

A Roman ditch and late-Saxon boundary ditches at King William Road, Kempston

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with contributions by
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SUMMARY

A small open area to the rear of 1 King William Road, Kempston was excavated prior to the construction of housing. Evaluation had revealed what appeared to be late Saxon property boundaries, and the excavation aimed to examine the nature of these features more fully. The excavation unexpectedly revealed a large Roman ditch, dated to the 1st to early 2nd centuries AD, probably an enclosure ditch. No other Roman features were present, but only the north-east corner of the enclosure was examined. The late Saxon ditches traversed the whole width of the area and appear to have formed a plot boundary system that was retained throughout the medieval period. Further gullies, pits and postholes were also present, which reinforces the suggestion that the area was situated to the rear of tenement plots. A number of post-medieval and Victorian features were found which related to backyard activities, and included construction trenches for a small building, and at least one well. At the eastern extent of the site, the metalled surface of the old lane linking Kempston High Street to the corn mill adjacent to the River Great Ouse was seen.

INTRODUCTION

An archaeological excavation was carried out by Northamptonshire Archaeology in August 2005 to the rear of 1 King William Road, Kempston (NGR TL 0245 4739; Fig. 1). The work was commissioned by CgMs Consulting on behalf of O'Neill Homes. The excavation was undertaken as part of the mitigation strategy fulfilling a condition placed on planning permission for a small housing development on the site. A brief issued in April 2004 (Mather 2004) outlined a staged approach to the archaeological investigation of the site. An initial field evaluation, to assess whether further work was required, was undertaken in June 2004 by Northamptonshire Archaeology on behalf of CgMs Consulting (CgMs 2004). This demonstrated the survival of archaeology dating from the late Saxon to the post-medieval periods.

As a result of the potential revealed by the evaluation stage, a project design was prepared detailing the scope of works necessary to fulfil the condition attached to the planning permission

(NA 2005). All works were approved by the Bedfordshire County Archaeological Officer prior to excavation commencing.

The archive will be deposited with Bedford Museum (Accession No. BEDFM 2004.136), and the client report is available online with the Archaeology Data Service, OASIS/ADS No. 15136.

TOPOGRAPHY AND GEOLOGY

Kempston is situated on the south bank of a prominent bend of the River Great Ouse, which flows from west to east towards the county town of Bedford. The geology of the area consists predominantly of Oxford Clay and Kelloway Beds (www.bgs.ac.uk/magazine/geology/home.html). The site lies in the north-west part of Kempston known as Bell End. The area of application encompasses 906m² comprising waste ground and part of a lawn currently attached to 1 King William Road. It is bounded on all sides by residential

