THREE MEDIEVAL VILLAGE SITES IN SUFFOLK:

Archaeological excavations at Church Farm, Brettenham; Mill House, Darsham; and Semer Road, Whatfield, 2014

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Introduction

The concept of this paper was driven by several key regional research priorities regarding medieval sites in the East of England, specifically rural settlements and farmsteads. Medlycott states the need to better understand the origins and development of different settlement types and their dynamics (Medlycott 2011, 70). This includes how rural settlements 'appear, grow, shift and disappear', the form and function of medieval buildings and any links between field size and specific agricultural regimes. Guided by these themes, this paper presents the findings of three recent archaeological excavations at medieval village sites in Suffolk: Church Farm, Brettenham (BTT 027); Mill House, Darsham (DAR 030); and Semer Road, Whatfield (WHA 018).

The sites

The sites in question (Table 1) were excavated by Archaeological Solutions Ltd in 2014. They occupy locations within rural villages in the south and east of Suffolk and all front principal roads (Fig. 1). The Whatfield and Darsham sites are located towards the periphery of their respective settlements, while the Brettenham site is a village centre plot neighbouring the medieval parish church of St Mary the Virgin (Fig. 1). At the time of excavation all three were laid down to pasture. The geological situation of these sites is also similar; they all occupy slowly permeable clay-rich soils suitable for grassland/grazing - at least in the short-term - and the cultivation of winter cereals (Soil Survey of England and Wales 1983, 7, 13 and 17). The underlying geology in each case is chalky till above either London Clay or Cretaceous Upper Chalk (British Geological Survey 1978).

Archaeological background

The undeveloped, rural character of Brettenham, Darsham and Whatfield has resulted in a dearth of historical archaeological investigation. Nonetheless, all three sites occupy favourable settlement landscapes with good archaeological potential close to rivers or streams. The area around Brettenham – within 1 km of the excavated site – includes five probable medieval moated sites and two parcels of ancient woodland. Taylor defines a moated site as 'an area of ground, often occupied by a dwelling or associated structure, bounded or partially bounded by a wide ditch, which in most cases was intended to be filled with water' (Taylor 1978). A dense concentration of such sites exists across the east Midlands and the southern part of East Anglia (Aberg 1978, 2, fig. 1). Three examples are present in the area surrounding Darsham, while two are recorded within 1 km of the Whatfield site (Fig. 1). The latter is also close to a possible medieval house platform. Extant medieval remains in each case include the Grade I listed churches of St Mary the Virgin (Brettenham), All Saints (Darsham) and St Margaret's (Whatfield) (Fig. 1). Darsham parish church dates from the 12th century while Domesday Book records an 11th century church at Brettenham (http://opendomesday.org); the existing church building (Suffolk Historic Environment Record (SHER) BTT 006) is largely of 14th century date with some 15th century and later work (www. britishlistedbuildings.co.uk). Although Domesday Book records no church for Whatfield, St Margaret's is thought to be one of two churches listed for the parish of Aldham (SHER WHA 009); the extant fabric is 13th to 15th century in date.

Notable archaeological evaluations have taken place at Darsham (Meredith 2012) and Whatfield (Bampton 2012). Trial trenching on land adjacent to Station Garage, Darsham (SHER DAR 021), some 900 m westsouth-west of Mill House, revealed a small number of parallel medieval ditches containing 12th to 14th century pottery. The Whatfield evaluation (SHER WHA 015), located some 550 m north-east of the Semer Road site encountered a medieval pit and gully containing 11th to 13th century pottery and daub of possible medieval date. At Brettenham, archaeological monitoring and recording at Old Rectory School (SHER BTT 018), approximately 250 m to the north of Church Farm, encountered a possible mound platform and a group of ponds of medieval or post-medieval date. No fieldwalking is recorded in the vicinity of the sites and isolated finds are few. Those reported by the Portable Antiquities Scheme include medieval coins (e.g. SF-C8AA93) and a lead alloy seal matrix of c. 13th to 14th century date (SUSS-1435E5) from the Darsham area and a cast medieval buckle of Meols type 6 from Brettenham (SF-5387AA; https://finds.org.uk). No such finds are listed for Whatfield.



Figure 1 Site locations.

Table 1 Site summary. SHER = Suffolk Historic Environment Record; NGR = National Grid Reference

Village	Site Name	SHER Code	NGR (point)	Area (hectares)
Brettenham	Church Farm	BTT 027	TL 96744 54135	0.23
Darsham	Mill House	DAR 030	TM 41490 70170	0.80
Whatfield	Semer Road	WHA 018	TM 02226 46383	0.20

Excavation results

Chronological phasing

Based on the artefactual evidence (pottery and ceramic building material (hereafter CBM)), medieval activity at Brettenham and Darsham was dated to the 12th to 14th centuries, whilst Semer Road, Whatfield included two overlapping medieval phases dating to the 11th to 13th and 12th to 14th centuries respectively. The 14th century cessation of medieval activity was common to all three sites. The Brettenham pottery assemblage is dominated by unprovenanced coarse wares, with sand tempered wares comprising 44.8 per cent of the assemblage and medieval gritty wares, 38.3 per cent. Of the 13 fineware sherds present, six are Hedingham ware, five are Colchester-type wares and two are Hollesley-type wares. Forms comprise bowls, cooking pots and jugs (Table 2; Fig. 2).

The Darsham pottery assemblage is dominated by sherds of high medieval date, with just 1.4 per cent comprising late medieval and transitional or later wares. The medieval assemblage is a homogenous group of sand tempered fabrics, most of which (76.8 per cent) are Hollesley-type wares, with some vessels almost



Figure 2 Selected pottery illustrations.

