THE EXCAVATION OF MEDIEVAL PITS AND ANALYSIS OF A 13TH – 15TH CENTURY CERAMIC ASSEMBLAGE FROM 18–20 HIGH STREET, ALTON, HAMPSHIRE

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ABSTRACT

The evaluation and subsequent excavation of a parcel of land to the rear of properties on High Street, Alton revealed evidence of medieval activity dating from the mid 13th to 15th centuries. This evidence consisted mainly of a number of large sub-circular pits which contained quantities of domestic refuse. A large assemblage of pottery was recovered; the first major ceramic collection of this period from the town, or indeed from this part of the county. This material has been used to create the beginnings of a fabric series for the area to which other ceramic assemblages can be referred. A small number of prehistoric and post-medieval pits was also excavated.

INTRODUCTION

A proposal for the construction of housing and commercial units on a plot of land to the rear of 18–20 High Street, Alton, Hampshire led to archaeological investigation at the site, in accordance with guidance in Archaeology and Planning (PPG16 1990) and East Hampshire District's policies on archaeology. A field evaluation was conducted by Thames Valley Archaeological Services Ltd in December 2000 (Ford 2000), followed by excavation of part of the site in February and March 2001.

The site was located on the north-western side of the High Street, near the top of the hill (SU 7180 3944) (Fig. 1). It occupied an area of 540sq. m, including the rear of plot 16 and the whole of plots 18 and 20. The land falls away steeply to the south, towards the river Wey, from 109m above Ordnance Datum at the northern extreme to 104m at pavement level. According to the British Geological Survey (BGS 1975), the underlying geology is gravel with Upper Chalk nearby and, indeed, both of these were encountered during fieldwork.

The evaluation and excavation followed schemes of work prepared by Mr Peter Reeves of Wardell Armstrong and approved by Mr Ian Wykes, Senior Archaeologist for Hampshire County Council. The site code is 18HSA00/73 and the finds and archive will be deposited in due course with the Hampshire Museum Service under the accession number A.2001.5.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Alton is one of a large number of small towns in Hampshire and the south of England generally, known to have medieval or Saxon origins, but from which only a little detailed archaeological evidence has been recovered. Documentary research into Alton's origins has recently been summarized in this journal (Page 2005). Few large-scale archaeological investigations have taken place in Alton or the surrounding area (Hughes 1976, 23–28). A small number of early rescue projects examined medieval and post-medieval development, but shed little light on possible earlier origins of the town (Millett 1983, Bowden et al. 1988), although a number of small projects in recent years have extended the archaeological background to the town (Edwards 2002). The origins and development of small towns and rural markets have been identified as urgent areas for research (English Heritage 1991, 36).

Roman and Iron Age finds have been made
Fig. 1 Location of site within Alton, showing evaluation trenches and excavated area
to the south; a small but very rich early Roman cemetery has been excavated at 87 High Street (Millett 1986) and a large settlement has been excavated at nearby Neatham (Millett and Graham 1986).

The parish church of St Lawrence stands 150m to the north-west of the site, at the top of the hill. Although largely 15th century in construction, it has Norman origins and is believed to have replaced an earlier, Saxon church (Couper 1995, 7). A sizeable Saxon cemetery adjacent to Mount Pleasant Road, to the south, was excavated in the 1960s (Evison 1988) and Saxon pottery has been recovered from several sites around the centre of the town. Although the location of the Saxon town has yet to be discovered, it may well have had its focus near the church.

Intensive medieval occupation has been identified at a small number of locations along the High Street, as well as later medieval buildings fronting the street (Millett 1983, Currie 1999). The property occupying the front of 16 High Street, behind which part of the excavation trench lay, is a Listed Building (number 12805), a fairly complete 15th-century house with a late 19th-century shop front. High Street follows (roughly) the line of the Roman road from Winchester to Neatham, and on to London. It became an important medieval route, too, due in part to pilgrim traffic between Southampton and Canterbury (Edwards 2002). The Market Place, set north of High Street, was certainly in use by AD1280, which implies High Street was also already in use by this time. The medieval settled area does not appear to have extended south beyond the junction of High Street and Drayman’s Way.

Alton was affected by the Civil War and the church was the site of the climax of the Battle of Alton on December 13th, 1643. Work in the churchyard in the early 20th century revealed several graves, and artefacts from these are on display in the church (Couper 1995, 15–17).

Post-medieval occupation at 18–20 High Street is attested by both documentary and cartographic sources. Documents, such as rate records, wills and leases, exist from the early 18th century onwards and a map of 1666 appears to show two-storey buildings at the front of both 18–20 and 16 High Street. The Tithe Map of 1842 shows structures at the front of both 18 and 20, with open areas to the rear, and editions of the Ordnance Survey maps from 1871 onwards show few changes. It was these buildings that were demolished in 1971 to create the infamous Crown Hill ‘gap’. A small structure is seen within the garden at the rear of number 16 on maps of 1871, 1896 and 1910, but not that of 1956.

The Evaluation

An evaluation (Ford 2000) comprising four trenches (Fig. 1) revealed that the front portions of both 18 and 20 High Street had been severely truncated by late post-medieval cellars. Behind these cellars, as the hill rises to the north-west, the natural gravel remained intact and two medieval pits, two late post-medieval pits and a post-medieval well were revealed. As the area where the medieval features were located was to be deeply terraced during the development this became the focus for the ensuing excavation.

THE EXCAVATION

An area approximately 22m by 13m (255sq. m) was stripped for excavation (Figs 1 and 2). Topsoil and overburden were removed by a mechanical excavator under archaeological supervision. This revealed several large pits and small postholes. All were hand cleaned and the majority were half-sectioned as a minimum. Safety concerns prevented full hand-excavation of several of the deepest pits (up to 1.75m) filled with loose gravelly deposits.

Following recording of the hand-excavated features, the remaining halves of those that had been identified as medieval were fully excavated with a small mechanical digger, to enable more complete artefact recovery.

All artefacts were collected from the prehistoric and medieval features, and those of unknown date. In the case of obviously late post-medieval features, a policy of selective recovery operated; all pottery and clay pipe
Fig. 2 All excavated features
was collected but the majority of brick, tile and animal bone was not. Bulk samples for the recovery of charred plant remains were taken from eighteen sealed and securely dated contexts (see below).

Phasing

A total of 66 cut features and three layers were excavated, in full or in part (Fig. 2). These have been assigned to eight phases: prehistoric; Iron Age or early/middle Saxon; medieval (mid 13th to late 14th century); late medieval (late 14th to 15th century) and four post-medieval phases: 16th century, 17th century, 18th century and 19th century. The phased features are illustrated in Fig. 3.

Phase 1: Prehistoric

Four small, shallow pits (107–109, 210) (Fig. 3) produced struck flints and quantities of burnt flint and are, therefore, believed to be prehistoric in date. A tiny fragment of medieval pottery from pit 108 is thought to be intrusive. Worked flints and fragments of burnt flint were also found in many of the later features suggesting further prehistoric features had been disturbed across the site. The flint is not particularly diagnostic but may be Bronze Age.

Small quantities of charcoal and a single carbonized cereal grain were retrieved from sieved samples from the prehistoric features, but as there was severe root disturbance it is possible that these are intrusive and no conclusions can be drawn from their presence.

Phase 2: Iron Age or early/middle Saxon

This phase is represented solely by three sherds of much abraded, hand-made chaff-tempered pottery which could belong to either an Iron Age or a Saxon tradition. All were redeposited in later features; no features are recorded of this date. Whilst activity of either date would not be unexpected for the location, this plot was clearly not a focal area in these periods.

Phase 3: Medieval (mid 13th–late 14th century)

A large number of features, including several deep rubbish pits, testify to an intensive period of site use in this phase. Intercutting amongst the pits indicates continuous activity over a number of years.

Ten pits are assigned to this phase (2, 3, 104, 119, 144, 147, 204–6 and 213). They were all circular or oval and varied between steep-sided and more bowl-shaped profiles (Fig. 4). The largest was 3.1m in diameter and 1.75m deep. The steeper examples cut through gravel showed slumping at the edges, and in pit 119 this sat above the primary fill indicating that the pit had remained open for some time. Experience of excavating the features archaeologically showed that the gravel was fairly loose and the sides of open features collapsed frequently. The medieval pits need not have remained open for substantial periods in order to show signs of slumping. Pit 204 may have been lined with chalk and clay. The pits generally contained large quantities of refuse, particularly pottery, often large unabraded sherds, indicating they had been deliberately filled with fresh domestic waste.

