

On behalf of:	Tinos Homes Long Orchard Farm Cobham Surrey KT11 1EL
National Grid Reference:	SU 4813 2967
Site Code:	WINCM AY 256
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Timing:	
Excavation:	February and April 2006
Post-excavation:	November 2006
Archive and publication production:	October 2007

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1 NON TECHNICAL SUMMARY

- 1.1 This document aims to summarise the results of the archaeological investigation, conducted by AOC Archaeology Group, at Granville House, St Peter Street, Winchester, on behalf of Tinos Homes. A series of archaeological investigations were carried out on the site between February and April 2006 and these were allocated the site code WINCM AY 256. The investigations on site revealed Roman floor layers composed of clay and chalk dating from the 1st to the mid 4th century. The site appears to have been abandoned until the 11th century after which there is a brief period of intensive pitting until the mid 12th century when the site is once again abandoned. No later activity was recorded on site, possibly due to later truncation during the construction of the overlying Victorian Methodist Church constructed in 1875.

2 INTRODUCTION

2.1 SITE LOCATION

- 2.1.1 The investigation area is located within Winchester City Centre at National Grid Reference (NGR) SU 4813 2967 (Figure 1). The site is bounded by Sutton Gardens to the north, properties fronting Parchment Street to the east, The Royal Hotel to the south and St Peter Street to the west (Figure 2). The area affected by the development covered a total area of approximately 500 square metres.
- 2.1.2 Granville House is a former Victorian Methodist church building which until recently was occupied by offices as Granville House. An extension on the east end of the building was demolished in March 2006. Prior to the site investigations the internal structure of the building (except structural features such as columns and load bearing walls), was demolished leaving only the outer core of the Victorian church structure intact. The archaeological investigations were conducted within the core of the building.

2.2 DEVELOPMENT PROPOSAL

- 2.2.1 The proposed development was for the conversion of the property into 11 residential flats and the construction of a maisonette in the area of the former extension. Prior to the archaeological work taking place on site the interior of the building was demolished and removed leaving only one interior wall, the exterior walls and the roof.
- 2.2.2 Due to the nature of the development, certain restraints were placed on the mitigation works. These restrictions were due to the location of several columns and column bases within the shell interior of the structure and the anticipated depth of the archaeological deposits. Any excavation close to or impacting on these columns would have structural implications for the building. The depth of the archaeological sequence was anticipated as being at least 3m deep. Full excavation of these deposits, whether in large evaluation trenches or a full excavation, would structurally affect not only the columns supporting the roof but also the exterior walls. As such, a mitigation programme was designed that would allow for a reasonable percentage of the archaeological sequence to be excavated without having any structural implication (AOC 2006a).

2.3 PLANNING BACKGROUND

- 2.3.1 The local planning authority is Winchester City Council. Archaeological advice to the council is provided by the Sites and Monuments Officer for Winchester Museums Service.
- 2.3.2 Planning permission to undertake the development has been granted under the Town & Country Planning Act (1990) (Ref No.: 04/00225/FUL), subject to conditions. Condition 4 states that:

“No development or site preparation prior to operations which has any effect on disturbing or altering the level of composition of the land, shall take place within the site until the applicant or their agents or their successors in title has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation, to be submitted by the applicant and approved in writing by the Local Planning Authority.”

Condition 5 states that:

“No development shall take place until a detailed method statement for all groundworks and a detailed foundation scheme has been submitted to and approved in writing by the Local Planning Authority. The development hereby approved shall only take place in accordance with the approved details.”

- 2.3.3 These conditions have been required in accordance with *Planning Policy Guidance: Archaeology and Planning* (PPG 16) issued by the Department of the Environment in 1990 (DoE 1990), and were recommended by Winchester Museums Service.
- 2.3.4 As a result of the condition, an archaeological evaluation was carried out by AOC Archaeology in 2006.

3 METHODOLOGY

- 3.1 Prior to the redevelopment of the site two phases of archaeological works were conducted by AOC Archaeology Group from February to April 2006 (Figure 3). The first phase of evaluation involved the excavation of five test pits. The principal objective of the evaluation was to establish the levels and thickness of: the modern overburden; the archaeologically sensitive deposits and the natural geology. Medieval and Roman archaeological remains were identified during the evaluation. The test pits showed that the archaeological deposits were over 1.50m deep and subsequently a sequence of boreholes were used to record the full depth of the archaeological deposits as well as assessing the natural stratigraphy and topography
- 3.2 Following the test pit investigations, the archaeological advisor to Winchester City Council advised that further excavations of the site should be carried out to further evaluate the archaeological sequence and to mitigate for the damage that would be caused by the development of the site. This second phase involved the hand excavation of two further test pits, larger and deeper than the first phase, as well as a second phase of boreholes which would further assess the depth of the archaeology and the natural geology.

4 REVISED RESEARCH AIMS

4.1 GENERAL

The revised research aims are based upon an assessment of the degree to which the original aims were fulfilled by the excavation and what further work should be carried out to enable fulfilment of these, or any new, aims.

4.2 ROMAN

The excavation on site confirmed the presence of *in situ* Roman archaeology. The activity is restricted to the remains of floors or surfaces and their partial demolition or truncation. If the deposits are the *in situ* remains of floors, their truncation by Roman pits suggests that the use of the site had changed during the Roman period from habitation to waste disposal.

How does the evidence of Roman activity on site correlate with the known Roman archaeology of the area? Does the known evidence suggest why the site appears to have been abandoned in the 5th century and how does this fit with the known pattern and chronology of Roman settlement within the locality?

4.3 ROMAN POTTERY

What information does this assemblage provide regarding the late Roman settlement patterns in Roman Winchester?

4.4 BUILDING MATERIAL

Does the fabric types identified match with other ceramic building material fabrics already identified in the Winchester area?

What is the origin and probably quarry source of the various sandstones and limestones used?

4.5 BOTANY

To look at cereal consumption in Roman Winchester and to compare the plant remains from this site to others in Winchester.

4.6 FAUNA

What is the species and body-part composition of the local fish diet?

What is the composition and variation of the local meat diet with particular reference to chicken, beef, lamb, mutton and pork?

What are the estimated statures of horse, cattle and sheep/goats?

What evidence is there for local horn working?

4.7 REGISTERED FINDS

What is the identity of the Roman coin?

4.8 MEDIEVAL

The wealth of early (Saxo-Norman) medieval activity was not expected on site. The majority of activity from this period was recorded in Test Pit 6. The site appears to have been used for the deposition of rubbish both domestic and industrial waste with the occurrence of slag, kiln debris and copper alloy lumps.

How does the evidence recovered on site fit within the framework of known early medieval activity in Winchester? Are there any known industrial sites locally that might have supplied the industrial waste? What does the finds assemblage recovered from the pits tell us about the people depositing them?

Why is there no evidence for later medieval activity? Is the absence of any deposits or artefacts from this period purely a function of later post-medieval truncation?

4.9 MEDIEVAL POTTERY

How do the pottery fabrics equate with those defined by Winchester Museum?

How does the pottery reflect local trade? Are any Michelmersh or Portchester wares present and if so in what quantity?

What is the source of the chalk- and flint-tempered pottery?

Can a chronological progression be observed in the different fabric and form types?

What is the source of the later fabrics?

How does the assemblage compare with others of similar date from Winchester?

Are any new form types present?

4.10 BOTANY

To look at cereal consumption in medieval Winchester and to compare the plant remains from this site to others in Winchester.

4.11 FAUNA

What is the species and body-part composition of the local fish diet?

What is the composition and variation of the local meat diet with particular reference to chicken, beef, lamb, mutton and pork?

What are the estimated statures of horse, cattle and sheep/goats?

What evidence is there for local horn working?

5 GEOLOGY AND TOPOGRAPHY

- 5.1 Geoarchaeological field investigations were carried out by ArchaeoScape in conjunction with AOC Archaeology during both phases of the archaeological investigations at Granville House. The aims of the geoarchaeological work were to assess the sedimentary sequences in nine boreholes (Figure 3 & 4), <BHA>, <BHB>, <BHC>, <BHD>, <BHE>, <BHF>, <BHG>, <BHH> and <BHI>) and to record the lithostratigraphy in each of the borehole gouge samples to provide a reconstruction of the sedimentary history of the site.
- 5.2 At the western end of the site Boreholes <BHB>, <BHC>, <BHE> and <BHH> consisted of bedrock chalk overlain by shallow archaeological deposits, probably of colluvial origin. They represent accumulation on the lower valley side slope at a level of c.36.0m OD, above a steep, almost cliff-like bluff bounding the floodplain of the River Itchen on its western side.
- 5.3 For the boreholes to the east of Borehole <BHH> (i.e. to the east of the buried chalk bluff), the upper part of the sediment sequences in all cases comprised of colluvial deposits containing evidence of nearby anthropogenic activity. The level of the base of these deposits ranges from 35.25m to 35.77m OD (an average of 35.4m OD for five boreholes).
- 5.4 The organic sediments in Boreholes <BHD> and <BHF> represent waterlogged material infilling depressions, probably close to a site of human occupation. The level from which they were recovered (34.24m to 34.55m OD in Borehole <BHD> and 33.59m to 34.55m OD in Borehole <BHF>) is close to the level at which similar deposits were recovered at 9A Parchment Street, Winchester. At this site, the organic sediments occurred from 33.93m to 34.23m OD, within a possible natural depression at the floodplain margin, which infilled rapidly because of anthropogenic disturbance in the surrounding landscape (Branch *et al.* 2005).
- 5.5 The level of the chalk at the eastern end of the site (at an average of 32.85m OD for Boreholes <BHF>, <BHG>, <BHI>, <BHD>, <BHA>) is close to the level recorded at 9A Parchment Street, where natural sediments immediately overlying the chalk were interpreted as floodplain deposits of the Itchen (Branch *et al.* 2005). These deposits were regarded as being of the same age as a peat horizon, recovered at approximately the same level at 158-159 High Street, Winchester (Green *et al.* 2004). The peat was interpreted as a floodplain accumulation probably dating from the period before the Roman occupation of Winchester.

6 THE HISTORICAL LANDSCAPE

6.1 SITE LOCATION

- 6.1.1 Winchester, in its current and previous forms, is located within the floodplain of the River Itchen (Figure 5). Its position lies at a narrowing between a gradually sloping spur of chalk forming the western ridge, and at the end of an east-west chalk ridge seen topographically in the east as a steep slope (Zant 1993). The potential for crossing the narrowed River Itchen at this point was aided by the location of several small ‘tufa’ based islands which acted as a stepping stone between the two sides.
- 6.1.2 The proximity of a settlement to the River Itchen would have directly influenced its principle location and also its success, as the floodplain, in places, would have created inhospitable alluvial based pockets of land, unsuitable for habitation although it would also have provided fresh water and wealth of food.

6.2 PREHISTORIC ORIGINS

- 6.2.1 The settlement of a localised population was already established in the area, prior to the Roman conquest. A 20 hectare defended enclosure was constructed on the western bank of the River Itchen, known as Oram’s Arbor. The middle Iron Age enclosure would have dominated the landscape and its placement near to the ford across the Itchen would have given it regional importance. The location of the enclosure on the current landscape is indicated in Figure 6. The locations of the eastern limit of the enclosure remains unclear although it is thought that it extended no further than the current Parchment Street, which itself is thought to have been the western extent of the Itchen floodplain (Qualmann *et al.* 2004).
- 6.2.2 Archaeological investigations at 20b St Peter Street recorded a steep slope in the natural chalk deposits (Qualmann *et al.* 2004). This slope may reflect a natural ridge or terrace in the chalk. It has been theorised that this ridge may have been enhanced during the Iron Age period to form the eastern limit of the enclosure, rather than creating an artificial defensive bank (Winchester Museum Service 1997). The borehole investigations at Granville House, St Peter Street also indicated the presence of the steep slope in the natural chalk deposits from west to east (AOC 2006b). This potentially suggests that the site was located on a chalk ridge, possibly deliberately modified during the Iron Age for its use as part of the eastern limit of the Oram Arbor enclosure. If this suggestion is correct, the site’s proximity to the large defensive enclosure would have had a substantial influence on how the site was used during the early Roman period.

6.3 ROMAN OCCUPATION

- 6.3.1 The period between the abandonment of the enclosure in the late Iron Age and the establishment of the Roman town, *Venta Belgarum*, in AD70, is little understood. However it is likely that the enclosure and the population settled there would have been the foundation upon which the Roman town would have been built.

- 6.3.2 Early Roman activity is thought to have been focused on the defence of the area, (which may have included the upkeep of the defensive Iron Age enclosure), small-scale occupation on the ‘tufa islands’, perhaps including a fort (AOC 2006c); small-scale occupation located on the drier chalk slopes and the diversion of the River Itchen to allow drainage of the floodplain area (Zant 1993). A grid street system was established at the end of the 1st century (Figure 6) creating a formal layout of the town, this included square shaped ‘insulae’ towards the east (floodplain) and rectangular ‘insulae’ towards the west (terraced chalk slopes) (Zant 1993). Observations during construction work on land between St Swithuns School and St Peters Street and at 20a St Peter Street recorded the presence of metalling which may indicate the presence of a north-south Roman street, (Winchester City Council 2007)
- 6.3.3 The development of Roman Winchester follows a similar pattern to most Roman towns with the inclusion of a forum, stone structures replacing early timber housing and perhaps baths and an amphitheatre (which remain undiscovered). At the height of its success *Venta Belgarum* was the 5th largest Roman ‘civitas’ in Britain (Winchester Museum Service 1997). During the mid 4th century there is a notable lack of development. No new buildings appear to have been built with some already in existence falling into disrepair. By the 5th century *Venta Belgarum*, as a Roman ‘civitas’, no longer existed though the local population appeared to have continued living and working in the area which would later become Saxon *Wintanceaster*.