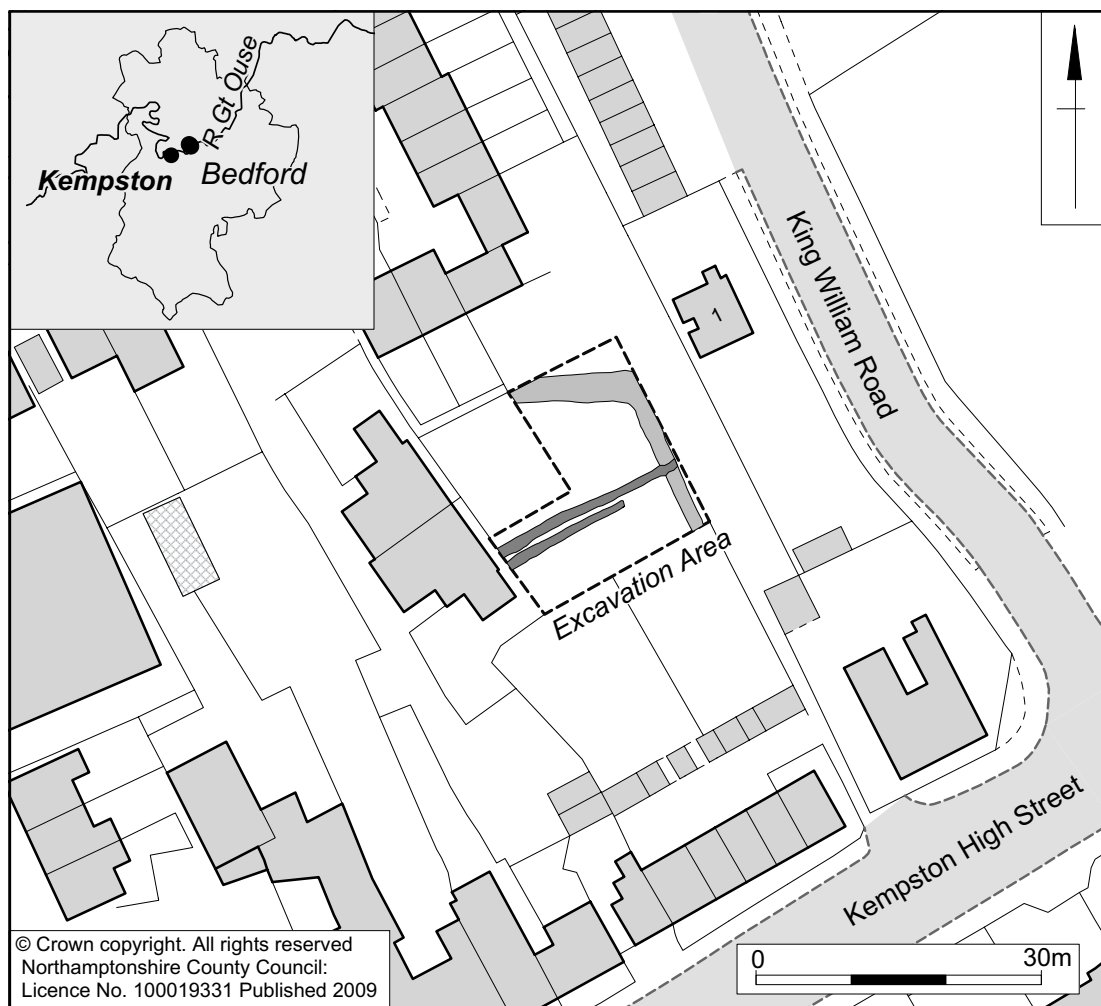


Figure 1: Site location

development, with the High Street located to the south (Fig. 1).

The development lies approximately 300m south of the present river course on the first gravel terrace at about 28m OD. The soil profile encountered on site included a horizon of alluvial silty clay interspersed with patches of river-borne gravel through which features were cut, and similar horizontal deposits of subsoil and topsoil. The topsoil was humus-rich from the site's previous use as an orchard.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Although the site was not known to contain any archaeological remains, the area around the site is

rich in prehistoric and Roman settlement and activity, in common with other river valley locations. Many chance finds of prehistoric flint tools have been made in the vicinity and there is crop-mark evidence for the existence of possible Bronze Age round barrows to the west of the site. Iron Age and Roman finds from the area indicate a densely occupied region taken up by multiple small farmsteads and settlements. To the west of the current site an excavation was carried out on what may exemplify a planned Roman village, with a gridded network of roads and remains of farm buildings (Dawson 2000). There is some evidence that there was a villa at Kempston Church End to the north-west. The existence of a Roman ford to the north of the site is disputed, the probability being that the ford is, in fact, modern in

origin. An excavation undertaken in 1985–7 at King William Close to the north-east of the current site found a Palaeolithic handaxe, Neolithic and Bronze Age pottery, as well as Roman to medieval ditches, gullies and post-pits (Kennett 1986, 26).

Dawson (1999) states that the origins of the parish may have followed a model in which an Anglo-Saxon palace (or *villa regalis*), which was supported by a number of hamlets, grew out of a Roman estate. Kempston was situated just within King Alfred's territory when the Danelaw was defined in the 9th century. By the late 10th century Kempston was at the centre of an estate held by Earl Tostig, which was later seized by Edward the Confessor. The manor of Kempston was held by Countess Judith, niece of King William, by the time of the Domesday Survey in 1086. In addition to the estate centre, there were, according to Domesday records, two thegns resident at Church End, Box End or Hardwick.

Excavation at Kempston Manor, to the east of the site, has identified evidence of probable high-status, manorial Saxo-Norman structures. These are possibly part of Countess Judith's holding (Crick and Dawson 1996). A medieval cemetery, dating to the 11th and 12th centuries, was excavated in the 1860s at Up End, near the manor site. A further cemetery dating to the same period was recovered and subsequently investigated in Brook Drive, to the south-east of the site. Thought to be situated too far from the manor complex, it was suggested that the site represented an early settlement pattern, probably the graveyard of a previously unknown missionary chapel.

EXCAVATION METHODOLOGY

The site was stripped of topsoil and subsoil, under archaeological supervision, using a 360° excavator fitted with a toothless ditching bucket to reveal significant archaeological deposits, or where these were absent, the natural substrate. All archaeological recording was carried out in accordance with standard procedures. A metal detector survey was undertaken during the excavation.

SUMMARY OF CHRONOLOGY

Human presence in the area during the Neolithic period is attested by ten worked flints which

were found as residual items in later features. The presence of three blades, one of which was in the process of being worked as a leaf-shaped arrowhead, suggests that the material is at least predominantly of Neolithic date and perhaps specifically dating to the early to middle Neolithic (A Chapman pers. comm.).

The corner segment of a large Roman ditch lay in the eastern part of the excavated area (Fig. 2). The ditch was probably part of an enclosure, and may have enclosed a small settlement such as a farmstead. The relative lack of finds and ecofactual evidence suggests that any settlement activity was not in the immediate vicinity of the site.

