Archaeological Investigations at 15 Knightrider St, Maidstone, Kent

(TR 76210 5533)

Jim Stevenson
With contributions by
Oni Akeret, Luke Barber, Samantha Crawt,
and Lucy Sibun

April 2013
Archaeological Investigations at 15 Knightrider St, Maidstone, Kent

(TR 76210 5533)

Jim Stevenson

With contributions by
Oni Akeret, Luke Barber, Samantha Crawt,
and Lucy Sibun

April 2013

Archaeology South-East
Units 1 & 2, 2 Chapel Place
Portslade
East Sussex
Tel: 01273 845497
Fax: 01273 844187
fau@ucl.ac.uk
www.archaeologyse.co.uk
Tables
Table 1: Quantification of ceramics by period (no./weight in grams)
Table 2: Pottery from contexts [219] (pit [218]) and [221] (pit [220])
Table 3: Pottery from fills [278] and [281]
Table 4: Quantification of pottery from pits [311] and [338] (fills [312/315])
Table 5: Characterisation of tile assemblage
Table 6: Animal bone quantity by period
Table 7: MNI per species
Table 8: List of plant taxa

Figures
Figure 1: Site location
Figure 2: Plan showing Iron Age/Romano-British features
Figure 3: Plan showing medieval features
Figure 4: 1888 Tootell Map
Figure 5: Plan showing all post-medieval features
Figure 6: Photographs of stone-lined cesspit [253]
Figure 7: Pottery illustrations nos 1-14
Figure 8: Pottery illustrations nos 15-19
Figure 9: Glass vessel illustrations nos 1-4
Figure 10: Bone object illustrations nos 1-3
Archaeological Excavation at 15 Knightrider St, Maidstone, Kent

INTRODUCTION

Planning permission was granted by Maidstone Borough Council for the refurbishment of an existing medieval building at 15 Knightrider Street, Maidstone, Kent (NGR 576210 15533, Fig. 1) and the construction of a new building at the rear of the plot. The Kent County Council Heritage Conservation Group advised that an historic building survey of the upstanding building and archaeological evaluation should be undertaken as a condition of planning permission prior to construction work. Accordingly, Archaeology South-East (UCL Institute of Archaeology) was commissioned by Osbourne Homes to undertake the work. In addition to the historic building survey, (Martin and Martin 2004) evaluation (Stevenson 2002) and subsequent excavation revealed surviving Iron Age/ Romano-British, medieval and post-medieval archaeological remains.

BACKGROUND

Although now obscured by centuries of urban development, Knightrider Street lies on the southern slope of the River Len valley overlooking the point where the Len discharges into the Medway. The underlying geology is Hythe Beds, a Greensand formation with units of Atherfield and Weald clay to the north (Geological Survey of Great Britain sheet 288). This substrate was exposed during the excavation as orange-brown silty sandy clay with greensand fragments at 13.00m-14.00m AOD.

There is currently little prehistoric evidence from the immediate vicinity, although isolated finds of Neolithic, Bronze Age and Late Iron Age date from the town indicate some activity. The status of the area during the Roman period is uncertain. There are Roman burials and buildings and a large villa to the north, though little evidence is apparent close to Knightrider Street. The area to the west of the site became a Royal estate centre during the Anglo-Saxon period, clustered around the minster church; however, it was only in the medieval period that Maidstone rapidly developed, becoming a major market centre. The site itself lies to the south of the historic core of the town, in the vicinity of the Archbishops Palace complex, and the name Knightrider may have derived from the processions of retainers who passed to and from the Palace when the Archbishop was in residence. The area surrounding the site developed further during the post-medieval period, although despite being on an established thoroughfare, it was still on the outskirts of the urban centre which lay across the River Len to the north.

There has been comparatively little formal archaeological investigation within Maidstone. A notable exception is the excavations at Fremlin Walk, Maidstone (640m from the present excavation) which revealed evidence of Roman activity including urned cremations, pits, post-holes and linear features and post-medieval remains including pits and an inhumation (Edwards 2007). In 2006 excavations to the north of the current site at King Street found evidence for buildings fronting onto the road from the thirteenth century (Knight 2012).

HISTORIC BUILDING SURVEY

Historical sources suggest that until the early 18th century, numbers 13 and 15 Knightrider Street formed part of the same property (Martin and Martin 2004), with number 15 effectively being in the back yard of number 13, perhaps indicating the buildings originally functioned in association. There have been suggestions that number 13 may have served as an inn during the earlier centuries (as it did in the 20th century until demolished by World War II bombing), but there is no direct documentary evidence which supports this (James 2002).
The historic buildings survey carried out at number 15 revealed a very complex pattern of development with eight phases of construction or alteration identified, possibly beginning as early as the 13–14th centuries and continuing through to the mid 19th century (Martin and Martin 2004). This work further supports the view that the early history of the number 15 should be understood in relation to the missing building and adds weight to the argument that this structure was an inn or alehouse. The survey concluded that the building has proved to be an example of a little known, and little understood group of structures built within towns in order to serve as meeting places for groups or individuals whether they be town officials, members of a religious or trade fraternity, or members of the public wishing to gather for a feast or other special occasion and would have incorporated a first floor ‘hall’ or function room which serviced the probable inn to the front of the plot (Martin and Martin 2004).

PERIOD SUMMARY

All features were cut into the natural substrate at 13–14m AOD. They were sealed intermittently by 0.10-0.25m of subsoil overlain by 0.20-0.60m of topsoil or made ground.

Iron Age/Romano-British (Fig. 2)
A shallow gully [224], (Fig. 2) aligned northwest-southeast, was clearly cut by later medieval and post-medieval pitting. It had a single fill from which a sherd of Iron Age/Romano-British pottery and two struck flint flakes were recovered. Although dating evidence is sparse, an early origin is likely because of the markedly different alignment and fill composition, compared to later, well-dated features. The short section of gully located means the function is unclear.

There was no evidence found during the excavation of a Roman Road (as has been suggested might be located in the vicinity); ditch [224] is not aligned correctly to be a possible roadside ditch.

Medieval (Fig. 3)
The first medieval evidence from the excavations comprises two ditches and a series of intercutting pits infilling in the 12th century (Fig. 3). Ditches [215] and [335] were aligned north-south and east-west respectively and it seems likely that they intersected outside the excavation area. Both ditches appear to have naturally silted and contained pottery of c.12th century date. Given their form and alignment these ditches are probably early plot boundaries. These potential plots may run from Wren’s Cross/Upper Stone Street to the east. There is however, a suggestion of a possible lane running along the western edge of the site, fossilised on the 1888 Tootell Map (Fig 4) which may have medieval origins (James 2002). This may indicate that any such east-west aligned plots were accessed from this, rather than the existing roads to the east.

At the northwest corner of the site, within one of the plots formed by the two ditches, a group of intercutting refuse pits was investigated ([370], [222], [218], [220] and [229]). They were broadly similar, being oval or circular with mid-dark grey brown sandy or silty clay fills. These fills generally, also showed evidence of charcoal and ragstone fragments, including more frequent blocks in one of the features, [220]. All contained pottery of 12th-century date. These features were probably refuse pits or cesspits - re-used as refuse pits - although no clear cess-like deposits were identified. These features may also be indirect evidence of the possible lane, concentrated as they were at the west, suggesting the plot may have been accessed from here and rubbish or cess disposed of at the margins of the site.