6.4 SAXON WINCHESTER

- 6.4.1 Early archaeological evidence recorded in Winchester suggests that a small community continued inhabiting the local area after the collapse of the Roman settlement although the size and scale of the population remains unclear (Welch 1996). The internal development of the town (within the fortified Roman wall remains) is also unclear, however excavations in Lower Brooks Street of high status burials overlaid by a timber structure might suggest some form of settled population in the 7th century, (Welch 1996). The survival of the surrounding Roman wall is thought to have been one reason why the church authorities opted to establish a bishopric there in the mid 7th century, (Welch 1996). The Old Minster was founded in c.AD648 and was given cathedral status in AD676. A street system, ditches and the reinforcement of the city wall in the 9th century formed part of the general fortification of Saxon populations in the south, known as ‘burghs’ (Figure 7).
- 6.4.2 Archaeological investigations carried out at the former cinema site on North Walls (NHW89) produced a series of timber structures and buildings (MCW6641) (Winchester City Council 2007). The remains were mainly in the form of postholes, beam slots, floor layers and pits. Two structures also contained a hearth (EWC7767) and a sunken oven (EWC7756). Pottery recovered from the

investigations dated the activity to AD850-950. The evidence recorded on this site suggests the area of North Walls contained a sizeable Saxon settlement.

- 6.4.3 Evidence for Saxon activity on St. Peter Street is limited. Investigations at 6 St. Peter Street uncovered the remains of a building dated to the Saxon period by sherds of pottery, loom weights and bone needles (MWC6640), (Winchester City Council 2007). The excavation at 20 St. Peter Street recorded several floor deposits, some of which may date to the late Saxon/early medieval period (MWC6968), (Winchester City Council 2007).

6.5 MEDIEVAL

- 6.5.1 During the mid to late Saxon and early medieval period Winchester was the royal and ecclesiastical capital of the West Saxon kingdom as well as the location of the royal treasury until the 12th century (Figure 7). Winchester benefited from this as the towns prominence brought with it trade, some of which came from Southampton and more importantly London. By the 11th century the streets had fixed names and areas of industry were further established (Keene1985).
- 6.5.2 Between the 12th and 14th centuries industries such as cloth finishing (particularly dyeing), leathering working and parchment making were located within Winchester. Archaeological evidence for the tanning of leather has been found in Buck Street (formerly Busket Lane) in the form of wood-lined pits. Other trades also flourished in this area, with a fishmonger, vintner, baker, goldsmith and carpenter also attested during the Middle Ages (AOC 2006b). There is a suggestion that at one point St Peter Street (formerly *Alwarnestret*) was known as Fleshmonger Street, but this may also refer to an early Parchment Street. Small-scale industries like those mentioned above would have occupied the High Street end of the street where small stalls would have been established selling the local goods.
- 6.5.3 Evidence for tenement activity was recorded on several sites in close proximity to the Granville House site. St. Peter Street, which became a cobbled street during the medieval period, (MWC6925), was lined by tenements as excavations at Dolphin House suggests. The remains identified at the Dolphin House site (MWC6950) included Saxo-Norman floor and occupation deposits and a timber structure which was then overlaid by 13th to 14th century garden and cultivation soils. Industrial waste from silver refining and horn core working were also recorded on the site. The pottery identified from the site dated from the mid 10th through to the 14th century. Tenements have been recorded on Jewry Street (MWC6855, MWC6856, MWC6857, MWC6965 & MWC7072) in the form of postholes, beam slots, masonry walls, wells, pits and garden soils. Timber and masonry building remains dating to the medieval period have also been recorded on Parchment Street, the High Street, St. George's Street and North Walls. This suggests that the local area was highly populated during the medieval period.

6.6 POST – MEDIEVAL ACTIVITY

- 6.6.1 From the mid 12th century to the 16th century Winchester rapidly declined. Although still the prominent town in Hampshire and the south, its importance with regards to the royal seat and political power diminished as power shifted to London. In the 16th century Winchester was a third of the size it had been 400yrs earlier (Keene 1985). The evidence from John Speed's 1611 map (Figure 8) shows the local area continued to be well populated, although not densely. Little changed in Winchester over the next few centuries as it remained a small market town. However with the loss of the royal power and administration, the effects of the plague and the decline of the cloth industry after 1500, the population of the city declined and properties were abandoned. In 1724 Daniel Defoe wrote that Winchester was a 'place of no trade, no manufacture, no navigation' (Lambert 2007). Later maps (not illustrated) suggest that the area surrounding the site was not heavily impacted upon by structures until the development of the Victorian Methodist church in 1875. Prior to that, the site appears to have been open fields or possibly orchards.
- 6.6.2 Several post-medieval buildings have been recorded on St. Peter Street. Avebury House is Grade I listed and is situated at 6 St. Peter Street. It dates to 1690 and includes two storeys and an attic (MWC6787). At 4 St. Peter Street is another Grade I listed house, attributed to Christopher Wren. The house has two storeys with a basement and an attic (MWC6786). Similar structures or the remains of similar structures have also been recorded on Parchment Street and Jewry Street. Other post-medieval activity recorded in the local area includes garden or cultivation soils, wells and occasional rubbish pits.
- 6.6.3 Winchester changed and developed in the 19th century with a major increase in population, partly due to industrialisation and the coming of the London to Southampton railway in 1839 (Figure 9). In the 1950s and 1960s the town centre was redeveloped, and there was widening of St. George's Street, the junction of Jewry Street and the High Street and other nearby roads. Council houses were developed and older buildings were replaced.
- 6.6.4 In 1875 a Methodist church was constructed on the investigation site fronting St Peter Street. As part of the construction the site was terraced horizontally in order to create a flat and level surface for the foundations. This would have heavily truncated any earlier post-medieval and late medieval archaeology on site. The church was later converted into office space becoming Granville House.

7 RESULTS

7.1 PERIOD 1 – ROMAN OCCUPATION

General

- 7.1.1 The earliest activity identified on site dated to the Roman period. This mainly consisted of floor layers and their associated make up deposits. Two pits were identified as dating to the Roman period and are likely to be evidence of the demolition or redevelopment of structures related to the identified floors. A wealth of Roman artefacts was also identified in later dating contexts due to the heavy truncation of the site by later medieval activity and through the importing of waste from the local area. Though these finds are not *in situ*, which limits how much we can learn from them regarding the site itself, they do add to our overall knowledge of the Roman settlement in terms of pottery typology and local trade.

Floor and make-up layers

- 7.1.2 Due to the limited size and depth of excavation on site and the depth to which the medieval activity extended, only four of the seven test pits contained Roman archaeology. Roman remains may exist in the area of the remaining test pits but at a lower level than was excavated. Overall nine floor layers were recorded on site, each with associated made ground and some were overlaid with occupation deposits. It is unlikely that the remains represent nine individual floors, instead several may relate to the same horizon.
- 7.1.3 The lowest and possibly earliest Roman remains in the site sequence was deposit (6/050), a layer of hard yellow brown silty sandy clay recorded at 36.65m OD (Figure 10). The layer which contained no finds or datable inclusions has been interpreted as a disturbed *in situ* clay floor. Layer (6/050) is the only floor composed of clay recorded on the site, possibly signifying an earlier and different phase of construction. Associated with deposit (6/050) was a small sub-rectangular block of unknown function composed of chalk and clay with an almost vertical edge on its southern side (6/051). It is possible that this had a structural function relating to the building associated with clay floor (6/050). However due to the limited nature of the excavation and the level of truncation by later activity within Test Pit 6, the deposit cannot be fully understood.
- 7.1.4 If the remains of clay floor (6/050) represent the first phase of Roman structures excavated within the limited site investigations, later chalk floor (7/026) may represent a second phase. The change in materials used may suggest advancement in construction methods or that chalk had become the main material of choice. Floor (7/026) located 1.10m north of (6/050) and (6/051), was composed of crushed chalk with inclusions of crushed mortar (Figure 11). The deposit was recorded at a height of 37.17m OD measuring 1.15m x 0.50m x 0.10m. No datable finds were recovered from the deposit.

- 7.1.5 Test Pit 1 abutted Test Pit 7 on its north-western edge (Figure 3 and 12). At approximately the same height as (7/026) was floor make-up deposit (1/010) and chalk floor (1/009). The floor make-up deposit (1/010) was composed of mid brown clay silt at 37.19m OD. Its depth was not established due to the restrictions on the depth of the test pit investigations. The deposit is thought to have provided a level and compacted make up for chalk floor (1/009) recorded at 37.51-37.24m OD. Floor (1/009) which was composed of compacted white chalk, appears to have slumped in a south-easterly direction (not illustrated). This slumping follows the line of the sloped underlying chalk geology, as indicated in Section 5.1. The results suggest that both floors (1/009) and (7/026) are the same deposit or represent the same phase of activity. No finds were recovered from these deposits.
- 7.1.6 Overlying both (1/009) and (7/026) were a series of deposits identified as either dumped deposits or makeup layers for later floors. Overlying (1/009) was deposit (1/002) which composed of mid grey brown clay silt approximately 0.50m thick and covered the entire limit of the test pit. Finds recovered from deposit (1/002) included a pottery assemblage dating to AD50-80. The assemblage included 28 sherds with examples of South Spanish (Baetican) Dressel 20 amphora, *Terra Nigra* platters (form *Camulodunum* 16) (Figure13, 1) south Gaulish (la Graufesenque) Samian cups (forms Drag. 27 and Drag. 24/25) and a plate (Drag. 18), jars from the Alice Holt kilns on the Surrey-Hampshire border (Figure 13, 2 & 3) and a sand-tempered jar with a short everted rim (Figure13, 4). The imported pottery suggests an established trade link with the continent during the early periods of the Roman settlement probably via Southampton. The full extent of the deposit could not be ascertained due to the limited investigation however, (1/002) is the earliest dated deposit in the archaeological sequence.
- 7.1.7 A similar deposit to (1/002) was recorded in Test Pit 2 as (2/006), a mid light grey clay silty sand measuring 1.0m x 0.80m x 0.70m thick (Figure 12). The deposit contained inclusions of a *tegula mammata* fragment, an iron nail <2> and 11 sherds of Roman pottery dated to AD 120-220. The pottery including six large joining sherds from an Alice Holt ware large flat rimmed bowl decorated with burnished acute-lattice decoration on the exterior and horizontal burnished lines on the interior (Figure 13, 5).
- 7.1.8 Despite the proximity of Test Pit 1 to Test Pit 7 deposit (1/002) was not observed in the latter test pit suggesting the deposit terminated at the junction of the two test pits. Instead, overlying floor layer (7/026), were two layers (7/024) and (7/022) which were interpreted as ground make-up deposits, possibly for the later deposition of surfaces. The layers were composed of yellow/red brown clay silt and red brown clay silt respectively. The pits measured approximately 0.05m and 0.10m thick covering the entire area of the test pit, at a height of 37.35m OD and 37.83m OD respectively. Finds recovered from (7/024) included sherds of 3rd-4th century pottery with examples of Alice Holt-Farnham ware along with possibly residual earlier sherds of Alice Holt ware and Central Gaul Samian dating to 1st

- and 2nd centuries. The earlier Alice Holt ware sherds are similar to those recorded in deposit (1/002) discussed in Section 7.1.6.
- 7.1.9 Directly above (7/022) were floor layers (7/023) and (7/021), composed of degraded chalk and concreted mid yellow silty clay respectively (Figure 11). The deposits which were 0.03m and 0.10m thick, measured 0.90m x 0.80m and 1.32m x 1.06m and were located at 37.33m OD and 37.38m OD. Both deposits showed signs of slumping in a south-easterly direction. These layers may represent a surface or floor in Roman structure. Pottery recovered from layer (7/021) had a wide date range of AD50-400. No similar deposits i.e. in date, layer composition or recorded height, were observed on site which perhaps suggests that the structural activity recorded as (7/021) and (7/023) was confined to a small area.
- 7.1.10 Overlying deposit (1/002) and floor (7/021) were a series of 'made ground' deposits (1/013), (1/007), (1/006), (7/020), (7/019), and (7/016). Layers (1/013) and (1/007) were composed of very compacted light yellow brown mortar and chalk with occasional flints and represent the same deposit truncated by a later pit. The deposits were 0.10m and 0.20m thick and were only observed in section due to the level of truncation by pit [1/011]. Above (1/007) was a 'made ground' deposit composed of soft mid brown silty clay (1/006). The deposit, which was 0.08m thick, was only observed in section due to truncation. No datable finds were recovered from the layer. In Test Pit 7 deposits of a similar nature and function were recorded as (7/020), (7/019) and (7/016). Layer (7/020) was a 0.28m thick deposit of reddish dark brown to dark grey clay silt with inclusions of chalk, charcoal flecks, with fragments of ox bone, imbrex roof tile, tesserae, brick and pottery. The tile and pottery assemblage dates to the late 3rd to 4th century. The overlying deposits (7/019) and (7/016), mid to light grey silty clay and light brown yellow silty clay respectively, were recorded at 37.85m OD and 37.76m OD. Layer (7/016) contained frequent fragments of building material including sandstone and limestone roofing tiles, tegula, bricks, tesserae and mudbrick, whilst (7/019) contained a fragment of pig bone along with a similar assemblage of building material. Due to later truncation the layers only measured 0.35m x 1.50m x 0.21m (7/016) and 0.30m x 1.50m x 0.11m (7/109).
- 7.1.11 The deposits described above have been interpreted as make-up layers for floors (1/012), (1/005) and (7/015), composed of very compacted chalk or chalk and mortar. The floors were 80mm, 20mm and 70mm thick. Layers (1/005) and (1/012) which are likely to represent the same deposit, were only recorded in section, where as layer (7/015) measured 1.50m x 0.30m x 0.07m. Small bones identified as salmon family and mackerel were recovered from the layer along with a fragment of pottery which dates c.AD50-400. These floors are possibly the remains of internal floors of a Roman structure although due to the limited investigation a full conclusion cannot be drawn. If the interpretation of these deposits is correct, they represent the third series of Roman floors or surfaces on site.

