540. A subsection devoted to religious life offers a novel insight into the people's principal preoccupation in this epoch. In connexion with the civil wars, the siege, in 1648, is mercifully (and justly) treated as the sideshow that it really was, detaining Fairfax while Cromwell gained the kudos for smashing the Scottish invasion of the northern counties; in view of the cost to his position, the Lord General may be pardoned for feeling uncharitably disposed towards Lucas and Lisle after the surrender.

Full treatment of the Georgian period serves to confirm the general impression of it as a singularly interesting one for most of the older provincial towns. Despite (?because of) the terminal malaise of bay manufacture, which had under-pinned the town's prosperity since 1568, life was pleasant enough, except of course for unemployed clothworkers, and the increasing burden of poor relief did not bear too onerously on the ratepayers. A contemporary (indeed a kindred spirit) of Jane Austen described 'a nice old town... clean, open, and agreeable... situated on a healthful gravelly hill...' and the high street as 'quite a gay promenade'.

As nearly as possible the volume divides evenly between the secular development of the community and the examination of topics that lie outside the chronological framework. At the same time, the chapters on the nineteenth and twentieth centuries consist substantially of the outward expansion of the town and the re-estabalishment of industries taking the place of earlier, defunct ones.

The second half of the volume brings together where they belong matters which might otherwise be dispersed in general chapters dealing with the whole county. It is clearly desirable to have the town's monasteries all located before churches and chapels.

What could easily end up as dry summaries of facts are enlivened by intriguing sidelights. Under 'Communications' it is confirmed that Old Heath (from Old Hythe) was in fact the original Anglo-Saxon port, until, in the fourteenth century, the waterway became blocked as a result of vessels dumping ballast; after three centuries of false starts, the present channel, above Rowhedge, did not come into use until 1888. It will be of small comfort to commuters that the notorious unreliability of the rail service to London is a venerable tradition dating back to the opening of the Eastern Counties (later Great Eastern) Railway in 1843. In view of the local press's obsession with the vicissitudes of Colchester United Football Club, the compression of 'Sport' into barely half a page came as something of a relief.

Illustrations conform to the standard usually expected of the V.C.H., the desirability of using the earliest available photographs of course necessitating monochrome plates only. Maps and text figures are generally informative, although Figure 13, 'The Growth of the Built-up Area', resembles something of a riot of shading and cross-hatching that is a trifle hard on ageing eyes. Enthusiasts for urban transport would have welcomed a plan of the long-defunct tramway system to re-awaken fading memories.

It is a pleasure to review a work in which, short of plumbing the depths of nit picking, nothing seriously amiss can be detected. Why the short, non-committal title 'Colchester Institute' was finally preferred to the more ambitious 'Institute of Higher Education' is known only to a small circle of initiates. The connexion of examples of the North American lunatic fringe with 'Protestant Nonconformity' eludes this reviewer who also wonders at the allocation of more space to cataloguing the successive owners and custodians of the Castle than to the important findings of recent research into its complex structure.

Imaginatively edited, it all adds up to a model of urban history, autonomous in its own right, and not merely one volume of nine, a treasure house of information for specialists that is also enjoyable to read. The down side, if the expression is permissible in this context, is that this wealth of interest is achieved at the expense of those sober accumulations of prosaic facts that have long secured the V.C.H. recognition as an indispensable resource for scholars. £70 may sound a lot, but in this world you get what you pay for, and here is incontestable value for money — can you honestly quibble at 16p per page?

Julian Cornwell

Mobility and Migration — East Anglian founders of New England, 1629-1640, by Roger Thompson. University of Massachusetts Press (1994). 305 pp. ISBN 0 87023 893 0.

In 305 well-printed pages, comprised of three Parts — The Context, Personal and Ancestral Backgrounds, and New World Communities — two maps and 33 tables packed with information, plus Abbreviations, Notes, Table Source Notes and an extensive Index, Roger Thompson, Reader in American History at the University of East Anglia, provides us with much new evidence on the people of the "Greater East Anglia" and colonial America of the early seventeenth century.