Two postholes, 136 and 200, are dated by pottery to this phase, and another, 125, was cut by pit 119 so is also of this date, or earlier. Postholes 110 and 135 contained small fragments of tile and are therefore of this phase or later.

Phase 4: Later medieval (Late 14th to 15th century)

Continued activity through this period is demonstrated by the presence of six rubbish pits (129–32, 134, and 143). These pits were generally smaller than those of the preceding phase, with just one exceeding 0.70m in depth.

Pit 129 was similar to several of the phase 3 features, being large, steep-sided and deep (Fig. 4). It appeared to have been lined with chalk and clay, presumably to stabilize the sides. It was cut by another phase 4 pit, 130, of a similar diameter, but considerably less deep.

Pits 131, 132, and 134 were part of a complex of intercutting features that also included phase 3 posthole 135, and phase 5 pit 133. The stratigraphy of the area was difficult to discern, the only clearly visible relationship being that 133 was later than 134.
Fig. 3 Phase plan
The other pit of this phase, 143, cut pit 144 of phase 3.

Phases 5–8: Post-medieval (16th to 19th century)  
Most of the features of these phases were rubbish pits which contained huge quantities of material, of which only a sample was retained. These are not discussed here; details are in the archive. The research agenda for the site highlighted the medieval pottery assemblage and it was felt appropriate to focus resources on that aspect both during and after fieldwork. In particular, most of the animal bone and all but a representative sample of the ceramic building material from obviously late post-medieval features was discarded. One pit and a handful of small postholes cannot be phased and are also not described in detail here.

THE FINDS

Pottery by Paul Blinkhorn and Duncan Brown

The pottery assemblage comprised 1,724 sherds with a weight of 41,295g. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference, was 11.62 (medieval fabrics only). All the pottery was medieval or later, with the exception of three sherds of extremely abraded Iron Age or early/middle Saxon hand-built material. The range of medieval pottery types present suggests that there was virtually uninterrupted occupation at the site from the earlier 13th century until today, although some 15th-century pottery types appear somewhat under-represented, and there is the possibility of an hiatus in activity around that time.

Analytical Methodology

The pottery was initially bulk-sorted and recorded on a computer using DBase IV software. The material from each context was recorded by number and weight of sherds per fabric type, with featureless body sherds of the same fabric counted, weighed and recorded as one database entry. Feature sherds such as rims, bases and lugs were individually recorded. Decorated sherds were similarly treated. In the case of the rimsherds, the form, diameter in mm and the percentage remaining of the original complete circumference were all recorded. The latter figure was summed for each fabric type to obtain the estimated vessel equivalent (EVE).

The terminology used is that defined by the Medieval Pottery Research Group’s Guide to the Classification of Medieval Ceramic Forms (MPRG 1998) and to the minimum standards laid out in the Minimum Standards for the Processing, Recording, Analysis and Publication of post-Roman Ceramics (MPRG 2001). All the statistical analyses were carried out using a Dbase package written by the author, which interrogated the original or subsidiary databases, with some of the final calculations made with an electronic calculator. All statistical analyses were carried out to the minimum standards suggested by Orton (1999, 135–7).

Fabrics

The range of fabric types is of some interest, as very little work on the archaeology of medieval and later Alton has been carried out. Consequently, this report will concentrate mainly on the local wares. The regional imports are all well-attested at other sites, and thus will not be discussed in any great detail, although reference will be made to published examples.

<table>
<thead>
<tr>
<th>Fabric</th>
<th>Description</th>
<th>EVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>Hand-built. Chaff-tempered ware. Few visible inclusions except for moderate to dense chaff voids up to 5mm. Iron Age? or Early/middle Saxon?</td>
<td>2 sherds, 9g, EVE = 0</td>
</tr>
<tr>
<td>F2</td>
<td>Hand-built. Sparse sub-rounded quartz up to 0.5mm, white angular flint up to 1mm. Rare chaff voids. Iron Age? or Early/middle Saxon?</td>
<td>1 sherd, 15g, EVE = 0</td>
</tr>
<tr>
<td>F10</td>
<td>Moderate to dense sub-rounded white, pink and orange quartz up to 1mm. Rare sub-angular red ironstone of the same size. Occasional organic voids. Glazed and unglazed sherds noted. Glaze poor quality, patchy orange/green, internal and external. Some jar rims have a few small splashes of glaze, indicating that they were fired with glazed vessels. Some jars have scoring on the lower body and outer base-pad. Medieval?13th–14th century.</td>
<td>690 sherds, 14,745g, EVE = 6.34</td>
</tr>
</tbody>
</table>
Fig. 4 Selected sections
F11: Moderate sub-angular chalk up to 1mm, angular white flint up to 2mm, rare sub-rounded red ironstone up to 1mm. Rare to moderate sub-rounded quartz up to 1mm. Medieval, ?13th–14th century 161 sherds, 1638g, EVE = 0.91.

F12: Finer version of F10, inclusions less than 0.5mm. Similar range of forms and decoration. Medieval, ?13th–14th century. 292 sherds, 3126g, EVE = 2.06.

F13: Sandy glazed wares. Moderate to dense fine sub-rounded quartz up to 0.5mm, sparse black ironstone of the same size, rare sub-rounded chalk up to 1mm. Pale grey glazed fabric with red or grey surfaces. Glazed jugs. Medieval, ?13th–14th century. 58 sherds, 1670g, EVE = 1.10.

F30: Transitional earthenware I. Orange sandy fabric with few visible inclusions apart from rare sub-rounded chalk up to 0.5mm and red and black ironstone of the same size. Medieval/Post-Medieval, 15th century? 15 sherds, 923g, EVE = 0.15.

F31: Transitional earthenware II. Fine reddish fabric with few visible inclusions apart from rare sub-rounded red ironstone up to 2mm. Medieval/Post-Medieval, 15th century? 23 sherds, 1958g, EVE = 0.10.

F356: Kingston Ware (Pearce and Vince 1988). White fabric with abundant, well sorted iron-stained, pink, white and clear quartz, sparse to moderate red and black ironstone. Mainly jugs with a rich copper-green glaze, often highly decorated with incised and applied decoration and iron-rich slip. Medieval, c. 1250–1450 23 sherds, 1041g, EVE = 0.04.

F405: Frechen/Cologne stoneware (Gaimster 1997). Uniform grey stoneware, characterized by either a mottled brown or 'tiger striped' salt glaze. The main vessels forms for this ware include a range of mugs and Bartmann jugs. Post-Medieval, c. 1550–1700 17 sherds, 531g.

F406: Tudor Green wares (Pearce and Vince 1988). A uniform untempered, green glazed white ware. The source for this particular ware is almost certainly from Kiln 4 at Farnborough Hill, Hampshire (McCarthy and Brooks 1988, 450). The main forms are all from various types of lobed cups, jugs and chafing dishes. Medieval/Post-Medieval, c. 1380–1550. 3 sherds, 20g, EVE = 0.02.

F413: Westerwald/Cologne Stoneware (Gaimster 1997). Hard, grey Rhenish stoneware, usually with cobalt and/or manganese painted decoration. Post-Medieval, c. 1600–present. 2 sherds, 36g.

F417: Tin-glazed earthenwares. A uniform yellowish/buff biscuit fabric with a white tin-glaze and painted blue or polychrome decoration. Produced on a large scale in London from c. 1612 onwards and then in centres like Bristol, Liverpool, Glasgow later in the century (Orton 1988, 298). Post-Medieval, c. 1612–1800. 31 sherds, 438g.


F447: Pearlware. Similar to Creamware, but with cobalt added to the glaze, giving it a blue tinge. Later examples with painted or transfer decoration. Post-Medieval, 1765–19th century. 2 sherds, 12g.


F451: Border wares. White fabric, moderate rounded red quartz, iron stained to varying degrees, up to 0.25mm in size, with occasional grains up to 0.5mm. Sparse rounded red and black ironstone up to 0.25mm with sparse flecks of mica up to 0.1mm. The range of glazes on the vessels range from green, olive and yellow. Made in a wide range of utilitarian forms. Known sources include Farnborough Hill, 'Ye Olde Malthouse', Hawley and 'The Limes' in Ash, Surrey (Pearce 1992, 2). Post-Medieval, c. 1550–1700. 42 sherds, 1197g.