Refuse pits continued to be dug in the 13th century ([106], [286], [238] [288] and [317]) and quantities of animal bone, tile and pottery were recovered from them. The tile suggests the presence of roofed buildings in the vicinity and it is tempting to speculate that these pits may be associated with the upstanding building which potentially originated in the 13th century (Martin and Martin 2004) The probable plots identified in the 11th-12th centuries probably continued into this phase.
By the 14th-15th centuries refuse pitting seems to reduce, with just one example, pit [307] found, although this did contain a larger finds assemblage that earlier examples, including animal bone, pottery and iron objects. A linear shaped deposit [305], containing pottery of 14th-15th century date, and aligned approximately north-south, may represent the accumulation of soil and debris along a now undetectable boundary (such as a fence or hedge). Certainly it is on the same alignment as the boundaries identified in the 11th-12th centuries and may represent a shifting or bisecting of this potential plot. Generally, though, the relative lack of features is likely to indicate a decline in the use of this area, and potentially the associated buildings.

Post-medieval (Fig. 5)
The vast majority of features excavated date from the late 16th to 17th century and the date of the infilling of most of the contexts can be refined to the years 1650-1670 as they contain clay pipe bowls and stems, whose form can be closely dated.

Refuse pitting continued into this period, including, notably, a group of 11 intercutting features (Pit Group 1). The pits contained a mix of finds: pottery, animal bone, and ceramic building material. One of the pit fills ([311], fill, [310]) was almost entirely composed of roof tile and mortar (not shown on plan). Similarly, fill [234] of pit [233] was also composed of frequent tile and mortar as well as animal bone, pottery and clay pipe (dated to 1630-1680). The historic building survey identifies the demolition of a link between the main range and the ‘kitchen’ range of the building (Martin and Martin 2004, 25) and other alterations, taking place in this period and it is probable that these (and other dumps of tile found across the site) derive from this event. In general, these pits contained much domestic rubbish with large quantities of clay pipe and several drinking vessels; a probable indication of the function of the building as an inn or meeting house. A bone knife, (Fig. 10, no. 3) was also recovered from this pit group. Further pits, infilling in this period may have originally been cesspits, ultimately used for refuse disposal: pits [321], [244], [246], [291], [295], [299] and [303]. These ranged from fairly small and irregular ([244] and [303]) to larger and circular or sub-rectangular in plan, ([246], [291], [295] and [299]). All of these features contained varying amounts of general domestic rubbish: bone, pottery and shell. Pit [299] also showed evidence of building/demolition detritus, tile and mortar. The suggestion of some cess-like deposits in the primary fills provides indication of their original function.

Three square postholes ([203], [205] and [209]) are the only convincing structural evidence from this period, although what they may have represented is not clear.

A stone lined pit was the most substantial of the archaeological remains found (Fig. 6). The initial cut for this feature measured 2.55m x 1.95m with a depth of 2.00m. Roughly worked irregular blocks of ragstone (typical size 0.35m x 0.20m x 0.15m.) formed a well-constructed lining. These blocks were faced at the internal edge and bonded at all four corners and fragments of ragstone were used to pin the joints between the blocks. A clay soil with ragstone fragments was also used to infill between the initial pit cut and the block facing. This matrix would have been added as the block wall was built. There was a succession of episodes of infilling within the pit, 30 layers being identified. Several are of specific interest: layer [255] contained a quantity of tile, mortar and other demolition debris, and layers [256], [257], [265], [320], [279] and [280] were comprised of ash and cinder, probably from household fires. Several re-cuts indicate that the pit was occasionally cleaned out. The finds recovered include pottery, (a total of 225 sherds) animal bone, shell and CBM. Dates from the clay pipe suggest that the lower fills of this feature were deposited in the 1650s and the upper fills in the 1660-70s, potentially a 20 year infilling period, although successive infilling then partial cleaning out seems more likely. Of particular note are a bone comb and a bone letter opener (Fig. 10, no. 2). Environmental evidence includes a very large amount of raspberry seeds, possible from jam making, recovered from a single deposition event. The most likely function for this feature is as an elaborate cess-pit, although there may be other
possibilities, outlined in the discussion, (although the environmental evidence has proved inconclusive), which was cleaned out before being used, ultimately, for rubbish disposal. It is probable that a ‘privy’ style structure covered it at one time, although this has left no archaeological trace (Martin and Martin 2004). Its substantial nature probably reflects the public function of the building. Similar examples have been found during excavations at Mill Road, Richmond House and Blackfriars Barn, Winchelsea (Martin and Martin 2004).

Pit digging and infilling also continued into the eighteenth – nineteenth century with five probable refuse pits found.

Discussion

There are little in the way of useful parallels in Maidstone that can be drawn upon as there have been very few excavations in the town. The small number that has been completed, particularly the Fremlin Walk site (Edwards 2007), is some distance away and of a different nature.

Cartographic evidence alone would indicate that the medieval occupation of Maidstone lies to the north and west of Knightrider Street. The excavation and the historic building analysis have shown, however, that the medieval activity continues further south and east in the eleventh-twelfth centuries. The importance of Knightrider Street as a thoroughfare at this and later times was a significant influence, the street being the main eastern access-way to the Archbishops Palace complex. This would explain the development of the site in what was a sparsely occupied area; an inn or alehouse established at number 13/15 Knightrider Street to service the high status traffic passing through to the Palace.

The early post-medieval period sees a decline in the archaeological evidence, suggesting a lull in occupation or a change in use of the site, leaving little archaeological trace and there is very little domestic activity evident in the record at this time. This is at odds with the historic buildings evidence, which sees the continued development of the building.

By the sixteenth-seventeenth centuries there is an increase in the number of archaeological features and artefacts which must be connected to the use of the upstanding building. The type of archaeological evidence recovered (drinking vessels, clay pipes, a large cesspit) reinforces the conclusion of the historic building analysis. There can now be little doubt that this building served, at least at this time, a public purpose, probably as some kind of function room, the back plots, exposed and sampled during the excavation, seemingly used for the disposal of cess and rubbish.

The ceramic evidence has not only proved invaluable for dating the site but is in itself significant. This is the first major assemblage to be studied from Maidstone and has offered important insights into the economy of the town, notably, that there are little or no continental imported wares before the post-medieval period.

The historic building report highlights the rarity of medieval function rooms such as stands on the site. It is even rarer to be able to excavate the rear plots of one as well as complete a detailed analysis of the building. The opportunity to be able to follow an integrated approach to these two types of investigation has enabled insights into the use and development of the site that would not have been possible from excavation alone. The Knightrider Street excavation and buildings analysis have offered a rare and important new dimension to the understanding of the historic development of Maidstone.
THE POTTERY by Luke Barber

Introduction
The assemblage totalled 581 sherds weighing just over 15kg from 67 individually numbered contexts. The pottery spans the Late Iron Age/Early Roman period to the 19th century though by far the majority can be placed into the mid/late 17th century (Table 1).

<table>
<thead>
<tr>
<th>Period</th>
<th>Late Iron Age/ Romano British</th>
<th>Medieval</th>
<th>Post-medieval</th>
</tr>
</thead>
<tbody>
<tr>
<td>No./weight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C11th-12th</td>
<td>56/475g</td>
<td>38/279g</td>
<td>15/160g</td>
</tr>
<tr>
<td>C13th</td>
<td>37/321g</td>
<td></td>
<td>428/13,547g</td>
</tr>
<tr>
<td>C14th-15th</td>
<td>12g</td>
<td></td>
<td>2/5g</td>
</tr>
<tr>
<td>Mid/Late 16th</td>
<td>32g</td>
<td></td>
<td>4/200g</td>
</tr>
</tbody>
</table>

Table 1: Quantification of ceramics by period. (No./weight in grams)

The condition of the assemblage is generally good with no/little sign of abrasion to the sherds. This is particularly so for the 17th century material where the average sherd size is approximately 32g. The earlier and later pottery is more commonly, but not exclusively, represented by smaller sherds, occasionally residual or intrusive into 17th-century contexts. The largest single assemblage from the site comes from context [281], the lowest fill of stone-lined pit [253], which produced 111 sherds (3,550g). However, this assemblage is made up virtually exclusively of two near complete vessels and the largest ‘diverse’ assemblage comes from context [312]/[315], the mixed fills of pits [311] and [314] (62 sherds weighing 3,159g). The assemblages from cut features are always small and a number of these ‘sealed’ groups contain small amounts of intrusive or residual material though, with the exception of some 16th- and early 17th-century material, these sherds have been easy to isolate.