Thompson's "East Anglia" is made up of Essex, Suffolk, Norfolk, Lincolnshire and Cambridgeshire. He follows the gentry, entrepreneurs, artisans, clergy, farmers, servants and those with unknown occupations from England to New England. His section on the women emigrants, who formed a uniquely large proportion of the migration, underlines the major part played by them.

There are details of persons from at least 117 towns and villages of Essex; some places merit up to 40 references. Belchamp *Water* needs correction in any reprint to Walter, Boxford is not in Essex but Lindsell is, Polstead is in Suffolk, Wherstead too, West Bergholt may lie near the Suffolk border but is proud to be in Essex like West Hanningfield and Wickham *Bonant*, which Dr Reaney finds in 1561 as Wyckyn alias Wychyn Bonant, but to us is Bonhunt. The printer has followed copy.

Readers will be familiar with many of the family names from *Wills at Chelmsford* by Dr F.G. Emmison, *Essex Review* and *Essex History*. Descendants of families, such as the Stone family of Great Bromley and the Marvins of Great Bentley, regularly make a pilgrimage back to those villages to see what remains of that their ancestors left behind, and sometimes returned to after experiencing the trials of New England.

The Revd. Thomas Waterhouse, M.A., born 1600, may have only spent four years in New England (1639-1643) before returning to England, but he was the first master of the "Free School" at Dorchester, Mass., founded 1639, the first school in New England — and there is no mention of this. On his return he was elected master of Colchester's Royal Grammar School, where he spent four years as required by his agreement with the Bailiffs. Some of his children were baptised at St Peter's Church, Colchester. He resigned in 1647 and retired to Coddenham, Suffolk, "where his wife's estates lay". Thompson tells us that he ministered at Ash Bocking and Brandeston, Suffolk, which livings were in the gift of his wife, Anne, née Mayhew. Thomas had insight into the fact that Colchester was soon to have some calamity befall it — the Siege of 1648. He lived to be 80 but was silenced from preaching by the Act of Uniformity, 1662. He moved

to Ipswich and preached there on several occasions, "but his principal employment was teaching School, for which he was peculiarly qualified". These omissions by the author would have given a fairer judgment of Waterhouse especially.

The 33 tables are full and extensive, but it is aggravating to find the flow of one's reading suddenly and abruptly interrupted in mid-sentence by them, and have to resume reading several pages further on. Perhaps it would have been better to have these tables at the end of each chapter or section.

Nevertheless to all students and followers of seventeenth-century England and its American connections this volume is a must. There will undoubtedly be opportunity to enlarge on the Essex connections, which are only part of the large field covered by the author, in either our *Newsletter* or *Essex History*.

Tribute is given to Roger Thompson for the vast amount of research undertaken in two continents to produce this volume into why, when and how this display of family enterprise came about. At least 80% of the 1635-1638 companies of people were related, and they came from the East Anglian gentry and their neighbours and business contacts, devotees of Puritan preachers and groups of ordinary families with their servants. Essex supplied many of them

The Suffolk vicar who advised Queen Elizabeth I, in 1584, that there was merit in colonisation could have been right. He said, "If England cry out and affirm, that there is so many in all trades that one cannot live for another, as in all places they do, America offreth the remedy". Read what Roger Thompson has to say and you may or may not agree.

John S. Appleby

The Sleepers and the Shadows. Chelmsford: a town, its people and its past. By Hilda Grieve. Volume two, From Market Town to Chartered Borough, 1608-1888. Pp. xiv + 462. Forty-six illustrations, including six in colour; thirteen maps and plans; endpaper maps. Essex Record Office Publication no. 128 (1994). Price £18.95.

The first volume of *The Sleepers and the Shadows*, containing 'The Medieval and Tudor Story', was published in 1988 and is now reprinted. This second volume (which contains a list of corrigenda to the first) takes the story up to 1888, when Chelmsford obtained its borough charter. It was completed shortly before Miss Grieve's death, and was seen through the press by Mrs Beryl Board, a former colleague in the Victoria County History of Essex. Handsomely produced and illustrated, the book is well priced to combat 'that arch-enemy, the empty purse' (cf. page 316), since it costs less than a tankful of petrol or a modest meal out. It includes a list of sources, bibliography, index, and 'A Street Directory of June 1787' identifying the town sites of that date, with the street names and numbers of 1876, and the occupancy of each site in 1888.

