

MEDIEVAL BOUNDARIES, QUARRY PITS AND OTHER ACTIVITY AT DUNMOW ROAD, GREAT HALLINGBURY, ESSEX

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In September and October 2015 Archaeological Solutions (AS) carried out an archaeological excavation on land south of Dunmow Road, Great Hallingbury, Essex.

The excavation recorded six ditches, ten possible quarry pits, a buried soil layer, and a handful of other features representing medieval occupation. The ditches appear to indicate that the site was divided up into roadside plots possibly represent toft and croft-type habitation. The quarry pits appear to have been used to extract the clays overlying the naturally occurring sands in this area and this was possibly transported for use at a nearby medieval tile kiln which has been recorded in the vicinity. The finds assemblages recovered from the site contain elements that appear to be of a higher status than the recorded features would suggest, possibly indicating that deposits, perhaps from the nearby Thremhall Priory, were being transported to this location to infill the pits and other features that were present.

Introduction

Dunmow Road in Great Hallingbury follows the line of Roman Stane Street which ran east to west linking the settlements at Braughing and Colchester (EHER 4697). Extensive multi-period occupation dating from the Bronze Age to the post-medieval period is known from Stansted Airport and from other sites along this ancient route. In September and October 2015 Archaeological Solutions (AS) carried out an archaeological excavation on land south of Dunmow Road (Fig. 1).

The excavation was required after an archaeological trench evaluation demonstrated the presence of medieval ditches and other features. The excavation recorded eight ditches, ten possible quarry pits, seven other pits, and a buried soil were. Of these six ditches, ten quarry pits, three other pits, and the buried soil were medieval, two ditches were post-medieval or modern, and four pits and one ditch were undated.

Dating and Chronology

The medieval pottery assemblage contains material with currencies ranging from the late 11th century to the 16th century. Based on the point where the date ranges of these pottery types overlap, evidence from the small finds and CBM assemblages also recovered from this site, and on evidence from medieval sites in the surrounding area (Havis and Brooks 2004), it is possible to suggest that the medieval activity recorded at this site must have occurred between the 12th and 14th centuries.

Although sufficient stratigraphic evidence to produce a complete model of the chronological development of the medieval site is lacking, it is evident that the earliest medieval activity is associated with layer L2007, a firm, mid red brown clay silt which contained pottery of mid 12th to 14th century date, including a large decorated storage vessel, through which medieval features were cut. Thereafter, some stratigraphically early cut features were identifiable but relationships were insufficient to determine the precise chronology of the creation of the identified features.

The earliest medieval features

Pit F2078 and the slightly later Pit F2065 were amongst the stratigraphically earliest features recorded (Fig. 2). F2078 contained pottery of 12th to 14th century date; stratigraphically later features contained additional pottery types suggestive of a slightly later date. F2078 was a notably deep feature but F2065 was deeper and has been interpreted as a quarry pit. Throughout the span of medieval activity, the site appears to have been used for quarrying, mostly for the clay in the layer below the upper chalky material and not for the underlying sand.

The early stratigraphic position of F2065 indicates that the extraction of clay had begun in this area prior to the creation of the large east to west and north to south aligned boundary features. The function of the north-east to south-west aligned gullies which were stratigraphically later than F2065 but which preceded the boundaries remains uncertain.

The medieval boundaries and the function of the site

The establishment of ditches F2087=2019, F2092, F2094, F2052 and F2085 (Fig. 2) on north/south and east/west alignments effectively divided the site into small roadside plots of land. The rural economy of much of northern and central Essex during the medieval period was a mixture of farming, crafts and industry, or trading. The basic unit of production was the household (Poos 1991, 11). Environmental sampling has identified cereal remains suggestive of the scattered waste from day to day domestic cereal consumption suggesting that a dwelling may have existed in the vicinity. Usually, peasant houses in a medieval village were arranged with a smaller 'toft' fronting the street and a larger 'croft' at the rear (Gies and Gies 1991, 34).

A cluster of possible quarry pits (F2036, F2045, F2099, F2103, F2116 and F2125; Fig. 2) was present around, and to the north of, the terminus of the large east-west aligned boundary. Beyond the cluster of pits, further quarry pits were located at the eastern (F2110) and western ends (F2059) of the site. Another, elongated, quarry pit (F2055) was located to the south of the east-west aligned Ditch F2087.

None of the quarry pits were excavated into the underlying sand layer suggesting that the target for extraction was the clay layer overlying the sand. The site lies approximately 800m to the east of a possible medieval tile kiln (EHER 4661). The medieval tile recovered from the site appears to have been produced using local clay and it is possible that it was clay extracted from this area, or nearby, and formed and fired at the tile kiln to the east.

Although there is insufficient stratigraphic evidence to determine the exact chronological relationship between the boundary ditches and the various large pits distributed around the site, it seems possible that the site was divided up into different areas, perhaps under different ownership or tenancy, in which this quarrying activity took place or that it was divided up in order to separate the quarrying from other activity; it is notable that no quarry pits were present in the area between north/south aligned ditches F2092 and F2094.