F1000: Refined white earthenware. Usually with blue 'willow pattern' or multi-coloured transfer prints. Post-Medieval, Early 19th century+. 33 sherds, 213g.
Table 1  Pottery occurrence per site phase by number, weight and EVE, all medieval and later fabrics

<table>
<thead>
<tr>
<th>Phase</th>
<th>Date (century AD)</th>
<th>No</th>
<th>Wt (g)</th>
<th>EVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Mid 13th–Late 14th</td>
<td>1040</td>
<td>19177</td>
<td>10.03</td>
</tr>
<tr>
<td>4</td>
<td>Late 14th–15th</td>
<td>109</td>
<td>4390</td>
<td>1.39</td>
</tr>
<tr>
<td>5</td>
<td>16th</td>
<td>36</td>
<td>503</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>17th</td>
<td>39</td>
<td>790</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>18th</td>
<td>327</td>
<td>12796</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>19th</td>
<td>106</td>
<td>2370</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1657</td>
<td>40026</td>
<td>11.42</td>
</tr>
</tbody>
</table>

Table 2  Pottery occurrence per site phase, major wares only, by weight, expressed as a percentage of the phase assemblage

<table>
<thead>
<tr>
<th>Phase</th>
<th>F10</th>
<th>F11</th>
<th>F12</th>
<th>F13</th>
<th>F356</th>
<th>F30</th>
<th>F31</th>
<th>F405</th>
<th>F425</th>
<th>F451</th>
<th>Total weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>65.8%</td>
<td>7.6%</td>
<td>11.8%</td>
<td>8.98%</td>
<td>2.9%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>19177</td>
</tr>
<tr>
<td>4</td>
<td>11.6%</td>
<td>0.5%</td>
<td>6.9%</td>
<td>0.7%</td>
<td>11.3%</td>
<td>21.1%</td>
<td>41.6%</td>
<td>6.3%</td>
<td>-</td>
<td>-</td>
<td>4373</td>
</tr>
<tr>
<td>5</td>
<td>10.0%</td>
<td>-</td>
<td>21.2%</td>
<td>2.7%</td>
<td>9.5%</td>
<td>-</td>
<td>6.8%</td>
<td>13.7%</td>
<td>27.7%</td>
<td>4.7%</td>
<td>430</td>
</tr>
<tr>
<td>Total</td>
<td>13899</td>
<td>1478</td>
<td>2740</td>
<td>1643</td>
<td>949</td>
<td>923</td>
<td>1850</td>
<td>334</td>
<td>119</td>
<td>20</td>
<td>23980</td>
</tr>
</tbody>
</table>

Chronology
Each context-specific ceramic group has been given a seriated date based on the range of pottery types present. The occurrence per phase is shown in Table 1. The data indicate that there was relatively little pottery deposition during the 16th and 17th centuries.

The presence of sandy glazed wares in all of the stratigraphically earliest features at this site indicates that it is likely that there was no significant medieval occupation before the mid-13th century.

Table 2 shows the occurrence of the major wares in each phase, and suggests a dating scheme for the local wares. Fabrics 10, 11 and 12 all appear to have fallen from use before the beginning of phase 4 (late 14th to 15th century). Certainly, this is the pattern with the traditional ‘high’ medieval pottery in most of southern England, and there is no reason to think that the situation at Alton was any different. The chronology of these coarsewares certainly seems typical of similar wares in the region. For example, the chalk-and-flint wares at Netherton in Hampshire lasted until the mid-13th century, with the quartzitic wares continuing in use until the mid-14th century (McCarthy and Brooks 1988, 331). By phase 4, the medieval fabrics had all but fallen from use, with Surrey Whitewares, local transitional earthenwares (fabrics 30 and 31) and, to a lesser extent, German Stonewares dominating the pottery assemblage. The Surrey wares and F30 and F31 seem to have rapidly declined as a proportion of the assemblage during phase 5, when local red earthenwares dominated,
Table 3 Mean sherd weight per fabric type per site phase, major wares only

<table>
<thead>
<tr>
<th>Phase</th>
<th>F10</th>
<th>F11</th>
<th>F12</th>
<th>F13</th>
<th>F356</th>
<th>F30</th>
<th>F31</th>
<th>F405</th>
<th>F425</th>
<th>F451</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>22.1g</td>
<td>9.8g</td>
<td>9.0g</td>
<td>56.1g</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>22.8g</td>
<td>10.8g</td>
<td>14.1g</td>
<td>6.8g</td>
<td>62.0g</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>14.9g</td>
<td>4.4g</td>
<td>17.6g</td>
<td>5.0g</td>
<td>82.5g</td>
<td>61.5g</td>
<td>113.8g</td>
<td>34.3g</td>
<td>1.5g</td>
<td>33g</td>
</tr>
<tr>
<td>6</td>
<td>21.5g</td>
<td>-</td>
<td>8.3g</td>
<td>6.0g</td>
<td>13.7g</td>
<td>-</td>
<td>29.0g</td>
<td>29.5g</td>
<td>13.2g</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 4 Vessel occurrence per medieval site phase, expressed as a percentage of the total EVE per phase

<table>
<thead>
<tr>
<th>Phase</th>
<th>Jars</th>
<th>Bowls</th>
<th>Jugs</th>
<th>Curfews</th>
<th>Cisterns</th>
<th>Cups</th>
<th>Total EVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>83.8</td>
<td>4.6%</td>
<td>10.4%</td>
<td>1.3%</td>
<td>0</td>
<td>0</td>
<td>10.05</td>
</tr>
<tr>
<td>4</td>
<td>17.9%</td>
<td>0</td>
<td>6.6%</td>
<td>0</td>
<td>66.2%</td>
<td>1.3%</td>
<td>1.51</td>
</tr>
<tr>
<td>Total EVE</td>
<td>8.68</td>
<td>0.46</td>
<td>1.15</td>
<td>0.13</td>
<td>1.00</td>
<td>0.02</td>
<td>11.44</td>
</tr>
</tbody>
</table>

although German Stonewares also increased in popularity at that time. There does seem to have been at least some residuality at that time; F12, despite having all but fallen from use by the previous phase, comprises nearly a quarter of the 16th century assemblage. Generally, these findings are supported by the evidence of the fragmentation analyses (see below).

Fragmentation Analysis
The data in Table 3 indicate a generally similar chronological pattern to that suggested by the pottery occurrence (Table 2, above). Fabric 10 shows a fairly large drop in mean sherd weight during phase 5, suggesting that at least some of the material of that date is residual. It increases back to a similar value as was noted during the earlier phases during phase 6, but only two sherds of the material were present in the contexts dated to that phase, and thus these data can be regarded as unreliable. Fabric 11 appears to be wholly residual by phase 5, although fabric 12 actually has its greatest mean sherd weight during phase 5, but the data may again be distorted by the presence of a single large sherd from a dripping dish/frying pan, which accounts for around one-third (by weight) of the F12 from that phase. The mean sherd weight for F12 during phase 6 suggests fairly strongly that the material was wholly residual by that time, despite making up nearly one quarter of the phase assemblage by weight. Fabric 13, as the pottery occurrence data indicate, appears to be wholly residual during phase 4 and beyond, and only a single sherd of either of the transitional earthenwares (weighing 29g) was noted in phase 6, further showing the material fell from use around the time of the introduction of the red earthenwares (F425).

Vessel Use
The data in Table 4 show a fairly typical pattern of medieval vessel consumption at the site, with jars dominating the assemblage during the medieval period, then new vessel forms being introduced from the later 14th century onwards. The data for phase 4 are distorted by
the presence of a near-complete cistern (Fig. 9 AL29).

Fabric Discussion
The Local Wares
While the majority of the medieval and later pottery types from this site are regional products that are well-known from other excavations, the earlier medieval wares (fabrics 10, 11, 12 and 13) appear to be of local origin. This assemblage is the largest group of medieval pottery to have been excavated in Alton in recent years, and thus merits further discussion. In general the fabrics are broadly similar to the mass of locally produced medieval wares present in Hampshire.

Fabric 10
This slightly coarse, sand-tempered ware comprises the majority of the medieval assemblage. Vessels are wheel-finished (thrown?), with the upper bodies well made and showing turning rings, whilst the lower bodies and/or base-pads are extensively scored or scratch-marked. The mineral component of the fabric is somewhat indistinctive, and does not suggest an obvious source, but it is likely that it is of local origin. There are some similarities with material recently analysed from Odiham Castle, some 15km to the north of this site (Brown pers comm.). Those wares are thought to be products of the kilns at Bentley (Barton and Brears 1976), although scratch-marking is not as prevalent on the Bentley material. The dating of the material at this site, 13th – late 14th century, does correspond fairly closely with that from Bentley but not with the general tradition of scratch-marking, which at other centres is thought to have vanished by c. 1250. At Laverstock, in eastern Wiltshire, scratch-marked coarsewares of 12th century date gave way to developed scratch-marked wares, which continued to the end of the 13th century (Musty et al. 1969, 105) and it is likely that the Alton examples fall into this later style. It is not suggested that these are Laverstock products, but rather local equivalents of the same tradition. Scratch-marked coarsewares of 11th to 13th century date are known from Southampton (Brown 1986, 95) and Winchester (Brown, pers comm.) and although there is no equivalent of developed scratch-marked wares there, this is evidence of the tradition extending into Hampshire. In general terms, coarsewares are likely to have been supplied by local manufacturers, while glazed wares were drawn from a wider variety of sources (Brown 1997), and Fabric 10 is therefore likely to have been produced close to Alton.