Chelmsford was founded, as a planned town, by a bishop of London about 1200, and within fifty years it had become the county town of Essex. It owed its success to a central position in the county, and to the enterprise of its townsmen in providing goods and services for travellers and for their rural neighbours. Before the 20th century it was, by present standards, a very small place. In 1670 the population (recently hit by the Plague) was probably about 1,700, and it was only 3,755 in 1801. It was still under 10,000 in 1881, and was dwarfed by the ancient borough of Colchester. But it was larger than all other Essex towns outside the orbit of London, and its greatest days lay ahead.

From the 16th century to the 19th Chelmsford was dominated by the Mildmay family, who were lords of the manor. Their part in the town's history was emphasised by J.H. Round in a valuable paper published in our own Society's *Transactions* in 1921. The family also figures in Colin Shrimpton's *Landed Gentry and the Farming Community of Essex in the late 18th and early 19th Century* (New York 1977), which does not appear in Miss Grieve's bibliography. The Mildmays lived at Moulsham Hall, on the east side of Chelmsford, until 1789, when their estate passed to Jane (Mildmay), wife of Sir Henry Paulet St. John of Dogmersfield Park in Hampshire. By the terms of their inheritance Jane and Henry were obliged to take the Mildmay name and to live at Moulsham Hall for at least three months in the year. In 1804, however, they obtained exemption from the residence requirement, and let the Hall to the Army. In 1809 the house was demolished, and in 1839 the Mildmays sold off a large part of Moulsham for building. Development was stimulated by the opening of the railway in 1843, and during the following years Chelmsford grew steadily as an industrial and commercial centre.

During the centuries covered by this book Chelmsford became increasingly important as the administrative centre of Essex, accommodating the assizes, quarter sessions, the house of correction, and the county gaol. The Shire Hall, built in 1791, still dominates the high street. But Chelmsford's municipal growth was comparatively slow. The parish vestry, gradually superseding the ancient manor courts, was the local authority until 1789, when a body of town commissioners was set up by Act of Parliament to provide lighting. cleansing and watching. A local board of health replaced the commissioners in 1850 and governed the town until 1888. By then Chelmsford was the only county town in England, except Oakham (Rutland) that was not a chartered borough. The movement towards incorporation — bringing greater democratic control — came not from the local board, but from an independent committee led by Arthur Furbank, a young solicitor recently settled in the town.

The religious elements in Chelmsford's history, well-described, include the conflicts of the 1630s and 1640s, when Thomas Hooker, the puritan town lecturer, was 'silenced' and emigrated to America, while the moderate rector, John Michaelson, having been forced by Laud to conform, was later sequestrated as a royalist, and withdrew into prudent seclusion 'without meddling in any business, and for the most part reading histories.' By the early 18th century dissenters had three congregations in the town, and two more had been added by 1810. They became particularly influential in the 19th century, when they included some of the principal townsmen. The directors of the 'Chelmsford Company', which developed Moulsham in the 1840s, were five nonconformists, headed by John Copland, a solicitor, and William Collings Wells, a brewer. These entrepreneurs did not lack self-confidence. The first building on the Moulsham development was the Independent chapel in New London Road, claimed to be the largest of its kind in Essex. Its pulpit was designed 'in the semblance of a beer barrel' in recognition of generous contributions from W.C. Wells and his partner, Isaac Perry. Copland and Wells had been in the forefront of recent opposition to church rates, then a burning issue. They had ceased their resistance in order to concentrate on the Moulsham project, but one dissident, the clog-maker John Thorogood, served nineteen months in gaol for refusing payment.