It is possible that all of the quarry pits were contemporary with the stratigraphically early F2065 and that this kind of activity, and the tile kiln to east, occurred as a short-lived chapter associated with a particular event such as the construction or re-roofing of the nearby Thremhall Priory. The large north/south and east/west aligned boundaries may, therefore, represent rearrangement of the site following the cessation of this activity.

Finds assemblages and their origins

Introduction

At least superficially the finds assemblages recovered during excavation of this site appear to be consistent with small scale rural settlement of the type that might be considered consistent with the 'toft and croft' type habitation that has been suggested for the site. To some extent this may be accurate but some elements of the finds assemblages hint at other origins or processes through which artefactual material arrived at the site. The following comprise summaries of the artefactual analysis; full specialists' finds artefactual and environmental reports can be found in the Research Archive Report produced for this project (Newton *et al* 2016).

The Pottery

Peter Thompson

The assemblage, which is all of a domestic nature, spans the majority of the medieval period and comprises approximately 45.8% early medieval sandy wares, 21.3% medieval sandy greywares, and 32% medieval sandy orange ware. The latter category also includes the small number of products from the Hedingham, Colchester, and Mill Green industries which amount to 13.6% of the sandy orange ware total. There is clearly quite a high degree of residuality of the early medieval sandy wares which probably ceased production by the mid 13th century. St Neots ware is absent from the site, which was present at the Stansted Airport excavation in 10th century contexts and alongside shelly wares in 11th century deposits (Mephram 2014, 19.10). It was also present in small amounts at Colchester where it is thought to have arrived in the 11th century and been gradually replaced by sandier fabrics during the 12th (Cotter 2000, 32-3). At Stansted Airport early medieval sandy wares featured in late 11th-late 12th century contexts (Mephram 2014, 19.10), and so this is likely to be the case for the Great Hallingbury site.

The large, almost complete, storage jar from Great Hallingbury is a form that has parallels with Late Saxon Thetford ware (Rogerson & Dallas 1984, fig. 166.250). Storage jars are also found in early medieval ware including examples produced at the Middleborough kilns, Colchester (Cotter 2000, 62 fig. 37), and at the Frogs Hall site (Walker 2006, fig. 7. 40-48). They are also found in medieval coarse ware fabrics at the Sible Hedingham sites in north Essex (Walker 2012, Plate 32-3, fig. 28). The 'late' early medieval sandy ware vessels produced at Frogs Hall are border line with medieval coarseware and have comparisons with Middleborough products and Hertfordshire greywares from Middlesex (Walker 2006, 65). The closest known Hertfordshire greyware production site to Great Hallingbury is at Great Munden, 16km to the west (Blackmore and Pearce 2010, 91-92). However, Hertfordshire greyware found at a moated manor site at Whomerley Wood, Stevenage which included horizontal incised decoration may have closer affinities with Frogs Hall (Walker 2006, 78).

Frogs Hall kiln products do not appear to have been consumed locally in general, and may have been made for a specific market or ones more further afield (Walker 2006. 78). However, the large storage jar from L2007 could be a Frogs Hall product. The bulbous form is similar to Thetford ware (Rogerson and Dallas 1984, 146-151), but the flat topped everted rim appears simpler than the more elaborate Thetford rims. The firing of the vessel is similar to some 'transitional' vessels present on a number of sites across southern Herts (Berni Seddon pers. comm.). The Frogs Hall kilns (and Middleborough kilns) were of a similar late 12th-early 13th centuries date (Walker 2006, 77), and it is suggested that the large storage jars from Frogs Hall with thumbled applied strips, may have been indirectly copying Thetford ware storage jars, which were probably no longer being produced by c.1100. The Frogs Hall

kilns also produced vessels of earlier traditions such as spouted pitchers which are more typically 11th-12th century forms (Walker 2006, 77, 78). The reason why an intact vessel may have been deposited in the ground is likely to be for either a ritual or functional purpose. There are examples of medieval pots being ritually buried beneath hearths or the threshold or walls of buildings, although these are quite rare. Alternatively, pots were sometimes buried in order to keep their contents cool (Walker 2006, 67 & 84).

Table 1 (below) compares the medieval pottery by weight with the medieval pottery from Stansted Airport. The main difference is that medieval Harlow ware (Davey & Walker 2009, 12), which makes up more than half of the Stansted assemblage, and was also present at Frogs Hall, is absent from the Great Hallingbury site. The medieval sandy orange ware present at Great Hallingbury appears to derive from different sources to Harlow, of which Colchester ware forms a very small part. The remaining wares otherwise compare quite favourably. Mill Green ware which was absent at Stansted was present in a small amount at Frogs Hall. The volume of early medieval wares from Great Hallingbury also suggests a similar pattern to Stansted Airport and Frogs Hall in that the main focus of occupation was during the 12th and 13th centuries with continued occupation at a more reduced scale into the 14th century and beyond (Walker 2006, 80 & 82). At Stansted Airport medieval sandy orange wares dated between the late 13th and 15th centuries were present, with post-medieval red earthenware commencing in the late 15th century. However, unlike Frogs Hall and Stansted Airport, activity at the Great Hallingbury site appears to have ceased before the end of the 15th century, and possibly by the end of the 14th century.