A pair of parallel late Saxon ditches which had been recorded in the evaluation were further investigated. The ditches were aligned east to west and probably formed some sort of boundary, possibly demarking the rear of peasant tenement plots aligned along what became Kempston High Street. Although the southern ditch was interrupted, both ditches continued across the whole width of the excavation. The pottery assemblage recovered from the ditches is primarily 10th to 11th-century in date, although 13th, 15th and 16th-century sherds were also recovered. This suggests that although the boundary was in origin late Saxon, it remained in use until much later. A fairly large quantity of domestic debris was recovered from the fills of the ditches, including one or more dumps of refuse destroyed by fire, suggesting domestic activity was taking place close to the site.

Several pits were also dated to the late Saxon period. There was part of a possible timber structure in the north-east corner of the site.

A number of post-medieval and modern features were also found, including the remains of a small structure; one, or possibly two, wells; and a number of pits.

THE ROMAN ENCLOSURE DITCH

A broad ditch [166] was located in the eastern half of the site (Fig. 2). The ditch measured up to 2.80m wide to the north, but was narrower to the south, at c. 1.3m wide. It was consistently 0.83m deep. The primary and secondary fills, (190) and (165), comprised firmly compacted greyish-brown clay silts with occasional inclusions (Fig. 3; section 2). A segment of the ditch [115] was excavated close to the corner and the primary fill here was partly made up of limestone fragments and irregularly