Chelmsford parish church, 'a noble structure' with tower and spire, was equipped with new galleries, pews and organ in 1772, largely through the efforts of Peter Muilman, a naturalized Dutchman who had made a fortune in London and bought estates in Essex. He had been a 'generous encourager' of Morant's *History of Essex* and had sponsored the concise version of that work 'by a Gentleman.' He may also have contributed towards the new peal of bells installed in 1777. The organ attracted to Chelmsford a brilliant young musician, Raynor Taylor, who, during a brief stay, 'first whetted the local appetite for orchestral and choral entertainment which the town has never lost.' He later emigrated to Philadelphia, and figures in the *Dictionary of American Biography*, though not in our own *D.N.B.* The church was rebuilt in 1800-03 after collapsing, and is now the cathedral of Chelmsford diocese.

A remarkable feature of the book — as of the previous volume of *The Sleepers and the Shadows* — is its topographical power. Having traced the history of every site in the old town, with its occupants, from the 13th century to the 19th, Hilda Grieve could identify the names and trades of all the leading townsmen, and shed much light on their public activities. The present volume, which is twice as long as the first, is based on an even wider range of sources (including the *Chelmsford Chronicle* founded in 1764 and one of the oldest provincial newspapers) which flesh out the narrative and provide much human interest. The ingenuity and stamina required by all this meticulous research is awe-inspiring.

The book is divided into chronological chapters, each with sub-headings. This arrangement is not ideal for readers seeking information on particular institutions or topics, but it is effective for periods when the pressures upon Chelmsford of national upheaval or war provide a strong narrative thread. During 'The War Years, 1793-1815' (chapter ten), Chelmsford was a garrison town, with soldiers often outnumbering residents, and in 1803, when Napoleon was threatening invasion, a line of fortifications was thrown up on the eastern suburbs of the town. During the same period the Chelmer-Blackwater canal was constructed, linking Chelmsford with Maldon, and an iron foundry was opened in New Street, ushering in the town's 'nineteenth-century industrial revolution.' This chapter also includes a section on 'The Poor in War Time.' Earlier chapters show that there was much rebuilding in the town during the 18th century, and some of the Georgian facades appear in a fine colour reproduction of David Ogborne's painting of 1762. One of the new houses was built by Benjamin Pugh, a distinguished surgeon and pioneering obstetrician. Medical men were then among the leaders of the community, as were attorneys, who included John Oxley Parker, forerunner of a distinguished Essex family.

When the first volume of *The Sleepers and the Shadows* appeared, Hilda Grieve told the present writer that she wished her work to be judged by the highest standards. It may, therefore, be suggested that academic readers, especially those far from Chelmsford, will regret the omission of footnote references. Space could easily have been found for them by abbreviating the accounts of churches, nonconformity, schools, poor relief, and gaols; by omitting irrelevances like William Mildmay's career in the diplomatic service, and James Fenton's years in Croydon; by reducing the amount of national history introduced to explain local events; and, in general, by eliminating excessive detail. Two minor errors have been noted. On page xiv the decimal equivalent of a crown should be 25 new pence; and Yarmouth (pp. 455, 459) should be indexed under Norfolk rather than Suffolk.

Urban historians will learn much from this book, though they might have welcomed critical comparisons between Chelmsford and other towns of similar size or type, and more information on commercial links with other places. The chapter on the Local Board of Health would, perhaps, have benefited from a study of the records of central government — the General Board of Health and its successors. More might have been said about the buildings erected in Moulsham after 1840. Hilda Grieve's friends will be pleased to learn the early history of Carew Terrace, New London Road, the elegant group of town houses where she herself lived. She mentions several other buildings

erected between 1840 and 1888, but strangely omits Oaklands, the mansion that now houses Chelmsford museum. It would also have been instructive to learn more about the houses lying behind Moulsham Street to the south and east, which ranged from working-class cottages to sizeable villas.

Chelmsford is defined in this book as the ancient parish of the name, comprising the old town and Moulsham 'hamlet'. That was the extent of the borough in 1888. By then, however, there had been suburban building in Springfield parish, north-east of the old town, and in Broomfield to the north, as can be seen from an endpaper map in the book. Development at Springfield had been extensive enough to warrant the building of a new church and school, but these are not mentioned in the text.