Great Hallingbury	% by weight	Stansted	% by weight
		St Neots ware	4.1
Shelly & sandy/shelly wares	0.15	Shelly & sandy/shelly wares	7.4
Early medieval sandy ware	62.2	Early medieval sandy ware	4.9
Early medieval stansted ware	2.2	Early medieval stansted ware	7
Early medieval ware inclusion free	>0.1	Early medieval ware inclusion free	1.2
		Early medieval ware – rose quartz	0.2
Early medieval – flinty ware	0.1	Early medieval – flinty ware	2.3
Early medieval – Frogs Hall products?	0.3	Early medieval –Frogs Hall products?	0.8
		Early medieval transitional	1.2
Medieval coarse ware	7.7	Medieval coarse ware	11.7
SHER type Medieval coarse ware	6.3		
Hedingham coarse ware	0.25	Hedingham coarse ware	0.2
Sandy orange ware	16.3	Sandy orange ware	1.3
S'grafito ware	0.1	S'grafito ware	0.2
		Harlow ware	56.5
Hedingham fine ware	1.5	Hedingham fine ware	0.2
Mill Green	0.3		
Colchester type ware	1.8		
Tudor Green?	>0.1	Tudor Green	0.2
		Saintonge	0.2
London type ware	0.3	London type ware	0.4
UPG	0.3		

Table 1. Comparison between medieval wares from Great Hallingbury and Stansted by weight

Excavations recovered a total of 123 fragments (8811g) of CBM, with a further 26 fragments (72g) of daub. The CBM assemblage is predominantly composed of medieval roof tile, in particular peg tile, but also with rare fragments of crested ridge tile or louver (Table 2). The CBM is highly fragmented and slightly abraded, but the presence of several cross-joining fragments in a single pit, with small groups in ditch and quarry pits suggests that the CBM may represent deposits associated with a nearby structure, albeit possibly re-deposited as material to aid packing or drainage.

Medieval CBM accounts for 105 fragments (5284g) of the assemblage, of which the bulk, 58 fragments (3536g), was contained in Pit F1027 (L1028, L1033 & L1056), with lesser groups of 13-14 fragments (570-690g) in Ditch F2087 and Quarry Pit F2110, and a very sparse distribution of peg tile fragments in other ditch and quarry pit features. The medieval CBM was manufactured in a single fabric consistent with the exploitation of local resources, and potentially indicative of temporary production associated with a local foundation. The fabric typically has orange surfaces fading to red margins and a red/dark grey core, occasionally over-fired to brown-grey.

CBM type	Date	Frequency	Weight (g)
Peg tile	Medieval	95	4522
Ridge tile (plain)	Medieval	4	313
Crested ridge tile/louvre	L13th-15 th C	6	449
Brick	Modern	11	3387
Land Drain	Modern	7	140
Daub	?Medieval	26	72
<i>Total</i>		<i>149</i>	<i>8883</i>

Table 2. Quantification of CBM

The peg tile does not preserve any extant dimensions, beyond a thickness of 12-14mm that might indicate whether it conformed to dated statutes, but other technological traits appear consistent with production relatively early in the period of its use; potentially in the mid 13th century, and certainly by the beginning of (and into) the 14th century (Drury 1981, 131). The peg tile is frequently warped with a slight lip on the upper edge, a sanded base and relatively crude, sub-circular tapering peg holes (12-15mm diameter). Equally fragmentary but more diagnostic are fragments of ridge tile, notably those of crested examples or louvers, while the plain fragments may be derived from the body of these tiles. The ridge tiles are 15mm thick, with a 20mm wide crest rising from the apex (height unclear). The upper surface and crest are covered with a green lead glaze while the crest and adjacent tile surface has been impressed with stamped decoration. Each stamp is square (14mm wide) and is filled with a grid (5x5 squares). The production of ridge tile commenced in Britain in the 13th century, with crested roof tiles developing in the late 13th century and continuing in production through the 15th century, possibly into the early 16th century. These were supplemented by louvers (or ventilators) that could also form part of roofs, as air vents or smoke-vents, which appear to date between the mid 13th and early 15th centuries, and are often associated with monasteries, such as the Austin Friars, Leicester, as well as buildings at Great Easton, Hadleigh and Rayleigh Park (Allin 1981, 63). The use of stamped decoration remains anomalous, and appears very small for an item such as roof tile, therefore perhaps was associated with a louver-type fixture or finial designed to be visible from a closer distance.