- 7.1.12 Unlike the Roman sequence recorded in Test Pit 7, Test Pit 1 contained a fourth chalk floor layer (1/003) with underlying make up layers (1/008), and (1/004). The make up layers of compacted mortar and stone (1/008) and dark grey sandy silt (1/004) measured 0.30m and 0.10m respectively. No finds were present in these deposits. Chalk floor (1/003) measured 0.10m and covered the entire area of the test pit at a height of 38.10m OD. At approximately the same height as (1/003) was deposit (2/005) in Test Pit 2. This was recorded as compacted crushed chalk, sand and stone measuring 1.0m x 0.80m x 0.25-0.40m. The possible floor or floor makeup deposit may be part of the later sequence of Roman development on the site, represented by (1/003). Overlying (2/005) was a 0.44m thick deposit of dark grey sandy silt interpreted as a Roman dump layer (2/004). No finds were recovered from the deposit.

Roman Pitting

- 7.1.13 A fourth floor layer was not observed in Test Pit 7, instead, the first Roman pit was recorded in the archaeological sequence, (Figure 11). Pit [7/027] was filled by (7/025), a yellow brown sandy clay, which measured 1.50m x 0.60m x 0.40m at 37.61m OD. The function of the pit remains unclear as no artefacts were recovered. The pit may be the remnants of demolition or renovation activity relating to the later redevelopment of the Roman structures occupying the site. Truncating pit [7/027] was a second pit [7/028]. The pit was filled by (7/018), (7/017) and (7/014), which were recorded as yellow brown silty clay, yellow dark grey silty sand and yellowish brown sandy clay respectively. Pottery recovered from fills (7/017) and (7/014) date the deposit to the 3rd to 4th centuries. The assemblage from both deposits included fragments of Hampshire grog-tempered ware, BB1 pottery, Nene Valley ware, East Gaulish Samian, Alice Holt ware and Oxford red colour-coated ware. Other finds recovered from deposits (7/014) and (7/017) were a large quantity of building materials including sandstone roofing tile, rubble, paving, imbrex, tegula and tessera as well as frequent fragments of ox bone. Considering the elements of building material and fragmentary pottery within these two pits and their presence in the Roman sequence it is possible that they represent a period of demolition or renovation of the Roman structures on site. The changes present on site may be contemporary with the general developments in Winchester such as the abandonment of buildings recorded elsewhere in Winchester towards the mid 4th century. (Winchester Museums Service 1997).
- 7.1.14 The pits recorded in Test Pit 7 were the final phase of activity dated to the Roman period on site. There is a significant hiatus in activity on site between the Roman and medieval period. This lack of activity is not represented in the archaeological sequence, i.e. layers of soils. The lack of activity on site suggests the focus during the intervening years was focused elsewhere probably near to the ford or that the population became so dispersed that there was no focus during those years.

7.2 PERIOD 2 – MEDIEVAL RE-OCCUPATION

General

- 7.2.1 As with other many sites in Winchester the period between the end of the Roman occupation of the site in the early 4th century and its reoccupation in the mid 11th century remains unclear. The archaeological remains on site that have been dated to the early medieval period are almost exclusively related to domestic refuse pitting in contrast to the conjectured Roman structural sequence.
- 7.2.2 There is a lack of any artefactual remains pre-dating AD1050. This highlights the lack of early and middle Saxon activity in the area of the site suggesting that the size of the town may have receded closer to the river and the religious establishments.
- 7.2.3 The medieval remains recorded on site were only located within four of the seven test pits. Test Pits, 2, 4, 6 and 7 all contained medieval archaeology however the bulk of the medieval sequence was recorded in Test Pits 6 and 7 located in the central portion of the site. The lack of medieval remains in Test Pits 1, 3 and 5 was due to later truncation in the post-medieval or modern period, rather than a spatial variation on the site. The type of archaeological remains also varied between the test pits as Test Pit 7 mainly contained dump layers, Test Pits 2 and 4 were each dominated by a solitary large and deep pit, whilst Test Pit 6 contained 17 pits and five dump layers, which together formed over 1.80m of stratigraphy.

Pitting – Phase 1

- 7.2.4 The earliest remains in the medieval sequence were recorded in Test Pit 6 as pit [6/052], which measured 2.0m x 1.28m x 1.20m deep (Figure 14). The large pit, which covered most of the area of Test Pit 6, contained four fills varying from mottled deposits of grey, brown and white sandy silt clays (6/045), (6/044), (6/031) to compact brown gravel (6/030). As the large pit truncated the earlier Roman sequence, residual Roman pottery and building material were identified along with 56 sherds of medieval pottery dating to c.1050 and c.1100-1120 and building material. The pottery identified from all four dumped fills included examples of Chalk-tempered ware, sand tempered ware, flint tempered ware and sandy flint tempered. All of the fabrics are common to Winchester and Hampshire during the Saxo-Norman period. The forms identified from the sherds recovered from the pit indicate a dominance of jars and cooking pots suggesting domestic based pottery deposition (Figure 15, 1-7). A single fragment of daub was recorded in the pit however due to the amount of residual Roman material it cannot be confirmed whether it is of medieval origin.
- 7.2.5 Pit [6/052] was cut by pit [6/061] which contained two fills; brown sandy silt with inclusions of chalk, flint and mortar (6/059) and a soft brown organic silt (6/060). No datable finds were recovered from either fill. Pit [6/061] was cut by a small pit [6/049] which measured 0.70m x 0.40m x 0.37m deep. The pit was filled by a

- dark brown organic-based deposit (6/048 / 6/037) which contained residual Roman pottery fragments and building material, along with medieval pottery sherds dated to AD970-1150. The pottery was identified as examples of chalk and flint tempered ware, sand tempered ware and chalk tempered ware. One sherd from a sand and flint tempered spouted pitcher in the was decorated with incised wavy line decoration, (Figure 15, 8). Pit [6/061] was also cut by pit [6/047], which measured 2.25m x 0.30m by 1.80m. The fill (6/046), a mixed brown and dark brown sandy silt clay contained chalk, shell, charcoal, flint, ox bone, residual Roman pottery and building material and medieval pottery dated to AD970-1120. Some of the residual Roman roof tiles may have been reused during the medieval period as crude paving slabs, as fragments showed signs of ware. The medieval pottery included similar examples to contemporary pit [6/049] mentioned above, as well as a Late Saxon, sand tempered thick base sherd.
- 7.2.6 Cutting pit [6/047] were two small pits [6/056] and [6/058], (Figure 14). Pit [6/056] measured 0.90m wide and 0.45m deep (in section only) and pit [6/058] measured 0.88m x 0.70m x 0.45m deep. Pit [6/056] was filled by (6/042), a dark grey brown sandy silt which contained fragments of chalk tempered ware, flint tempered ware and fragments of Kennet Valley-Type ware, dated to AD1050-1150.
- 7.2.7 Pit [6/058] was cut by shallow pit [6/021], which measured 0.65m x 0.50m x 0.19m deep. It was filled by (6/020), a friable brown sandy silt with inclusions of chalk, flint and charcoal. Pottery recovered from the fill was identified as a chalk tempered rim sherd dated to AD970-1120.
- 7.2.8 Above pit [6/056], at the southwest edge of the test pit, was pit [6/053] located at a 37.70m OD. The pit measured 0.95m x 0.20m deep and was filled by (6/041) and (6/040), a light brown sandy clay and a mid to dark brown grey sandy clay respectively. Inclusions within the fills included chalk tempered ware, fine sandy ware and sandy chalk flint tempered ware pottery sherds dated to AD970-1120. Also within the pit were fragments of vitrified hearth lining and undiagnostic slag suggesting that small-scale, possibly domestic-based, industrial working or domestic fires were conducted in close proximity to the site.

Dump Layers

- 7.2.9 At this point in the medieval sequence there is a move from pitting to the deposition of dump layers (Figure 14 & 17). In Test Pit 6 layer (6/017) was identified as a 0.25m thick deposit of mixed light brown chalky sandy silt with inclusions of clay and gravel, fragments of ox, sheep and pig bone and sherds of chalk tempered wares, Late Saxon sandy ware and Newbury B-type ware. Of particular interest was a sherd of a spouted pitcher with thumb rim in chalk tempered ware (Figure 15, 9). The layer was heavily truncated by later activity, measuring 1.10m x 1.36m at 37.89m OD - 38.12 m OD. Unlike the medieval pitting sequence excavated in Test Pit 6 the medieval sequence within Test Pit 7,

begins at 37.71m OD with a series of dump deposits (7/013), (7/012), (7/011), (7/008), (7/007), (7/006) and (7/001). The layers were mainly composed of light and dark grey sandy silt with inclusions of chalk, charcoal, flint, oyster shell, bone and pottery. The pottery assemblage recovered from these layers is similar to the assemblages recovered from the inter-cutting pits in Test Pit 6. Fabrics identified include chalk tempered ware, chalk and flint tempered ware, sand tempered fabric, Late Saxon sand tempered ware, flint tempered ware, greensand tempered ware and its chalk variant ware, sandy ware with flint and Kennet Valley-type ware. Of note were sherds from layers (7/012), (7/008), (7/006) and (7/001) which included a simple rim of everted form with rounded/angled junction of the neck and body (7012), (Figure 15, 10), an everted rim and rounded junction of the neck and body of a chalk tempered cooking pot (7/008), (Figure 15, 11), cooking pots and a sherd from a spouted pitcher with thumb rim (7/006), (Figure 15 12-17), Chalk tempered wares (Figure 15, 18), a thick walled pot in a densely sanded handmade fabric (Figure 15, 19) and a handmade cooking pot in Kennet Valley-type ware (Figure 15, 20). The assemblage indicates the deposition of widely available domestic wares and forms and is dated to AD970-1150.

- 7.2.10 A solitary sub-circular pit [6/013], measuring 1.10m x 1.50m x 0.37m deep, truncated layer (6/017) in Test Pit 6 (Figure 14). The pit fill (6/012), a loose dark grey brown organic silt, contained inclusions of charcoal, chalk, flint, iron nail fragments and a large assemblage of animal bone including bird, chicken, cod, plaice/flounder, herring, ox, pig, sheep/goat and sheep-sized bones. The pottery assemblage from (6/012) was the largest recorded in the test pit, the most common of which was chalk tempered sherds and the flint variants, (Figure 15, 21-24); chalk and flint tempered wares (Figure 15, 25-26); sand tempered wares, (Figure 15, 27), coarse sandy reduced ware, Kennet Valley type ware and oxidised sandy fabric. The pottery assemblage dates to AD970-1120. Environmental evidence recovered from pit [6/013] consisted of a small assemblage of charred plant remains of wheat (*Triticum* sp.), barley (*Hordeum vulgare*) and oat (*Avena* sp.) grains. Charred seeds of wild plants came mainly from grasses (*Poaceae*), some of which were large and may have been poorly-preserved oat grains. Occasional large leguminous seeds (*Lathyrus/Vicia/Pisum* sp.) were present which resembled peas or horse beans, but these were too poorly preserved for accurate identification. Occasional fragments of eggshell were also seen in the flit and all these remains are typical of general domestic waste.
- 7.2.11 Overlying pit [6/013] was a sequence of thin layers located in the western corner of the trench (6/008), (6/009), (6/010) and (6/011). The layers measured between 0.08m and 0.18m deep with the largest deposit (6/011) measured 1.05m x 0.30m x 0.18m deep. This sequence of layers was composed of compacted gravel, grey brown sandy silt clay, chalk and dark grey brown sandy silt. This sequence is thought to represent dumped material within a truncated pit.