Many of the illustrations are of a high standard. The colour plates are particularly welcome, and it would have been helpful to find them distinguished in the table of contents. Three of them are views by A. Bennett Bamford, an Essex artist whose charming topographical drawings deserve to be better known. A wide variety of buildings and street scenes are depicted, but only one person is portrayed. It would have been good to see pictures of some of the Mildmays, or of nineteenth-century worthies like James Fenton or Fred Chancellor.

We must not end on a critical note. *The Sleepers and the Shadows* presents a lifetime's research in graphic style. Hilda Grieve's wide interests — including music, sport, and Essex's links with America — enliven the narrative, and her human sympathies are displayed in the accounts of the plague victims in 1637 and food rioters in 1772. She provides some examples of the way in which history can suddenly strike a familiar note. In 1764 *Chelmsford Chronicle* reported the rebuilding of 'the great protestant church of Dresden' (in this case, after bombardment by the Prussians), and the imprisonment of an Essex highwayman who had threatened his victim with a sawn-off shotgun — 'a musket cut short.' The madness of George III, portrayed in a recent film, is also recalled by the fact that the foundation stone of the Shire Hall contains a number of medals struck in 1789 to commemorate the King's recovery from his first attack. In 1776 fifteen men escaped from the house of correction by tunnelling under the wall: 'a bulky prisoner who stuck in the hole was forced through by the others.'

In a paragraph analysing 17th-century wills Hilda Grieve comments that 'friendship played a great part in many testators' lives.' This book is dedicated to her own friends, who 'helped to sustain my effort when illness threatened the completion of it,' and she remembered them gratefully during her last days.

W.R. Powell.

Essex Gold: the Fortunes of the Essex Oysterman, by Hervey Benham in collaboration with Peter French and John Leather. Essex Record Office Publication 120, Chelmsford (1993). ISBN 0 900 360 92 5. £12.95.

Hervey Benham's last book, brought to posthumous publication by his collaborators, is a welcome detailed account of the history of the county's oyster industry. The mollusc has been a popular and useful item in the diet from prehistoric times, as shown by the frequent presence of shell in archaeological deposits, but the earliest known reference to its cultivation in Essex occurs in the Charter granted by Richard I to the Borough of Colchester in 1189. This indicates that the burgesses had fishing rights on the Colne at the beginning of the 12th century. Not unexpectedly, the information available is limited until the 18th century and the book deals mainly with the industry from that period onwards.

Oyster fishing has always been a precarious and competitive business and the title is well chosen for the oysterman's fortunes can fluctuate as wildly as a prospector's. Much of the fluctuation is due to the perils which afflict the oyster; pollution, diseases, excesses of sea temperature, storms, algae, limpets, sea squirts, crabs, anti-fouling paint and, of course, man. In the 17th and 18th centuries, growing consumption led to what was effectively farming of the shellfish, and cultivation had its heyday in the 1860s when, according to one estimate, the poor of London swallowed over 100 million a year, many of them from Essex. The industry could not sustain such a demand when the harvest was so variable and subject to uncontrollable circumstances. As stocks of the native declined, layings of foreign varieties with greater resistance to disease were increased, but the numbers produced continued to diminish owing to the various problems of cultivation. The consequent rise in price has turned a staple of the diet into a prestige dish.

With this background the book tells the story of the fisheries from the Orwell to the Thames, in estuaries which are popularly regarded as the premier oyster grounds in Britain. It begins by describing the equipment used and methods of working, and then recounts the often complex affairs of the individual grounds. As might be expected from this author, he makes particular mention of the working boats, the oyster smacks. However, the oystermen are the main interest and the ups and downs of their calling are well recorded.