The range of vessel forms is dominated by jars, usually with sharply-angled everted rims with an ovoid bead. The body forms appear simple and basically globular. Surface treatment is largely limited to scratch marking and/or incised shoulder cordons and thumbed applied strips, although a single small fragment with an incised wavy line and a bowl with a stabbed rim (Fig. 7 AL13) were also noted.

A small number of sherds had a few spots of glaze on the outer surface, indicating that they were fired with glazed vessels. Glazed sherds in this fabric were noted, with many sherds having it on the inner surface. These are likely to have been bowls. A total of 1014g of glazed fabric 10 sherds were noted in phase 3 contexts.

The data in Table 5 demonstrate that the range of decorative techniques employed by the fabric 10 potters was somewhat limited, but also show that nearly half the pottery in medieval contexts was treated in some way. As the data in Table 6 suggest, the fabric 10 assemblage is largely dominated by jars, although bowls, jugs and dripping dishes/ pans were also noted. The last-named could not be tabulated as the EVE cannot be measured due to their asymmetrical forms.

Charts 1 and 2 indicate that there was a significant change in the rim diameter of fabric 10 jars from phase 3 to phase 4. The phase 3 assemblage, with a mean rim diameter of 244.0mm, is on the whole smaller, with a more restricted size range than the phase 4 assemblage, which has a mean rim diameter of 290.5mm. This change

Fig. 5 (opposite) Medieval pottery, phase 3 (see text for catalogue)
Table 5 Decorated sherds, fabric 10, expressed as a percentage (by weight in g) of the phase assemblage

<table>
<thead>
<tr>
<th>Phase</th>
<th>Scratched</th>
<th>Cordons</th>
<th>Thumbed Strips</th>
<th>Scratched + Cordons</th>
<th>Scratched + Strips</th>
<th>Cordons + Strips</th>
<th>Scratched, Cordons + Strips</th>
<th>Plain</th>
<th>Total Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>17.1%</td>
<td>7.6%</td>
<td>5.3%</td>
<td>1.0%</td>
<td>7.1%</td>
<td>10.6%</td>
<td>0</td>
<td>51.3%</td>
<td>12476</td>
</tr>
<tr>
<td>Total Wt</td>
<td>2135</td>
<td>948</td>
<td>662</td>
<td>123</td>
<td>888</td>
<td>1325</td>
<td>0</td>
<td>6395</td>
<td></td>
</tr>
</tbody>
</table>

Table 6 Vessel occurrence per phase, fabric 10, expressed as a percentage of the EVE per phase

<table>
<thead>
<tr>
<th>Phase</th>
<th>Jars</th>
<th>Bowls</th>
<th>Jugs</th>
<th>Curfews</th>
<th>Total EVE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>90.5%</td>
<td>6.0%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>6.32</td>
</tr>
<tr>
<td>Total</td>
<td>5.72</td>
<td>0.38</td>
<td>0.11</td>
<td>0.11</td>
<td></td>
</tr>
</tbody>
</table>

*Dripping dish/frying pan fragments were also noted*

in rim diameter could conceivably have been due to a major change in vessel form during this period, but there is no evidence for this having happened.

Some thumbed 'piecrust' rims were noted. During phase 3, these accounted for 21.2% (by EVE) of the fabric 10 jar assemblage, and 22.2% of the phase 4 assemblage. This suggests that they are not a significant chronological marker.

One slightly curious vessel type is a shallow open form with a long tubular spout (see Fig. 6). It is impossible to be sure if these are dripping dishes or frying pans, as few are complete enough to allow identification of the body shape. It is possible that the spouts could have acted as sockets for wooden handles, and such vessels are known from the late Saxon period onwards in many places. Similarly, dripping dishes with tubular spouts are also widely-attested.

Fabric 10 Illustrations

Fig. 5 AL1. Pit 2, (285) phase 3. Base of large jar. Grey fabric with browner outer surface. Extensive scratch-marking on lower body and base pad. Fine horizontal cordons on upper part of surviving body.

Fig. 5 AL2. Pit 206, (278 and 280) phase 3. Rim and body of jar. Grey fabric with reddish-brown surfaces. Lower outer surface extensively sooted, limescale over most of inner surface below the neck angle.

Fig. 5 AL3. Pit 206, (278) phase 3. Jar rim. Grey fabric with brown surfaces. Two bands of

Fig. 6 (opposite) Medieval pottery, phase 3 (see text for catalogue)
Fig. 7 Medieval pottery, phase 3 (see text for catalogue)
multiple horizontal cordons on the outer body. Outer surface lightly and evenly sooted.

Fig. 5 AL4. Pit 206, (278) phase 3. Lower body and base of small jar. Grey fabric with brick-red surfaces. Two bands of multiple horizontal cordons on the outer body. Outer surface sooted from the lower band of cordons downwards.

Fig. 5 AL5. Pit 104, (267 and 269) phase 3. Jar rim with finger-grooving. Grey fabric with brick-red surfaces, outer rim sooted.

Fig. 6 AL6. Pit 104, (269) phase 3. Jar rim. Grey fabric with browner surfaces, sooting on outer lower body and rim bead.

Fig. 6 AL7. Pit 119 (181) phase 3. Jar rim. Grey fabric with reddish-brown outer surface, sooting on outer surface below rilling, limescale on lower inner surface.

Fig. 6 AL8. Pit 119, (173, 181) phase 3. Rim and shoulder of storage vessel with applied
Fig. 8 Medieval pottery, phase 3 (see text for catalogue)

Fig. 6 AL9. Pit 206 (290) phase 3. Jar rim. Grey fabric with reddish-brown surfaces, sooting on waist and rim bead.

Fig. 6 AL10. Pit 2 (284) phase 3. Full profile and spout/socket of dripping dish/frying pan. Grey fabric with reddish-brown surfaces. Stabbed decoration on top of rim bead, dull green glaze on inner surface. Outer body and lower surface of spout/socket heavily burnt and sooted.

Fig. 7 AL11. Pit 104 (267) phase 3. Fragment of spout/socket of dripping dish/frying pan. Grey fabric with reddish-brown surfaces. Slashed decoration and dull green glaze on top of rim bead. Outer body and lower surface of spout/socket heavily burnt and sooted.

Fig. 7 AL12. Pit 206 (278) phase 3. Full profile of curfew. Dark grey fabric with reddish brown outer surface. Inner surface evenly blackened, outer surface becomes progressively darker near 'rim'.

Fig. 7 AL13. Pit 204 (276) phase 3. Bowl rim. Uniform grey fabric. Stabbed decoration top of rim bead, thumbed applied strip on outer surface of body.

Fig. 7 AL14. Pit 104 (269) phase 3. Rim and neck of jug. Grey fabric with reddish-brown outer surface. Vertical applied strips in body clay, patches of dull green glaze on body.

Fig. 7 AL15. Pit 133 (197) phase 5. Grey fabric with reddish-brown surfaces. Patches of dull green glaze on outer face.

Fig. 7 AL16. Pit 104, (267 + 269) phase 3 F10. Full profile of bowl/dripping dish/frying pan. Grey fabric with reddish-brown surfaces. Poor quality partially blackened orange glaze on inner surface and base.

Fabric 11
This coarse, flint- and limestone-tempered ware is very much a minor part of the medieval assemblage, and the fabric has many similarities with material which is well-known from Winchester, although the lack of publication of the material makes comparison somewhat difficult.

The majority of the vessel forms were jars, and all were undecorated apart from one small sherd with possible scoring, although these marks may have been made by inclusions dragging during knife-trimming. A few thumbed 'piecrust' rims were also noted.

Generally, as noted above, chalk-and-flint-tempered wares (apparently from several different sources) are a feature of the medieval assemblages in the area between the Thames Valley corridor and the south coast. Such wares are known from Berkshire, Wiltshire, Southampton, Winchester, and Netherton, and the chronology seems similar.