Table 2: Summary of illustrated pottery sherds

Site	Figure No.	Description
Brettenham	2.1	Medieval gritty coarse ware jar (12th to 13th century)
	2.2	Medieval sandy ware (12th to 13th century)
Darsham	2.3	Hollesley ware cooking pot; upper profile (13th to 14th century)
	2.4	Hollesley coarse ware decorated bowl (13th to 14th century)
Whatfield	2.5	Early medieval shelly ware inturned bowl rim (11th to 13th century)
	2.6	Medieval grey sandy coarse ware cooking pot (13th to 14th century)

certainly deriving from the Hollesley kilns (Anderson *pers. comm.*). The use of these kilns is dated between the 13th and 14th centuries. Just 10.4 per cent of the Hollesley-type wares display evidence of glaze. Forms comprise cooking pots, jugs and bowls (Table 2; Fig. 2).

The medieval coarse wares recovered from Semer Road, Whatfield can be split into three principal groups: sandy wares, comprising 45.1 per cent of the assemblage; early medieval shelly wares (32.6 per cent); and medieval grey wares making up just 17.5 per cent. The remaining unglazed sherds comprise four of probable Hedingham fine ware and eight tiny sherds which equate to Essex Fabric 21 and are similar to Colchester-type wares (Cotter 2000). The Whatfield assemblage contains just four glazed sherds, comprising one of Hedingham fine ware, an Ipswich ware handle and two residual sherds of green glazed and white slipped Colchester type ware. Forms comprise jars, bowls and a single jug (Table 2; Fig. 2). Full reporting of the medieval pottery from these sites, including raw data, is presented elsewhere (Thompson 2015a; 2015b; 2015c).

The only useful CBM assemblage was recovered from Church Farm, Brettenham. Quantities of peg tile and daub from this site attest to local building activity between the 12th and 16th centuries. Peg tile is present in two fabrics, which are likely to represent contrasting chronological production, with the first potentially produced from the late 12th to 14th centuries, while the second fabric may have been produced as early as the late 13th century, but is more likely to be associated with the increasingly standardised production of peg tile that evolved locally in the 14th to 15th centuries and was recorded in legislature in 1477 (Drury 1981, 131). The bulk of the CBM assemblage from Darsham is postmedieval in date and includes only sparse fragments of possible medieval tile in a highly abraded condition. The Semer Road site was devoid of CBM.

Site layout

The excavated sites shared a commonality of form and layout. They were all bounded by at least one road and each was divided into a series of separate enclosed spaces by ditched boundaries that broadly mirrored or ran perpendicular to the roads (Figs 3 and 5-6). This suggests that the routes of the modern roads were laid out by the medieval period and that their alignments probably served as reference for the enclosure of adjacent land. Early mapping, including the 1843 tithe map of Darsham and the 1885 Ordnance Survey maps of Brettenham and Whatfield show no significant alteration in road layout since this time. In the case of Brettenham and Darsham, short lengths of ditched trackway were also identified which appeared to provide access between the excavated enclosures and adjacent roads. One or more trackways at Church Farm, Brettenham appeared to run between enclosures (Fig. 3).

The layout of the Church Farm site was the most complex and included the greatest concentration of medieval features (Fig. 3). Eleven separate boundary ditches were identified within the excavated area, although one was heavily truncated by subsequent activity and may have actually been an irregular pit or



Figure 3 Church Farm, Brettenham (BTT 027).

pond. The medieval boundaries defined parts of two enclosures and three possible trackways. Enclosure B1, located within the north-western part of the site measured at least c. 87 m² internally and was enclosed to the south-east by a pair of coaxial, partly intercutting ditches. These were thought to represent either a doubleditched boundary or a succession of individual boundary features. The Enclosure B1 ditches all contained single fills possibly indicating that they were short-lived and/ or had been backfilled within a relatively short space of time. The south-western edge of the enclosure was truncated by a broadly contemporary ?pond, which strongly suggests that the layout of the medieval site was latterly reorganised.

Enclosure B2 at Brettenham (Fig. 3) was again defined by coaxial ditches to the north-west and southwest, possibly representing double-ditched boundaries. A third ditch running parallel to the north-western enclosure boundary may have defined an 'internal' division of space or part of a trackway leading towards the line of nearby Buxhall Road. Once again, these boundary features contained only single fills, possibly suggesting that they had been short-lived or backfilled rapidly as part of a single event. It is highly unlikely that the Brettenham trackways, if genuine, were wholly contemporary. Their parallel alignment perhaps better suggests the lateral modification of a single route over time. The stratigraphic and dating evidence did not suggest a clear sequence of development, however.

A single, sub-rectangular Enclosure (D1) was identified at Darsham, although the corner of a possible second was partially exposed at the eastern site boundary (Fig. 5). Enclosure D1 was defined by a single rectilinear ditch and measured at least c. 645 m² internally. The eastern end of the enclosure had been truncated by later activity and no medieval boundary remained. A possible ditched trackway was present to the north of the enclosure and appeared to lead eastwards towards nearby Priory Lane. The northern edge of the possible trackway was defined by a longer,



Figure 4 Church Farm, Brettenham (BTT 027), Structure B1.

wider ditch which continued to the west and formed part of a possible field boundary with other medieval and undated features. Enclosure D1 may have represented a delineated 'space' at the northern edge of this field. The fill of an additional, wider boundary ditch or possible medieval pond was truncated by the northern edge of the possible field boundary (Fig. 5).

Evidence of enclosure at Whatfield was less clear-cut. The 11th to 13th century site was defined to the south by the meandering course of a ditch (F1005=2026) which ran broadly east to west, essentially parallel to Semer Road (Fig. 6). The eastern extent of this boundary truncated the fill of a curvilinear ditch which may have defined some form of pen set against F1005 (=2026). Both ditches had similar profiles and contained comparable fills, suggesting that they were broadly contemporary. Short sections of two rectilinear ditches were recorded to the north and east of this pen, although their relationship to the latter was unclear.