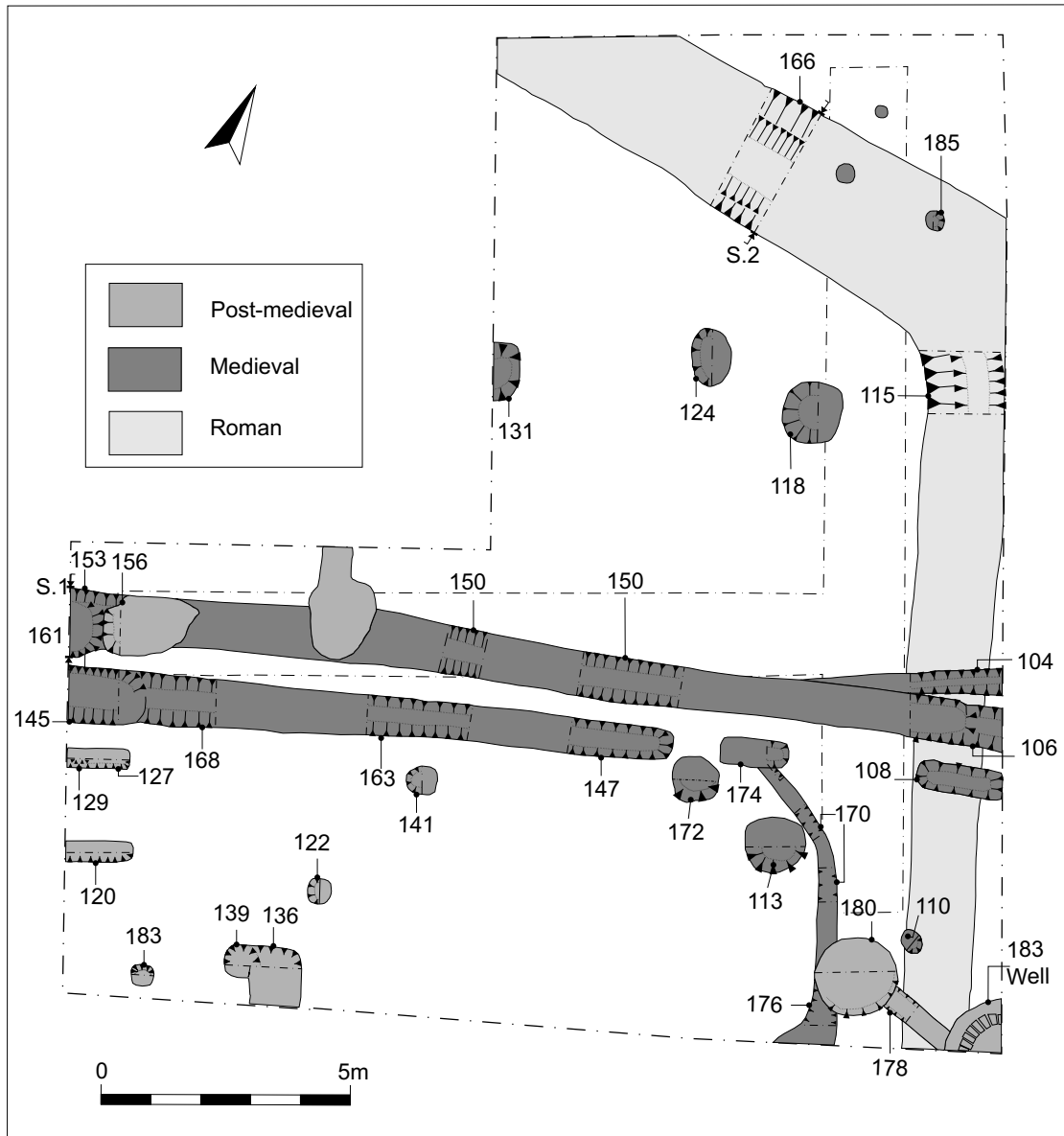


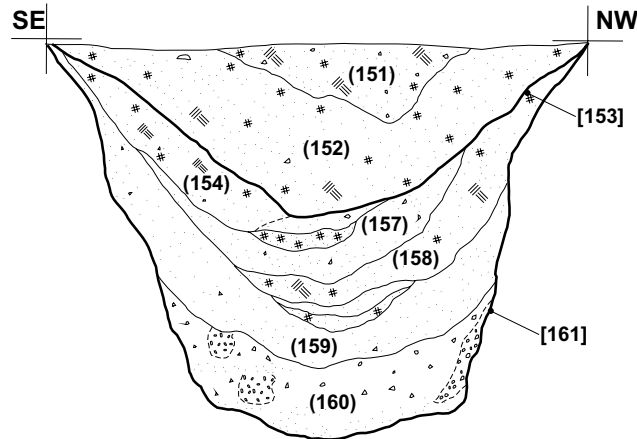
Figure 2: The excavated features

shaped rocks. It is possible that this debris was derived from a nearby structure. Both of these fills had clearly defined boundaries with the surrounding natural. The uppermost fill (164), however, was very similar to the light orange-brown clay silt natural, and it was for this reason that the ditch had not been identified in the evaluation stage of the investigation. The pottery found in the ditch fills was all early Roman in date and mainly of local origin.

ROMAN POTTERY Anna Slowikowski

Although some contexts contained the odd residual sherd of Roman pottery, only the ditch [166] could be securely dated to the Roman period from the absence of any other pottery. This assemblage of eleven sherds, weighing 78g, is probably early Roman in date, from the absence of any diagnostically late pottery.

Section 1



Section 2

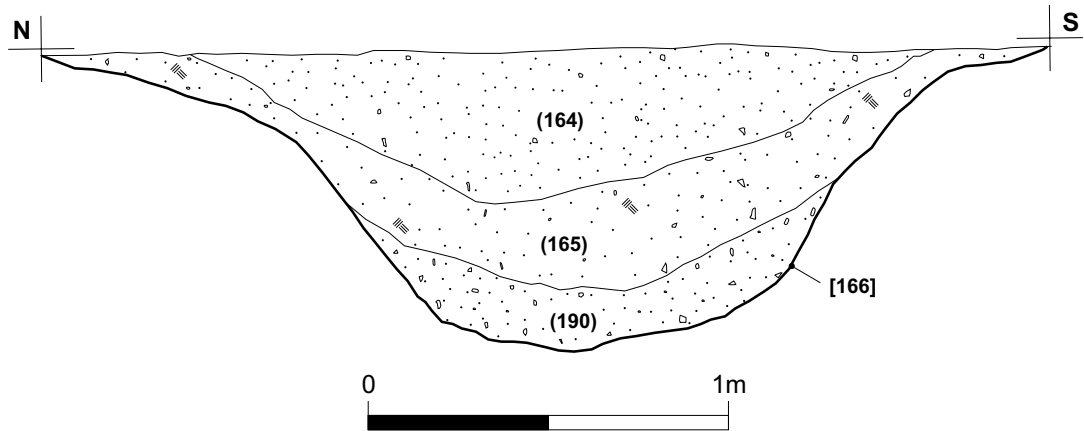


Figure 3: Section 1, late Saxon ditch [153] cutting [161]; Section 2, Roman ditch [166]

The earliest pottery is a sherd of possibly 1st-century grog- and shell-tempered fabric. The Roman assemblage is small and comprises largely grey and orange wares, which are likely to be local. Regional or continental imports are present in the form of a sherd of Verulamium-region ware and central Gaulish samian, possibly from Les Martres de Veyre. A single Roman sherd is sooted externally.

state with any certainty whether the remaining macrofossils are contemporary with the ditch or not. However, the low density of charred grains and weed seeds recorded may indicate that this ditch was peripheral to any main centre of activity during the Roman period.

THE LATE SAXON AND MEDIEVAL FEATURES

ENVIRONMENTAL EVIDENCE
Val Fryer

The two samples from the Roman ditch both appear to contain high densities of modern intrusive material and, as a result, it is not possible to

There were two parallel late Saxon ditches aligned east to west (Fig. 2, Plates 1 and 2). Three segments of the southern ditch were excavated, [163], [168] and [147]. The ditch terminated to the east and beyond this the alignment was defined by two short lengths of ditch [108] and [174]. Less



Plate 1: View of late Saxon ditches, looking west

substantial than its northern counterpart, this ditch measured up to 0.75m wide and 0.25m deep, with a wide U-shaped profile. It appeared that much of the fill of this ditch was associated with rubbish disposal, possibly long-term, but more probably as a single episode of dumping at a change of use. To the west, possible faecal concretions were found in the fill, suggesting it was close to domestic areas. Many of the soil samples taken were from this ditch, and the material found seems to have derived from at least one batch of semi-processed grain that had been destroyed by fire.