The assemblage also includes a total of 26 fragments (72g) of daub, typically preserved as highly fragmented and abraded 'crumbs', probably adversely affected by soil conditions. The daub is sun-dried and pale to mid orange in colour. No extant surfaces or structural features

were preserved, but the association of the daub with medieval CBM suggests that it was a contemporary component of structures that incorporated peg and ridge tile.

The small finds

Nicholas J. Cooper, with conservation and x-radiography by Graham Morgan and Heidi Addison, University of Leicester Archaeological Services

A total of 33 iron objects and one of copper alloy (recorded under 16 small find numbers) were recovered during the evaluation and excavation phases, from a range of contexts dating to the 12th to 15th century. All objects were x-rayed and this has allowed identification and accurate measurement. The catalogue is arranged by functional category.

Tools

Handle?

- 1) [1007] 1008 Fill of Ditch, Trench 6. A long iron rod of 7mm square section, tapering and angled to a flat length of 4mm width by 2mm thickness. Broken length 285mm. This is possibly part of a long implement handle.

Knives

- 2) [1027] (1028) Fill of Pit, Trench 6. Small iron knife with centrally-placed whittle-tang. The tip of the blade is missing. Length 73mm (48mm blade). Back of blade rises before sloping down to the tip, thus belonging to Winchester Type A (Goodall 1990, 842, fig. 253 Type A).
- 3) [2087] (2089) B, Middle fill of Ditch. Incomplete whittle-tang knife blade in three fragments, with remains of a lead hilt band at the junction of the blade and tang which would have reinforced the, since decayed, wooden handle. Tang set centrally between cutting edge and back of the blade. Length: 205mm (165mm blade), width of blade: 28mm. This knife also appears to belong to Winchester Type A with the back rising slightly before angling down to the tip, with a straight or slightly curving cutting edge (Goodall 1990, 842, fig. 253 Type A). It is unusual for the hilt band to survive still attached to the tang after the handle has decayed; an iron example was found on a knife from London (Cowgill *et al.* 1987, 86, fig.58.55). It is unlikely that the knife was originally manufactured with a lead hilt band and it probably represents a later repair.

Equine Equipment

Horseshoe

- 4) [1009] (1010) Fill of Pit, Trench 6. Fragment from branch of iron horseshoe with two square nail holes preserved; tapering to a squared off terminal at the heel. Width of holes 7mm. This is the type of horseshoe which appears before the middle of the 14th century characterised by a different form of nail hole and nail, to those used during the second half of the 13th and early 14th century (Clark 1986 fig.8).

'Fiddle key' and other horseshoe nails

Four examples of horseshoe nails were identified; three of fiddle key type, for horseshoes with rectangular countersunk nail holes used during the Norman period and up to the mid-13th century, and one with a rectangular head, flush with shaft and with expanding 'ears' at the base, designed to sit in the countersunk holes used in horseshoes of transitional type, made between the second half of the 13th and early 14th century (Clark 1986, fig.7a).

- 5) [1027] (1028) Fill of Pit, Trench 6. Head and upper shaft of fiddle key type. Width of head 10mm.
- 6) [2087] (2089) B, Middle fill of Ditch. Complete but twisted nail of fiddle key type with semi-circular head flush with the shaft (Clark 1986, fig.5a). Nail is double-clenched; bent half way down and with tip bent over again when hammered back into the wall of the hoof (Clark 1986, fig.5b). Length: 30mm. Width of head 9mm.
- 7) [2059] (2060) Fill of quarry pit. Head and upper shaft of nail of fiddle key type. Width of head: 10mm.
- 8) [1027] (1028) Fill of Pit, Trench 6. Head and most of shaft of nail with rectangular 'eared' head. Length: 32mm, width of head: 9mm.

Fastenings and Fittings

All of the remaining identifiable iron objects were carpentry nails, a small number of which were complete. All were typical handmade carpentry nails with flat circular heads and tapering square-sectioned shafts, the complete examples being around 50mm in length; equivalent to the modern two-inch nail. The nails are detailed in context number order below.

- 9) [1009] (1010) Fill of Pit, Trench 6. One complete but bent nail (52mm) and two shaft fragments
- 10) [1027] (1028) Fill of Pit, Trench 6. Five near-complete nails with lengths of 35mm and 38mm, and three other shaft fragments.
- 11) [1027] (1033) Fill of Pit, Trench 5. Five nails including three with heads of up to 40mm in length. One other long shaft fragment (102mm) possibly not from a nail.
- 12) [1036]/ [1039] (1042) Slumping fill of Pit, Trench 7. Nail shaft (48mm).
- 13) [2036] (2037) B, Fill of large Pit. Nail shaft (58mm).
- 14) [2036] (2038) A, Fill of large Pit. Nail shaft fragment.
- 15) [2094] (2095) Fill of Ditch. Nail (35mm).
- 16) [2103] (2107) A, Fill of Pit. Two nail shafts (45mm).
- 17) [2110] (2112) Fill of quarry pit. Complete nail (52mm) and one shaft tip.
- 18) [2125] (2128) Fill of Pit. Nail shaft (48mm).