In the western area of the site a series of three 11th to 13th century ditches was encountered running c. north-east to south-west away from the southernmost boundary (Fig. 6). Two further ditches were present a short distance to the north of the latter, both of which very loosely mirrored its approximately east to west alignment. It is thought that these ditches formed a rectilinear system of early medieval enclosures or fields to the north of Semer Road (Enclosures W1–3; Fig. 6). The largest of these – Enclosure W3 – measured c. 270 m² within the confines of the excavation although may have been substantially larger. Enclosures W1 and W2 measured at least c. 70 m² and c. 145 m² respectively. Only a single instance of intercutting boundaries was identified in this area.

The 12th to 14th centuries at Whatfield were more sparsely represented and lacked any evidence of renewed enclosure (Fig. 6). However, features of this date did not cut the earlier medieval boundaries and it is possible that Enclosures W1–3 were still in use, to some extent, when the later features were established. The overlapping chronology of the medieval phases at this site goes some way to supporting this hypothesis.



Figure 5 Mill House, Darsham (DAR 030) (eastern site area only).

Evidence of activity

The Brettenham and Darsham sites included good evidence of activity within/around the identified medieval enclosures. In both cases this evidence included pits, postholes and ponds. A possible well was also present at Brettenham. Notable features included Pit F2035 at Brettenham, which yielded the largest medieval pottery assemblage from this site (46 sherds; 595 g). F2035 was also one of the larger Brettenham pits, measuring $1.97 \times 1.80 \times 0.45$ m (Fig. 3), although, like most of the medieval features, it contained only a single fill. Other finds from this pit, including an iron hook, animal bone and oyster shell would tend to suggest that it was ultimately used for the disposal of domestic rubbish, although its large size implies a different original purpose. It may have been a quarry feature, although the rather mixed nature of the local drift geology makes the intended target of any quarrying activity difficult to determine. A possible post-medieval clay extraction site (SHER BTT Misc) is recorded in the near vicinity, however.

Of additional interest at Brettenham were Pit F2078, ?Pond F2037 and Well F1026 (Fig. 3). F2078 was the largest Brettenham pit (in plan), although was comparatively shallow at just 0.28 m. It is possible, however, that its depth was the result of post-medieval/ modern truncation, possibly by ploughing. Like Pit F2035, it is thought that this feature may have derived from quarrying activity, although it may equally have represented a pond that had been backfilled with domestic waste. No gleyic component - potentially representing sediment formed under waterlogged/anoxic conditions (Ashman and Puri 2002; Lindbo et al. 2008) - was identified within the fill of F2078. Possible Pond F2037 was similarly shallow at just 0.25 m. Like Pit F2078, this feature contained a single fill which yielded modest quantities of pottery, CBM, iron fragments (mostly nails), animal bone and shell. The nails may have originally derived from a nearby post-built structure (see below; Fig. 4). The fill of this feature also lacked evidence of waterlogging. The fact that F2037 truncated part of the Enclosure B1 boundary (Fig. 3) suggests that



Figure 6 Semer Road, Whatfield (WHA 018).

the layout of the medieval site was significantly altered at some point, perhaps as a consequence of changing social and/or economic conditions.

Well F1026 had a distinctive steep-sided profile and a flat base $(1.65 \times 0.56 + \times 0.61 \text{ m})$ (Fig. 3). The interpretation of this feature was originally made by the excavator and is supported by the seasonally waterlogged nature of the local soils (Soil Survey of England and Wales 1983, 13). Although F1026 did not contain a lining or other structural evidence that one might associate with a well, similarly crude medieval examples have been recorded elsewhere, including an earth-cut well from Cedars Park, Stowmarket (Woolhouse forthcoming). Johnston also notes that medieval wells were often little more than 'holes dug down to the water table', with rural examples often lacking walls or other accoutrements (Johnston 2011, 713–14).

A total of 15 medieval pits, including a possible pond (F2059) were encountered at Mill House, Darsham. All of these were located in the eastern part of the site, within or surrounding Enclosure D1 (Fig. 5). Like the

Brettenham examples, most of the pits also contained single fills. Finds from the pits generally comprised pottery and animal bone with lesser quantities of CBM/ fired clay and ferrous nails/fragments. Notable pottery groups were present within Pits F1020 (2669 g) and F2040 (1200 g), both of which were located within the confines of Enclosure D1 (Fig. 5). This concentration of material suggests the presence of a nearby dwelling(s), though no contemporary structural remains were identified.

The possible pond at Darsham (F2059; Fig. 5) was stratigraphically early within the medieval sequence. This feature was elongated in plan and quite deep, measuring $22.00+ \times 4.30 \times 0.72$ m. It contained three consecutive fills. The blue/grey colour of its primary clay fill suggested a gleyic sediment formed under conditions of at least intermittent or seasonal waterlogging, in keeping with the site's slowly permeable geology (Ashman and Puri 2002; Lindbo *et al.* 2008). Given the linear nature of F2059, however, we cannot discount the possibility that it represented a broad boundary and/or

drainage feature. This ditch was aligned down the gentle eastern slope of the site.

A possible quarry-type feature (F2051; Fig. 5) was also encountered at Darsham. This comparatively deep feature (c. 1.00 m) was situated on slowly permeable clayey soils and was originally interpreted as a well. However, unlike nearby possible pond F2059 the fill of this feature did not suggest any level of waterlogging. A similar interpretation might be suggested for Pit F2013, immediately to the east of Enclosure D1 (Fig. 5). Unlike the majority of features at Darsham, this feature contained two consecutive fills, suggesting that it was something more than just a single-use rubbish pit.

Evidence of activity at Whatfield was restricted to just four datable features (Fig. 6). One of these was a possible foundation trench and is described separately (see below). A single 11th to 13th century pit (F2017) was present within Enclosure W3, close to its southern edge (Fig. 6). This shallow feature was sub-rectangular in plan and contained a fill of mottled orange/brown silty clay with moderate charcoal inclusions. This material yielded nine sherds (23 g) of pottery and was thought by the excavator to represent redeposited burnt material, possibly hearth waste. An environmental sample of this fill contained nothing of note, however.