Medieval Pitting – Phase 2

- 7.2.12 Large-scale and intensive pitting (evidenced in Test Pit 6) continued with a second phase of inter-cutting pits [6/055], [6/054], [6/035], [6/015] (Figure 14). The earliest was pit [6/055] which measured 1.05m x 0.40m deep and 0.20m wide due to later truncation. The pit fill (6/039) was a dark brown sandy silt that contained oyster shells, flint, charcoal and pottery sherds including locally available Winchester wares dated to AD970-1120. Pit [6/055] was cut by large pit [6/054], measuring 1.90m x 1.47m deep and 0.70m wide due to later truncation. The pit contained 10 separate and varying fills. Fill (6/038) was recorded as mixed brown and dark grey/brown sandy silt with inclusions of chalk, oyster shell and flint. The remainder of the fills within the pit were a sequence of mortar/plaster floor remnants (6/036), (6/033), (6/027) and (6/025); floor make up layers, (6/024), (6/026) and (6/029); a layer of burning (6/028); and a mixed deposit which included large amounts of clay which was possibly related to a clay floor (6/032). Medieval pottery was only recovered from fills (6/033) and (6/032). The sherds were identified as chalk tempered wares dating to AD970-1120. Roman material was recovered from layer (6/024) which suggests that the layers, which represent a series of floors and make-up layers, may have their origins in the Roman period. The material may have been redeposited on site in the early medieval pit as a result of clearance redevelopment of the local area.
- 7.2.13 Pits [6/035] and [6/015] contained a dark brown silty clay (6/034) and a mid grey brown sandy silt clay (6/014) respectively. The fills also contained inclusions of domestic waste including chalk, flint, ox, sheep, sheep/goat fragments, charcoal and Winchester ware pottery.

Medieval pitting – Phase 3

- 7.2.14 A third phase of inter-cutting pits was recorded in Test Pit 6 which consisted of pits [6/063], [6/023] and [6/005] (Figure 14). The earliest pit in the sequence [6/063] measured 1.10m x 0.20m x 0.20m deep and was filled by (6/062) an organic deposit of brown and orange silt. No datable inclusions were recovered from the fill however; decayed wood was identified as possibly lining the pit. Pit [6/023] which truncated [6/063] measured 1.20m x 0.90m x 1.70m. The pit was filled by (6/022) a mixed deposit of very dark grey, brown and black silts and sandy clays with inclusions of flint, chalk, charcoal, frequent animal bone and a large quantity of industrial waste including cinder, hammerscale, vitrified hearth lining, copper alloy working waste and smithing hearth bottom. The inclusion of metal working debris suggests a local, possibly domestic, industry in close proximity to the site. Environmental samples taken from fill (6/022), produced the largest charred plant assemblage from this site, and contained over 70 grains of free-threshing wheat (*Triticum aestivum/turgidum/durum*), 6-row hulled barley (*Hordeum vulgare*) and oats (*Avena* sp.). Also identified were several large leguminous seeds which may have been peas (*Pisum sativum*) or horse beans

(*Vicia faba*) and a single flattened cotyledon resembled a lentil (*Lens culinaris*). Charred seeds from wild grasses and a variety of arable weeds were found, including sedge (*Carex* sp.), spike-rush (*Eleocharis palustris/uniglumis*) and wood-rush (*Luzula* sp.). These arable weeds have a preference for damp or wet habitats, perhaps originating in wet hollows or ditches in or around the arable fields. Also recovered from fill (6/022) and perhaps from the same environment, were several freshwater mollusc shells, identified as two species of the family *Planorbidae* (A. Pipe pers. comm.), which appeared to be blackened by fire. Clinker fragments and occasional shells of foraminifera were also recorded in the sample. The latter are single celled, marine organisms which may have arrived on site in the guts of fish or could perhaps be fossils from the soil matrix. The pottery assemblage of 51 sherds included cooking pots with everted rims (Figure 15, 28 & Figure 16, 29-31), Late Saxon sandy ware (not illustrated), fine sandy ware (Figure 16, 32) and sherds of the base of a cooking pot in a micaceous coarse sandy fabric containing Greensand quartz (not illustrated). The assemblage dates to AD970-1150.

- 7.2.15 Cutting pit [6/023] was pit [6/005] measuring 1.28m x 0.52m x 0.65m deep. The pit was filled by (6/004), a grey brown sandy silt clay, with inclusions of chalk, oyster shell, charcoal, fragments of ox, pig and sheep/goat bones and flint.
- 7.2.16 The final large pit recorded in Test Pit 6, was [6/019] which contained two fills, (6/018) and (6/016). The pit measured 1.40m x 1.30m by 0.90m deep and contained a hard and dry grey brown sandy silt clay (6/016) and a loose dark grey brown sandy silt (6/018). The pit fills contained flint, charcoal, chalk, metal, pottery and possibly reused Roman brick and tiles. The pottery assemblage includes chalk-tempered fabrics including a large irregularly formed rim (Figure 16, 33). Two sherds are from flint-tempered vessels (a simple everted rim, Figure 16, 34). Sand-tempered wares include part of a residual cooking pot in late Saxon sandy ware (Figure 16, 35), sherds of medium and fine sandy ware, one of oxidised ware and two of a coarse sandy ware that may be from Wiltshire. The latter both have neatly wiped/scratch-marked surfaces (Figure 16, 36-37). Other examples include a base angle of a Winchester ware spouted pitcher with external sooting, sherds from at least two tripod pitchers; one with rouletting and applied thumbled strips under a green glaze (Figure 16, 38). One sherd is from the neck of a jar in a reduced fabric containing Greensand quartz. Also present are the base of a crucible, a fragment of a Roman curved fired ceramic of uncertain function (Figure 13, 6) and part of a possible industrial vessel or residual Roman sherd with white deposits on both inner and outer surfaces. The pottery assemblage dates to AD1070-1150 for (6/016) and AD1050-1120 for (6/018).
- 7.2.17 Also recorded in these pit fills was a complete hone stone <4>, rectangular shaped in section with and hole for suspension. One edge showed signs of wear suggesting that it had been well used. Fragments of copper alloy <5> like those identified in pit [6/022] were recorded in the fill as well as a copper alloy hook

<9>, copper alloy working waste and fragments of kiln lining; again suggesting local industry.

- 7.2.18 Three large pits [7/005], [7/010] and [7/003] were recorded in Test Pit 7 cutting into the earlier medieval dump layers (Section 7.2.9), (Figure 17). Pit [7/010] measured 0.50m x 0.30m x 0.50m deep and was filled by a dark brown grey silty clay (7/009). The pit contained a large quantity of building stone suggesting that the pit had either been used to deposit building materials or the pit actually represents the terminus of a very disturbed and robbed out wall. Pit [7/003] (only recorded in section), measured 0.65m wide x 0.44m deep. The pit was filled by (7/002), red brown grey silty sand with inclusions of decayed wood, charcoal, shell fish bones and 14 sherds of pottery. The assemblage was similar to the other local wares observed on site and included a cooking pot rim sherd in the a chalk tempered fabric (Figure 16, 39). The pottery assemblage was dated to AD970-1120. The final feature in the medieval sequence in Test Pit 7 was pit [7/005], which measured 1.50m x 0.65m x 0.11m deep. The fill (7/004) was recorded as dark grey sandy silt with high concentrations of chalk as well as inclusions of decayed wood, charcoal and 15 sherds of chalk tempered pottery contemporary with that found in the others pits mentioned above.
- 7.2.19 The two pits recorded in Test Pits 2 and 4 (Figure 18) are similar in size and were recorded at a similar height as those mentioned in above (Section 7.2.14). Pit [2/003] which cut Roman layer (2/004), measured 0.65m x 1.00m x 1.50m deep and was filled by (2/002), a dark brown dark grey sandy clay silt. The fill contained inclusions of chalk, animal bone and a large assemblage of pottery. Fabrics identified in the assemblage include chalk tempered ware and chalk and flint tempered ware including a deep flaring rim sherd (Figure 16, 40), internally thickened rim sherd (Figure 16, 41), part of a spouted pitcher with incised decoration (Figure 16, 42) and sherds of a large cooking pot or jar (Figure 16, 43). Other fabrics identified included flint tempered wares (Figure 16, 44), sand tempered wares (Figure 16, 45-47), chalk tempered ware (Figure 16, 48) and sandy ware with flints (Figure 16, 49). The most notable finds were the complete rim of a cooking pot in the Kennet Valley-type ware (Figure 16, 50) and fragments of two crucibles (Figure 16, 51). The pottery recovered from the feature was dated to AD1000-1150. Environmental samples taken from (2/002) produced charred grains of free-threshing wheat (*Triticum aestivum/turgidum/durum*), 6-row hulled barley (*Hordeum vulgare*) and oats (*Avena* sp.), along with a single grain of probable rye (*Secale cereale*). Seeds of arable weed seeds including stinking mayweed (*Anthemis cotula*), bedstraw (*Galium* sp.), knapweed (cf. *Centaurea* sp.), fumitory (*Fumaria* sp.), sheep's sorrel (*Rumex acetosella*). Wild grasses were also present, along with seeds of sedge (*Carex* sp.) and a large, poorly-preserved seed resembling a pea (*Pisum sativum*) or other cultivated pulse. A very small number of mineralised seeds were identified in this sample, including one plum/sloe (*Prunus* sp.) stone. Fragments of eggshell, fish and bird bone and mineralised fly puparia were present which confirms that the pit was used for the disposal of a variety of domestic refuse including cess.

7.2.20 The upper 1.30m of Test Pit 4 was almost exclusively filled by (4/002), a dark grey silty loam measuring 1.0m x 1.0m (Figure 18). This deposit may be the fill of a large pit similar to the deep pitting activity observed in Test Pits 2, 6 and 7. The deposit contained fragments of pottery dating to AD1000-1500 identified as chalk tempered ware and fragments of a two thick walled jars in a coarse iron rich fabric containing Greensand quartz. The charred plant assemblage from fill (4/002) contained thirty charred cereal grains, with roughly similar numbers of wheat (*Triticum* sp.), barley (*Hordeum vulgare*) and oat (*Avena* sp.). Apart from a single fragment of hazelnut (*Corylus avellana*) shell, the remaining charred items were all from arable weed seeds including bedstraw (*Galium* sp.), stinking mayweed (*Anthemis cotula*), chickweed (*Stellaria media*) and wild grasses (*Poaceae*). These plants remains are typical of post-Roman charred assemblages and probably derive from household waste and accidental charring. The final phase of medieval activity in Test Pit 6 were small pits [6/003] and [6/007] measuring 0.60m x 0.30m deep and 0.35m x 0.30m deep respectively. Both pits were filled with similar deposits of dark grey brown sandy silt (6/002) and (6/006), with inclusions of flint, chalk, reused tile, oyster shell. No datable evidence was recovered from either feature.

7.2.21 Deposit (6/001) was the number assigned during the initial cleaning of the test pit area prior to excavation. Finds recovered during the initial cleaning included a hone stone <11>, Roman pottery, fragments of tegula, imbrex, tesserae and brick and medieval pottery (Figure 16, 52-53) dated to AD970-1120.

7.3 PERIOD 3 - POST-MEDIEVAL TO MODERN

General

7.3.1 No activity appears to have taken place on site from the early medieval period to the 19th century, although residual finds dating to the 13th to 16th centuries were recorded in later dated features. However as there is no evidence on site relating to any activity during the 13th to 16th centuries the origin of this later pottery remains unclear.

7.3.2 Features dating to the post-medieval period mainly consist of large pits or dump layers. The stratigraphically lowest post-medieval activity was recorded in Test Pit 3 towards the east of the site (Figure 19). Layer (3/005) was composed of chalk with occasional brick fragments, glass, flint and residual medieval pottery. The layer measured 1.00m x 1.20m x 0.30m+ deep. Cut into layer (3/005) was pit [3/004] which measured 0.50m by 0.20m and 0.30m+ deep. It was filled by (3/003), a dark brown clay silt with inclusions of animal bone. This cut may relate to the construction of the Victorian Methodist Church in 1875. Overlying the pit were layers (3/002), a brown clay silt and (3/001) a dark grey silt. The former deposit only contained residual finds disturbed during the excavation of the foundations for the Methodist church whilst layer (3/001) contained both residual finds as well as a pottery sherd dating to AD1580-1800. A similar pit to [3/004] was recorded in Test Pit 1 as [1/011] measuring 1.00m x 1.00m x 0.90m deep. It

- was filled by (1/001), a grey sandy silt with inclusions of chalk and flint as well as pottery fragments dating to the Roman, medieval and post-medieval period.
- 7.3.3 Test Pit 5 excavated outside the main Granville House structure contained the articulated remains of a small horse (5/006). Analysis of the remains indicates that the horse would have been approximately the same size as a modern Shetland pony. The bone structures suggest it may have been a donkey, although this cannot be confirmed. There are no indications as to what lead to the deposition of this animal on site as no other articulated animal remains were recorded and only two contexts (both medieval) outside of Test Pit 5 contained equine bone fragments.
- 7.3.4 The skeletal remains were overlaid by layer (5/005), a mid brown clay silt with inclusions of residual pottery and post-medieval pottery dated to 1570-1800, as well as animal bones from fish, chicken, eel, equid, ox, pig, and sheep/goat fragments. Fragments of a Roman brooch <3> were found in this layer which, with the other residual material, suggests that this area of the site had suffered considerable disturbance. Overlying this layer was (5/004), a 0.30m thick layer similar to (5/005). Construction cut [5/003] truncated (5/004). The cut was only recorded in section measuring 1.50m wide x 0.45m deep. It was filled with mixed 19th century backfill material (5/002) and (5/001) that contained fragments of brick, chalk and flint. The cut is probably related to the construction of the Victorian church.
- 7.3.5 Overlying Test Pits 2 and 4 were (2/001) and (4/001), a dark grey clay silt measuring 0.48m and 0.30m thick respectively. Layer (2/001) contained fragments of modern pottery dated to AD1805-1900 whilst no datable finds were recovered from (4/001).