A dump of daub was found in one of the excavated segments of this ditch. The presence of wattle impressions on two of the fragments suggests that it was derived from some sort of structure, although there was too little evidence to say whether this was a building or something less substantial such as an oven or boundary wall. Two limestone tiles were also recovered, which may indicate that there was a relatively substantial structure in the vicinity. A largely complete St Neots ware jar, which probably dates to the 11th century, was found in the terminal end of this ditch, [147].

Little more than a metre to the east was a short length of ditch, [174], which was 1.35m long and contained a yellow-brown clay silt fill similar to the fill of [163]. A further 2.5m to the east another was another short length of ditch [108], with a wide but shallow U-shaped profile. The gap between these short ditch lengths may have formed an entrance into the plot. If so, the northern and southern boundary ditches would have had to have been of different phases.

The southern ditch [168] was re-cut at the western edge of excavation by [145], which was a more substantial boundary. The ditch was 1.30m deep and had an odd asymmetrical profile; the northern edge was almost vertical, while the southern edge was much shallower. This suggests that the southern edge had been subject to more erosion, perhaps by stock being kept in the area. The primary fill (144) was made up of dark grey-brown silty clay with a fairly large amount of flint and some organic material. The secondary and tertiary fills of the ditch were much the same, although the uppermost fill had a larger organic component. All the segments of this boundary were 10th or 11th-century in date.



Plate 2: Late Saxon ditches, [145], left, and [153] cutting [161], looking west

At the western edge of the site, a large pit or ditch terminal, [161] (Fig. 3, section 1; Plate 2), was 1.10m deep and 0.80m wide and had a wide U-shaped profile. Its fills were made up of successive periods of natural inwash caused by weathering of the edges, interspersed with episodic dumping of organic material. The relatively large number of different fills suggests that the feature may have been open for a long time. At the eastern edge of the site, there was a small gully [104]. Both of these features were late Saxon in date, and they may have been remnants of an earlier phase of the boundary system that was largely replaced by a continuous northern ditch.

The later northern ditch [153] / [150] / [106] extended unbroken across the excavated area. It was 1.45m wide and 0.48m deep to the west, but only 1.03m wide and 0.18m deep to the east. To the west the fills consisted of dark grey-black silty clays with a large organic content, mostly composed of charcoal lumps and flecks. This indicates dumping of refuse, possibly from hearths, which may point to the presence of buildings nearby. To the east the ditch fill was, similarly, a dark grey-black silty clay, but without the organic content. Pottery retrieved

from the fills of the ditch is generally dated to the 10th or 11th centuries, although at the eastern end the pottery appeared to consist of 13th-century material, with residual sherds of 11th-century pottery and also some 15th and 16th-century sherds.

There were a number of scattered pits and post-holes on either side of the boundary system. Three of the postholes in the north-east corner of the site, including [185], may have formed part of a structure. They were dated by a single sherd of late Saxon pottery, and were up to 0.33m in diameter and 0.09m deep. The rest of the structure may have lain beyond the edge of excavation.

The pits were all fairly similar in terms of size and fill make-up. None had a diameter of more than 1.30m. Pits [131] and [124] were fairly shallow, while [113] and [118] were more substantial, being up to 0.56m deep. Pits [113] and [118] were 10th or 11th-century in date, while pit [124] was dated to the 15th to 16th centuries.

There was a very heavily truncated curvilinear gully [170] / [176] to the south-east, the function of which is unclear. About 4.2m long, it was 0.35m wide and 0.08m deep and contained pottery of 15th-century date.

LATE SAXON AND MEDIEVAL POTTERY

Anna Slowikowski

The bulk of the assemblage, 160 sherds weighing 723g, ranges from the late Saxon period (10th–11th centuries) to the late medieval period (15th–16th centuries), with the late Saxon pottery predominant. This is generally a poor, abraded and very fragmentary assemblage, although the lower-fired shelly wares naturally abrade more than the harder sandy wares. The average sherd weight is only 4.7g.

The late Saxon pottery comprises mainly St Neots ware or its variants, although a small sherd of Stamford ware was identified. This St Neots pottery is particularly fragmentary and abraded, although there is one substantially surviving jar, made up of twenty-eight sherds, weighing 295g, from the upper fill of ditch [147]. It is probably of 11th-century date.

A smaller part of the assemblage is dated to the 12th to 14th centuries, although all this pottery appears to have been residual in later contexts. Among the fragments are sherds of shelly, Potterspury and Hedingham wares, as well as a number of sandy wares. Only the Hedingham sherd is glazed and comes from a jug.