Twelfth to 14th century features at Whatfield included two substantial pits (F2039 and F2044) (Fig. 6). Suboval Pit F2044 contained a single fill and yielded a comparatively rich finds assemblage including 91 sherds (300 g) of pottery, CBM (100 g) and animal bone. The volume of finds from this feature – all within a single backfill – suggests that it was deliberately dug for the disposal of domestic rubbish. This feature truncated the fill of a possible construction cut (see below).

A substantial pit, F2039, was located in the southernmost corner of the site and appeared ovoid in plan with steep sides and a concave base (Fig. 6). This feature had been heavily truncated by an undated pit and was also partially obscured by the edge of excavation. The depth of F2039 suggests that it may have been a clay extraction pit; certainly, the relative dearth of finds from this feature (including small to modest quantities of pottery, CBM and animal bone) does not suggest a primary use for waste disposal.

Structural evidence

Enclosure B1 at Church Farm, Brettenham contained ten pits and postholes which appeared to form the subrectangular outline of a putative earth-fast structure (?Structure B1), the edges of which mirrored the alignments of surrounding boundaries (Fig. 4). The pits and postholes were all shallow and, with the exception of one, contained single fills. It is possible, based on their very shallow depth, that some or all of these features had suffered a degree of truncation, perhaps as a result of post-medieval/modern ploughing. This may also account for the comparative lack of features forming the southwestern extent of ?Structure B1. The surviving pits and postholes were mostly located to the north-east and were regularly spaced. Two pits were set apart from the main trunk of the structure, a short distance to the north-west, and may have formed a porch, lean-to or similar.

Only three of the features making up the possible Brettenham structure contained finds. The combined assemblage comprises just three sherds (31 g) of pottery and trace CBM and animal bone. One of these features (Pit F2017) also represented the only 'internal' feature, although its purpose remains unclear. Based on the overall character of the medieval archaeology, however, it is likely that this structure – if genuine – comprised an outbuilding/shed or similar, perhaps with an agricultural function (see below). The paucity of internal deposits, like the shallow depth of the structure's constituent features, may be due to later truncation.

At Mill House, Darsham the nearby presence of a medieval structure was suggested by finds of possible thatching/flooring material and carpentry/roofing nails. Any dwelling associated with this site is likely to have fronted The Street or Priory Lane, possibly in the area of neighbouring Mill House (to the immediate east).

A possible 12th to 14th century foundation trench (F2046) was identified at Whatfield. This feature was rectangular in plan (measuring at least 27 m²) and shallow with steep sides and a single fill of compacted clay silt. The fill of the foundation trench was comparatively rich, with finds including pottery (121 sherds; 1053 g) and animal bone (558 g). It was suggested by the excavator that this context comprised an occupation layer, perhaps associated with a structure for which F2046 was the construction cut. Certainly, excavation into the site's underlying clay would have provided a reasonably sound foundation. However, no structural features were present within the base of the cut to suggest the presence of an earth-fast building. Furthermore, environmental samples from this feature yielded nothing of note. Nonetheless, structural evidence from the surrounding area includes a possible medieval house platform (SHER WHA 011) located adjacent to Rectory Lane, c. 200 m to the southwest of the Semer Road site.

Environment and economy

The animal bone

Small animal bone assemblages were found at each of the sites with a total bone count of c. 430 fragments. Domestic mammal bone assemblages at the three sites were all fairy similar with cattle, sheep/goat, pig and equids all being represented. At Darsham sheep were positively identified, but no positive identifications of goat were made. At Whatfield equid bones were noted as being particularly small and likely belonging to a pony or a mule; no other such distinctions were made. Some bones from each of the sites had evidence of dog gnawing but no dog bones were recovered indicating their remains may have been disposed of differently to those of other domestic species. Indeterminate large and medium mammal bones were also present from each site.

The occurrence of birds was much more variable. At Whatfield the remains of at least two geese were buried in Pit F2039, representing one adult and one juvenile; a number of other unidentified bird bones were also present. At Brettenham only a single bantam chicken bone was recovered, and at Darsham no bird remains were noted.

The small sizes of the assemblages means that making detailed analysis of the site economies is difficult to do with any reliability but some comment can be made on the available ageing and butchery data. Cattle were clearly used as a meat source at all three of the sites with prime meat age animals being present and clear signs of butchery; however, animals of other ages were also present. The occurrence of older animals was noted at Darsham and Brettenham, while the latter also included neonates. This variety in cattle age may indicate a mixed use, possibly including traction and dairying. A butchered horn core from Whatfield indicates the utilisation of cattle horns.

The sheep/goat bones from Darsham and Brettenham indicate the presence of adult animals and body part representation points towards possible selection of body parts, with some of the meatier elements possibly being traded away from the sites. However, these relatively small samples must be treated with caution. The sample of sheep/goat bones from Whatfield was too small for comment.

The pig bones from Darsham showed only the presence of prime meat age animals with no indication of breeding stock. Only single pig bones were found at Brettenham and Whatfield, that from Brettenham indicating the presence of a male animal (mandibular canine).

Where age data were available equid bones all belonged to adult animals. Horses, ponies and mules seem likely to have been used as traction or pack animals (Grant 1984). There is no evidence horse meat was consumed, but butchery marks on horse bones from Darsham indicate possible skinning.

Birds are likely to have been used as a supplementary source of meat; the bantam bone from Brettenham bears a cut mark. No butchery marks were observed on the goose remains form Whatfield and it seems likely that if consumed they were cooked whole. It is also possible that these birds were guard animals that died of natural causes. Eggs and feathers were also a likely secondary resource.

The marine molluscs

All three sites yielded small marine mollusc assemblages with some variation between the three. Native oysters (*Ostrea edulis*) were the dominant species at all of the sites and at Whatfield were the only species identified. A small number of mussels (*Mytilus edulis*) were present at both Brettenham and Darsham and at the latter cockles (*Cerastoderma edule*) were also represented. The Whatfield assemblage was small, well preserved and fairly dispersed throughout the deposits; no signs of human modification or parasitic attack were noted.