The main aims of the pottery analysis were to characterise the assemblage; help date the excavated features and, as this is the first reasonable assemblage to be analysed from the town, begin to establish a fabric series.

Initially, the pottery was used, in conjunction with the clay pipes, to establish a spot-dating list for all contexts. All pottery was quantified by sherd count/weight by context. The pottery from the larger sealed assemblages was subsequently divided into fabric groups based on a visual examination, using a hand-lens where necessary, of tempering, inclusions and manufacturing technique. All the fabric groups were given a short title and code (see below) to enable ease of recording on pro forma. Each fabric was subsequently quantified by sherd count and weight for each context. This information, along with the spot dates, general quantification for all contexts and details of the single Late Iron Age/Roman sherd, is housed with the archive.

The medieval assemblage
The small assemblages of medieval pottery from the site consist of 131 sherds. Some 29 of these (251g) are residual in post-medieval contexts. This material is spread fairly evenly between the 11th/12th to 15th centuries. No large groups are present (the largest medieval group consists of 39 sherds, weighing 230g, from context [219], pit [218] (see below). The next largest group of medieval pottery consists of 17 sherds from context [308], pit [307].

Although the assemblage is too small to be studied in detail it has been of use in demonstrating the chronological span of the earliest occupation. In addition, it has established the range of fabrics likely to be encountered elsewhere in the town. However, the small size of the assemblage, together with the
lack of diagnostic sherds for many of the fabrics means much refinement is still needed in and future excavations in the town will hopefully provide much larger stratified groups. The fabrics are briefly described below.

**Medieval shell and sand-tempered wares**

*M1a*: Moderate shell to 1mm, rare fine sand. Low-fired cooking pots only, some with incised line decoration. Suggested date – 11th to 12th century.

*M1b*: Moderate fine/medium sand, rare/sparse shell to 1mm. Medium to well-fired cooking pots and unglazed jugs. Suggested date – 13th century.

*M1c*: Moderate fine/medium sand, sparse/common shell to 1mm. Medium to well-fired cooking pots only. Suggested date – mid 12th to mid 13th century.

*M1d*: Moderate/abundant shell to 3mm, rare fine sand. Low-fired cooking pots only. Suggested date – 11th to mid 12th century.

*M1e*: Moderate shell to 3mm, sparse rounded quartz grits to 0.5mm. Low-fired cooking pots only, some with incised line and stamped decoration. Suggested date – 11th to mid 12th century.

**Medieval sand-tempered wares**

*M2a*: Moderate medium sand. Well to high-fired buff ware, probably the same as M2d. Cooking pots only. Suggested date – mid 14th to 15th century.

*M2b*: Moderate/abundant medium sand. Well fired oxidised ware, appearing as both cooking pots and jugs, the latter sometimes with white slip. Suggested date – 14th to 15th century.


*M2d*: Moderate medium sand. Well to high-fired grey ware, probably the same as M2a. Cooking pots only. Suggested date – mid/late 14th to 15th century.

*M2e*: Moderate medium sand. Medium to well fired oxidised ware, appearing as both cooking pots and jugs, the latter sometimes with external green glaze. Suggested date – late 13th to 14th century.

*M2f*: Moderate fine/medium sand. Medium fired grey ware. No forms recognised. Suggested date – mid 13th to 14th century.

*M2g*: Sparse fine sand. Medium fired oxidised ware. Only jugs noted, usually with external green glaze over white slip (Mill Green type). Suggested date – late 13th to 14th century.

The earliest medieval material consists of a number of coarse shell tempered fabrics usually containing no, or very little, fine sand. Two small groups of interest are present (Table 2).

<table>
<thead>
<tr>
<th>Fabric</th>
<th>[219]</th>
<th>[221]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Weight</td>
</tr>
<tr>
<td>M1a</td>
<td>34</td>
<td>184g</td>
</tr>
<tr>
<td>M1c</td>
<td>3</td>
<td>8g</td>
</tr>
<tr>
<td>M1d</td>
<td>2</td>
<td>27g</td>
</tr>
<tr>
<td>M1e</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 2: Pottery from contexts [219] (pit [218]) and [221] (pit [220]).

Only two drawable sherds were present (Fig. 7 no’s P1 and P2)

P2) Bodysherd from storage vessel or large cooking pot with incised line and stamped (roundels with spoked motif) decoration. Mid grey core, dull orange surfaces with grey patches. Fabric M1e. 11th to early 12th century. Context 221.

The shell tempered wares decline with the advent of the sand and shell tempered wares, which appear to dominate the 13th century. These in turn are replaced by the sand tempered wares which dominate the later 13th to 14th centuries. The latter wares appear to become plainer and higher fired in the later 14th to 15th centuries though the change is gradual and uneven. Interestingly there was no imported pottery though this is probably more likely to be the result of the small size of the assemblage.

**The post-medieval assemblage**

The assemblage from this period dominates the pottery from the site. The whole assemblage was scanned in order to establish the full range of fabrics present for this period. Brief descriptions are given below in, approximately, chronological order. Common names for wares are used where applicable, including a reference for fuller publications.


Raeren stoneware. Germany. Suggested date – mid 15th to mid 16th century.


HFE 2a. High-fired fine earthenware with no/very rare white ?chalk inclusions to 0.5mm. Reduced brown/black surfaces. Unglazed. Local. Suggested date – 17th century.

HFE 2b. High-fired fine earthenware with abundant white ?chalk inclusions to 0.2mm. Reduced brown/black surfaces. Unglazed. Local. Suggested date – 17th century.


HFE 1a met. glaze. Very high-fired fine earthenware with no visible inclusions. All over ‘metallic’ purple glaze. Local/Regional. A harder-fired version of GRE 1b glit. Suggested date – 17th century.


GRE 1a. Glazed red earthenware. Medium-fired granular fine/medium sand tempered with larger quartz and iron oxide inclusions to 1mm. Internally red brown glazed. Local. Suggested date – mid 16th to 17th century.

GRE 1b. Glazed red earthenware. Medium-fired granular fine/medium sand. Finer version of GRE 1a for tableware. All-over glaze red brown glaze. Local/Regional. Suggested date – mid 16th to 17th century.
GRE 1b. Glazed red earthenware. As GRE 1b but with notably 'glittering' thick glaze. Local/Regional. Suggested date – 17th century.

GRE 1c. Glazed red earthenware. Medium to well-fired earthenware with moderate/abundant iron oxides to 0.5mm. Patchy to even internal pale brown glaze. Local. Suggested date – mid 16th to 17th century.

GRE 1d. Glazed red earthenware. Medium to hard-fired with no visible tempering. Rare quartz inclusions. Internal/all-over glaze red brown glaze. Local. Suggested date – mid 17th to 18th century.


WWG2. Very fine green-glazed whiteware. Possibly Borderware or French whiteware. Suggested date – mid 16th to 17th century. Only two sherds (275 1/5g)


TGE 1b. Tin-glazed earthenware with external lead glaze and internal blue painted decoration. Suggested date – early 17th century.

TGE 1c. Tin-glazed earthenware with plain white glaze. Suggested date – 17th century.

Frechen 1. German stoneware. Suggested date – late 16th to 17th century.


Westerwald stoneware. German stoneware with cobalt blue decoration. One vessel only (Gaimster 1997). Suggested date – 17th century.

Later post-medieval assemblage

GRE 2a. Fine earthenware with even tan glaze. Suggested date – 18th century.