As several anecdotes demonstrate, they were, and surely still are, of independent disposition. "The placid and harmless oyster has shown ... a remarkable capacity for provoking dispute, dishonesty, litigation and violence." Poaching raids on competitors' grounds, disputed or undisputed, were made from time to time, and eventually brought about the formation of the

Colne River Police in 1891. An affray in the Blackwater between Burnham and Tollesbury oystermen in 1894, known at the time as 'The Piracy Case' when subsequently brought before a no-nonsense judge, provides an amusing incident which nevertheless was a serious matter in principle for the industry. Like many other disputes it was eventually dealt with by the introduction of new regulations.

The deep-sea fisheries off Friesland and the Channel coast of France will not be as well known as the Essex grounds, but in the latter half of the 19th century they provided a profitable income for the more venturesome oysterman. Fleets of large sea-going sailing smacks crossed the North Sea to dredge the deep-sea oysters from a depth of up to twenty-four fathoms, but at a price, as the chapter on "The Skillington" relates. Storms took a heavy toll, such that the Rector of Brightlingsea observed of the North Sea, "During the past year ... In that vast cemetery we have buried twice as many men as in the old churchyard at home." Apart from "skilling", many oystermen pursued their trade over long distances, voyaging to Ireland and France, for example, to purchase brood, or young oysters, for laying in Essex beds to mature. Mr Benham gives details of these and other journeys, making the point that the Essex fisheries were never wholly self-regenerating but required transfusions of stock from elsewhere.

The last chapters bring the story of Essex oyster cultivation up to date and are a useful record of recent endeavours to secure a viable industry for the future. Even with new techniques for nursing the spat through four or five years of development into a marketable shellfish, discouraging disaster can still strike, latterly in the form of bonamis, a parasitic disease. Evidently oysters will never be easy.

The illustrations include many from private collections, particularly those of the author and his collaborators. Maps of individual oyster grounds, mostly from the 19th century, show their immediate location in an attractive and historically interesting form, but an additional overall map of the Essex coast would have been useful, even for readers familiar with the county. Knowledge of the natural history of the oyster is assumed from the first chapter and, although information is scattered throughout the text and the glossary, a concise account of how it breeds, feeds, matures, chooses its habitat and dies would have been helpful at an early stage in the book.

However, the subtitle is "The Fortunes of the Essex Oysterman", and Mr Benham has left us a remarkably useful account of them, full of information and anecdotes for the local historian and the general reader. It makes a fine addition to his other books on East Coast history. We must be grateful to Peter French, John Leather and the Essex Record Office for bringing the work to publication in such a handsome form. Devotees of the oyster, who may be dismayed by the undoubted decline of a favoured delicacy, should not miss the reassuringly hopeful afterword by Mr French at the end of the book.

A.J. Fawn

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Essex bibliography

Bibliography of Journal literature on Essex Archaeology and History at February 1995

Both monograph and periodical literature are included; articles published in journals which are devoted exclusively to Essex (e.g. Essex Journal*) are not included. Items which have been overlooked in earlier bibliographies are added for completeness of coverage.*

For new books on Essex history, see the regular lists published in the Society's Newsletter.

Berridge, P.J. 1993	"Cornish Axe Factories: fact or fiction?" in N. Ashton & A. David (eds), *Stories in Stone* (Lithic Studies Occasional Papers No 4), 45-56. [Greenstone axes from Cornwall were not redistributed from Essex in Neolithic period]
Fairclough, K. 1993	"Navigation Defences along the River Lea 1600-1767", *Transactions of the Newcomen Society* **64**, 21-40.
Faulkner, N. 1994	"Later Roman Colchester", *Oxford Journal of Archaeology* **13**(1), 93-120.
Foster, S. 1993	"A Bishop for Essex: Bernard Ward and the Diocese of Brentwood", *Recusant History* **21**, 556-71.
Foster, S. 1994	"Monsignor Lord William Joseph Petre (1847-93): a pillar of Downside", *Recusant History* **22**, 88-101.
Huggins, P. 1994	"An Anglo-Saxon fastener from Waltham Abbey", *London Archaeologist* 7 No. 6, 163-7.
Jackson, C.R. 1993	"How the Normans determined Domesday Book manorial values for Essex county", *Albion* **25**, 1-22.
James, M. 1991	"The History of Chemistry in Essex and East London", Essex Section, Trust of Royal Society of Chemistry.
Johns, C.M. 1994	"An enamelled bronze 'pyxis' from a Roman grave at Elsenham, Essex", *Antiquaries Journal* 73 for 1993, 161-5.
Jones, J. 1991	"The Chapel Granary at Harlowbury: survival of a 'redundant' building", *Journal of Historic Farm Buildings Group* **5**, 43-59.
Padfield, A. 1991	"The Round Barns of Stapleford Tawney, Essex", *Journal of Historic Farm Buildings Group* **5**, 60-63.
Parr, H. 1993	"A visit from the General: Ingatestone 1844", *Journal of Railway and Canal History Society* **31**, 25-30.
Phillips, A. 1994	"Women on the Shop Floor: the Colchester Rag Trade 1918-1950", *Oral History* **22** Part 1, 56-65.
Sharpe, P. 1994	"De-industrialisation and re-industrialisation: women's employment and the changing character of Colchester 1700-1850", *Urban History* **21**, 77-96.