Two features, pit [124] and the curving gully [170] contained assemblages which could be dated to the late medieval period from the presence of 15th or 16th-century pottery: late medieval oxidised and reduced wares. The fill of pit [124] also contained residual late Saxon pottery.

All the pottery is likely to be domestic in nature, although there is little in the way of evidence for use surviving. Among the St Neots wares, pitting on the interior, an internal white residue and a sooted exterior are found on single sherds.

THE CERAMIC BUILDING MATERIAL

Anna Slowikowski

A small quantity of daub came from ditch [168], which is dated by the pottery to the 11th or 12th centuries. The presence of two wattle impressions, 10mm and 20mm in diameter, confirms that this was daub, although it is uncertain whether it was used as part of a building or another structure, such as a boundary wall or oven. The fabric is coarse and sandy with abundant quartz, moderate quantities of red iron ore and flint, and calcareous inclusions particularly obvious to the naked eye. The

uniformity of fabric suggests it all came from the same structure.

ENVIRONMENTAL EVIDENCE

by Val Fryer

The samples were bulk floated by Northamptonshire Archaeology, and the flots were collected in a 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils and other remains noted were listed (Table 1). Nomenclature within the tables follows Stace (1997). All plant remains are charred. Modern contaminants including fibrous and woody roots, seeds and arthropod remains are present throughout.

Plant macrofossils

Cereal grains/chaff and seeds of common weeds are present at varying densities. Preservation is very variable; some macrofossils are extremely well preserved, while others appear to have been subjected to extremely high temperatures during combustion, resulting in severely puffed and distorted grains and seeds.

Oat (*Avena* sp.), barley (*Hordeum* sp.), rye (*Secale cereale*) and wheat (*Triticum* sp.) grains were recorded, with wheat being predominant in the fills of all but pit [118]. Chaff is not common (possibly due to the high temperatures of combustion, which may have destroyed many of the more delicate chaff elements), but rachis nodes of bread wheat (*T. aestivum/compactum*) type were recorded from most samples. Of particular note is the presence of rare rivet wheat (*T. turgidum*) type rachis nodes within the fills of ditch segments [163], [168], [145], and [161]. Although rivet wheat has been recorded from medieval deposits throughout the eastern region, records remain comparatively rare and it has yet to be determined whether free-threshing tetraploid wheats were a pre- or post-Conquest introduction. Oat grains were common within [145] and [161], and were the principal grain recorded from pit [118]. However, only a single floret base was recorded, from [161], and as this lacked the diagnostic basal abscission scar, it is not possible to ascertain whether wild or cultivated species are present. Remains of other food plants are extremely sparse, although fragmentary large pulse (Fabaceae) cotyledons were noted within the fills of ditches [150] and [168].