GRE 2b. Refined hard-fired earthenware with all-over even brown glaze. Suggested date – 18th to early 19th century.

Pearlware. 19th century.

GRE 3a. Fine earthenware (thick-walled) with even tan brown glaze. 19th century.

The site only produced small groups, however, a number of complete profiles are present.

Stone-lined pit [253], fills [279], [278] and [281]

Although this pit contained 30 fills producing a total of 225 (6,183g) sherds of pottery, most fills produced no, or minimal, quantities. There appears to be no notable chronological difference in the pottery from the pit fills, however, the clay pipes, being more stylistically sensitive, show the lower fills
to have been deposited in the 1650s (contexts [278] and [269]), while some of the upper fills have pipes as late as the 1660s to 1670s (contexts [263] and [265]) suggesting up to a 20 year infilling period. Although some cross-joins are present, these are usually from adjacent contexts. The largest context groups, and most complete vessels, came from the lowest fills.

Fig. 7, no. P3
P3) Nearly complete globular small jug in Westerwald stoneware. Decorated with applied and stamped roundels on a cobalt blue washed body. Further bands of blue is on the neck and base. (15 sherds, weighing 806g). Context 279.

<table>
<thead>
<tr>
<th>Fabric</th>
<th>No. of sherds</th>
<th>Weight (grams)</th>
<th>Comments</th>
<th>No. of vessels represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fill 278</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HFE 1a</td>
<td>1</td>
<td>4g</td>
<td>?residual</td>
<td>x1 jar</td>
</tr>
<tr>
<td>HFE 1a</td>
<td>13</td>
<td>236g</td>
<td>Same vessel in 281</td>
<td>x1 ?bed pan</td>
</tr>
<tr>
<td>HFE1b</td>
<td>6</td>
<td>171g</td>
<td>Same vessel in 281</td>
<td>x1 ?urinal</td>
</tr>
<tr>
<td>HFE 1a met. gl.</td>
<td>2</td>
<td>8g</td>
<td>-</td>
<td>x1 mug</td>
</tr>
<tr>
<td>GRE 1b</td>
<td>3</td>
<td>11g</td>
<td>-</td>
<td>x1 mug</td>
</tr>
<tr>
<td>WWY1</td>
<td>13</td>
<td>646g</td>
<td>-</td>
<td>x1 bowl</td>
</tr>
<tr>
<td>TGE 1c</td>
<td>2</td>
<td>24g</td>
<td>-</td>
<td>x1 ointment pot</td>
</tr>
<tr>
<td>Frechen</td>
<td>4</td>
<td>129g</td>
<td>-</td>
<td>x1 Bellarmine bottle</td>
</tr>
</tbody>
</table>

| Fill 281     |               |                |           |                           |
| HFE 1a       | 55            | 1,357g         | 54 sherds (1,347g) from same 'complete' jar Other vessel also in 278 | x1 jar (x1)?bed-pan         |
| HFE 1b       | 3             | 185g           | Same vessel in 278 | (x1) ?urinal              |
| HFE 1a met. gl. | 43     | 2,061g         | Nearly complete jug and spout from another | x2 jugs                    |
| WWY1         | 3             | 23g            | Tubular handle- | x1 pipkin                 |
| Totals       |               |                |           |                           |

Table 3: Pottery from fills [278] and [281]

At least 12 different vessels are represented within these two contexts. These are of quite a wide range of types but appear essentially domestic in nature though the lack of plates is notable. The presence of probable bed-pans/urinals suggests the assemblage in the main may originate from bed-chambers suggesting the pit to be a cess-pit. However, although the jugs and drinking vessels would not be out of place in a bed-chamber they could also be from a different source of activity. Of note are the following vessels:

(Fig 7, no’s P4-P6)
P4) Crude simple rim, cut flat on top from a possible urinal. Mid grey core, dull orange/light brown exterior and dark brown interior surfaces. Fabric HFE 1b. Contexts 279 and 281. Fragments from a tubular handle from a bed-pan is also present in these two contexts.
P6) Nearly complete jug with simple pulled spout. Dark grey with metallic glittering glaze all over upper ¾ of vessel. Another pulled spout is also present showing two identical vessels are represented. Context 281.

Miscellaneous contexts

Several other contexts produced material of interest. These vessels are catalogued below (Fig. 7 no’sP7-P10).

P8) Lid with simple rim and stabbed round handle. Dull orange throughout. Fabric HFE 1a. Context 301 (Cut 299).


Intercutting pits [311] and [338], Fills [312]/[315]

Although these fills were not differentiated upon excavation both are clearly of a similar date, belonging to the mid to later 17th century.

<table>
<thead>
<tr>
<th>Fabric</th>
<th>No. of sherds</th>
<th>Weight (grams)</th>
<th>Comments</th>
<th>No. of vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual medieval</td>
<td>2</td>
<td>20g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HFE 1a</td>
<td>13</td>
<td>660g</td>
<td>All one vessel</td>
<td>x1 bowl/flower pot*</td>
</tr>
<tr>
<td>HFE 1b</td>
<td>14</td>
<td>198g</td>
<td>All one vessel</td>
<td>x1 pitcher/jug*</td>
</tr>
<tr>
<td>HFE 2a</td>
<td>1</td>
<td>43g</td>
<td></td>
<td>x1 jar*</td>
</tr>
<tr>
<td>HFE 2b</td>
<td>2</td>
<td>16g</td>
<td></td>
<td>x1 ?jar</td>
</tr>
<tr>
<td>HFE 2c</td>
<td>2</td>
<td>34g</td>
<td></td>
<td>x1 ?jar</td>
</tr>
<tr>
<td>GRE 1a</td>
<td>2</td>
<td>140g</td>
<td>Two vessels</td>
<td>x1 large dish</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x1 unknown</td>
</tr>
<tr>
<td>GRE 1b</td>
<td>4</td>
<td>94g</td>
<td>Two vessels</td>
<td>x2 unknown</td>
</tr>
<tr>
<td>GRE 1c</td>
<td>1</td>
<td>822g</td>
<td></td>
<td>x1 large dish/pancheon*</td>
</tr>
<tr>
<td>GRE 1d</td>
<td>2</td>
<td>10g</td>
<td>Two vessels</td>
<td>x2 unknown</td>
</tr>
<tr>
<td>WW 1</td>
<td>2</td>
<td>26g</td>
<td>All one vessel</td>
<td>x1 unknown</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(conjoin with 234)</td>
<td></td>
</tr>
<tr>
<td>WWY 1</td>
<td>2</td>
<td>299g</td>
<td>Two vessels</td>
<td>x1 ‘lobed’ dish *</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(conjoin with 234)</td>
<td>x1 mug/jar</td>
</tr>
<tr>
<td>TGE 1a</td>
<td>4</td>
<td>13g</td>
<td></td>
<td>x1 unknown</td>
</tr>
<tr>
<td>?Raeren</td>
<td>1</td>
<td>4g</td>
<td></td>
<td>x1 mug (residual?)</td>
</tr>
<tr>
<td>Frechen 1</td>
<td>8</td>
<td>584g</td>
<td>Two vessels</td>
<td>x1 Bellarmine bottle*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x1 mug*</td>
</tr>
<tr>
<td>Frechen 2</td>
<td>3</td>
<td>220g</td>
<td>All one vessel</td>
<td>x1 Bellarmine bottle*</td>
</tr>
<tr>
<td>Totals</td>
<td>63</td>
<td>3,183g</td>
<td></td>
<td>20 vessels</td>
</tr>
</tbody>
</table>

Table 4: Quantification of pottery from pits [311] and [338] (fills [312/315])

The 20 vessels represented in this group could represent normal domestic waste though the material could also represent other assemblage types, such as those from an inn (there are a number of drinking vessels) but the material is ambiguous. Whatever the case the average sherd size of 50.5g shows the material has not been reworked to any degree.