University theses completed

Davey, C. 1991	"Reconstructing local population history: the Hatfield and Bobbingworth districts of Essex 1550-1880", Cambridge Ph.D.
Robey, A.C. 1991	"The village of Stock, Essex 1550-1610: a social and economic survey", London Ph.D.
Challis, K. 1992	"Early Anglo-Saxon Essex", Nottingham M.Phil.
Marsh, C. 1992	"The Family of Love in English Society 1550-1630", Cambridge Ph.D. [Essex important]
Robertson, A. 1993	"The Army in Colchester and its influence on the social, economic and political development of the town 1854-1914", Essex Ph.D.
Hart, I. 1993	"Religious Life in Essex *c.* 1500-1570", Warwick Ph.D.
Webster, T. 1993	"The godly of Goshen scattered: an Essex clerical conference in the 1620s and its diaspora", Cambridge Ph.D.
French, H. 1993	"Chief inhabitants and their areas of religious influence: local ruling groups in Essex and Suffolk parishes 1630-1720", Cambridge Ph.D.
Woodgate, M. 1993	"Farmworkers' unionism in North-West Essex 1870-1914", Essex M.Phil.

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1 Contributions should be sent to the Editor, The Manor House, The Street, Pebmarsh, Halstead C09 2NH.

2 The closing date for the receipt of material is 1 January. Publication date is usually in October.

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4 Footnotes should also be typed double-spaced and submitted collectively.

5 Bibliographical references should be given according to the Harvard system, i.e. in parentheses after the text, giving: author's surname; date of publication, page, figure or plate number; e.g.:

(Hawkes and Hull 1947, fig. 33 and p. 201).

(Hewett 1962, 241).

Where it is inappropriate to identify a work by an author (e.g. Victoria County History) an abbreviated title and volume number should be given, e.g.:

(*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. 1947 *Camulodunum*, Society of Antiquaries.

Hewett, C.A. 1982 'The Timber Belfries of Essex', *Archaeol. Journ.*, **cxix**, 225.

Victoria County History, 1963 *Essex*, **iii**.

Names of books and journals should be underlined (and will appear in italics); titles of articles in journals should be in inverted commas. Abbreviations of works cited should be in accordance with the annual *Archaeological Bibliography*, published by the C.B.A.

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11 In order to reduce costs the Publications Committee is prepared to consider the use of microfiche. Authors are advised, therefore, to consider what elements of their contributions could be published in the medium and prepare their articles accordingly, after prior consultation with the Editor. Supporting technical data, statistical tables, etc., may be appropriate subjects.

12 Authors should also bear in mind the desirability of good illustrations in the form of photographs and drawings, to improve the attractiveness of the volume for general readership.

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Shorter Notes

Cover illustration: St Nicholas' church, Canewdon, showing 15th-century west tower. Drawing by A.B. Bamford (1857-1939) in the Essex Record Office (see 'Short studies in topography and family history' [pp. 162-73]).