8 CONCLUSION

8.1 ROMAN

- 8.1.1 During the Roman period the site was located within the walled *civitas* of *Venta Belgarum*. The spatial arrangement of properties and open land on St Peter Street remains unclear as no property boundaries have been identified. There are indications that the area of St Peter Street and/or Parchment Street may have been part of the eastern limits of Orams Arbor during the Mid-Late Iron Age period. Keene (1985) suggests that the Iron Age ditch and rampart may have been maintained during the early Roman period. This has also been noted at North Wall where excavations uncovered repairs and maintenance of the city walls, SMR EWG7761.
- 8.1.2 Evidence recorded on sites within close proximity to Granville House suggests that the local area was occupied throughout the 1st to 4th centuries. Observations at 20a St Peter Street suggests the presence of a metallised surface which indicates that St Peter Street was already established in the Roman Period. Timber buildings dating to the 1st to 2nd were recorded at 27 Jewry Street (EWC 7528 & EWC 7529) and at North Walls (EWC 7755), whilst a chalk floor and rubbish pit were recorded at 20 St Peter Street (EWC 9163 & EWC 9164).
- 8.1.3 The Roman remains recorded on site continues the trend for structural occupation in the area during the Roman period. Evidence for both chalk and clay floors were recorded on site perhaps suggesting a change in construction techniques. No other evidence was observed on site relating to the Roman structures other than the residual finds in the form of tesserae, glass mosaic tesserae, roofing tile including imbrex, tegula and stone tile; flue tile and wall plaster. This suggests substantial Roman structures had previously occupied the locality prior to the medieval development of the town. The buildings on site are likely to have fronted onto the Roman road which would later become St Peter Street.
- 8.1.4 One early Roman feature was recorded on site in the form of a possible dump layer (1/002) which included pottery of later Neroian – Flavian (AD 50-80). The other Roman features tended to be mid/late 2nd to 3rd century or late 3rd to early 4th century. No features date later than AD350. The pottery assemblage suggests the use of typical local wares for the period and area. These include south Dorset black burnished ware 1, Alice Holt Farnham ware and Hampshire grog tempered ware. Imported wares were also identified such as South Spanish Dressel 20, Gaulish Samian and Soller (east Rhine) mortaria. The imported wares indicate trade links with the continent, probably via Southampton. The vessels identified are dominated by domestic forms such as dishes, jars, with occasional beakers and one sherd from a flask or flagon. No sherds on site indicate exceptional wealth.
- 8.1.5 Other than the pottery assemblage, the Roman contexts did not contain many finds which are indicative of wealth or status, diet or use of the buildings. The

residual artefacts must be treated with some caution as they may have been imported onto the site from anywhere within Winchester.

8.2 MEDIEVAL

- 8.2.1 The investigations at Granville House indicate that the area underwent a period of intensive pitting and dumping from the 11th to the 12th century at which point activity appeared to cease on site.
- 8.2.2 The early medieval activity on site was focused on the deposition of domestic waste. No structural remains were recorded on site and there was no indication that any settled occupation took place on site. Artefactual evidence recovered from the pits included pottery, animal bones, plant remains and industrial waste. No medieval building material was recorded on site, instead Roman brick, roof and floor tiles showed signs of reuse either as floor tiles or for use in domestic fires or hearths. This may suggest there was an abundance of Roman material ripe for re-use or that there was a lack of funds in the local population for new material.
- 8.2.3 The pottery from the site has been identified as a typical assemblage for an early medieval site in Winchester. Chalk tempered wares dominate the assemblage which also includes 27 other fabrics, predominately produced locally. The specific origin for the pottery fabrics is unknown however the wares recorded on site have been found on other Winchester sites dating to the late Saxon to early medieval period. The pottery assemblage suggests the main bulk of activity on site was carried out between AD1050/1070 and c.AD1100. Why the activity was so short lived remains unclear. The focus of activity may have shifted to another part of town or that the lack of activity from AD1150 onwards echo's the decline within Winchester itself, suggesting that the town was contracting in size.
- 8.2.4 Industrial waste was recorded in several pits within Test Pit 6, (Figure 14). Several pottery sherds appeared to contained purple internal residues which are probably the result of boiling madder. Madder, (genus *Rubia*) is a natural red dye produced from the species roots. This has been recorded on sherds from the Brooks excavations (see Appendix B) and suggests spinning and weaving on a domestic scale. Two crucibles, various fragments of copper alloy working and kiln residues were also recorded within Test Pits 2 and 6, suggesting domestic-scale metalworking.
- 8.2.5 The animal bone assemblage consisted of fish, amphibians, birds and mammals. The fish species would have been widely available for consumption as they are all local to the British coast or major estuaries. As Winchester was the main royal, political and religious centre during the early medieval period, traders were drawn to the markets of the vibrant town. The fish remains recorded on site were almost entirely prepared off site, suggesting they were deposited on site as waste. The meat consumption was dominated by beef and mutton with a smaller amount of pork and even less chicken. The remains were post-consumption waste,

dominated by adult and young adult cattle, sheep and goat. No illness or sign of work/stress was observed suggesting the animals were reared for meat production rather than traction, dairy or wool production. There is no evidence of status within the assemblage or any suggestion that the waste originated from a specific location within Winchester.

- 8.2.6 Environmental evidence analysed from the sites revealed grains of wheat, barley and oats which are all typical cereals of the post-Roman period. The occurrence of wheat is probably through consumption waste which along with remains of sedge seeds, suggest the deposition of cess. The charred weed seeds recorded on site may be the waste from domestic or industrial hearths.

8.3 POST-MEDIEVAL

- 8.3.1 There are no archaeological remains on site from the 12th century until the late post-medieval and modern period. Due to the terracing during the construction of the Victorian church a large amount of information has been lost. The only post-medieval activity appears to relate to the construction of the church and possibly to the renovation or development of the church into the offices known as Granville House.

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APPENDIX A – CONTEXT REGISTER

Cuts are marked in **BOLD** type

NFE = Not fully excavated

Context	Description	Length	Width	Depth
1/001	Modern made ground	Trench	Trench	1.00m max
1/002	Roman levelling layer	Trench	Trench	0.50m max
1/003	Roman mortar floor surface (recorded in section)	-	-	0.10m
1/004	Roman accumulation layer (rec. in section)	-	-	0.10m
1/005	Thin mortar surface (rec. in section)	-	-	0.02m
1/006	Clay levelling layer (rec. in section)	-	-	0.08m
1/007	Mortar and stone levelling layer (rec. in section) = (1/007)	-	-	0.20m
1/008	Mortar and stone levelling layer (rec. in section) = (1/008)	-	-	0.30m
1/009	Thin chalk surface. Slopes steeply to south	0.60m	0.60m	0.30m max
1/010	Roman layer. Not excavated	0.40m	0.60m	NFE
1/011	Modern cut	Trench	Trench	0.98m
1/012	Compact chalk layer (rec. in section)	-	-	0.08m
1/013	Mortar and stone levelling layer (rec. in section)	-	-	0.10m
2/001	Modern intrusion	Trench	Trench	0.48m
2/002	Fill of medieval cess pit [2/003]	Trench	0.65m	1.50m NFE
2/003	Cut of cess pit	Trench	0.65m	1.50m NFE
2/004	Roman levelling layer	Trench	Trench	0.44m
2/005	Roman hardcore or floor surface	Trench	0.80m	0.40m max
2/006	Roman layer. Not excavated	Trench	0.80m	0.70m NFE

Context	Description	Length	Width	Depth
3/001	Mixed dumped layer	Trench	Trench	0.61m
3/002	Backfill dumped against C19th wall foundations	Trench	Trench	0.50m
3/003	Fill of [3/004]	0.50m	0.20m	0.30m NFE
3/004	C19th cut	0.50m	0.20m	0.30m NFE
3/005	Chalk surface	Trench	Trench	0.30m
4/001	Modern made ground	Trench	Trench	0.30m
4/002	Dark earth- Dump deposit	Trench	Trench	1.30m NFE
5/001	Modern chalk packing within foundation cut	Trench	1.00m	0.45m
5/002	Modern construction backfill	Trench	0.30m	0.45m
5/003	Modern construction cut	Trench	Trench	0.30m
5/004	Dark earth - post medieval = (5/005)	Trench	Trench	0.80m
5/005	Dark earth - post medieval = (5/004)	Trench	Trench	0.30m NFE
5/006	Horse or cow skeleton	Trench	0.60m	NFE
6/001	Overburden-cleaning layer	Trench	Trench	0.10m
6/002	Fill of 6/003	-	0.60m	0.30m
6/003	medieval pit cut	-	0.60m	0.30m
6/004	Fill of 6/005	1.28m	0.52m	0.65m
6/005	medieval pit cut	1.28m	0.52m	0.65m
6/006	Fill of 6/007	-	0.35m	0.30m
6/007	medieval pit cut	-	0.35m	0.30m
6/008	Dump Layer	-	0.26m	0.13m
6/009	Chalk and plaster dump	0.24m	0.09m	0.08m

Context	Description	Length	Width	Depth
6/010	Dump Layer	0.18m	0.07m	0.10m
6/011	Compact Orange Gravel	1.05m	0.30m	0.18m
6/012	Fill of 6/013	1.10m	1.50m	0.37m
6/013	medieval pit cut	1.10m	1.50m	0.37m
6/014	Fill of 6/015	0.60m	0.48m	0.95m
6/015	medieval pit cut	0.60m	0.48m	0.95m
6/016	Dump Layer	1.40m	1.30m	0.90m
6/017	Dump Layer/truncated pit fill	1.36m	1.10m	0.50m
6/018	Fill of 6/019	1.40m	1.30m	0.30m
6/019	medieval pit cut	1.40m	1.30m	0.30m
6/020	Fill of 6/021	0.65m	0.50m	0.19m
6/021	medieval pit cut	0.65m	0.50m	0.19m
6/022	Fill of 6/023	Trench	1.0m	0.50m
6/023	medieval pit cut	1.30m	0.55m	1.63m
6/024	Dump Layer	0.40m	0.22m	0.18m
6/025	Chalk / mortar floor	0.25m	0.22m	0.05m
6/026	floor make up	0.40m	0.29m	0.11m
6/027	Floor surface	0.38m	0.33m	0.03m
6/028	Dump layer	0.40m	0.36m	0.07m
6/029	Made ground	0.65m	0.40m	0.04m
6/030	Gravel dump	1.80m	0.70m	0.11m
6/031	Dump layer	1.50m	1.30m	0.15m
6/032	Fill of 6/054	0.50m	0.34m	0.22m
6/033	Fill of 6/054	1.74m	0.75m	0.24m
6/034	Fill of 6/035	0.50m	0.15m	0.22m

Context	Description	Length	Width	Depth
6/035	medieval pit cut	0.50m	0.15m	0.22m
6/036	Dump of plaster mortar	0.70m	0.50m	0.12m
6/037	Fill of 6/049	0.40m	0.15m	0.40m
6/038	Fill of 6/054	0.90m	0.25m	0.25m
6/039	Fill of 6/055	1.05m	0.25m	0.40m
6/040	Fill of 6/053	0.60m	0.25m	0.12m
6/041	Fill of 6/053	1.06m	0.25m	0.13m
6/042	Fill of 6/056	1.15m	0.25m	0.45m
6/043	Animal Burrow	0.54m	-	0.30m
6/044	Fill of 6/052	1.56m	1.28m	0.28m
6/045	Fill of 6/052	1.70m	1.24m	0.85m
6/046	Fill of 6/047	2.25m		0.90m
6/047	Large medieval pit cut	2.25m	0.30m	0.90m
6/048	Fill of 6/048	0.70m	0.40m	0.37m
6/049	medieval pit cut	0.70m	0.40m	0.37m
6/050	Clay floor-Roman	1.0m	0.70m	NFE
6/051	Chalk and clay deposit-Roman ?	1.80m	1.30m	0.50m
6/052	medieval pit cut	1.70m	1.24m	0.85m
6/053	medieval pit cut	1.06m	0.25m	0.13m
6/054	medieval pit cut	1.90m	0.25m	1.25m
6/055	medieval pit cut	0.40m	0.20m	0.75m
6/056	medieval pit cut	0.90m	0.25m	0.45m
6/057	Fill of 6/058	0.50m	0.25m	0.50m
6/058	medieval pit cut	0.50m	0.25m	0.50m
6/059	Fill of 6/061	0.50m	0.15m	0.30m

Context	Description	Length	Width	Depth
6/060	Fill of 6/061	0.25m	0.15m	0.65m
6/061	medieval pit cut	0.75m	0.15m	0.65m
6/062	Fill of 6/063	0.25m	0.20m	0.30m
6/063	medieval pit cut	0.25m	0.20m	0.30m
7/001	Dump Layer	Trench	Trench	0.10m
7/002	Fill of [7/003]	1.04m	0.47m	0.44m
7/003	Post hole cut	1.04m	0.47m	0.44m
7/004	Fill of [7/005]	1.50m	0.65m	0.11m
7/005	Shallow Cut	1.50m	0.65m	0.11m
7/006	Dark silt deposit	1.40m	1.50m	0.46m
7/007	Dump layer	Trench	Trench	0.22m
7/008	Dump Layer	Trench	Trench	0.10m
7/009	Fill of [7/010]	0.50m	0.30m	0.50m
7/010	Pit cut/Robber cut	0.50m	0.30m	0.50m
7/011	Dump Layer	1.50m	0.60m	0.14m
7/012	Dump Layer	1.10m	Trench	0.13m
7/013	Dump Layer	Trench	Trench	0.20m
7/014	Fill of [7/027]	1.45m	Trench	0.60m
7/015	Chalk Floor	Trench	0.30m	0.07m
7/016	Floor make up	Trench	0.30m	0.11m
7/017	Fill of [7/028]	Trench	1.30m	0.25m
7/018	Fill of [7/028]	1.0m	0.90m	0.12m
7/019	Floor make up	Trench	0.35m	0.21m
7/020	Silt deposit associated with the floor	Trench	1.46m	0.28m

Context	Description	Length	Width	Depth
7/021	Chalk and plaster surface	1.32m	1.06m	0.10m
7/022	Floor make up	Trench	Trench	0.12m
7/023	Chalk deposit, possible floor	0.90m	0.80m	0.15m
7/024	Floor make up	1.30m	Trench	0.10m
7/025	Fill of [7/027]	1.30m	Trench	0.40m
7/026	Chalk Floor	1.10m	Trench	0.20m
7/027	Roman Pit cut	1.30m	Trench	0.40m
7/028	Roman Pit cut	Trench	1.30m	0.25m

APPENDIX B

SPECIALIST REPORTS

THE ROMAN POTTERY

Beth Richardson

Introduction

The pottery was examined macroscopically and with a binocular microscope. It was recorded by fabric and form and quantified by sherd count, estimated vessel count (ENV), and weight. The data was entered onto proforma sheets and an Excel spreadsheet using Museum of London and National Roman fabric reference collection (NRFC) codes.