Fabric 11 Illustrations

Fig. 8 AL17. Pit 104 (267), phase 3. Thumbed 'piecrust' jar rim, heavily abraded. Grey fabric with browner surfaces. Many of the calcareous inclusions leached out.

Fig. 8 AL18. Pit 104 (158), phase 3. Jar rim. Grey fabric with brick-red outer surface. Outer rim-bead sooted.

Fig. 8 AL19. Pit 104 (268), phase 3. Bowl rim. Grey fabric with reddish-brown, smoke-blackened surfaces.

Fabric 12
This material has a very similar range of inclusions to fabric 10, although they are on the whole smaller, and the fabric is generally finer. A similar range of rim- and vessel forms were noted, and some sherds were also glazed, either internally or externally. It is likely therefore that the material was produced at a similar, or indeed the same, source as fabric 10.

Only three decorated sherds were noted, one with scoring, one with an incised wavy line and a jar rim with a combed bead. A pierced sherd, possibly from a curfew, was also present.
Fig. 9 Medieval pottery, phases 3 and 4 (see text for catalogue)
Fabric 12 Illustrations

Fig. 8 AL20. Pit 206 (278), phase 3. Jar rim. Grey fabric with reddish-brown outer surface.

Fig. 8 AL21. Pit 204 (276), phase 3. Jar rim. Uniform black fabric.

Fig. 8 AL22. Pit 2 (287), phase 3. Decorated jar rim. Pale grey fabric with darker surfaces.

Fabric 13: Sandy Glazed Wares
This category encompasses a range of fabrics, all of which have a similar mineralogical composition, but seem likely to be the products of several as yet unknown kiln sites. Most sherds were small, with a few exhibiting traces of incised decoration, but generally it was not possible to identify the style or form of the original vessels, other than a single, near-complete jug with slip decoration (Fig. 8 CP22). A single foot from a tripod jug was also noted and it is likely that most of these sherds came from jugs. A typical pattern for 13th-century Hampshire sites is that cooking pots or jars are made in coarsewares, often chalk and flint-tempered, while jugs are in iron-rich sandy fabrics such as those in this category. Within this group are a few sherds of South Hampshire Redware, a type recognized in south Hampshire towns such as Portsmouth, Romsey, Southampton and Winchester (Brown 2002; e.g., McCarthy and Brooks 1988, nos. 1298, 1299). These sherds suggest that some pottery was coming to Alton from southern production sites and one other type in this fabric group is comparable to an orange-coloured sandy ware recognized from the northern and eastern suburbs of Winchester (Denham and Blinkhorn in press), which emphasizes this link. It is likely that these sandy wares were displaced by Surrey Whiteware, perhaps in the 14th century, when it is known that many of the southern Hampshire kiln sites ceased production (Brown 2002).

Fabric 13 Illustrations

Fig. 8 CP22. Pit 206 (280), phase 3. Full profile of decorated jug. Brick-red fabric with buff inner surface. Outer surface covered with thin white slip on lower body, horizontal cordons of the same on the upper. Upper half of jug has patchy clear glaze showing orange over body clay and yellow over the slip.

Fig. 8 CP23. Pit 104 (158), phase 3. Foot from tripod pitcher. Uniform orange fabric.

The Regional Imports

Surrey Whitewares
The majority of this assemblage comprised large sherds from two vessels, a slip-decorated baluster jug and a bunghole cistern. Both are typical products of the industry, and have many parallels (e.g., Pearce and Vince 1988, 35 and figs 31 and 110–12). The jug is a typical medieval vessel, but the cistern is slightly later, with the London examples dated mid 14th–mid 15th century (Pearce and Vince 1988, fig. 44).

Illustrations

Fig. 9 CP24. Pit 206 (278), phase 3. Lower part of baluster jug. Pale grey fabric with copper-spotted green glaze on the outer surface. Criss-cross decoration in red slip under glaze.

Fig. 9 CP25. Pit 129 (188), and Pit 130 (192), phase 4. Base and bunghole from cistern. Pale grey fabric with buff surfaces. A few glaze spots on outer base, indicating that the vessel was fired upside-down.

Late Medieval Transitional Wares

Fabric 30
The assemblage is largely fragmentary, making identification of vessel types, in the main, impossible. A few feature sherds were noted, however, a skillet handle (Fig. 9 AL26) and the thumb-frilled bases of a large jug (Fig. 9 AL27) and what may be an imitation of a German stoneware mug (Fig. 9 AL28). They appear fairly typical of late medieval transitional vessels throughout southern England.
Fig. 10 Medieval and post-medieval pottery, phases 4 and 7 (see text for catalogue)
Illustrations

Fig. 9 AL26. Pit 100 (151), phase 6/7. Skillet handle. Grey fabric with orange surfaces.

Fig. 9 AL27. Pit 129 (188), phase 4. Thumb-frilled base from large jug. Grey fabric with brown surfaces. Vessel has suffered post-depositional burning.

Fig. 9 AL28. Pit 130 (192), phase 4. Thumb-frilled base of German stoneware mug copy. Grey fabric with orange surfaces, thick green glaze on both surfaces.

Fabric 31
As with fabric 30, this assemblage is largely fragmentary. The bulk of the material is made up of the upper part of a decorated two-handled jar or cistern (Fig. 9 AL29).

Illustration

Fig. 9 AL29. Pit 130 (192), phase 4. Rim and body of two-handled jar/cistern. Grey fabric with brown surfaces. Patchy green glaze on upper body.

Post-medieval Wares

Post-medieval Red Earthenwares
Post-medieval Redwares were produced in and around Hampshire from the 16th to the 19th centuries (Fox and Barton 1986, 83). They were made in a wide range of utilitarian forms, with pancheons and jars being the most common at this site.

Illustrations

Fig. 10 AL30. Pit 106 (160), P7 (mid-18th century or later). Handled jar. Brick red fabric with thick orange glaze on inner surface, large runs and pools of black glaze on outer surface and base pad, indicating that the vessel was fired upside down with black-glazed wares.

Fig. 10 AL31. Pit 212 (294), P7 (mid-18th century or later). Handled bowl. Brick red fabric with thick orange glaze on inner surface. Patches of glaze on outer surface.

Fig. 10 AL32. Pit 106 (160), P7 (mid-18th century or later). Pancheon. Brick red fabric with thick orange glaze on inner surface. Wavy line of trailed white slip on upper rim bead, appearing yellow through glaze.

Fig. 10 AL33. Pit 148 (270), P7 (mid-18th century or later). Plate. Brick red fabric with slightly dull orange glaze on inner surface. White slip design in centre and on part of rim, appearing yellow through glaze.

Discussion of the Assemblage

The medieval and later pottery assemblage from these excavations is the first one of any size to have been excavated in the town of Alton, and offers a useful window into the patterns of pottery consumption from the 13th century onwards. The range of ware types is typical of those found on contemporary sites in the south of England. The bulk of the medieval wares are local types; sandy wares, possibly manufactured at Bentley, and flint and limestone gritted material, variants on which are found across the whole of the area to the south of the Thames. The manufacturing sites are largely unknown, but it appears probable that a number of local sources were responsible. The rest of the medieval wares are imports from the London area, particularly glazed whiteware jugs from various kilns in Surrey, such as Kingston and Cheam. Such pottery is found at many towns and cities in the south of England, such as Oxford and Reading, and its presence at this site shows that Alton did have trade links with London during the medieval period.

The range of medieval vessel types at the site is again typical of those found at most contemporary English sites. In the earlier part of the medieval period, the assemblage is dominated by jars, jugs and bowls, along with a single pottery fire-cover, or curfew. In the later medieval period, c. 15th century, other vessel types such as cisterns and cups appear, showing the typical pattern of increasing sophistication,
as formal dining became more of a norm, and a wider range of pottery was produced to facilitate this. The assemblage for this period at Alton is somewhat small, but it is likely that the full range of late medieval cooking and tablewares was in use. Amongst the former could have been vessels such as dripping dishes, which were used to catch the fat from spit-roasted meat for use in sauces and the like, and a wider range of tablewares, such as the numerous different types of cups in 'Tudor Green' and 'Cistercian ware' fabrics, and aquamaniles, vessels in the form of sheep or knights on horseback, which contained water to be used for washing the hands between courses at formal dining. It would be a major surprise if future excavations in Alton did not produce such vessels, as they were commonplace throughout England in the late medieval period.