A ROMAN DITCH AND LATE-SAXON BOUNDARY DITCHES AT KING WILLIAM ROAD, KEMPSTON 383

Sample	1	2	3	4	6	7 / 8	9 / 10
Context	116	146	148	162	167	143/144	158/159
Feature	118	147	150	163	168	145	161
Feature type	pit	ditch	ditch	ditch	ditch	ditch	pit/ ditch
Cereal and other food types							
<i>Avena</i> sp. (grains)	xxx	x	x	x	x	x / x	xx / xx
(awn)	—	—	—	x	x	— / —	— / —
(floret base)	—	—	—	—	—	— / —	— / x
Large Fabaceae indet.	—	—	x coty	—	x coty fg	— / —	— / —
<i>Hordeum</i> sp. (grains)	x cf	x	—	x cf	x	x / x	x / —
<i>Hordeum/Secale cereale</i> type (rachis nodes)	—	—	—	—	x	x / x	x / —
<i>Secale cereale</i> L. (grains)	—	x cf	—	—	x	— / —	x / x
(rachis nodes)	—	x cf	—	x cf	x	— / —	— / —
<i>Triticum</i> sp. (grains)	—	xxx	xx	xx	xxx	xxx / xx	xx / xx
(rachis node frags.)	—	—	—	x	x	— / —	— / —
(rachis internode frags.)	—	—	—	—	—	x / x	x / x
<i>T. aestivum/compactum</i> type (rachis nodes)	—	x	x	x	xx	x / x	xx / x
<i>T. turgidum</i> type (rachis node)	—	—	—	x cf fg	x	x / x	x cf / —
Cereal indet. (grains)	x	xx	xx	xxx	xx	xx / xx	xx / xx
(rachis node frags.)	—	x	—	x	—	— / —	— / —
(rachis internode frags.)	—	x	—	—	—	— / —	— / —
(basal rachis nodes)	—	—	—	—	—	x / x	— / —
(detached embryos)	—	—	—	—	—	x / —	— / —
Herbs							
<i>Agrostemma githago</i> L.	—	—	—	—	—	x / x	— / x
<i>Anthemis cotula</i> L.	—	x	x	x	x	x / x	— / xx
Asteraceae indet.	—	—	—	x	—	— / x	— / —
<i>Bromus</i> sp.	x	—	—	—	x	x / —	— / —
<i>Chenopodium album</i> L.	—	—	x	—	—	x / —	— / —
Chenopodiaceae indet.	—	—	x	—	—	x / x	x / x
Fabaceae indet.	x	x	x	—	—	x / x	xx / —
<i>Fallopian convolvulus</i> (L.) A. Love	x	x	—	—	—	— / x	— / —
<i>Galium</i> sp.	—	x	—	—	x	— / —	— / —
<i>G. aparine</i> L.	—	—	—	—	x	— / —	x / x
<i>Lapsana communis</i> L.	—	—	—	—	x	— / —	— / —
<i>Lithospermum arvense</i> L.	—	—	—	—	—	— / —	— / x fg
<i>Medicago/Trifolium/Lotus</i> sp.	—	—	—	—	—	x / x	x / —
<i>Plantago lanceolata</i> L.	—	—	—	—	x cf	— / —	— / —
Small Poaceae indet.	—	—	x	x	x	x / x	x / x
<i>Polygonum aviculare</i> L.	—	—	—	x	x	— / —	— / —
Polygonaceae indet.	—	x	—	—	—	— / —	— / —
<i>Ranunculus acris/repens/bulbosus</i>	—	—	—	—	x	— / —	— / —
<i>Raphanus raphanistrum</i> L. (siliquae)	—	—	—	x	x	— / —	— / —
<i>Rumex</i> sp.	—	—	x	x	x	x / —	x / x
<i>Silene</i> sp.	—	—	—	—	x	— / —	— / —
<i>Stellaria graminea</i> L.	—	—	—	—	—	— / —	— / x
<i>Vicia/Lathyrus</i> sp.	—	—	x	x	x	xx / x	xx / xx
Wetland plants							
<i>Carex</i> sp.	—	—	—	—	x cf	— / x	— / —
<i>Eleocharis</i> sp.	—	—	—	—	x cf	— / —	— / —
<i>Sparganium</i> sp.	x	—	—	—	—	— / —	— / —
Sample volume (litres)	20	20	20	20	10	20/ 20	10 / 10
Volume of flot (litres)	0.1	0.2	<0.1	0.2	0.2	0.1/ 0.1	<0.1/<0.1
% flot sorted	100%	50%	100%	50%	50%	100%	100%

Key: x =10 specimens, xx =10–100 specimens, xxx =100+ specimens, coty = cotyledon, fg=fragment

Table 1: Samples from the Saxo-Norman pit and ditch fills

Weed seeds were recorded throughout at a low to moderate density. Segetal taxa occur most frequently and include corn cockle (*Agrostemma githago*), brome (*Bromus* sp.), indeterminate small

legumes (Fabaceae), black bindweed (*Fallopia convolvulus*), goosegrass (*Galium aparine*), small grasses (Poaceae), wild radish (*Raphanus raphanistrum*), dock (*Rumex* sp.) and vetch/

vetchling (*Vicia/Lathyrus* sp.). The occurrence of seeds of stinking mayweed (*Anthemis cotula*) in all but three samples may indicate that most crops were being grown on the local clay soils. Wetland plant macrofossils comprising sedge (*Carex* sp.) and spike-rush (*Eleocharis* sp.) nutlets and bur-reed (*Sparganium* sp.) fruits were only recorded as single specimens within three samples, pit [118] and ditches [168] and [145].

Charcoal fragments are abundant throughout, along with small pieces of charred root or stem. Other plant macrofossils are exceedingly rare, but indeterminate culm nodes and inflorescence fragments were noted from ditch segments [163], [168], [145] and [161].

The fragments of black porous and tarry material noted within all assemblages are probably mostly residues of the combustion of organic remains (including cereal grains) at extremely high temperatures. However, some fragments had the appearance of porous fuel residues (?coke) and may be modern in origin. Other remains are rare, although small pieces of coal occurred in most assemblages, and possible faecal concretions were noted within sample 7.

Discussion

Cereal grains are common or abundant in all nine samples along with chaff and weed seeds, the latter two possibly indicating that the material is derived from at least one batch of semi-processed grain. As a high density of the recorded weed seeds (for example the corn cockle, brome, black bindweed and wild radish) are of a similar size to the grains, this may suggest that processing was at an advanced stage. Many of the smaller seeds and much of the chaff would have been removed by winnowing, but these larger specimens would persist until removed by hand at the end of the cleaning process. As wheat is predominant in all but one assemblage, pit [118], it is assumed that this was the staple crop, with the oats, barley, rye and the large pulses probably being present as either main-crop contaminants or possibly relicts of earlier cropping regimes. The abundance of small legume seeds within the assemblages is interesting, as it may be indicative of the rotational cropping of the fields with plants which have nitrogen-fixing capabilities, a practice which became widespread from the 13th century as soils became nitrogen-depleted due to prolonged use.