Miscellaneous Fitting

- 19) (2007), Occupational layer. Fragment of hollow rectangular copper alloy casing. Broken and open at both ends. Broken length 40mm, internal width 20mm, internal height: 5mm. Not recognisable as medieval in date and possibly a modern intrusion.

Sheet Fragments

Two amorphous fragments of iron sheet (25mm square) came from [2110] (2112).

Overview

This is a small assemblage consisting entirely of iron objects (if the copper alloy object is intrusive) relating to transport or agriculture (horseshoes and shoeing nails), and crafts or possibly household activity (knives and implement handle), with evidence for timber structural debris (nails). There is a complete lack of any dress fittings in copper alloy, indicative of residential occupation but in an assemblage of this size this is not necessarily surprising.

The Animal Bone

Dr Julia E.M. Cussans

This small assemblage of animal bone shows the presence of several mammal taxa including both wild and domestic species. Cattle and pigs appear to have been utilised for meat. Equid bones appear to represent a mix of horse and smaller equid, either pony or donkey, but as no measurable bones were available no firm conclusions can be drawn.

Grant (1984) notes horses as being particularly important in the medieval period as pack animals and says that they were not generally eaten. However, the butchery evidence here suggests that some use was made of the equid meat, or that the bones were processed in some way.

	Medieval	Undated	Total
Cattle	10	2	12
Sheep/ goat	2	0	2
Pig	14	1	15
Horse	4	1	5
Fallow Deer	9	5*	14
Roe Deer	1	0	1
Large Mammal	53	6	59
Medium Mammal	85	4	89
Bird	2	0	2
Total	180	19	199

Table 15. Quantification of animal remains by NISP, * indicates antler only.

The lack of sheep/goat remains at the site is somewhat unusual (see Bedwin 1992, Wade 1996 or Hutton 2004 for example) for the medieval period, as during this time the wool trade formed a key part of the medieval economy (Ryder 1983, Grant 1984, Sykes 2006). Sheep were also one of the main meat producing animals throughout the medieval period (Sykes 2006). Therefore the lack of their bones in the assemblage here would seem to indicate one of two things, that either sheep/goat was neither produced nor consumed at the site or that their remains were disposed of elsewhere, both of these scenarios would be quite unusual. A third possibility is that their remains are for some reason underrepresented. However, given the relatively good preservation at the site, the good recovery of similarly sized pig and deer remains and the lack of sheep/goat representation in the sieved material it would appear that the almost complete absence of sheep/goat is real and not a factor of poor preservation or recovery.

The relatively high proportion of fallow deer bones present is also of interest. Examination of data on the occurrence of fallow deer at UK medieval sites from the Dama International fallow deer project (www.fallow-deer-project.net) indicates that sites with high numbers of fallow deer bones tended to be high status sites such as castles, ecclesiastical or manorial sites. Other rural and urban sites do contain occasional fallow deer bones but these are only present in very small numbers for example one or two bones per site. Fallow deer have long been associated with high status and from the Norman period onwards in Britain Sykes (2010, 58) notes fallow deer as 'an icon of social position, their consumption and management in privatised parks forming elements of the package through which the elite sought to distinguish themselves from the lower classes'. It should be noted here, however, that very little in the way of meat bearing elements is present and the elements that are present (foot and head bones) may represent the use or processing skins. It is likely, however, that the attractive pelt of the fallow deer was also a prized possession.

Plant Macrofossils
Dr John Summers

During excavations at Dunmow Road, 28 bulk soil samples were taken and processed for environmental archaeological analysis. All sampled deposits date to the medieval period, with the potential to provide information regarding diet and economy during this time.

Carbonised plant macrofossils were recorded in 17 of the 28 bulk sample light fractions (61%), with cereal remains (grains or chaff) present in 15 samples (54%). The most frequently encountered cereal was wheat (*Triticum* sp.), remains of which were present in 50% of samples. All identifiable specimens were of a free-threshing type (*T. aestivum/turgidum*) and bread wheat (*T. aestivum*) rachis was identified in L2122 (F2087). Barley, including hulled asymmetric grains (*Hordeum vulgare* var. *vulgare*) were present in 14.29% of samples, while oat (*Avena* sp.) was present in 3.57% (1 sample). These cereal crops are all typical of the period (e.g. Carruthers 2008; Ballantyne 2005; Moffett 2006).

Also recorded were seeds of pea/bean (Fabaceae) in three samples (10.71%). Preservation was insufficient to determine whether peas or beans were present but the size of the specimens is indicative of cultivated taxa.

Densities of carbonised remains ranged from 0.025 items per litre in L2095 to 3.85 items per litre in L2122. The majority of deposits contained less than 0.5 items per litre of sediment. This concentration of remains is indicative of scattered carbonised debris which became incorporated into fills through natural processes rather than through direct deposition.