The post-medieval pottery is again typical of that found throughout southern England. The red earthenwares are ubiquitous, in a range of utilitarian vessels primarily for the preparation, cooking and serving of food and drink. These were produced at large numbers of kiln sites, usually for consumption in local markets. The so-called Border wares, from kilns in Surrey and north Hampshire, produced a similar range of wares. German stoneware mugs were the main drinking vessels; the Port Books of London reveal that these were imported by the million in the 17th century in particular, and they are found almost everywhere in the known world at that time, and at sites of all types from the humblest rural dwelling to the major cities.

During the 17th century, tin-glazed earthenwares, commonly known as 'Delft' wares, are arriving at the site, probably from sources in London. These, and the later industrially-produced wares found at the site, mark the end of regional industries other than perhaps the utilitarian red earthenwares, and the 18th century assemblage, like the earlier material from this site, can be paralleled with contemporary sites just about anywhere in the south of England.

Petrological analysis by Alan Vince

Six samples were selected for petrological analysis (Table 7). The aims of this analysis were two-fold: first, to provide an accurate description of the petrological characteristics of the fabric (albeit based on a single example in each case); and, second, to use this information to

<table>
<thead>
<tr>
<th>TSNO</th>
<th>Cut</th>
<th>Context</th>
<th>Fabric</th>
<th>Description</th>
<th>Form</th>
<th>Illus</th>
<th>Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1685</td>
<td>130</td>
<td>192</td>
<td>31</td>
<td>Plain ext splash glaze; grooved decoration</td>
<td>Jar/jug</td>
<td>AL 29</td>
<td>BS</td>
</tr>
<tr>
<td>V1686</td>
<td>104</td>
<td>268</td>
<td>11</td>
<td>Handmade; cylindrical body; flat topped rim</td>
<td>Jar</td>
<td>AL 19</td>
<td>R</td>
</tr>
<tr>
<td>V1687</td>
<td>206</td>
<td>280</td>
<td>13</td>
<td>Wheelthrown; white slipped exterior with rough wheel-applied sgraffito lines</td>
<td>Jug</td>
<td>CP 22</td>
<td>BS</td>
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<tr>
<td>V1688</td>
<td>129</td>
<td>188</td>
<td>30</td>
<td>Wheelthrown?; Kt exterior; darkened exterior surface (cf TUDB)</td>
<td>Jug/jar</td>
<td>AL 27</td>
<td>BS</td>
</tr>
<tr>
<td>V1689</td>
<td>206</td>
<td>278</td>
<td>12</td>
<td>Wheelthrown?; Everted rim; oxidized exterior margins</td>
<td>Jar</td>
<td>AL 20</td>
<td>R</td>
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<tr>
<td>V1690</td>
<td>2</td>
<td>284</td>
<td>10</td>
<td>Handmade?; Reduced green glaze interior; traces of handle; combing around base angle. Sooted exterior</td>
<td>Handled jar</td>
<td>AL 10</td>
<td>B</td>
</tr>
</tbody>
</table>
investigate the possible source(s) of the fabrics. The detailed results are in the archive.

There is very little difference between the petrological characteristics seen in Fabric 31 and in Fabric 10. In both cases the outlines of the quartz grains suggest that at least some of the rounded quartz originated in lower Cretaceous deposits, which are widespread throughout the south-east of England. The presence of brown-stained veins in Fabric 10 probably indicates that the parent body had an iron-rich cement and similar sands are common throughout the Surrey/Hampshire border. Unless this distinction between iron-stained and non-iron-stained quartz grains can be confirmed through visual examination of more samples the two fabrics ought to be amalgamated.

A coarse sand temper found in the sample of Fabric 11 indicates a mixed gravel draining upper Cretaceous and Tertiary deposits. In composition this gravel is similar to those derived from the Plateau gravels found in coarsewares in the Southampton area but similar gravels probably occur closer to Alton and the Gault clay outcrop, thought to be the origin of the parent clay (see below).

The abundant fine grained rounded opaque inclusions seen in Fabrics 10, 11, 30 and 31, were certainly present in the parent clay, despite being strictly speaking of fine sand grade rather than silt. Although they may well have originated as glauconite grains (and the presence of glauconite grains of similar size and character in Fabric 30 seems to support this) it is likely that the replacement by an opaque material, presumably an iron oxide, took place in the geological past rather than as a result of firing (heat-altered glauconite turns brown, from green, but is still translucent). Such micaceous, silty, glauconitic clays occur in the lower Cretaceous strata of southern England, such as the Gault Clay. The similarity of the four samples suggests that they were all produced from the same strata.

The two remaining sections, from Fabrics 12 and 13, are rather different. The former is produced from a clay with a low iron content and few inclusions to which a quartzose sand, with minor flint inclusions, has been added as temper. Such wares were produced at numerous centres exploiting light-firing beds in the Reading and Bagshot Beds (Chatwin 1960). The presence of rounded brown flint grains confirms that the sand temper includes Tertiary material but otherwise the fabric is not diagnostic in thin-section. It is comparable in its petrological characteristics, for example, with the products of the Laverstock and Salisbury industries in south-east Wiltshire whilst the absence of quartz grains from the lower Cretaceous distinguishes it from Surrey whitewares (Pearce and Vince 1988).

Fabric 12 was tempered with a sand which includes a high proportion of grains of Permo-Triassic origin. However, such sands have a much wider distribution than that of the parent strata, reaching at least as far south as Berkshire. The low quantity of silt in the clay matrix also distinguishes this fabric from the presumably more local products.

Animal bone by Sheila Hamilton-Dyer

Detailed analysis has been carried out on the bone from the two medieval phases (3 and 4) only. Later material was less significant, and full assemblages were not systematically collected during excavation.

Species identifications were made using the author’s modern comparative collections. All fragments were identified to species and element with the following exceptions. Ribs and vertebrae of the ungulates (other than axis, atlas, and sacrum) were identified only to the level of cattle/horse-sized and sheep/pig-sized. Unidentified shaft and other fragments were similarly divided. Any fragments that could not be assigned even to this level have been recorded as mammalian only. Where possible, sheep and goat were separated using the methods of Boessneck (1969) and Payne (1985). Recently broken bones were joined where possible and have been counted as single fragments. Tooth eruption and wear stages of cattle, sheep and pig jaws were recorded following Grant (1982). Withers height calculations of the domestic ungulates are based on factors recommended by von den Driesch and
Boessneck (1974). Shoulder heights of dogs are calculated using the factors of Harcourt (1974). Archive material includes metrical and other data not presented in the text. The small amount of bone from sieved samples is included.

Bone from the two phases examined amounts to 393 and 133 individual specimens respectively. The condition of the bone is good, with little surface erosion and relatively few recent breaks. Almost 58 per cent can be identified to taxon and surface details such as butchery, gnawing and pathology are readily visible.

The identified taxa include horse, cattle, sheep, goat, pig, red deer, dog, hare, goose and fowl. As expected the bones of the domestic ungulates dominate the assemblage with cattle and sheep the most frequent. Horse and pig are less frequent but occur in many contexts. The other taxa are rare (Tables 7 and 8).

**Phase 3: Mid 13th~Late 14th century**

The 393 bones were recovered from ten features, several of which offer only small samples of material. Two pits, 2 and 104, contributed over half of the bones. There are distinct differences between these two pits, the greater number of sheep bones from pit 2 and the presence of horse and dog bones in pit 104 for example. The assemblages are, however, rather small; the 28 sheep bones from pit 2 are the largest species group, yet this is fewer than the bones of a single sheep skeleton. The results might not indicate any major difference in disposal strategy (Table 8).

The bones from pit 2 include those of prime meat areas but also those usually considered waste such as head and foot bones. Pit 104 also offered a mixture of elements.

Many dog bones were recovered from pit 104. They are assumed to be of a single individual despite being recovered from different fills. All the estimates of shoulder height are approximately 0.54m and the bones match in type and colour. There are several elements of the skeleton missing and it seems likely that a partly decomposed body was disposed of along with other rubbish, perhaps from a yard midden. The bones represent an adult of some age with signs of age related arthritis round the joints. The jaws and skull have teeth that are quite worn, the first premolar had been lost during life from both jaws, and caries affected the 4th premolar of the left jaw.

In addition to the dog bones this pit offered a foot bone and horn core of goat. These may both be from a skin, probably a male. Goat is often rare in medieval town assemblages and, as here, usually represented by head and foot bones only.

Pit 204 contained several complete horse bones, but not from a single skeleton. At least four individuals are represented with one under four years at death. Estimates of withers heights range from 1.109m to 1.31m. The single phalanx recovered has knife marks indicating that this animal was probably skinned. There are also several substantial pieces of cattle bone including bucrania, some showing signs of horn removal. A complete cattle radius is unusually small with an estimated withers height of only 0.98m. None of these bones would be regarded as kitchen waste but the collection does include some material that could be domestic in origin. Butchery marks indicate the axial division of sheep and pig heads.