In contrast the oysters from Darsham all came from a single deposit and the majority bore opening notches on both upper and lower valves; it was thought most likely that these shells (minimum number of individuals = 22) represent the remains of a single meal. The oysters were of a small size (35–50 mm in length) compared to those found in Poole, Dorset (80–90 mm) and due to the clumped nature of some of the shells and the malformed nature of others it is thought that these oysters derived from natural oyster beds (Winder 1992). Chalky deposits present in a large number of the shells, indicative of changes in salinity, tend to suggest an estuarine origin for the Darsham oysters. Those from Brettenham were more dispersed throughout the deposits with only a small number of opening notches present. The shells were similar in size to those found at Darsham but their uniform size and shape led to their interpretation as deriving from cultivated beds. A small number of the Brettenham oysters had holes punched through them, perhaps indicating a use as fishing line or net sinkers.

The environmental data

A single sample from the early medieval phase (11th to 13th centuries) at Whatfield produced an appreciable number of carbonised plant macrofossils. This material derived from the southernmost site boundary and comprised free-threshing type wheat grains (*Triticum aestivum/turgidum*) and oat (*Avena* sp.), along with a small amount of diffuse porous charcoal (potentially *Corylus* sp.). Free-threshing wheat was the primary cultivar in many parts of Britain from the Anglo-Saxon period onwards, while the limited presence of oat could be attributed to fodder rather than human consumption (Ballantyne 2005; Carruthers 2008; Murphy 1985).

The dominance of free-threshing type wheat was also identified in five bulk samples from early to high medieval (12th to 14th century) deposits at Whatfield. Lesser numbers of hulled barley (*Hordeum* sp.), oat (*Avena* sp.) and rye (*Secale cereale*) were also present. Amongst the cereals were a number of tail grains, most likely from wheat, and a single culm node. Culm nodes were also present in a single sample from Darsham. Such remains often represent the by-products of cereal processing, although culm fragments can often remain with the final product.

The Brettenham and Darsham samples also indicated a clear dominance of free-threshing type wheat. Other cereal taxa comprised lesser numbers of barley and oat as well as indeterminate wheat from Darsham. Barley is likely to have been grown as another significant crop and may have had an additional role as fodder. Oats are another common fodder crop but the occurrence of only a single grain from Darsham may simply indicate its presence as a weed of other cereals. Carbonised plant remains were frequently encountered in the sampled deposits from Brettenham, with densities ranging from 2.7 to 4 items per litre. No more than 4.9 items per litre were recorded from Darsham. Such concentrations are likely to reflect the accumulated debris from multiple events of refuse deposition, which most likely included hearth ash, rather than discrete dumps of material from a specific process.

One medieval boundary at Darsham also produced a single grain and glume base of emmer/spelt wheat (*T. dicoccum/spelta*). Glume wheat is not a commonly recognised crop during the medieval period, with a change to the primary cultivation of free-threshing type wheat during the Anglo-Saxon period. However, there is evidence of continued cultivation or the reintroduction of glume wheat in some areas, including the East of England, throughout the Anglo-Saxon period (Carruthers 2008; Murphy 1985, 2005; Pelling and Robinson 2000). Medieval (12th–13th century) spelt wheat remains have also been identified from West Fen Road, Ely (Ballantyne 2005, 108). If considered to have a medieval origin, the low concentration of glume wheat remains in this instance may indicate its presence as a persistent weed of other crops, rather than a cultivar in its own right.

The 12th to 14th century pits at Whatfield also contained pea/bean seeds (Fabaceae), which are likely to have had a dietary role. In addition were two small grass seeds, including a single example of meadow grass (Poa sp.), which may have been present as an arable weed. A single specimen of horse bean (Vicia faba var. *minor*) and other pea/bean seeds (large Fabaceae) were recorded from Brettenham, while numerous pulses (large Fabaceae) were recorded from Darsham. These probably represent cultivated pulses, which are likely to have been an important source of diversity and protein in the medieval diet. Other non-cereal taxa from these sites included stinking chamomile (Anthemis cotula), a common weed of heavy, fertile soils. Good soil fertility is also indicated by goosefoot (Chenopodium sp.) in a number of samples from Brettenham, while other likely arable weeds included brome grass (Bromus sp.). Grassland taxa from Brettenham, in the form of buttercups (Ranunculus sp.) and eyebright/bartsia (Euphrasia/Odontites sp.) may indicate a contribution to the charred assemblage from grassland habitats, although both of these can also grow as arable weeds. The Darsham samples also included Great Fen sedge (Cladium mariscus), an important thatching material and fuel from at least the later medieval period onwards (Rowell 1986, 142-3).

The evidence from the early to high medieval phase at Whatfield is primarily for clean grain, perhaps carbonised during food preparation activities. However, the presence of a small number of weed taxa, cereal culm and wheat tail grains may indicate that some cereal processing by-products were also making their way into the deposits. At Darsham the common occurrence of pulses and the limited number of chaff elements in the samples indicates that much of the material recorded is from the day-to-day processing and use of cereals and other plant foods as part of food preparation activities. The Brettenham samples represented predominantly clean grain, with no chaff remains identified. Only a small number of non-cereal weed taxa were present. Charcoal from all three sites was present in small quantities only, insufficient for detailed analysis.

Terrestrial molluscs from Whatfield show predominantly grassland taxa, including those which prefer longer vegetation and more shaded conditions (e.g. Carychium sp., Cochlicopa sp., Discus rotundatus and Trichia hispida group). This implies that prevailing conditions on the site were long grassland or waste ground and that these conditions changed little over time. The presence of Anisus vortex from possible quarry pit F2039 also suggests some standing water in the base of this feature during the time it remained open. A number of shells were present in the samples from Brettenham, with several grassland (e.g. Helicella itala, Pupilla muscorum and Vallonia sp.) and catholic (e.g. Cochlicopa sp. and Oxychilus sp.) taxa recognised. These probably reflect grassland with some more shaded areas of scrub. A single shell of Lymnaea truncatula from Enclosure B1 also suggests some standing water, at least on a seasonal basis. Similar grassland and catholic taxa were recorded from Darsham, with a small number of aquatic snails, including *Anisus leucostoma* and *Lymnaea truncatula*, also indicating seasonal waterlogging.