There are 420 sherds of Roman pottery, weighing approximately 10 kg, from 42 contexts. The stratified pottery comes from surfaces, makeup (dumped) deposits and pits which are thought to relate to a building. A high proportion is residual; 26 of the 42 contexts containing Roman pottery also contain Saxo-Norman and medieval pottery from the overlying pits, and there are several other contexts in which the small abraded late Roman sherds are also almost certainly re-deposited. The sherds used for dating and any others of interest (eg residual imports) are listed by test pit and context. A complete list of the pottery from the site is available in archive form from AOC Archaeology Group. Two groups, from contexts, 1 [2] and 2 [6], are described in more detail as they are in fresh condition, uncontaminated by later material and appear to be securely stratified. The three sherds of decorated samian from the site are described in an appendix by Joanna Bird.

Test Pit 1

[1] 15 sherds. The context is dated AD 150–220 by sherds of Central Gaulish samian Drag. 31 plate and Drag. 38 flanged bowl, BB1 Gillam 226 bowls with incipient flange (two vessels), BB1 jar with short everted rim and an Alice Holt ware triangular-rimmed bowl (Lyne and Jeffries type 5A2; Lyne and Jeffries 1979, 45 fig.31). Also of note are sherds from a large storage jar with external finger-made indentations and a sand-tempered bowl with an everted rim and high angular shoulder.

*[2] 28 sherds from a surface or dumped deposit. The sherds are in fresh condition and include large pieces, including both handles from the neck of a South Spanish (Baetican) Dressel 20 amphora, sherds from two Terra Nigra platters (form Camulodunum 16) (one illustrated (Fig 13 <1>), three south Gaulish (la Graufesenque) samian cups (forms Drag. 27 and Drag. 24/25) and a plate (Drag. 18), late 1st-century bead-rimmed and cordoned jars from the Alice Holt kilns on the Surrey-Hampshire border) (Fig 13 <2>, <3>) and a sand-tempered jar with a short everted rim (Fig 13 <4>).

The TN platters are NRFC fabric Gallia-Belgica (Vesle Valley) Terra Nigra 1 with smooth pale grey surfaces and a silty matrix containing fine well-sorted quartz and dark iron-rich fragments (Tomber and Dore 1998, 15); see also a stamped Cam 16 with similar fabric from Winchester, dated *c* AD 45–75 (Jones in Collis *et al* 1978, 95, fig. 37, 18).

The un-sourced sand-tempered jar has dark grey surfaces, a burnished area on rim, neck and shoulder and a dense fabric which contains large amounts of fine mica, medium-fine rounded quartz and black iron and burnt organic inclusions. There are also three body sherds from jars in a distinctive hard dense cream-light orange fabric with abundant ill-sorted rounded iron-stained quartz inclusions; the fabric is similar to but coarser than the late Roman Surrey-Hampshire Overwey ('Porchester D' ware) fabric, and may have been made in earlier kilns from the same clays. The context is dated c 50–80.

Fig 13: Illustrated pottery from TP1 [2]

Test Pit 2

[1] Two body sherds from a hand-made flint-tempered vessel. Iron Age?

[2] 4 sherds. The context contains medieval pot. The Roman pottery includes a small piece from a BB1 plain-rimmed dish (AD 120–300) and a rim sherd from an Alice Holt ware late flat-rimmed jar (type 3A; c AD150–250) (Lyne and Jeffries 1979 *ibid*, 41).

*[6] 11 sherds from a silty layer at the base of the test pit. Six of these are large joining sherds from an Alice Holt ware large flat rimmed bowl decorated with burnished acute-lattice decoration on the exterior and horizontal burnished lines on the interior (Fig <5>). The bowl is a type 5A2, dated 150–220 (Lyne and Jeffries 1979, 45). There are also two body sherds from an Alice Holt ware storage jar with a burnished shoulder, two unsourced fine sand-tempered sherds from smaller jars and a sherd of 1st century South Gaulish samian. The context is dated AD 120–220.

Fig 13: Illustrated pottery from TP2 [6]

Test Pit 3

[1] 2 sherds. The context contains medieval pot. The Roman sherds are dated 50–400.

[2] 2 sherds. The context contains medieval pot. The Roman sherds consist of a BB1 jar or bowl with acute-lattice decoration (AD 120–250) and an abraded grey-slipped beaker or small jar rim in a fine sand-tempered fabric.

Test pit 4

[2] 13 sherds. The context contains medieval pot. The Roman pottery is abraded, but mainly mid to late 4th-century. It includes sherds of Oxford and New Forest colour-coated stamped bowls (Young forms C84; Drag. 38 copy), New Forest parchment ware bowl, late Alice Holt-Farnham ware storage jar, Hampshire grog-tempered ware jar and Nene Valley beaker.

Test pit 5

[5] 2 sherds. The context contains medieval pot. One of the sherds is from a Hampshire grog-tempered ware storage jar dated 250–400.

Test Pit 6

[1] 2 sherds. The context contains medieval pot. The Roman sherds consist of a large piece of BB1 plain-rimmed dish with burnished arc decoration, and a spouted rim sherd

from a Hampshire white ware mortarium with flint trituration grits, a squared bead rim and horizontal flange. AD 180–300.

[4] 3 sherds. The context contains medieval pot. The sherds include a New Forest colour-coated beaker base and a small piece of late Alice Holt-Farnham ware, both 4th-century.

[16] 9 sherds. The context contains medieval pot. The sherds are abraded; the only rim is from a late Alice Holt –Farnham ware round-rimmed bowl (type 5A4; 150–220, Lyne and Jeffries 1979, 45 fig. 31). There is also a sherd of late 3rd to 4th century Hampshire grog-tempered ware.

[17] 5 sherds. The context contains medieval pot. There are small abraded sherds of Nene Valley colour-coated ware and Alice Holt-Farnham ware, dated to the 3rd and 4th century.

[18] 16 sherds. The context contains medieval pot. There are small abraded sherds of BB1 bowl and Nene Valley colour-coated ware dated to the 3rd and 4th century.

[22] 10 sherds. The context contains medieval pot. The pottery is mixed in date and abraded. There is a rim/body sherd from a late 2nd to 3rd century Soller (Rhine) mortarium; only the bead from the rim is present, but the wall angle suggests a flange.

[23] 4 sherds. The context contains medieval pot. There are sherds from a BB1 bowl, a late Alice Holt-Farnham storage jar and a Hampshire late grog-tempered ware vessel. 4th century.

[24] 2 sherds. The context contains medieval pot. There is a sherd from a New Forest metallic colour-coated ware indented beaker and a sherd from a shell- and grog-tempered vessel.

[30] 1 sherd. The context contains medieval pot. The base from a New Forest (Fine) White ware mortarium, with fine sand temper and conspicuous larger red iron-rich inclusions. Unusually there are no trituration grits. Probably 3rd century.

[31] 6 sherds. The context contains medieval pot. The pottery includes an Alice Holt ware jar body sherd with obtuse lattice decoration and a BB1-like cavetto rim from a jar in a light grey grog- and sand-tempered fabric, probably Hampshire grog-tempered ware. Both these sherds date from AD 250–400.

[32] The context contains medieval pot. There is one sherd of Roman pottery dated AD 50–400.

[34] 3 sherds. A small sherd of Central gaulish samian dates from AD120 –250. There are also small sherds of Alice Holt-Farnham ware and grog-tempered ware.

[36] 2 sherds. The context contains medieval pot. The sherds consist of a New Forest (Fine) red-slipped ware 2 flagon or beaker with white-painted decoration and an Alice Holt ware jar. Late 3rd-4th century.

[37] 4 sherds. The context contains medieval pot. The pottery includes a largish piece of New Forest metallic colour-coated ware indented beaker, a piece from a New Forest (Fine) red-slipped ware closed vessel decorated with a band of grooves and a late Alice Holt-Farnham storage jar.

[38] The context contains medieval pot. One sherd of Roman pottery dated 50–400.

[42] 5 sherds. The context contains medieval pot. The pottery includes two Alice Holt-Farnham and BB2 plain-rimmed dish rims. AD 270–350.

[44] 10 sherds. There are four body sherds from an jar or flagon in a fine oxidised fabric, possibly New Forest Fine White ware. The other sherds are mixed and abraded, but dated post-120 by a small piece of BB1.

[45] 7 sherds. The context contains medieval pot. Again the Roman pottery is abraded. It includes 3rd- and 4th-century sherds from a Nene Valley white-painted colour-coated beaker, an Alice Holt-Farnham jar and a large grog-tempered storage jar.

[46] 11 sherds. The context contains medieval pot. There are three large pieces from a Savernake or Hampshire grog-tempered ware lid, two large pieces from a fine sand-tempered jar with a sharp shoulder carination, a rim from a grog-tempered everted rimmed jar, a piece from a ?New Forest (Fine) White ware mortarium flange and a small piece of samian bowl. The carinated jar and lid could be 1st century, although the lid could also be later.

[48] 6 sherds. The context contains medieval pot. The 3rd- and 4th-century pottery includes a sherd of Hampshire grog-tempered ware flanged bowl, two sherds of red colour-coated Oxford ware and a sherd from a grog-tempered storage jar.

Test pit 7

[1] 9 sherds. The context contains medieval pot. The 3rd-4th-century pottery includes sherds from a BB1 dish, an Alice Holt ware flanged bowl, a Nene Valley flagon and a large sand-tempered bead-rimmed storage vessel.

[4] 13 sherds. The context is dated 250–400 by a BB1 flanged bowl rim and a bowl/dish base.

[6] 15 sherds. The context contains medieval pot. A large piece from a hand-made grog- and sand-tempered jar with an upright everted rim and a burnish-decorated shoulder sherd from a late Alice Holt-Farnham storage jar are late 4th century. A sand-tempered everted rimmed jar is the same vessel as a jar in [8].

[7] 17 sherds. The context contains medieval pot. A sherd of black-burnished ware is dated AD120–400.

[8] 42 sherds. The context contains medieval pot. The pottery is mixed, with a small amount of 1st century material, but also 2nd- early 4th-century sherds of Alice Holt-Farnham ware, black-burnished ware and Central Gaulish ware. There are also two sherds from a large oxidised coarse sand-tempered jar with finger-grooving on the interior (cf Cunliffe 1964, 70, fig 19, 1; Collis 1978, 16, fig 5, 24). This is a late 3rd-4th century form, made in a reduced fabric in the Alice Holt/Farnham kilns and also in other Surrey/Hampshire kilns in an oxidised coarse sandy Overwey-type fabric.

[12] 5 sherds. The context contains medieval pot. A sherd of black-burnished ware with acute lattice decoration is dated AD120–250.

[13] 28 sherds. The context contains medieval pot. The 3rd-4th-century pottery includes a black-burnished ware plain-rimmed dish profile (Dorset or possibly Savernake; contains some grog), eight pieces from a large oxidised sand and iron ore tempered jar with finger-grooving on the interior (see [8]) and a sherd from a Central Gaulish Drag.33 cup.

[14] 23 sherds. The context contains medieval pot. The pottery includes sherds of Hampshire grog-tempered ware flanged bowl and cavetto-rimmed jar, a BB1 plain-rimmed dish, Nene Valley indented beaker and East Gaulish samian as well as Hampshire grog-tempered ware and Alice Holt ware body sherds. It is fairly consistently mid 3rd to early 4th century in date.

[15] One sherd, dated AD 50–400.

[17] 7 sherds. The pottery includes a rim from an East Gaulish form Drag. 45 wall-sided mortarium, an Oxford red colour-coated ware bowl and a fine slipped everted rimmed beaker. It is dated from the late-3rd to the mid- 4th century by the Oxford ware.