(Fig 7 no’s P11-P14)

P11) Steep-sided bowl/flower pot with out-turned, near horizontal rim. Heavy internal throwing marks. Two opposed circular perforations on rim (made prior to firing) on rim. Dull orange with dull orange/buff surfaces. The perforated base of a flower pot, possible the same vessel, was found in context 341 (Pit 340).

P12) Pitcher (unglazed) with simple rim and pulled spout. Incised horizontal lines on neck. Dull red orange throughout.

P14) Large dish with clubbed rim. Dull orange with red orange outer face. Glazed patchily brown/green internally. Fabric GRE 1c.

(Fig 8 no’s P15-P18)
15) ?Lobed or condiment dish. A generally similar form, but with six rounded ‘lobes’, is illustrated by Pearce (1992, 75, No. 454). The current example had at least three irregular/lozenge-shaped compartments. Yellow glaze (with occasional brown mottles) all over except on exterior base. Fabric WWY 1.

16) Bellarmine bottle with crude face-mask and ‘windmill’ pattern medallion. Frechen 2.

17) Bellarmine bottle with crude face-mask and double-headed eagle on medallion. This design is very similar to one from a late 16th-century drinking jug from London where the arms are described as being of the Hanse station in the City of London (Gaimster 1997, colour plate 8). Frechen 1.

18) Necked mug jug with incised line and cordon defining neck. Between the two is an impressed stamped decoration. Frechen 1.

(Fig 8 no P19)
In addition to the above group was the following:

19) Near complete rim from a small jug/large mug of the same type as No. 18 but slightly larger. Three impressed stamps of similar type. Part of the top of a medallion showing a dragon/griffin in centre and bungled legend around …H A N (backwards): V……Frechen 1. Context 315.

Discussion
The site has yielded a small but important group of pottery for the town. Although little can be said regarding the medieval material, its presence clearly demonstrates activity on the site at a modest level from perhaps the 11th to 15th centuries. Imported material is absent but a larger assemblage would be needed to check if this was a true reflection of a limited trade in ceramics. There is a notable absence in definite pottery of the later 15th and 16th centuries though a few Raeren pieces are present. The late 16th to early 17th centuries see slightly more domestic activity, however, it is not until the period 1650-1670 that the site sees rubbish disposal on any scale. The presence of significant quantities of clay pipes and vessels associated with drinking hint at an inn close by though the assemblage could easily be argued to be purely domestic. During this period imported material became far more common and although dominated by ‘regional’ wares (e.g. Borderware), continental material was also reaching the town in some quantity. Although this material certainly came up the Medway, whether it came direct from source, or was re-shipped from London, is uncertain though the latter is more likely (Gaimster 1997, 81). The lack of post 17th-century pottery from the site suggests that little refuse disposal occurred on site during the later post-medieval period.

THE CLAY PIPES by Luke Barber (incorporating comments by David Atkinson)

A total of 199 stem fragments (giving a combined total length of stem of 9,887mm), 27 complete/near complete bowls and 13 bowl fragments, were recovered from 34 individually numbered contexts. The largest group of pipe fragments came from context [278] (pit 252) which contained 56 stem fragments (with a combined total length of 2,686mm), seven complete bowls and two bowl fragments. Generally the pipes are unstained and unabraded, however a few show signs of brown ‘staining’ and others have been burnt (contexts [269] and [320], pit [253]).
The assemblage is dominated by 17th-century pipes of London type. All are plain, with no maker’s marks, though a few finely burnished pipes are present. Both pipes with spurs, round flat heels and ‘heart-shaped’ flat heels all appear together in the same contexts. The earliest pipe consists of a quite well developed, but very small burnished example from contexts [341]/[342] which could span a 1610-1620 date range unless it is a ‘ladies’ pipe of slightly later date. The remainder of the assemblage, with the exception of three fragments, belong to the 1650s and 1660s. The latest pieces consist of a mere three 18th-century stem fragments (context [247], pit [246]). As such the clay pipe assemblage relates to a fairly short period of activity spanning perhaps up to 20 years with little apparent activity before or after.

THE CERAMIC BUILDING MATERIAL by Samantha Crawt

The archaeological investigations produced 500 pieces of brick and tile weighing just over 31kg from 57 contexts. The majority of the material consists of peg tile in nine different sand tempered fabrics. The assemblage was recovered from contexts spanning the 12th to 19th centuries with the largest concentration dating to the 16th to 17th centuries. A complete list of all the material by context and fabric, with fabric samples, forms part of the archive.

Tile
The tile assemblage is best discussed in four chronological groupings (see Table 5 below). The earliest group dates from the 12th to 13th centuries. A total of 46 pieces of peg tile weighing nearly 1.5kg was recovered. All the fabrics except for fabric 6 and 8 are evident, with the largest concentration of material being comprised of fabric 3, which is likely to be an intrusive 16th to 17th century type. Similarly, fabrics 1, 2, 5b and 7 are all likely to be intrusive. Fabrics four and five are probably residual medieval types and are therefore rarely identified in the later periods.

The late medieval to early 15th century group is made distinct by the obvious absence of ceramic building material when compared to the earlier and later periods. Only three pieces weighing 589g were found in three different fabrics. Only fabric 8 seems to be identified with this group, as fabrics 3 and 6 are almost certainly intrusive. This evidence suggests that the activity associated with later medieval to early post-medieval building was taking place elsewhere, or little roofing material was coming off the building at this time.

By far the largest group dates to the 16th to 17th centuries, with a total of 340 pieces weighing nearly 20kg. Although peg tile is the most common, two pieces of ridge tile and one piece of bonnet tile were also identified. All the fabrics except for fabric 8 are represented within this group, with the largest concentrations represented by fabrics 2 and 3, which together account for 249 pieces of tile weighing just over 16kg. Although they occur in comparatively smaller quantities fabrics 1, 2, 5b, 6 and 7 are all types that appear to be dated to this period. Residual fragments of probable medieval fabric types 4 and 5 only occur in small quantities.

The last group dates to the 18th to 19th century and is represented by a total of 21 pieces, weighing approximately 1.6kg. Only four of the nine fabrics seem to be represented by this time (fabrics 2, 3, 4 and 5b) and these appear to be occurring in much smaller quantities and are probably residual.

Brick
A small amount of brick; in total 49 pieces, weighing just over 6kg was found, in three hard fired, sand tempered, fabric types. The majority of this material was recovered from 16th to 17th century contexts, with 11 fragments of fabric B1 weighing just over 2kg. The 18th to 19th century period is represented by only six pieces weighing 180g, with additional fabrics B2 and B3. The brick collected from the medieval contexts, a total of, 27 pieces weighing 116g, is intrusive, as all the material identified is comprised of fabric B1 in very small amounts.
<table>
<thead>
<tr>
<th>Fabric Type</th>
<th>No Date</th>
<th>C12th-13th</th>
<th>late Med-early15th</th>
<th>lateC16th-17th</th>
<th>C18th-19th</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hard fired moderate sand temper in laminated red and yellow clay</td>
<td>2/30</td>
<td>2/16</td>
<td>-</td>
<td>19/1382</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Hard fired abundant fine sand temper with moderate calcareous inclusions to 3mm and occasional iron oxides to 3mm</td>
<td>6/462</td>
<td>5/216</td>
<td>-</td>
<td>101/7771</td>
<td>5/570</td>
</tr>
<tr>
<td>3</td>
<td>Medium fired abundant fine sand temper with very rare calcareous inclusions to 3mm and very rare iron oxides to 3mm</td>
<td>20/678</td>
<td>22/252</td>
<td>1/1</td>
<td>148/8464</td>
<td>13/856</td>
</tr>
<tr>
<td>4</td>
<td>Medium fired moderate medium sand temper with occasional calcareous inclusions to 1mm and rare iron oxides to 1mm</td>
<td>1/12</td>
<td>10/688</td>
<td>-</td>
<td>6/256</td>
<td>1/102</td>
</tr>
<tr>
<td>5</td>
<td>Medium fired moderate course sand temper with moderate iron oxides to 1mm</td>
<td>-</td>
<td>5/258</td>
<td>-</td>
<td>4/148</td>
<td>-</td>
</tr>
<tr>
<td>5b</td>
<td>Hard fired abundant fine sand temper with occasional iron oxides to 1mm</td>
<td>-</td>
<td>1/6</td>
<td>-</td>
<td>10/234</td>
<td>2/162</td>
</tr>
<tr>
<td>6</td>
<td>Medium fired abundant fine sand temper with very rare calcareous inclusion to 0.5mm and very rare iron oxides to 0.5mm</td>
<td>12/316</td>
<td>-</td>
<td>1/30</td>
<td>28/668</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>Hard fired moderate medium sand temper in red clay with yellow clay laminations and iron oxides to 1mm</td>
<td>-</td>
<td>1/32</td>
<td>-</td>
<td>24/696</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Medium fired moderate course sand temper with rare iron oxides to 4mm</td>
<td>-</td>
<td>-</td>
<td>1/558</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Totals</td>
<td>41/1,498</td>
<td>46/1,468</td>
<td>3/589</td>
<td>340/19,619</td>
<td>21/1,690</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Characterisation of tile assemblage
THE GLASS by Luke Barber