Discussion

Settlement development

Much recent archaeological study has concerned factors influencing the appearance and development of medieval villages (Turner 2008). Jones and Page, for example, note various causal processes behind the creation of nucleated medieval villages including the reorganisation of existing dispersed settlements and expansion from one or more smaller foci (Jones and Page 2006). Jones also suggests that nucleation may be the result of multiple, lesser actions rather than any one overarching cause (Jones 2010, 25). Medlycott has pointed out the need to better understand such processes as regards medieval settlement in the East of England (Medlycott 2011, 70). Although we cannot make a major contribution here, the excavated sites do present some interesting findings.

The sites yielded evidence of activity dating from the 11th century in the case of Whatfield, and the 12th century in the case of Brettenham and Darsham. The 14th century cessation of medieval activity was a universal characteristic and is discussed in more detail below. The rectilinear medieval boundaries which characterised all three sites appeared to respect the alignments of neighbouring roads. This relationship was particularly notable at Brettenham and Darsham and suggests that the roads were already established by the medieval period, with subsequent activity being focussed along their routes. It might be postulated, therefore, that the Whatfield and Darsham sites, both of which occupied village edge locations, were developed as part of an outward expansion of settlement along established roads, whilst Church Farm, Brettenham occupied a more central position. At Long Melford in Suffolk the 'ribbon development' of the medieval settlement occurred along the main road from its early, nucleated core (Beresford and St Joseph 1979, 139). A similar outward spread is noted at the market town of Debenham (Bailey 2007, 127) and the village of Peasenhall (Gardner 2004). Indeed, by the 13th century the focus of medieval settlements across England had shown a marked shift from local power bases to major roads and other trade routes (Schofield and Vince 2003, 34; 37).

In possible contradiction of this linear model of expansion is the earlier (11th century) start date for medieval activity at Whatfield. The peripheral location of this site, some 350m from the parish church might suggest that this village developed from a number of dispersed nuclei rather than a single core. Other early finds from the village include an early Anglo-Saxon bow brooch fragment unearthed by metal detecting to the east of the village centre (SHER WHA 014). The possible joining up of separate settlements in this case might also be hinted at by the considerable number of landholders recorded by Domesday Book, numbering eight in total and including the Benedictine priory at Bury St Edmunds (http://opendomesday.org). This pattern of settlement development is well documented across East Anglia, particularly in areas of weak lordship, and is best illustrated by many of the Breckland villages which were 'formed by the fusion of separate loci into loosely nucleated vills' (Bailey 2007, 72).

Settlement form and function

It should be noted that due to the scope of these developerfunded excavations, no archaeological condition for aerial photographic assessment or geophysical survey was stipulated; a comparison of the excavated features with such evidence was not, therefore, undertaken.

The sites were all characterised by systems of one or more ditched enclosures, while possible integrated trackways were also identified at Darsham and Brettenham. At the Church Farm site, two rectilinear medieval enclosures were partly revealed within the excavated area (Fig. 3). Although it was not possible to determine a clear stratigraphic sequence of enclosure, the datable finds assemblage attests to the broad contemporaneity of all medieval boundaries. Evidence for the limited recutting/maintenance of enclosure ditches was noted, however. Morphologically, Enclosures B1 and B2 appeared similar. Both mirrored the alignments of adjacent roads and both included possible coaxial boundaries along one or more sides. In two instances, however, these may have represented sequential, single ditches rather than 'paired' features. All of the medieval ditches contained single fills, possibly indicating that they were short-lived and/or rapidly backfilled.

The boundary ditch forming Enclosure D1 at Darsham also contained a single fill along most of its length, as did the vast majority of medieval features at Whatfield. Once again, this may indicate their relatively short-term use and/or rapid infilling. Unlike Brettenham, evidence of intercutting/recutting was minimal at both sites, which suggests that the ongoing maintenance or replacement of boundary ditches did not occur on any significant scale; however, an earlier possible boundary was truncated by the western extent of Enclosure D1. Like Brettenham, the Darsham and Whatfield ditches all appeared to respect the alignments of nearby roads.

Inter-site comparison of enclosure size has little to offer in terms of their interpretation. In all three instances enclosures were only partially revealed. Enclosure D1 was perhaps the most complete example at $c. 645 \text{ m}^2$, although its eastern extent had been completely truncated by a later ditch (Fig. 5). Nonetheless, evidence of activity associated with the enclosures was broadly comparable at all three sites, although Brettenham and Darsham were most similar. In both instances, the enclosures were associated with a significant number of pits and postholes, including rubbish pits and possible quarries and wells. Both sites also included substantial features interpreted as possible ponds. At Brettenham these features were encountered across the site, although were most numerous in and around Enclosure B1 where several formed the outline of a possible earth-fast structure (?structure B1; Figs 3–4). Earth-fast construction, although more prevalent prior to the introduction of cruck construction and the blanket availability of bricks in the late medieval and post-medieval periods (Crabtree 2000, 77), persisted in use in Britain - particularly in poorer dwellings and outbuildings - well into the 19th century (Meeson and Welch 1993). A substantial late 18th century cart shed at Hall Farm, Loxley (Warwickshire), for example, was found to include earth-fast posts (Alcock and Harris 1987).