Butchery marks on bones in this phase include some heavy chopping by cleavers or axes; a few bones had been cut by knives including some indications of skinning.

Aging data are limited but there are several jaws with teeth present and bones of differing epiphyseal stages. Most of the cattle and sheep bones are from adult or sub-adult animals but there are also some remains of calves and lambs. Pig bones are mainly of juveniles as expected but there are some remains of adults of both sexes. The horse bones are usually of adult or aged animals, as they are not a primary meat source, but one is from a relatively young animal.

**Phase 4: Late 14th~15th century**

Five features from this phase contributed just 133 specimens with cattle dominating the identified material. Sheep are less than half as frequent, pig and horse uncommon. No other mammal taxa, bird or fish bones were identi-
<table>
<thead>
<tr>
<th>Feature</th>
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<th>sheep-size</th>
<th>mammal</th>
<th>deer</th>
<th>dog</th>
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<td>–</td>
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<td>18</td>
<td>–</td>
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<td>11.9</td>
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Table 9 Animal bone species (NISP) by feature – phase 4

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<th>sheep/goat</th>
<th>pig</th>
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<th>sheep-size</th>
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<td>17</td>
<td>4</td>
<td>29</td>
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<td>13</td>
<td>133</td>
</tr>
<tr>
<td>percentage overall</td>
<td>2.3</td>
<td>34.5</td>
<td>12.8</td>
<td>3.0</td>
<td>21.8</td>
<td>15.8</td>
<td>9.8</td>
<td>70</td>
</tr>
<tr>
<td>percentage identified</td>
<td>4.3</td>
<td>65.7</td>
<td>24.3</td>
<td>5.7</td>
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<tr>
<td>% cattle, sheep, pig</td>
<td>68.6</td>
<td>25.4</td>
<td>6.0</td>
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...fied in this, admittedly small, collection (Table 9).

The small sample from pit 129 includes a cattle bucranium fragment with abnormal perforations. These have been observed in other collections and, as yet, are of uncertain aetiology.

Discussion

The majority of the material is, as expected, of the main domestic ungulates. Cattle and sheep vary in their relative proportions but dominate the assemblages with pig and horse occurring in several contexts. Other taxa are usually of minor importance in medieval small town assemblages and this is the case here. If anything the assemblage is less diverse than some, with very few bird and fish. Fish bones are often underrepresented, in particular those of the small but economically important species such as herring, eel, and plaice. The number of sieved samples is not large but some remains of these species might have been expected, particularly if any of the pits contained cess.

The later medieval phase group is particularly small, so it is difficult to detect any true differences between the phases. The two estimated cattle withers heights, and the few other cattle and sheep measurements, indicate the presence of animals of the same typical small stature as the earlier medieval phase. The distribution of anatomical elements for cattle and sheep is variable but does not indicate any concentrations of a particular body part in either phase. The distribution is less evenly spread for sheep with a typical bias in favour of the largest and the sturdiest elements.

Neither phase group consists of purely domestic, slaughter, or industrial bone waste but a mixture. There are no indications of high status with very little bird or fish bone and the only deer remains are two small scraps of charred antler. Examination of further material from the town should reveal whether there is any zoning or whether this mixed pattern is repeated.

This is not a large collection but it is well preserved and includes several measurable bones. Little is known of the domestic economy of medieval Alton and this material offers useful archive data, to be compared with future material.

Struck flint by Steve Ford

A small collection of 64 struck flints was recovered. These comprise 45 flakes, four
possible blades (narrow flakes), 12 spalls, two cores, one core fragment and two scrapers. The condition of the pieces is highly variable, several pieces being fresh and unpatinated with a small number having a slightly rolled appearance. Many pieces are lightly patinated, often more so on one surface only and some of the pieces are burnt. The flint appears to have used locally available material from the nearby chalk, which is not of very good quality.

The collection as a whole is not obviously homogenous and is not chronologically distinctive. One or two of the narrow flakes might belong to the Mesolithic or earlier Neolithic but this is not certain. Thirty-two of the pieces came from the four pits thought to be prehistoric (107, 108, 109 and 210). These pits also contained burnt flint with no later material (apart from a crumb of pottery of medieval date thought to be intrusive in 108). The remaining material was residual in medieval and later features. The lack of distinctive chronological attributes might indicate that this material is of Bronze Age date (Ford et al. 1984).

Clay pipe by Paul Cannon

The excavation and evaluation produced a total of 138 clay pipe fragments, consisting of 22 bowl, 117 stem and two mouth-piece fragments, ranging in date from c. 1660 to c. 1770. There were three maker’s marks. It is not known if the town of Alton had its own pipemaking industry. The presence of pipes from Farnham indicates at least one source supplying the town.

The earliest pipe has a thick walled bowl and dumpy spur and belongs to the period c. 1660 to 1680. The presence of a number of stems with large bores probably points to some other 17th-century material being present. Most of the pipes however are clearly 18th century. The bowls have relatively thin walls and cut rims, a practice which began c. 1700.

A total of three marked pipes were recovered:

I/D [x2]. Moulded either side of an oval shaped foot. This same serif mark has been found at nearby Farnham in the extreme west of Surrey (Higgins 1981, 208 and 243). These are probably the work of John Denyer who was apprenticed to a Farnham pipemaker in 1717 and who was known to have been working until at least 1745 (Oswald 1975, 172). One of the I/D marks is associated with an internal bowl mark. Damage to the base of the bowl means that the exact form of this mark is unclear.

W/W [x1]. Moulded either side of a cylindrical foot. The well formed serif initials cannot be linked to any known pipemaker from the immediate district. This mark is also from an 18th-century pipe.

Charred plant remains by Mark Robinson

A total of 18 samples were taken from a range of prehistoric and medieval contexts. These were floated onto a 0.3mm mesh and dried. Charcoal from the flots was broken transversely and examined at up to x50 magnification. This is an appropriate means for the identification of Quercus and Fagus, but the other identifications must be regarded as tentative.

A single grain of free-threshing Triticum sp. (rivet or bread wheat) was identified from prehistoric pit 107 (171). It is thought likely to be intrusive. The paucity of carbonized cereal remains suggests that little grain processing was occurring on the site.

Identifiable charcoal was present in all but three of the flots. In the medieval samples this was mostly Fagus sylvatica (beech) but Quercus sp. (oak), Alnus / Corylus (alder/hazel) and cf. Pomoideae (hawthorn etc) are also present. It is likely that the charcoal reflects the fuel used on the site. One of the four prehistoric samples, contained Quercus sp. (oak), which is entirely plausible for the suggested date. Another, however, contained charcoal of Fagus sylvatica (beech) which, although possible as prehistoric, would be unusual and is more likely to be intrusive.

The predominance of Fagus (beech) charcoal, suggesting that the medieval site was obtaining fuel from beech woodland, is of interest. The intrusive material in the prehistoric samples, including coal in one instance, renders the results unreliable and not suitable for discussion.
Worked bone by Nicola Powell

Two pieces of a bone comb were recovered from the interface between medieval pit 2 and 18th-century pit 207. They do not conjoin, but appear to be from the same object. The comb is made from ivory and is of a one-piece, double-sided type with a straight plain end. The teeth appear to graduate in length from shortest at the end of the comb to longer towards the middle. The teeth on one side are quite widely set. A similar comb (Crummy 1988, 23-4) was recovered from a late 17th- to early 19th-century context, suggesting that the Alton example came from the 18th-century pit 207.

A bone button was found in 19th-century pit 146 (262). It is 18.5mm in diameter and has a counter sunk centre surrounded by a ridge and contains five perforations (one small surrounded by four larger stitch holes). It is 18th century in date (Margeson 1993, 20-1).

Other Finds by Nicola Powell

Over 27kg of brick and tile fragments was collected, comprising 376 pieces. No complete bricks or tiles were found. The assemblage consists of mostly roof tile with some complete and broken peg holes observed. A few fragments of thicker tile may be the remains of floor tiles. None is decorated. Only nineteen pieces of brick were recovered. All are fragmentary but two pieces appear to have been glazed.

Forty-two pieces of metalwork were recovered from the medieval and post-medieval features. These are mostly iron although a small number of copper alloy pieces are recorded. The assemblage is dominated by nails and fragments of nails. Most, however, are too corroded or bent to be positively identified or assigned a date.