The evaluation and subsequent excavations at the site recovered 110 pieces of glass, weighing 718g, from 20 different contexts. The largest assemblages are from [278], pit [253] (17 pieces from five different vessels and two window panes), [312]/[315], pits [311]/[315] (19 pieces from four different vessels) and [324], pit [321] (40 pieces from three different vessels). The material comes mainly from contexts dating to the second half of the 17th century. Only a few pieces of 18th- to 19th-century glass are present (contexts [212], cut [211], [247], pit [247] and [250], totalling three pieces weighing 13g, the material in the latter context possibly being intrusive). The 17th-century material is in variable condition with heavy corrosion and flaking evident on most of the green forest glass. The fine clear/grey soda glass does not exhibit the same degree of surface flaking, though a coloured surface sheen is usually present.

The 17th-century assemblage includes window glass, fine bottles/phials, wine bottles and goblets. There is a notable lack of beakers in the assemblage: there is only one possible example, with white coloured trails, from context [312]/[315]. The 11 window glass fragments from the site consists of small pieces, usually 1.9 – 2.5mm thick, with tapered smoothed edges. Relatively few wine bottle fragments were recovered (12 pieces weighing 305g) despite the presence of drinking goblets of which the remains of at least five different examples were excavated. Perhaps the most common vessels present are fine (thin-walled) bottles and phials in both forest and soda glass. At least 11 examples are represented, including both small round ‘phials’ as well as larger round and square sectioned ‘case’ bottles (Willmott 2002 Type 25.1).

The small glass assemblage has a relatively wide range of vessel types represented. The dominance of goblets over beakers in drinking vessels is more indicative of wine, rather than beer, consumption (Willmott 2002, 23). The variety in the assemblage would initially suggest a domestic assemblage but the deposited material may relate to sporadic breakage of vessels from an inn or similar establishment. The presence of a possible glass urinal top (together with two ceramic ones) could be interpreted either way.

Illustrated Material (Fig 9, No’s 1-4)

Stone-lined pit [253], fill [278]
2. Complete round-sectioned small bottle/phial in clear/yellow glass.
3. Rim from a urinal or flask in clear/yellow glass. Similar to Willmott Type 34.1, dated.
   Pits 311 and 338, Fills 312/315
4. Part of base and stem from a goblet in clear/grey glass with applied green blue glass decoration. Similar to the cage system but no direct parallels noted in Willmott (2002).

THE METALWORK by Luke Barber

The excavation uncovered 103 pieces of metalwork from 28 individually numbered contexts. With the exception of four medieval pieces (two iron nails, one iron strip fragment and a piece of copper alloy sheet, possibly from a buckle plate) and one piece of intrusive tin foil, all the metalwork is of 17th-century date.

The 17th-century ironwork is in a very poor state of preservation with all pieces being fragmentary, covered in heavy corrosion products and in some cases, totally mineralised. This suggests a fairly acidic burial environment, perhaps associated with cess disposal but also a result of the natural acidity of the subsoil. The assemblage, recovered from 20 different contexts, consists of 46 general purpose nails or fragments thereof, three strip fragments, three unidentified amorphous blobs and eight pieces from other objects. The latter include a hinge pivot, possibly from a window shutter, (context [265]); two bone handled table knives (represented by three pieces in contexts [269] and [320]); a buckle (context [277]);
a key (context [279]); a fragment of horse-shoe (context [293]) and a general purpose bracket (context [355]). With the exception of the last two items, all of the listed objects were from fills of stone-lined pit [253].

The 17th-century copper alloy, like the iron, is also in a generally poor state of preservation, with extensive powdering or adhering corrosion. In a few cases total mineralisation has occurred, again suggesting acidic burial conditions. The assemblage, recovered from 10 different contexts, is dominated by spherical headed pins (21 in number). These are usually 23-25mm long with head diameters of 1.5mm. Only one pin fell outside this range – an example from context [315] which measures 41mm long with a 3mm diameter head. This context produced the largest single group of pins (nine examples). Of interest are the two pins from context [294] which were found adhering to the inside of a base fragment from a Bellarmine bottle strongly suggesting the vessel was used as a ‘witch’ bottle at some point. Five lace-ends are also present in the assemblage as well as five totally mineralised amorphous blobs.

Other copper alloy items consist of an elongated rectangular leather decoration with trefoil terminals (context [234]), two plain book-clasps (contexts [278] and [312]/[315]), a double-framed belt buckle (context [278]), a thimble (context [278]) and a plain horse-ring (context [315]).

**NUREMBERG JETONS (CASTING COUNTERS) AND COIN** by David Rudling

Two Nuremburg Jetons and a corroded coin were recovered:


   **Obverse:** Rosette initial mark, HANNS. KRAUWINCKEL. IN. NVR, Three crowns, alternately with three lis, arranged around a central rose with 6 heart-shaped petals.

   **Reverse:** Cross initial mark, GOTT. ALLEIN. DIE. EER ESEI, Imperial orb surmounted by a cross patty within a treassure with three main arches.


   **Obverse:** Rosette initial mark, HANNS. KAVWINCKEL. IN. NVR, Three crowns, alternately with three lis, arranged around a central rose with 6 heart-shaped petals.

   **N.B.** the spelling of Krauwinckel without an r is a die cutter’s error.

   **Reverse:** Rosette initial mark, GOTES. SEGEN. MACHT, Imperial orb surmounted by a cross patty within a treassure with three main arches.


?Coin

Illegible copper ?coin. 35mm dia; c. 1mm thick. Penny size of c. 1797-1807, but too thin. Very corroded, uncleaned/conserved, and with no design or lettering visible.

Context 278; SF 7.
THE GEOLOGICAL MATERIAL by Luke Barber

Some 52 pieces of stone, weighing just over 1kg, were recovered from 15 different contexts. The material has been fully listed for archive on pro forma. The earliest stone consists of seven pieces (230g) of German lava, almost certainly fragments from a quern, from 12th- century context [223], pit [222]. The majority of the assemblage is of 17th- century date and consists of 13 pieces of coal (69g), 20 pieces of heavily burnt ?shale (182g) as well as a few pieces of local sandstone from the Hythe Beds of the Lower Greensand. Only one object was recovered – a whetstone fragment, probably residual in 18th- to 19th- century context [284], pit [283].