[19] 2 sherds, dated AD 50–400.

[20] 36 sherds. With [24] this layer is low in the sequence, above the earliest deposit [26]. It is late 3rd to 4th century, dated by an Alice Holt-Farnham straight sided dish with a slight lid seating on the rim and burnished wavy-line decoration (no exact Lyne and Jeffries parallel) and a BB1 bowl with burnished arc decoration. There are also sherds from a large jar with internal finger-grooving (see [8] and [13]) and several sherds from a large oxidised grog-tempered storage jar.

[24] 33 sherds. This layer is also dated late 3rd to 4th century by a sherd of Alice Holt-Farnham ware jar with wavy line decoration, although it is more mixed with sherds of late 1st to early 2nd-century Alice Holt carinated jar, and 2nd-century Central Gaulish samian Drag.33 cup. There are several sherds from a large Hampshire grog-tempered ware with a zone of lattice decoration and also from a large oxidised jar in a fabric, like

the sherds in TP 1 [2], similar to but coarser than the late Roman Overwey ('Porchester D' ware) fabric.

The decorated Samian Ware by Joanna Bird

6 [44] Drag 37, South Gaul. The ovolo was regularly used by Germanus (e.g. Mees 1995, pl 69, 1). c.AD 70–90

6 [46] Drag 37, Lesoux. No complete impression of the ovolo survives, but it may be Rogers 1974, type B5, used by several potters, including Cinnamus. Mid- to later Antonine.

7 [8] Drag 37, Central Gaul; the fabric suggests origin at Les Martres-de-Veyre rather than Lezoux. Probably by the anonymous potter X-5, who used the leaf (Rogers 1974, type J161) and what is probably the same figure of a horse and rider: Stanfield and Simpson 1958, pl 67, 11. c.AD 125–150.

Discussion

The pottery from the site dates from the 1st to the early 4th century. There is only one 1st century context (TP1, [2]) which is late Neronian-early Flavian (c AD 50–80), with a very small number of residual 1st-century sherds in other test pits. There are no obvious early to mid 2nd-century contexts, although there are a few sherds of this date in later contexts (such as a sherd of Central Gaulish samian dated c AD 125–150 and Alice Holt ware cordoned jars and certain forms of bead-rimmed jars, both of which have a wide date range). Most contexts date either from the mid-late 2nd to the early 3rd century, dated by Black-burnished ware 1 and Alice Holt-Farnham forms, or from the late 3rd to the early 4th century, dated by Oxford and New Forest colour-coated wares and late Alice Holt-Farnham ware forms. There is no pottery definitely later than c AD 350.

The pottery is therefore mainly late Roman, and typical of late Roman groups from Winchester with high proportions of South Dorset Black-burnished ware 1, Alice Holt-Farnham ware and Hampshire grog-tempered ware bowls, dishes and jars and smaller quantities of New Forest metallic colour-coated and Nene Valley colour-coated beakers and Oxford red colour-coated ware bowls (see for example late Roman groups in Collis 1974 *ibid*, Cunliffe 1964 *ibid*. The four mortaria sherds are either local or imported (Hampshire white ware, New Forest (fine) white ware, East Gaulish Drag. 45 and Soller, from the Lower Rhine). Except for a cordoned neck sherd from an Alice Holt ware flask or flagon (1st to 3rd century) there are no flagons, but this is not surprising as the vast majority of flagons occur in 1st to mid 2nd century contexts and there is little pottery of this date on the site. The only imports are very small quantities of South Spanish Dressel 20 olive oil amphora, South, Central and East Gaulish samian and the Soller mortarium.

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THE MEDIEVAL AND LATER POTTERY

Lyn Blackmore

INTRODUCTION

A total of 570 sherds (10.241kg) of post-Roman pottery were recovered from the site, of which 63 are from sieved samples. Of these, 563 sherds (432 vessels, 10.118kg) are medieval or late medieval, and the remainder are post-medieval. The material derives from 36 deposits/cut features (43 contexts) in six Test Pits, but most finds are from Test Pit 6. Although the pottery falls into a small number of general ware types, a wide range of different fabrics was identified.

The first major pottery reports on pottery from Winchester were by Dunning (1960, 1964), Hurst (1962a, 1962b, 1964a, 1964b) and Cunliffe (1964). These studies identified Winchester ware, and broadly distinguished between the chalk- and flint-tempered wares, although other descriptions vaguely refer to 'many grits' (Hurst 1964a, 123) without specifying what the inclusions are. The associations of different wares were considered but quantification was not attempted and chronologies could not be closely defined. During the 1960s–1980s a series of codes was built up by the Winchester Research Committee for material excavated by the Winchester Excavation Committee (Biddle and Barclay in prep) and these were then taken over and extended by the Winchester Archaeological Unit.

The pottery analysis carried out to date has shown that the Late Saxon pottery from Winchester is very homogenous. Nonetheless, six ceramic phases (hereafter normally referred to as CP for the purposes of this overview) can be defined for the 9th to late 12th centuries. These are based on the presence of particular ware types, the

combination of different wares, and subtle changes in rim form (Biddle and Barclay 1974, 149–54; McCarthy and Brooks 1988, 189–90; Matthews in prep).

CP1	Pre-900	Late Saxon sandy ware (MSH) and/or chalk-tempered wares (MBX, MAV)
CP2	Pre- c 950	MSH and MBX, MAV with Portchester ware (MBN) and/or Michelmersh ware (MMU) and rare flint-tempered ware
CP3a	From c 950	Winchester ware (MWW), MBK/MAF and other sandy wares
CP3b	From c 980/994?	Tripod pitchers in MWW, some Kennet Valley wares from c 1010?
CP4a	From c 1050?	Tripod pitcher ware (MAD); Kennet Valley wares, increase in sand-tempered wares
CP4b	From c 1070	Scratch-marked wares; developed rims in all fabrics
CP5	From c 1110	Developed Winchester ware (although this is a rare type)
CP6	After c 1150	'Thirteenth-century' finer sand-tempered and glazed ware

Table 1. Ceramic phases proposed for Winchester (from Biddle and Barclay 1974 and Holmes and Matthews in prep) with additions

Winchester code	MoL Fabric code	Expansion	Date range*	SC	GM
Chalk-tempered					
MBX	WEMCH	chalk-tempered ware	800–1150	242	4605
MAV/ MBE	WEMCHFL	chalk-tempered ware with flint	800–1200	141	2635
Flint-tempered					
MAB	WEMFL	flint-tempered ware, coarse	950–1200	20	344
Sand-and-flint-tempered					
MAP	WEMS1+FL	fine sandy ware with flint	950–1150	4	163
MBC	WEMS+FL15	sandy ware with flint and chalk	950–1200	14	399
MFA	WEMS+FLCH	flint-tempered ware with sand and chalk	800–1200	6	259
Sand-tempered, some with sparse flint					
MAC	WEMS2+FL	Sandy ware with flint		2	22
MAF1,2	WEMS1C, 1D	Medium sandy ware with rare fine flint, chalk and selenite	950–1150	7	48
MBK1,2,3	WEMS1A, 1B	Fine sandy ware with rare fine flint and chalk	950–1150	23	256
MDF	WEMS3, WEMS5	Reduced medium sandy ware	950–1200	3	109
MEO	WEMS6	Oxidised sandy ware	950–1200	5	31
MJO?	WEMS4	Reduced sandy ware, some flint/chalk		2	27
MNC type	WEMS7	Reduced fine sandy ware	1000–1200	3	11
MOE	WEMS15	Reduced coarse sandy ware	950–1200	8	48
MQB	WEMS8, WEMS14	Coarse sandy ware, waterworn quartz sand	950–1200	4	75
MSH1, MSH2	WEMS2, WEMS9	Late Saxon sand-tempered ware	800–1000	12	143
Other coarsewares					

MDL, Misc	MISC	Crucibles and miscellaneous	900–1150	3	30
MGSQ1a	WEMS10/ WGSQ1a	Greensand-tempered ware	900–1200	6	77
MGSQ1b = MGX	WEMS10/ WGSQ1b	Greensand-tempered ware with chalk and flint	900–1200	2	19
MGSQ2	WEMS11/ WGSQ2	Greensand-tempered ware	900–1200	4	71
MGSQ3	WEMS12/ WGSQ3	Greensand-tempered ware	900–1200	1	56
MGSQ4	WEMS13/ WGSQ4	Greensand-tempered ware	900–1200	1	15
MTE	KVW	Kennet Valley A/B-type ware	1000–1150	32	564
Glazed wares					
MWW	WINC	Winchester-type ware	950–1100	4	50
MAD	WTPTCH	Tripod pitcher-type ware	1050–1150	7	97
MMG	HSOXGL	Hampshire sandy oxidised ware (pink, glazed)	1200–1450	2	8
MMK	HSOXGL+FL	Hampshire sandy oxidised ware (fine quartz sand with flint, glazed)	1200–1450	1	3
MML	HSOXGL	Hampshire sandy oxidised ware (fine quartz sand, black ironstone)	1200–1450	1	1

Table 2. The medieval fabric codes with correlations, sherd count (SC) and weight (GM)

**date ranges assigned for the purpose of this report only*

THE MEDIEVAL POTTERY

Fabric descriptions

Reference collections are maintained by both the Winchester Research Committee and the Winchester Museums Service. The latter was consulted for this report and it is these codes that are used where possible below. A printed correlation of the two series is pending.

The pottery was initially recorded using a series of temporary codes, which were retained in a modified form for the purposes of grouping general traditions. Marrying these up with the Winchester reference sherds and fabric descriptions (Denham, Holmes and Matthews *nd*) was difficult, partly as samples of some of the sandier fabrics were lacking and partly because it is not clear how wide the variations within each ware type can be. Rather than create new codes, a number of sub-types were created to cover apparent differences that may simply represent minor changes to the composition of individual batches of clay within the same industry. As the various Winchester fabrics will be published in a forthcoming monograph (Matthews *et al* in prep) the different types are for the most part summarised in ware groups. Some fabrics are described more fully in the archive, which also contains the results of the thin section analysis of six sherds (Vince 2007). The different medieval fabric codes and quantities present in each type are presented in Table 2. A sample of most of the main fabric types has been retained by the Museum of London for reference purposes.

Chalk- tempered and chalk-and-flint-tempered wares

Description. Fabric MBX, the chalk-tempered ware used in Winchester, contains abundant chalk with occasional iron oxides, rare fine flint and/or quartz sand. In the Winchester description the chalk is 1mm, but for the present analysis the code MBX was used for all sherds where chalk is the dominant inclusion, regardless of size (which can be up to 4mm across) and frequency; this ware tends to have a soapy feel.

Two fabrics contain both chalk and flint. The first is basically the same as MBX but contains moderate to common flint and more quartz sand (MAV). A base sherd from [6/045] contains more sand than usual, while a rim sherd from [6/031] (No.18) is a particularly sandy example with only fine flint and chalk. The third fabric, MBE, is the same as MAV, but coarser, with abundant chalk up to 5mm and common flint up to 6mm, but little or no sand, the fracture is more hackly and the surfaces rougher to the touch. The division between the two types, however, is hard to pin down and for this study the code MAV was initially used for all sherds where the flint is coarser and more abundant and seems to be a deliberate addition to the tempering (regardless of size or frequency); the surfaces are still soapy, but can also have a pimply texture. Although only a few examples of MBE were recorded, many sherds of MAV from Granville House should probably be classed as this coarser fabric type.

A minor fabric is MGX1, which has a fine sandy matrix and is noticeably micaceous. The few sherds of this ware from [7/006] contain abundant fine chalk (up to 1.5mm across), moderate water polished grains of greyish and rose-coloured quartz sand, some iron-stained and/or iron coated (0.5–1mm). Also present are moderate inclusions of fine black iron and flint (up to 3mm across; see also below, Greensand-tempered wares).

Forms. These are handmade wares with sagging bases and rims that are usually wheel-finished, often with a self-slipped surface. Jars/cooking pots are the most common form, the earlier examples mainly having plain everted rims. From c 950 onwards (CP3 and CP4) an increasing number are thumbled, beaded or thickened, and in CP4 some rims in MAV are slightly more upright than before (Matthews in prep). The jar and cooking pot rims found at Granville House (26 and 15 examples in MBX and MAV/MBE respectively) broadly follow this pattern. Numerous parallels can be found in the published material from earlier excavations (Cunliffe 1964; Collis 1978) and so only a few examples are quoted here for comparison.

Simple MBX rims with rounded tops and internally rounded junction with the shoulder include Nos 34, 44 and 45, while No.16 is very slightly thickened; this is more noticeable on No.13, which also has a more angular inner profile. Simple MBX rims with flattened tops tend to be deeper, and also have a more angular inner profile (eg Nos 31, 46/46, 48); the same applies to some of the slightly thickened examples (Nos 22, 30, 46/47), although others (eg Nos 29, 42) are more rounded. The most developed MBX rim is No. 23, which is almost externally beaded. The rims in MAV are very similar, with both simple rounded and flat-topped rims (eg No.50). Slightly thickened forms include Nos 1, 18, 43. More developed is the externally beaded rim No.14, while the most exaggerated form is No.2, which has a slight external bead and is internally thickened (cf Cunliffe 1964, fig 30.5).