Forty-seven pieces of glass with a total weight of 947g were collected. Dark olive green body sherds dominate the assemblage although some clear window glass is recorded. Some small fragments were retrieved from medieval features, however they are not particularly diagnostic and it is not possible to determine whether they are themselves medieval or are intrusive. The most distinctive piece is part of a bottle neck, with string ring, from pit 209 (289). This is probably part of an onion flask dating to the late 17th century or later.

Four small pieces of stone were recovered. The only item of note is a fragment of Mayen Lava, probably a piece of a quern, from medieval pit 205 (277).

A total of 11 pieces of slag weighing 2824g was recovered from the site. Although some large pieces were recovered from medieval features the sample is too small for significant study of local metalworking.

Burnt clay fragments weighing 42g and oyster shell weighing 2674g were also collected from medieval and post-medieval features. Additionally burnt flint weighing 4876g was recovered, mostly during wet sieving of soil samples from the prehistoric features.

DISCUSSION

Despite the limited size of the site, it did present a significant opportunity to add to hitherto sparse knowledge of the history of the topography and economy of the town.

Prehistoric activity

Four small pits of prehistoric date are recorded, along with a few struck flints residual in later features. Although the quantity and quality of the material are not exceptional, these finds add to the pattern of settlement distribution for the region (and indeed from other locations on the High Street) and demonstrate that there may still be prehistoric features surviving even the heart of the medieval town.

Medieval and post-medieval activity

Intensive use of the land to the rear of 16–20 High Street in medieval and post-medieval times can be demonstrated. This adds to the small number of excavations in the centre of the town and has provided valuable informa-
tion about the development of the town during this period.

The earliest medieval use of the plot dates from the mid 13th century, as was also the case at Johnson's Corner (Millett 1983) and Amery House (Bowden et al. 1988). Possible earlier features at 37–39 High Street are in fact simply less closely dated (Currie 1999). Despite its proximity to the Norman (and the probable site of the Saxon) church, there is no evidence for significant earlier activity on the site and no real opportunity has been presented to investigate the Saxon origins of the town. Alton had clearly prospered during the early medieval period, however, leading to the expansion of the town and the incorporation of this site into the inhabited area. The nature of the surviving medieval remains, domestic refuse pits, suggests that the expansion into this area was caused by population growth rather than an increase in industrial activity.

National research agendas for medieval towns highlight the importance of studying consumption and trade patterns for domestic materials such as ceramics and food (e.g. Perring 2002). This not only sheds light on the economy of the town itself but also its relationship with the surrounding rural settlements, another topic for research. The earliest medieval activity demonstrates the use of ceramics from a number of different, fairly local, sources, the majority of which are as yet unknown. The ceramic fabric series created from this material will allow more detailed examination of local trade as further sites are excavated in the county. Should any of the kiln sites be located this will greatly add to the information. There is also evidence of ceramics being traded on a regional scale with south Hampshire wares being identified alongside the more local material. This is a typical pattern for small towns in the south of England. The faunal material is a mixture of domestic, slaughter and industrial bone waste and does not indicate high status consumption. Although a fragment of quern was recovered from one of the pits, the lack of charred cereal remains suggests the site was not used for crop processing.

Later medieval activity on the site appears to be less intensive with fewer pits and a reduction in the volume of refuse deposited. This is a common feature of medieval sites and has variously been ascribed to economic factors, changing trade patterns or depopulation caused by plagues during the 14th century (Reynolds 1980). Despite the less intensive use of the site there is no evidence that the individuals depositing the waste were any less prosperous than their predecessors. The pottery assemblage is typical for this period, with the local wares being largely replaced by regional imports from the London area and the range of vessels increasing with more formal dining items being seen. The limited faunal assemblage likewise does not show any evidence for a change in circumstances.

Post-medieval activity also appears to be domestic in character. The dates provided by the artefactual assemblages demonstrate continuous use of the site, at least for refuse disposal, from the medieval period through to the 19th/20th century, albeit with a marked decrease in deposition during the 16th and 17th centuries. The ceramic material, which, partly due to the selective collection policy for the later phases, forms the largest assemblage, is indicative of food preparation and consumption without any evidence of industrial activities. Other artefacts, such as bottle glass and clay tobacco pipes, also suggest the disposal of domestic waste.

There is no evidence to link any 17th-century activity to the Civil War battle which took place in the church and churchyard, just 150m up the hill to the north of the site. The only element of the site that can be directly related to documentary evidence is the cellar to the rear of 16 High Street which appears in several editions of the Ordnance Survey maps, disappearing between the 1910 and 1956 versions.

Research agendas have tended to focus on the investigation of processes of change as essential to the understanding of society. Within this framework, stability is itself an interesting phenomenon. The evidence from this small excavation suggests that this plot
has been a backland area since the mid 13th century, as indeed it was when the fieldwork took place. The majority of the features in the medieval and post-medieval phases appear to have been used for domestic waste disposal, at least in their final role, and there is no clear evidence of any structure other than the 19th-century cellar and associated wall. The character of the site appears to have been remarkably constant through time, perhaps indicating that the topography and economy of the town had been firmly established by the time this plot came into use. However, extrapolation from this small site to the urban development of the town is perhaps a little ambitious.

It is the material recovered from the rubbish pits that provides the most valuable information on the history of the town. The excavated features can be used to describe the site itself, whereas the refuse being disposed of reveals patterns extending beyond the plot to the town and the surrounding area.

**Medieval pottery assemblage**

The pottery assemblage is a particularly significant feature of this excavation. It is the first sizeable medieval assemblage from Alton and has allowed a study of the trade and consumption patterns of the town from the mid 13th century onwards. The material is typical of assemblages from many small towns in the south of England, both in the fabrics and the vessel types used.

Local wares which make up the bulk of the material from the mid 13th - late 14th centuries were largely replaced by regional imports in the later medieval period. The local wares are of typical fabric types and appear to have been manufactured in a number of locations. The majority of the kiln sites producing pottery for Alton and this part of Hampshire are unknown, although some of the material from the assemblage may have originated at Bentley (Barton and Brears 1976). The remainder of the medieval material is of recognizable imported wares from south Hampshire and the London area, particularly Surrey, and shows that, in common with other towns in the south of the country, medieval Alton was involved in trade with London.

The range of medieval vessel types at the site is not unlike those found in most contemporary towns. The earlier assemblage is dominated by jars, jugs and bowls, a typical pattern. The 15th-century material shows a wider group of items with more sophisticated table pieces such as cups and cisterns appearing. Although several typical vessel types were not present amongst the material it is thought that this is a product of the small assemblage for this phase rather than any indication of unusual cooking or dining habits.

The material has been used to create a ceramic fabric series for Alton and the surrounding area, which incorporates the results of the thin-sectioning of selected sherds. This will be housed with Hampshire County Museums and Archive Service. This resource will allow pottery from future excavations to be referred to the known wares and thus add to the picture of the production, trade and consumption patterns in operation in the area during the medieval period.

**ACKNOWLEDGEMENTS**

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REFERENCES


Boessneck, J 1969 Osteological Differences between Sheep (Ovis aries Linné) and Goat (Capra hircus Linné), in Brothwell D & Higgs E S (eds), Science in Archaeology, London, 331–58.


Couper, D I. 1995 The Story of the Parish Church of St Lawrence, Alton, Cheltenham (6th edn.).


Denham, V & Blinkhorn P in press The medieval pottery from the Northern and Eastern suburbs of Winchester.


Edwards, B 2002 An extensive urban survey of Hampshire’s and the Isle of Wight’s small towns, Hampshire County Council.


Ford, S 2000 18–20 High Street, Alton, Hampshire, an archaeological evaluation, Thames Valley Archaeol Services unpub report 00/73.


Gaimster, D 1997 German Stoneware, London.


McCarthy, M R & Brooks, C M 1988 Medieval Pottery in Britain AD900–1600, Leicester.

Mellor, M 1989 A summary of the key assemblages. A study of pottery, clay pipes, glass and other finds from fourteen pits, dating from the 16th to the 19th century, in Hassall, T G, Halpin, C E & Mellor, M Excavations at St Ebbe’s, Oxoniensia 49 181–219.


Millett, M 1986 An early Roman cemetery at Alton,


Oswald, A 1975 *Clay Pipes for the Archaeologist,* British Archaeol Rep 14, Oxford.


Payne, S 1985 *Morphological distinctions between the mandibular teeth of young sheep, Ovis, and goats, Capra,* *J Archaeol Science* 12 139–47.

Pearce, J 1992 *Border Wares,* London.


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