The material from L2122 was richer, although lower in density than would be expected for a discrete deposit of carbonised debris from a specific activity (e.g. drying or storage accident). The cereal remains were dominated by grains of free-threshing type wheat, with a small number of barley grains also present. Remains of free-threshing type wheat rachis, including bread wheat (*T. aestivum*), were also recovered. A ratio of free-threshing type wheat grains to rachis internodes, adjusted to include the relevant proportion of indeterminate grains and rachis, produced a result of 3.23:1. Unprocessed free-threshing hexaploid wheat can produce a ratio of 2-6:1, with up to six grains per rachis internode, depending on variety (e.g. van der Veen 1992, 82). Although it is difficult to be precise, the ratio calculated for the wheat remains in L2122 is consistent with un-threshed ears of bread wheat. This is supported by the number of seeds of non-cereal taxa, which produced a ratio for grains to weed seeds of 2.875:1. This is less than would be expected for a deposit of processing by-products and may also reflect un-processed ears of bread wheat. Two culm nodes were also present in the sample, which appear to support the interpretation. However, there is also the possibility that this sample represents the mixed remains from a range of sources, including crop processing by-products.

The non-cereal taxa in the assemblage included legumes (Poaceae), cleavers (*Galium aparine*), henbane (*Hyoscyamus niger*), stinking chamomile (*Anthemis cotula*) and wild grasses (Poaceae). These all occur as arable weeds. Henbane is more prevalent in nitrogen rich substrates, such as well fertilised fields, stinking chamomile is characteristic of heavy loam and clay soils and cleavers is generally more common in autumn sown cereals. These characteristics are typical of the growing conditions required by bread wheat and it is likely that they are associated with the wheat remains in the deposit. Heavy soils predominate in the area of the site and the cereals are likely to have been locally cultivated.

The samples from Dunmow Road show a low intensity of cereal use and processing, and of the deposition of carbonised remains during the medieval period. The crop taxa identified were dominated by free-threshing type wheat, most likely bread wheat, with small amounts of barley, oats and pulses also recovered.

The bulk of the material is likely to represent the scattered carbonised debris of daily activities. None of the deposits suggest the intensive use or processing of cereals in the vicinity of the excavated features. The identification of a single deposit of probable unprocessed bread wheat in L2122 indicates the presence of unmodified cereal crops on the site during the medieval period. Whether this crop was cultivated by the site's inhabitants or

imported from agricultural sites elsewhere is difficult to determine on the basis of a single productive sample.

Overview

The small finds assemblage contains items that would appear to be associated with daily domestic life or with agricultural activity; items consistent with 'toft and croft' type habitation. Some of these items, particularly the horseshoes and horseshoe nails, while possibly directly associated with agricultural activity, may be associated with transport. While transport, perhaps of goods for sale at market, may have been a concern of a medieval peasant household, the location of the site adjacent to a road of some antiquity (Dunmow Road follows the line of Roman Stane Street) suggests that it may have been directly associated in some way with traffic operating on this route.

The CBM assemblage contained crested ridge tiles or louvers, which are generally associated with high status structures and unlikely to have been used on buildings at a site such as this. This material might have come from the nearby Thremhall Priory or from the tilekiln site to the west. This suggests that refuse deposits from elsewhere in the surrounding area may have been used for the infill of features at the current site. This may be further supported by elements of the animal bone assemblage. To the north of the site lay Stansted Park, a medieval deer park (Cooke *et al* 2008), and to the south, the Royal hunting forest of Hatfield where deer were numerous (Hunter 1999). It is probable that the deer remains recovered from this site represent an animal from one of these locations but this does not explain their presence at a site considered to represent low status domestic habitation. The deer of the parks and forests were protected by harsh laws, restricting their hunting to the more affluent and influential members of society. It is possible that these deer remains represent an act of poaching but in light of the presence of other refuse material transported from a high status site it appears more likely that they arrived here through the same, or similar, processes and/or that they represent utilisation of the carcass for products other than meat.

The suggestion that some elements, at least, of the CBM and animal bone assemblages may have been imported from other locations in the surrounding area and are not representative of waste generated at this precise location suggests that other elements of these same assemblages and other finds assemblages recovered from the site are not directly indicative of evidence at this particular location either.

The medieval landscape

In addition to the major elements of the medieval landscape that exist in the proximity of the site, such as Thremhall Priory and Hatfield Forest, and the possible tile kiln at Start Hill 800m to the east, various other evidence of the medieval landscape is recorded in the vicinity of the site. This includes cropmarks representing medieval boundaries at Tilekiln Green, Great Hallingbury (EHER 46554), a pottery scatter recorded at Pantile Farm (EHER 6722), an enclosure ditch recorded at Duckend Farm (EHER 7294), pottery recovered during fieldwalking associated with the Stansted Project (EHER 14329), and a moated mill which may represent Thremhall Priory Mill (EHER 4663). In the slightly wider area, the Stansted Project has identified a variety of medieval settlement sites, flourishing in the 12th and 13th centuries but abandoned by the 14th century (Havis and Brooks 2004). These have been interpreted as satellite settlements and farmsteads dependent on the Domesday manors of Colchester Hall and Bassingbourne Hall (Brooks and Havis 1991). This is suggestive of the dispersed rural settlement, generally occurring as hamlets and scattered farmsteads, that is characteristic of Essex (Hunter 1999, 95). Ward (1996, 130) has identified a period of

settlement expansion and growth in north-western Essex, associated with a period of extensive assarting in the 12th and 13th centuries and a national rise in population. It is possible that the laying out of the main boundary system occurred as part of, or in response to, this period of settlement growth and expansion; ceramic dating evidence is broadly consistent with the later end of this period.