The outline of possible Structure B1 appeared incompletely defined by the surviving features particularly towards its south-western extent - and it is likely that other elements, including possible floor surfaces, had been lost to later activity/disturbance (Fig. 4). Browning and Higgins (2003, 75) note that medieval building remains can be 'notoriously insubstantial', however, especially where building stone is less available. Timber was, in fact, the most widely employed building material throughout the Middle Ages and basic wooden structures often survive only as postholes (Newman 2001; Parsons 1991, 2). Although it is difficult to speculate regarding the function of structure B1, it may have been a simple ancillary building such as a shed or byre, perhaps part of a toft fronting the line of The Street (see below). Across Europe, widespread socio-economic changes between the 11th and 13th centuries resulted in the appearance of more and varied buildings surrounding rural dwellings, including housing for livestock (Chapelot and Fossier 1985, 211). Regional excavated examples of such structures include 13th century farm buildings at the A12 Interchange, Chelmsford (Essex) (Lavender 1999).

Regardless of their primary uses, many of the encountered features at all three sites contained material consistent with domestic rubbish disposal. This type of medieval 'backyard' activity is in keeping with excavated evidence from across East Anglia and might suggest that the Brettenham and Darsham enclosures formed elements of toft and croft-type peasant holdings (e.g. Newton et al. 2013; Soden 2010). Tofts were simple, rural dwellings and associated structures, while crofts were larger agricultural enclosures attached to the former (Astill 1988; Gies and Gies 1991). Dyer suggests that crofts formed elements of family-based subsistence regimes and could be used for both arable cultivation and pastoral agriculture (Dyer 1989; 2000). Excavated examples of this settlement type include a 9th to 13th century holding fronting the Old Great North Road at Water Newton, Cambridgeshire (Newton et al. 2013). This site included a possible earth-fast structure and yielded evidence of a mixed agricultural economy. A 12th to 13th century toft and croft was also excavated at Anstey in Leicestershire. The toft at this site included a raised platform and buildings, and was separated from the croft by a partly ditched medieval hollow-way; similar to the arrangement of sequential ?trackways at Brettenham (Fig. 3). The location of this site, c. 4.8km from Leicester, suggested that the holding may have comprised a tenement of the town's Abbey (Browning and Higgins 2003). The Darsham site displays similar possible associations, situated some 4.9km from the rich Cistercian Abbey at Sibton, c. 6km from the Augustine Priory at Blythburgh and close to a monastic main manor (Northeast 1999, 70-1). Indeed, the Blythburgh Priory Cartulary details a number of church holdings in the parish from the 12th century (Harper-Bill 1980, 122ff). Domesday Book also records 11th century holdings by Bury St Edmunds Abbey in Brettenham and Whatfield (http://opendomesday.org).

The Whatfield excavation did not produce clear evidence of a toft and croft type holding, at least in the earlier phase of medieval activity. The majority of 11th to 13th century features comprised boundaries of larger enclosures/fields, delineated to the south by a long, meandering ditch (Fig. 6). This landscape of ditched boundaries enclosing open 'fields' agrees with the general character of medieval farming across East Anglia (Williamson 2005, 19). However, the overlapping chronology of the medieval phases at this site suggests that the field system was still in use – at least in part – when later (12th to 13th century) features were established; no intercutting of earlier and later features was noted. A possible foundation trench recorded immediately south of Enclosures W1–3 may allude to the one-time presence of a structure, possibly a dwelling, although this remains uncertain.

Other medieval features to the south of the Whatfield enclosures included a rubbish pit and a substantial possible quarry (F2039). Based on the scale of Pit F2039, it is possible that it was associated with the extraction of the site's natural clay geology, perhaps for brickmaking. The 12th century resurgence of brickmaking had its foundation in East Anglia and the earliest surviving English brick building – a late Norman church – is located at Polstead in Suffolk (Pankhurst 1999, 146). Local evidence of brickmaking includes the site of a post-medieval brickworks at Brick Kiln Farm, Hadleigh (SHER HAD 062), some 3.8 km to the south of Whatfield. A cluster of similar sites is known in the Ipswich area (Pankhurst 1999, 147).

Environment and economy

The predominance of wheat in the cereal assemblages is common for the period, particularly in areas dominated by heavy loam and clay soils (Soilscapes 2015). For instance, medieval wheat based economies have been recorded during recent work in Stowmarket (Fryer and Summers forthcoming) and extensive excavations at Stansted (Carruthers 2008). Bread wheat is well adapted to heavy, fertile soils, which were extensively exploited during the medieval period (Moffett 2006). It is likely that wheat and, to a lesser extent, barley constituted the mainstay of people's diet, which may have been supplemented by oats and rye, although the latter could also have played a more significant role as fodder. Pulses, such as peas and beans, also appear to have made a contribution to the diet of the inhabitants of all three sites.

The environmental evidence from these sites is insufficient to examine crop husbandry conditions in detail but does suggest that locally cultivated cereals were being processed and consumed by the site's inhabitants. The generally low densities of carbonised remains indicate a probable accumulation of mixed material from multiple burning events, deposited as part of general refuse disposal. Indeed, the terrestrial molluscan evidence suggests predominantly grassland habitats at all three sites. Full reporting of the environmental samples, including raw data, is presented elsewhere (Summers 2015a; 2015b; 2015c).

By and large the vertebrate animal bone assemblages were fairly typical of those for medieval England (Grant 1984, Sykes 2006), although sheep were perhaps more poorly represented than may have been expected at Darsham and Whatfield. However, this may well be a product of small sample size which was a universal issue. Cattle, sheep and pigs are likely to have supplied the majority of meat consumed, although domestic birds may also have contributed. Secondary products such as wool, traction, horns and skins were also probably exploited. Horses and dogs may have been used as work animals. There is no evidence for the exploitation of wild birds or mammals but given the small sample size, this cannot be ruled out as an occasional activity.

Marine molluscs appear to have made an occasional supplement to the medieval diet at the three sites with oysters being by far the most popular choice. The nearest modern day oyster beds are located in the Stour and Orwell estuary some 30 miles to the south of Darsham but somewhat nearer to Brettenham and Whatfield. While oyster distributions may have changed since the medieval period, the likely estuarine habitat of the Darsham oysters suggests the Stour and Orwell estuary as their most likely source. It would appear that during this time both cultivated and natural oyster beds were being exploited and that given the small size of the oysters demand was high, possibly too high to be sustainable. Jackson and Wilding (2009) specify that oysters are unlikely to spawn until they are over 50mm in length (lower valves), indicating that the majority of specimens from Darsham and Brettenham are likely to be only just of reproductive size - taking into account that the measurements taken were of the smaller, upper valves - and may have only spawned once or not at all. Full reporting of the vertebrate and invertebrate remains, including raw data, is presented elsewhere (Curl 2015; Cussans 2015a; 2015b; 2015c; 2015d).