THE WORKED BONE AND IVORY by Luke Barber

Six items of worked bone were excavated from the site. All are from 17th- century deposits. The items include two plain handles from whittle tanged table knives (context [269]/[320], pit [253]) and a further smaller handle with ‘rounded horned’ terminal (Fig. 10, no. 1). Similar examples from both Norwich and Colchester have been dated to the 17th century (Margeson 1993, No. 876 and Crummy 1988, No. 3089). The remains of an ivory double sided comb were recovered from [278]. This can be exactly paralleled with similar 16th- to 17th- century combs from Norwich (Margeson 1993, Nos 418-421). The remaining two items are small letter openers. Both have one-edged blades, integral carved handles and suspension holes for a cord. The cruder, plainer example (Fig. 10, no. 2) is from context [278], pit [253] while a more refined and decorated example (Fig. 10, no. 3) was recovered from context [315], pit [314]. Similar examples from the 17th century are known from Colchester (Crummy 1988, No’s 3105-6).

THE ANIMAL BONE by Lucy Sibun

Full analysis was carried out for the dated assemblage. The details of this work, which included identification to bone type and species, measurements and the recording of butchery and pathological evidence, can be found in the archive. A summary statement follows.

A total of 396 bone fragments were recovered from contexts dating to the Iron Age/Romano British (IA/RB) period as well as the 12th to 15th, 17th and 19th centuries. The table below shows the quantities recovered in each period.

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of fragments</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA/RB</td>
<td>4</td>
</tr>
<tr>
<td>12th century</td>
<td>11</td>
</tr>
<tr>
<td>13th century</td>
<td>7</td>
</tr>
<tr>
<td>14th to 15th century</td>
<td>27</td>
</tr>
<tr>
<td>17th century</td>
<td>345</td>
</tr>
<tr>
<td>19th century</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>396</td>
</tr>
</tbody>
</table>

Table 5: Animal bone quantity by period

The minimum number of individuals (MNI) has been calculated for each species within the periods and this data is tabulated below.

<table>
<thead>
<tr>
<th>Species</th>
<th>IA/RB</th>
<th>12th century</th>
<th>13th century</th>
<th>14th to 15th century</th>
<th>17th century</th>
<th>19th century</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Sheep/goat</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Pig</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Horse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
In terms of number of bone fragments, sheep and cattle dominate the assemblage with the other species only present in small quantities. This is reflected in the MNI totals for each period. Elements from both butchery and meat waste represent the main three domesticate species (cattle, sheep and pig) but meat waste is more abundant. Butchery is evident in all but the Iron Age/Romano-British period and cattle fragments from the 17th century are the most heavily affected. The marks visible are conducive with the splitting of the carcass, dismemberment and jointing. Occasional shallow knife marks to longbone shafts and ribs suggest domestic food processing such as meat removal. There were no signs of pathology on any specimens.

**PLANT REMAINS** by Örni Akeret

**Methods**

Seven sediment samples were processed using bucket flotation with flots being caught on a 500 micron mesh and residue on a 1mm mesh. All the plant remains recovered from the flots were sorted. Additionally, a single residue from context [279], pit [253], <15> was sent for examination. Only a part of this residue was analysed, as it soon became evident that it consisted exclusively of coal and cinder. Sample <16> (context [281], pit [253]) contained a huge quantity of seeds, most representing a single species. Seeds from a sub-sample of 10g (from 126 g) were counted and this value used to estimate the total number recovered. Nomenclature for plant species follows Stace (1997).

**Results and discussion**

The results of the investigation are presented in Table 7 and in Akeret (2004).

Plant material from the four deposits of medieval date (11th to 13th century) consisted exclusively of charred plant remains, including small amounts of cereals found in each. The most frequent taxa present were oat (*Avena*) and naked wheat (*Triticum aestivum/durum/turgidum*), whilst one sample also contained grains of barley (*Hordeum distichon/vulgare*). Detailed interpretation of the significance of the different crops was not possible from such small assemblages, however, in general, the cereal spectrum matched that from contemporary sites in the south-east of England (*e.g.* Arthur 1963; Jones 1979, 1980, 1988; Robinson and Straker 1991). One notable difference is the lack of evidence for rye (*Secale cereale* L.) at Knightrider Street, though this is more likely to be a result of the small assemblages recovered than an indication that this species was absent from medieval Maidstone.

Several fragments representing wild plant species were identified from these deposits. These included hazel (*Corylus avellana L.*) nutshell, the nut probably having been eaten and the shell casually discarded. The other taxa were corncockle (*Agrostemma githago L.*) and stinking chamomile (*Anthemis cotula L.*), both of which are weeds of arable fields and probably arrived as contaminants of the cereal crop.

In contrast to the earlier deposits, those examined from the 17th century stone-lined cesspit (contexts [265], [279] and [281]) all contained uncharred seeds or fruits. The lower the sample within the feature the greater the quantity of waterlogged remains present. All the plant macrofossils recovered, however, were of species with hard seed coats or fruit walls, able to survive periodic drying out. The latter appeared to have occurred throughout the stratigraphic sequence, even affecting the basal fill and was, perhaps, a result of fluctuations in the water table. More delicate remains were largely absent.

<table>
<thead>
<tr>
<th>Domestic fowl</th>
<th>1</th>
<th>3</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dog</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cat</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Rabbit</td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: MNI per species
Some charred fruits or seeds were recovered but only from the uppermost of the analysed fills (context [265]). These were mainly cereal grains, oat (*Avena*) and naked wheat (*Triticum aestivum/durum/turgidum*) being identified. Context [279] produced large quantities of cinder and coal (and a few charcoal fragments) which had clearly been dumped at this level of the cesspit. Food remains were scarce from this deposit but did include evidence for the consumption of fruit (fig seeds, grape and raspberry pips).

For the most part, the flot from the basal fill of the cesspit (context [281]) consisted of raspberry (*Rubus idaeus* L.) pips (possibly as many as 40,000). Other hard-‘seeded’ plants including fig (*Ficus carica* L.), strawberry (*Fragaria*), elderberry (*Sambucus nigra* L.) and grape (*Vitis vinifera* L.) also occurred but at far lower frequencies. It would appear that a large quantity of raspberries had been collected, either for immediate consumption, or perhaps for the preparation of jellies, jam or other foodstuffs.

In the same context (context [281]), there were a considerable number of oil-bodies of fruits of an unknown species of the carrot family (*Apiaceae*). Precise identification was not possible, because no entire fruits were preserved. It seems somewhat of a contradiction to find these apparently delicate remains in a context where otherwise only robust plant parts had survived and it is possible that the oil-bodies contain antibacterial substances that protect them from decomposition. Various species of the carrot family contain essential oils (in the oil-bodies) and, therefore, are frequently used as spices, well-known examples being coriander (*Coriandrum sativum* L.), anise (*Pimpinella anisum* L.), fennel (*Foeniculum vulgare* Mill.), cumin (*Cuminum cyminum* L.), and caraway (*Carum carvi* L.). These oils often have a very distinctive aroma — confirmation of the identification of the remains of dill (*Anethum graveolens* L.) and celery (*Apium graveolens* L.) from Anglo-Scandinavian deposits at 16-22 Coppergate, York (Kenward and Hall 1995) was made on the basis of the smell released by rubbing the dried fossils. Unfortunately, no odour was apparent from the fragments from context [281]. It remains open to speculation whether these fruits were being consumed with, or being prepared in conjunction with, the raspberries or whether they derived from completely different sources.

The dominance of one species and the presence of only a few taxa (compared with the number of remains) in context [281] seems surprising. There are other hard-‘seeded’ plants that survive well in similar conditions and are common in deposits with faeces, such as blackberry (*Rubus fruticosus* L. agg.) or various kinds of nuts, however, these were not found in this deposit. If the plant remains from the basal fill of the cesspit had accumulated over a long time, a greater diversity of taxa would be expected. Therefore, it seems probable that the plant assemblage encountered collected over a very short period of time or may even represent remains from a single event.