Conclusions

The samples strongly suggest that the production and processing of cereals were of considerable importance to the local economy during the late Saxon and Saxo-Norman period. Wheat was almost certainly the staple crop, as it was best suited to production on the local clay soils, and there may be evidence that some soils were being improved by rotational cropping with leguminous plants. Hexaploid wheat varieties appear to have been grown most frequently, although new tetraploid varieties were slowly being introduced, and the assemblages — though relatively small — provide an important additional record of the early post-Conquest cultivation of rivet type wheat. Although the original provenance of the material is unclear, it would appear most likely that the assemblages are derived from batches of stored grain, which were destroyed during one or more catastrophic fires, the residues from these fires being dumped within any available open feature.

THE ANIMAL BONE

Karen Deighton

A total of 474g of animal bone were collected from a range of contexts during excavation and from sieved samples (mesh sizes 1mm and 3.4mm; sample sizes 20 litres). This material was examined using standard zooarchaeological methods (Stace 1997).

Fragmentation is fairly heavy, with most bones in the form of shaft cylinders or shaft splinters. Surface abrasion is low, which could suggest that bone was buried rapidly after deposition. Only four examples of canid gnawing were noted. No evidence of butchery was seen. Small burned fragments were noted from ditch [150]. A single ovicaprid neonatal element was noted from ditch [145].

The assemblage largely represents the common domesticates, *i.e.* cattle, sheep/goat (no distinctions are made here due to the fragmentation and paucity of the material) and pig (Schmid 1972). The presence of amphibian and vole remains could be intrusive as both *taxa* have burrowing habits. Beyond this, discussion and interpretation of the assemblage are precluded owing to its size and condition.

THE POST-MEDIEVAL AND MODERN FEATURES

Two parallel slots, [120] and [127], at the western edge of excavation (Fig. 2; Plate 1) lay 1.50m apart and were 0.45m wide by 0.17m deep with vertical sides and flat bases. There was a posthole [129] in the base of slot [127]. The slots would have supported a small structure such as an animal shelter that may have had an open end. The fill of the slots and posthole was devoid of any inclusions, which suggests that the structure was dismantled rather than being left to rot *in situ*. The structure was probably late 18th-century in date.

Three postholes of post-medieval date were possibly the remains of a fence-line, [122], [183] and [141]. They were clearly contemporary, since the profiles and fills were uniform. There were a number of post-medieval pits. Two were intercutting, [136] and [139], and dated to the 18th or 19th centuries. A brick-lined well [183] and a nearby pit or unlined well [180] at the south-eastern corner of the site, were 18th or 19th-century in date. The remains of Mill Lane, the former lane leading from Kempston High Street to the corn mill on the River Great Ouse to the north, were seen in section in the eastern baulk of the site.

DISCUSSION

The small excavation in this part of Kempston has provided further evidence of continuity of settlement. The small amount of flint tools recovered attest to some degree of human activity in this area in the Neolithic period, although, given that all the flint tools were residual finds, the nature of the activity cannot be deduced.

The large Roman ditch probably formed part of an enclosure in use in the 1st to early 2nd centuries AD. No other structural evidence from this period was recovered, so it is not possible to define the character of the remains. However, environmental evidence suggests that the area of the excavation was situated away from any main centre of activity. The small pottery assemblage would tend to agree with this conclusion. The discovery of Roman features attests to the density of occupation in the Roman period of this area in general.

The nature of the late Saxon and medieval occupation is poorly defined since the excavation only revealed lengths of ditch and some pits and post-holes, but some form of settlement would have

been located in the immediate vicinity of the current site, given the amount of rubbish recovered from the ditches and pits.

A major reorganisation of the landscape is evident in many places in the late Saxon period, associated with the process of village formation. The 10th and 11th-century ditches probably relate to this process, forming a boundary which, from the evidence of the domestic rubbish, probably marked the rear of a row of tenement plots established along the northern side of the High Street. That the formation of this site coincides with the first phase of structural evidence found at the manorial complex to the north-east, is further evidence of a major reorganisation of the late Saxon landscape. The extensively excavated moated manor at Tempsford Park exhibited similar expansion and reorganisation in the 9th and 10th centuries with the formation of an extensive system of regular rectangular plots, which formed the basis of settlement for the next 300 years (Maull and Chapman 2005).

The environmental data from the site provides evidence for the growth in population that is thought to have taken place during the late Saxon period and continuing post-Conquest, since the presence of stinking mayweed seeds shows that the less productive local clay soils were being utilised for cultivation. It also appears from the environmental evidence that the inhabitants of this area were practising a rotational cropping system, indicating the establishment of common fields. The evidence for an early post-Conquest occurrence of rivet type wheat adds important information to the corpus of knowledge regarding medieval agriculture in Bedfordshire.

The post-medieval and modern features found during the excavation relate to backyard activities, with the construction of wells, a small structure which may have been used for storage or for penning livestock, and the excavation of pits for the disposal of domestic refuse.

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