Settlement 'disappearance'

Medieval activity at all three sites appears to have ceased at some point in the 14th century. A similar high medieval cessation of activity is also suggested by 12th to 14th century pottery recovered by earlier excavations at Darsham, some 900 m to the west-southwest of the Mill House site (SHER DAR 021; Meredith 2012). However, none of the villages in question were completely abandoned. Indeed, the 14th/15th century parish churches at Brettenham and Whatfield attest not only to continued settlement but also to a degree of local prosperity. We must therefore consider the lack of post-14th century material culture at the current sites as reflecting a shifting social and/or economic climate rather than settlement 'disappearance' *per se*.

The apparent abandonment of the current sites, at least in terms of their direct 'occupation' may be due to a number of individual or contributory factors. Firstly, patterns of discard might simply have altered during the 14th century resulting in the absence of late medieval material. Secondly, an apparent shift in land use, most notable at Brettenham and Darsham may have begun at some point during the high medieval period. At Brettenham, the stratigraphic relationship of possible Pond F2037 and Enclosure B1 suggests the reorganisation of the site, perhaps reflecting a move towards a more 'open' 14th century landscape. At Darsham, a similar phenomenon is reflected by the dearth of features dated to the post-medieval/early modern period; these numbered four in total and strongly suggested a move away from

earlier patterns of enclosure. The reorganisation of the Whatfield site was chiefly evidenced by the infilling of boundary ditches, although may have begun as early as the 13th century in this instance.

Although possibly the result of local pressures (see below), the reordering of the 14th century sites may have reflected shifting social and/or economic circumstances on a much broader scale. For example, the mid-14th century arrival of the Black Death in England resulted in major social upheaval and population decline (Platt 1997), and has been discussed as the possible cause of economic change at a number of medieval sites (e.g. Newton and Sparrow 2009). Examples of total village abandonment as a result of the Black Death include the parochial centre of Alston St John, to the southeast of Ipswich, although in the majority of cases depopulation of rural medieval settlements occurred over many centuries as a result of multiple contributory factors (Bailey 2007, 239). For example, a number of marginal settlements in Suffolk - often located on the periphery of larger parishes and/or on less fertile soils - appeared as a result of increasing population pressures in the 13th century. During the subsequent 14th and 15th centuries, however, population decline and 'agrarian retrenchment' made these 'late-settled' sites less viable and led to their abandonment in favour of more economically attractive prospects (Bailey 2007, 239–40). We might speculate that such pressures contributed to the 14th century decline of activity at the village edge sites of Mill House, Darsham and Semer Road, Whatfield, although no firm conclusions can be drawn.

Conclusions

The excavation results from Brettenham, Darsham and Whatfield provide a useful insight into the appearance, development and decline of medieval rural settlements in Suffolk. Each village may have formed via a process of linear 'ribbon development' along pre-existing roads, or by the joining up of separate, smaller settlements; the Darsham and Whatfield sites were not close to their respective parish churches, while the Brettenham site was adjacent to its church at the probable core of the medieval village. However, the earlier (11th century) start date at Whatfield, coupled with the large number of post-Conquest landholders recorded for this parish, suggests that activity at this site pre-dated the nucleated settlement.

In no instance could a clear link between field/ enclosure size and economic strategy be ascertained. A mixed arable and pastoral economy was evidenced at all three sites, however, broadly agreeing with the accepted regional pattern. Animal bone included the main domesticates, with evidence for the exploitation of both primary and secondary products, while the environmental samples attested to local cereal agriculture, processing and consumption. Although any surplus production could not be ascertained from the samples, the local market economy would have provided a convenient outlet. Whatfield, for example, was served by medieval markets at Bildeston (SHER BIL 022), Kersey (SHER KSY 022) and Great Bricett (SHER BCG Misc), all within 5km of the site. Exports from the larger medieval centre of Ipswich included grain and wool (Bailey 2007). Trade with the coast was also attested by the presence of marine molluscs, especially native oyster. At Brettenham, a few oyster shells showed possible signs of reuse as fishing line or net sinkers.

Activity at Church Farm, Brettenham and Mill House, Darsham appeared consistent with medieval toft and croft-type peasant holdings. Such holdings formed part of subsistence-based agricultural regimes (Dyer 2000). The Brettenham site included a possible earth-fast structure, while ditched trackways at both sites appeared to provide access between the holdings and adjacent roads. The possible presence of a medieval structure close to the Darsham site was also suggested by finds of roofing/carpentry nails and possible flooring or thatching material. This site may have formed a church tenement, possibly belonging to Blythburgh Priory. Both sites contained features and finds suggestive of 'backyard' activity.

The evidence from Semer Road, Whatfield is less conclusive. Although a possible 12th to 14th century foundation trench was identified at this site, no further structural features were present. Environmental remains from the fill of the foundation trench were also sparse. Nonetheless, the comparatively rich finds assemblage does attest to nearby occupation. A large 12th to 14th century pit at Whatfield may have been a clay quarry for brick making.

The dating evidence from all three sites suggests a cessation of activity at some point during the 14th century, at least in terms of their direct 'occupation'. There is good evidence to suggest an abandonment of earlier patterns of enclosure in favour of more 'open' landscapes, perhaps reflecting a changing social and/or economic climate. Although we can only speculate as to the precise form and scale of any changes taking place, there is no doubt that factors including agricultural economising (Bailey 2007, 239–40) and widespread mortality as a result of the Black Death had a palpable impact upon 14th century and later village life.

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