Despite the presence of robust fruit seeds and pips (capable of surviving the digestive system) in the 17th century cesspit deposits, particularly the basal fill, there was no strong evidence that these derived from faecal material. The uppermost fill was devoid of such remains, whilst only trace amounts were found in context [279]. The basal fill contained abundant raspberry pips but only small quantities of other fruit seeds and large amounts of general rubbish e.g. pot and other ceramics. Furthermore, there was no evidence of mineralisation of the plant remains as is typically found from faecal deposits. The overall impression is that this feature was used for the disposal of all kinds of refuse, perhaps including a small faecal component, but not primarily as a cesspit (although the infilling is, clearly, a product of the disuse of the feature). It is not unusual for cesspit deposits of this date to include more general waste, as seen, for example, at Bridge Street, Chester (Jaques et al. 2004). It is unusual, however, to find such a dominance of one plant species and relative dearth of other remains, perhaps indicating that the raspberry pips are more likely to represent the disposal of spoiled or prepared fruit than to derive from faeces.
Table 7. List of plant taxa

<table>
<thead>
<tr>
<th>Taxon</th>
<th>Vernacular (Latin)</th>
<th>Parts recorded</th>
<th>Preservation</th>
<th>[219]</th>
<th>[221]</th>
<th>[223]</th>
<th>[230]</th>
<th>[265]</th>
<th>[279]</th>
<th>[281]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aethusa cynapium L.</td>
<td>fool’s parsley</td>
<td>Achene</td>
<td>uncharred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Agrostemma githago L.</td>
<td>cockle</td>
<td>capsule fragment</td>
<td>charred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Agrostemma githago L.</td>
<td>cockle</td>
<td>Seed</td>
<td>charred</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Anthemis cotula L.</td>
<td>stinking</td>
<td>Achene</td>
<td>charred</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Apions etruscus</td>
<td>carrot</td>
<td>oil-body</td>
<td>uncharred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>c. 650</td>
</tr>
<tr>
<td>Avena</td>
<td>oat</td>
<td>Grain</td>
<td>charred</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cerealia</td>
<td>cereals</td>
<td>Grain</td>
<td>charred</td>
<td>17</td>
<td>14</td>
<td>8</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cerealia</td>
<td>cereals</td>
<td>rachis segment</td>
<td>charred</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Corylus avellana L.</td>
<td>hazel</td>
<td>shell fragment</td>
<td>charred</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fabaceae tribe Fabaeae</td>
<td>pea family</td>
<td>Seed</td>
<td>charred</td>
<td>15</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ficus carica L.</td>
<td>fig</td>
<td>Stone</td>
<td>uncharred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>c. 25</td>
<td></td>
</tr>
<tr>
<td>Fragaria</td>
<td>strawberry</td>
<td>Achene</td>
<td>uncharred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Hordeum distichon/vulgare</td>
<td>barley</td>
<td>Grain</td>
<td>charred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Poaceae</td>
<td>grass family</td>
<td>Caryopsis</td>
<td>charred</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ranunculus subg. Ranunculus</td>
<td>buttercup</td>
<td>achene</td>
<td>charred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Rubus idaeus L.</td>
<td>raspberry</td>
<td>stone</td>
<td>uncharred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>101</td>
<td>c. 10000</td>
</tr>
<tr>
<td>Rumex</td>
<td>dock</td>
<td>achene</td>
<td>charred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sambucus nigra L.</td>
<td>elder</td>
<td>seed</td>
<td>uncharred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Sonchus asper (L.) Hill</td>
<td>prickly sow-thistle</td>
<td>achene</td>
<td>uncharred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Triticum</td>
<td>wheat</td>
<td>grain</td>
<td>charred</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Triticum aestivum/durum/turgidum</td>
<td>naked wheat</td>
<td>grain</td>
<td>charred</td>
<td>5</td>
<td>1</td>
<td>-</td>
<td>9</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Triticum aestivum/durum/turgidum</td>
<td>naked wheat</td>
<td>rachis segment</td>
<td>charred</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vitis vinifera L.</td>
<td>grape-vine</td>
<td>pip</td>
<td>uncharred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>planta indeterminata</td>
<td>unidentified plant</td>
<td>bud</td>
<td>charred</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>13</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**MARINE MOLLUSCS** by David Dunkin

The excavation at Knightrider Street, Maidstone produced 26 contexts respectively which contained marine molluscs. These molluscs which include Common Oyster (*Ostrea edulis*), Common Cockle (*Cerastoderma edule*), Common Cockle (*Cerastoderma edule*), Carpet Shell (*Venerupis decussata*), Mussel (*Mytilus edule*), Periwinkle (*Littorina littorae*) are listed in full as part of the archive. In all a fairly small assemblage of marine molluscs was present, which Oyster being by far the most prevalent, particularly in 17th Centuries.

Context [110] (16th/17th century) from the evaluation was a shell-based residue which weighed in total 2.415 kg. This was taken from the fill of a pit. The residue was comprised of c. 85%+
comminuted shell, the principal component of which was the Common Cockle (*Cerastoderma edule*) (c.75/80%). Many of the discernible individuals were babies/juveniles. Other species represented in descending order of occurrence were the Carpet Shell (*Venerupis decussata*) (<1%); Oyster (*Ostrea edulis*) (<1%); Mussel (*Mytilus edule*) (<0.5%) and Periwinkle (*Littorina littorae*) (<0.5%). The likely source of the residue is the North Kent coast, perhaps from the shell banks known to exist on the Isle of Sheppey. (eg Shell Ness). Clearly the residue, because of the numerous baby/juvenile individuals represented, is not food waste. Most likely it represents material to be used for a mortar mix or temper for pottery.

The total weight of Oyster (*Ostrea edulis*) from the excavation was 1.865 kg. Oyster was represented in all of the 26 contexts containing marine molluscs. Of these contexts, 20 were 17th century; 1 is 13th century ([289], pit [288]); 3 are 14th century ([274], [276] pit [253], [306], pit [305]) and 2 fall within the 16th – 19th centuries ([247], pit [246], [304], pit [303]). Context [247] contained fragments of Common Cockle (*Cerastoderma edule*) weighing 2 gms; Context [278] contained one individual Common Whelk (*Buccinum undatum*) weighing 8 gms; and Contexts [292] and [296] contained fragments of Common Mussel (*Mytilus edule*) weighing 7 gms. Thus, the contexts containing marine molluscs other than Oyster are statistically insignificant as regards edible species.

The total assemblage of Oyster in the 26 contexts from the excavation (listed in the archive) is small. 23 contexts contain less than 10 left/right valves and the majority of these have less than 5 shells and/or fragments. The three contexts which have the largest numbers of individual Oysters represented are: [292] and [294] from pit [291] and [296] from pit [295] (all 17th century). The largest, [292], contained 38 right valves and 44 left valves and weighed a total of 723g and 17 fragments weighing 50g. Most of these shells were in the young adult range (c. 3-6 years old) and therefore represent a modest sample of the use of Oyster as a supplementary food. None of the Oyster valves from the excavation had evidence of infestation which probably reflects the relatively young age of the individuals represented (majority <7years) in the assemblage.
REFERENCES


James, R., Martin, D and Martin B, 2002 An Archaeological Desk-Based Assessment and Historic Buildings Survey of 15 Knightrider Street, Maidstone, Kent (Archaeology South-East unpublished client report)


Knight, H 2012 Excavations at King Street, Maidstone, Kent, http://www.kentarchaeology.org.uk/10/Maidstone%20-%20Excavations%20at%20King%20Street%20-%20Maidstone01.pdf


Fig. 4

Route of possible fossilised lane