Conclusions

Archaeological excavation at this site has demonstrated that it was utilised during the medieval period for the extraction of clay and that it was divided up into separate plots through the excavation of boundary ditches. It is possible that this represents a 'toft and croft' type arrangement or possibly just a series of roadside enclosures. Finds evidence is suggestive of domestic habitation but no evidence for domestic structures was recorded and at least of some this artefactual material may represent refuse deposits generated away from the site and transported to the site for the purposes of backfilling the open quarry pits and/or boundary features. Proximity and logic suggest that the site may have been associated with the nearby Thremhall Priory and so elements of the finds assemblage that appear to be of high status may have derived from there.

Acknowledgements

Archaeological Solutions Ltd would like to thank the Marshgate Group of Companies for funding the evaluation for assistance, in particular Mr David Warburton. AS would also like to acknowledge the assistance of Mr Peter Meyer of Mitchell Macfarlane. AS also acknowledges the input and advice of Mr Richard Havis of Essex County Council.

The Project was managed by Jon Murray of AS Ltd. Fieldwork was supervised by Gareth Barlow. Pottery was analysed by Peter Thompson. Flint and CBM was analysed by Andrew Peachey. Small finds were analysed by Nicholas J. Cooper. Animal bone was analysed by Julia E. M. Cussans. Environmental samples were analysed by John Summers. Graphics and illustrations are by Kathren Henry and Thomas Light.

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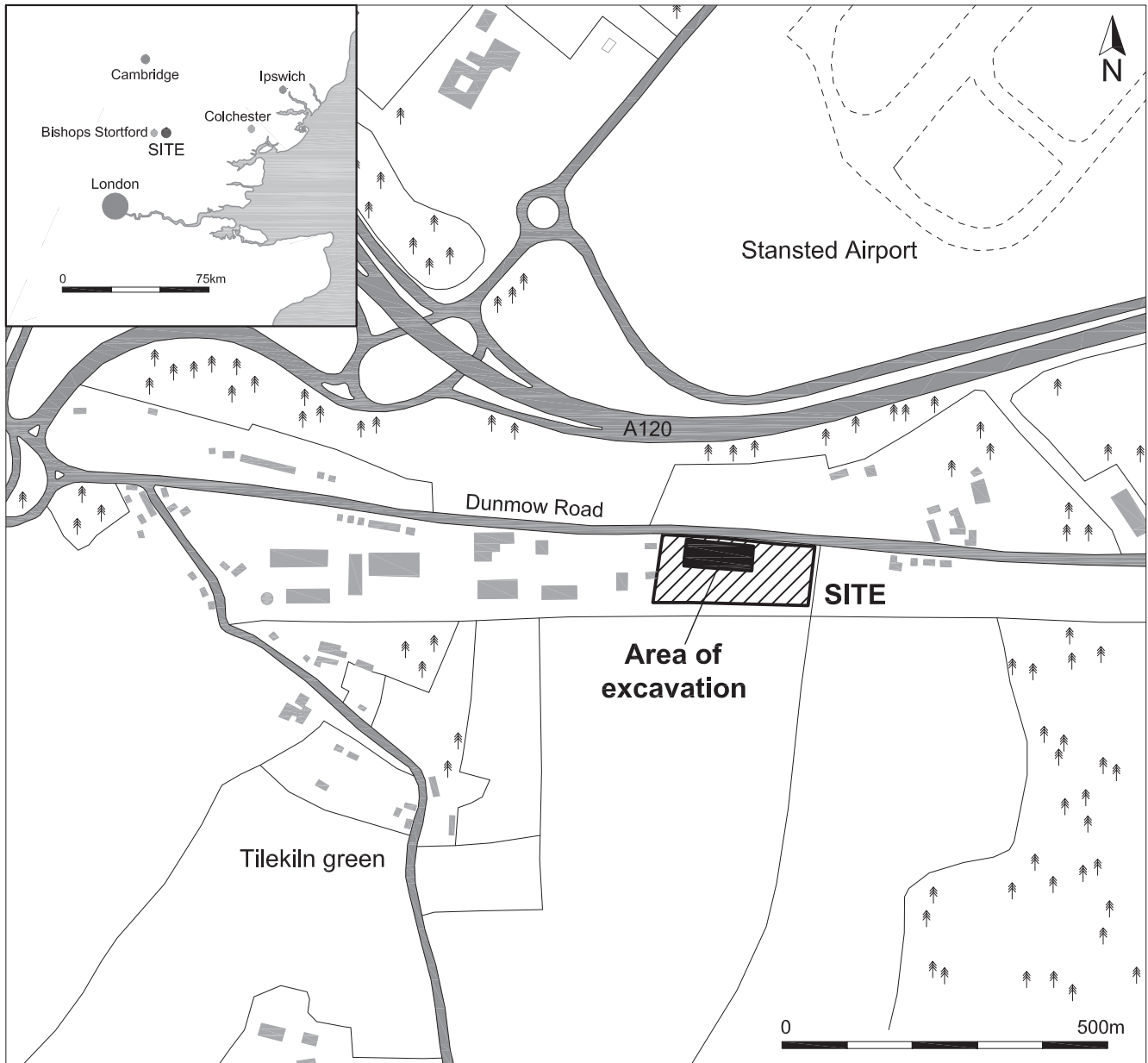


Fig. 1 Site location plan

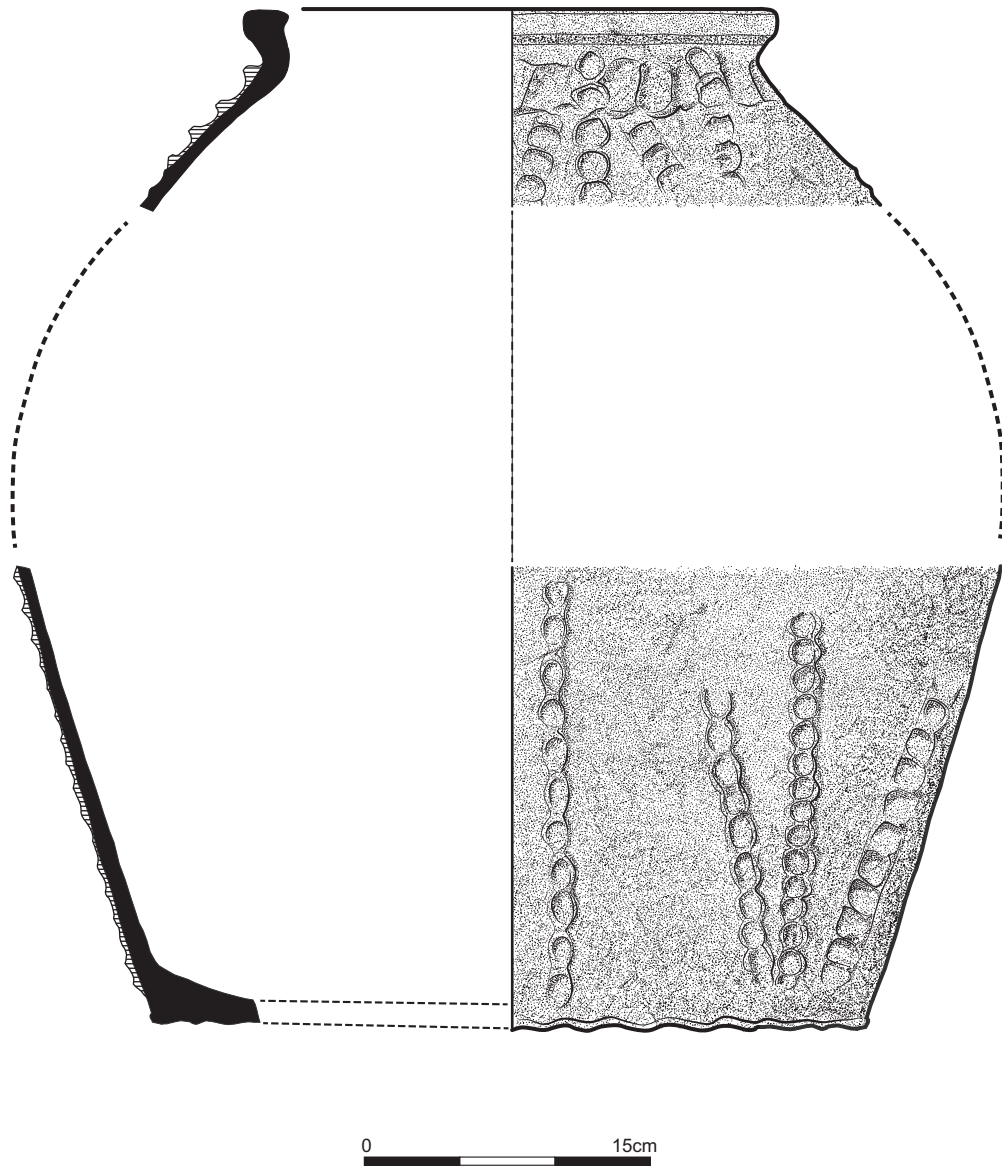


Fig. 3 Large early medieval storage jar