Technological variations can be observed, although whether they really represent chronological trends is unclear. In some cases the rims are quite crude and must have been built up with coils (eg No.1). Many have a uniform section, but a significant number of vessels have a noticeable internal thickening at the junction of the neck and shoulder, with rough wiping of the inner and/or outer surfaces (eg Nos 29, 31, 45, 47, 50, 53) and in several cases finger impressions on the inner body (eg Nos 14, 34 and especially on No.29). No.45 is the only vessel with a noticeable groove at the junction of the neck and shoulder (cf Cunliffe 1964, fig 33.14). On at least one pot the surface slipping of the body seems not to extend over the rim (No.18). These features lend support to the suggestion that many rims were made separately and then added to the body of the pot (Matthews in prep). Others, however, perhaps of later date, are extremely well made and even, suggesting that the whole pot may have been wheel-finished (Nos 2, 5, 23, 42, 43, and 46). The rim of No.4 is also well formed, although the neck is less even, while No.48 is well formed but was wiped while still damp. The 41 measurable cooking pot/jar rims mainly range between 120mm to 270mm in diameter, and most fall between 160mm and 260mm; there are also single examples of 340mm (No.2), 360mm and 460mm (No.4).

Five thumbed rims were found, of which Nos 25 and 40 might, from their diameters (240mm and 220mm respectively) and form, be from jars; No.40 is relatively upright, while No.25 is everted with almost imperceptible impressions. The others are from spouted pitchers, from which four rims were found, two with spouts. On No.21 the thumbing is quite small and neatly applied to the bevelled edge of the rim, while on No.49 it is deeper, giving a frilled inner edge as well as a decorative outer edge; marks in the clay itself show that the pot was decorated while still quite wet. The most exaggerated treatment is on No.41, on which the thumb impressions seem to be longitudinal rather than transverse. The fourth rim is decorated with oblique incisions (No.27) similar to those on the large flint-tempered spouted pitcher found in a late 11th-century pit on the Royal Oak site (Dunning 1960, fig 1; Cunliffe 1964, fig 34; cf also *ibid*, fig 31.9). Other forms of decoration are limited to incised horizontal lines on No.3, and scratch marking on a single sherd from [6/023].

Two possible bowls (Nos 24, 26, both *c* 120mm in diameter) and a possible dish rim ([7/001], not illustrated) were found, but no other forms were recognised, although lamps and a curfew/strainer have been found elsewhere in the city (Matthews in prep; Holmes in prep).

Source. The use of chalk-tempered pottery is widespread across the whole of Hampshire and in parts of the adjacent counties from the Late Saxon period if not earlier. The origin of these wares is not known but is presumed to be regional and not necessarily so far away as Chichester, where similar wares were produced in clamp kilns (Down 1978, 158, 341-5). The source may have been the same as that used to supply Southampton, where similar forms occur (Brown 1994, 133), Westbury, East Meon (Moorhouse 1973) or closer to Winchester. Jars and cooking pots similar to those noted above and dated to the 10th and 11th centuries also occur at Portchester (Cunliffe 1970, 80-1, 83; fig 7, nos 1-4; Cunliffe 1977, 132-34), although not necessarily from the same production centre. Finds

of MGX from the western suburb are said to be technologically the same as MBX and thus probably from the same source, although the quartz sand in the sherds from [7/006] suggests otherwise (see also below, Greensand-tempered wares).

Dating. Elsewhere in Winchester fabrics MBX and MAV occur in Late Saxon levels with Late Saxon sandy ware (MSH) but no other fabrics. The start date of the industry is unclear, but it may have its origins in the Middle Saxon period (Matthews in prep), although the form types paralleled at Southampton were dated to the mid-10th century at the earliest (Brown 1994, 133). Fabric MBX is the dominant ware in CP1 and CP2, totalling up to, or more than 90% of the stratified pottery from CP1 deposits in the western and northern suburbs (Matthews in prep; Holmes in prep). By CP3, MGX may be residual, while the flinty fabric MAV is more common, although the total amount of chalk-tempered pottery decreases during in CP3. By CP4 the amounts of MBX and MAV in the western suburb drop to less than 25% and *c* 18% respectively (Matthews in prep), while in the northern and eastern suburbs they comprise *c* 4% and 23% respectively (Holmes in prep). Fabric MBE is probably contemporary with MAV, and the probable pitcher No.26 is of late 11th-century date. Chalk-and-flint-tempered wares also seem to be the most common type in the St George Hotel pit group M4 (Cunliffe 1964, 96–102) and in most other contemporary groups published by Cunliffe (1964) and Collis (1978).

Flint-tempered wares

Description. The main type of flint-tempered ware that has been identified in Winchester (fabric code MAB) contains abundant coarse flint with rare quartz sand in an inclusion-free matrix; the Winchester description also notes occasional chalk and some iron oxides. This ware is probably related to the chalk-and flint-tempered wares MAV and MBE and the dividing line between the three fabric types can be hard to determine. In the Granville House assemblage 12 of the vessels recorded as MAB contained flint only, while seven also contained chalk.

Forms. Most of the 19 vessels in MAB are jars and cooking pots, although only three rims are present. These include No.5, which is externally thickened and from a very large (diameter 320mm) and very well made vessel. The other rim is everted, with simple, slightly flattened top (diameter 260mm). One internally abraded rim may from a dish, although insufficient survives to be sure.

Source. Flint-tempered wares are the most common local ware at Southampton (Brown 1994; 2002; Mephams 1995, 35), but the source of the Winchester fabrics is unknown. They could be imported from Southampton, or from the same general area as the chalk-tempered wares. Closer study of the clays used and of flint itself might help to resolve the problem, as that from the Hampshire basin would be rolled, while that from outside it would be in fresher condition (A Vince pers comm).

Dating. In the western suburb MAB first occurs in CP2 deposits and although present in CP3 contexts it was suggested that it may be residual; it accounts for no more than 1% of the stratified material in either phase (Matthews in prep). Elsewhere in Winchester, however, flint-tempered wares appear to figure in 11th-century groups (Cunliffe 1964, 36, 45–6, 107 (pits M19, M25, M27); Collis 1978, 186, 191, fig 82 and *passim*), as do

sandy and gritty flint-tempered wares in Southampton (Brown 1994, 131, 143; Brown 2002, 8–9) and at Portchester (Cunliffe 1970, 80–1, 83; fig 7, nos 5–6; Cunliffe 1977, 133). No.5 should, from its developed form, certainly be of post-Conquest date.

Sand-and-flint tempered wares

Description. Several wares fall into this category. Those discussed here have noticeably large inclusions of flint, whereas sherds with finer inclusions are discussed with the sand-tempered wares.

Six sherds (six vessels) are in fabric MFA, which has an inclusion-free matrix that contains abundant fine red and/or black iron oxides, appearing as both rounded and angular inclusions, mainly less than 0.5mm but up to 2mm across. It contains moderate to abundant fine sub-rounded quartz sand (0.1mm to 0.7mm) with mixed fine and coarse flint (up to 3mm across), sparse to moderate chalk and occasional ironstone. The coarsest sherd is No.34, which contains the least sand and chalk and could be classed as fabric MAB (see above); Nos 6 and 7, by contrast, are more sandy and contain more chalk. The ware is highly fired, with a grey core and oxidised red to brown surfaces.

The code MBC was used for 14 sherds (11 vessels) in a fabric that is similar to MFA, but which has a slightly more silty matrix. The iron oxides are also less evident (although red oxides are common in No.17), while the quartz sand is more abundant, both rounded and sub-rounded and ranging from 0.1mm to 1mm across. Other inclusions are moderate flint (mainly 2–3mm but also smaller fragments) and chalk (Matthews in prep). In some sherds this is quite rare, while in others it is quite common, appearing as white flecks up to 3mm across (notably in a possible curfew from [2/002]). All sherds have a reduced body, although the outer surface is generally red to brown in colour.

Fabric MAP is quite different in texture. Probably made of Gault Clay, it occurs here in both finer (eg No.32) and coarser variants. Both have a silty matrix with a dense groundmass of abundant fine or extremely fine quartz sand (one example of each) with sparse larger grains of polished quartz up to 1mm across, moderate fine chalk and moderate flint up to 3mm across. Fine dark streaks from burnt-out organic matter such as rootlets in the clay occur and distinctive fine black ironstone inclusions are evident in a small sherd from [2/002].

Forms. Cooking pots and jars are the main form in all fabrics. The rims in MFA range from everted and round-topped (No.34), to more upright and bevelled (No.6), to a long-necked, flaring and externally thickened, the latter from a large storage jar or pitcher (No.7). One sherd with incised decoration is probably from a spouted pitcher (No.8; cf Dunning 1960, fig 1; Cunliffe 1964, fig 34). Two other forms are present in MBC. Three sherds are from a large thick-walled vessel with black inner surface that may have been a curfew, while another rim has fine horizontal striations on the outer surface, possibly made by a brush on the other surface (No.17, diameter 130mm). The rough inner surface and diameter of 130mm suggest that this may be from a lid (cf Dunning 1960, fig 3.14; Cunliffe 1964, fig 37.9) rather than the pedestal base of a lamp (cf Barclay and Biddle 1990, fig 309.3577). One rim sherd of MAP is from a jar with a simple everted, round-topped rim (No.31, grey core, grey-brown surfaces), while the other is from a more

developed everted form with slight collar and bead (No.8, reduced throughout; cf Dunning 1960, fig.2–4; Cunliffe 1964, fig 36.2–4).

Source. Fabric MFA appears to be made of white-firing Reading Beds clay and seems to be related to the finer sandy fabric MEO, although the sands are different. Fabric type MBC is similar, but probably has a mix of Reading Beds and ?Gault clay (especially No.17); it appears to be related to fabric MEO and possibly MOE. The finer sandy ware MAP is similar to fabrics MBK and MAF (see below) and is probably from the same general source area (near Alton or Petersfield; A Vince pers comm).

Dating. One sherd of possible MFA ware is from layer [6/051], which is of Roman date, while another is from a later 11th-century pit ([6/049]). The remainder are from [2/002], which contained a number of developed rims and should be of post-Conquest date. In the western suburb fabric MBC first appears in CP3, while fabric MAP appears in CP4 (Matthews in prep), although the related fabrics MBK and MAF were in use before this (see below).

Unglazed sand-tempered wares

Late Saxon sand-tempered ware

Description. The wheel-thrown or wheel-finished ware MSH is generally reduced. It contains abundant evenly sized and sorted clear or yellowish quartz sand with iron oxides; some sherds (eg [7/006]) have virtually no clay and a crumbly texture, while others contain abundant coarser sand (see Biddle and Collis 1978, 133). Both types are represented in the present assemblage, although the only example of the coarser type is No.36.

Forms. Jars and cooking pots in these wares are typically thick-walled and small in diameter (c 60–70mm) with throwing lines on the body but rather crude sagging bases that appear to be hand-formed (Biddle and Collis 1978, fig 4; Matthews in prep; Holmes in prep). The rims are mainly short, everted and round-topped, but some of the later examples are lid-seated (Matthews in prep). Up to twelve vessels are represented in the present assemblage, but only one rim (No.36), which is a relatively large example (diameter 190mm) of the lid-seated form (cf Biddle and Collis 1978 fig 4.1).

Source. Fabric MSH is said to be similar to Michelmersh ware (Matthews in prep); the source is unknown but is presumed to be fairly local in origin (ibid; Biddle and Collis 1978, 133).

Dating. Late Saxon sandy ware predates Winchester ware and rarely occurs in early 11th-century or later contexts (Biddle and Collis 1978, 133). Although not abundant, it characterises the earliest Late Saxon levels (CP1 and CP2) in the western suburb ware but seems to have gone out of use by CP3 (Matthews in prep). While the exact date range is unknown, it may have been introduced in the 9th century and have died out in the earlier 10th century (ibid, 134–5). The few sherds from the Granville House site, therefore, are residual.

Fine sandy wares with fine flint

Description. This is a very distinctive group, characterised by abundant very fine quartz sand. The fabric, which also contains sparse fine flint and rare flecks of chalk with abundant very fine inclusions of black ironstone or glauconite, is probably made of Upper Greensand Clay (A Vince pers comm). Two related fabrics are found, MBK and MAF, the main difference being the presence in MAF of sparse to abundant rectangular voids *c* 5mm long and 0.5mm wide. These have been thought to derive from organic matter (Denham *et al* nd; Matthews in prep), but plates of shell-like matter are clearly visible in the type sherds and also in finds from Granville House and Staple Gardens, in the latter case identified as selenite, a form of gypsum (Cotter in prep). In the Granville House assemblage 23 sherds (16 vessels) were recorded as MBK and seven as MAF. A very fine and a slightly coarser variant were identified in each group, the former containing abundant very fine quartz sand (0.1mm) with sparse to moderate larger grains up to 0.5mm, giving a very dense texture. The latter is the same but contains more frequent larger grains of quartz sand and flint. Firing is usually reduced, although surfaces can be oxidised.

Forms. Round-bottomed cooking pots with everted rims seem to be the main form first produced in MBK and MAF (cf No.9), although no bases or decorated sherds were found at Granville House. In CP4 the rims are more developed (bevelled and/or beaded), as seen on Nos.10, 15 and 32, which have a flattened outer face giving a slightly collared effect. This feature, which is still more developed on No.8 (in the flinty variant MAP), was first noted on the finds from St George's Street and thought to be inspired by the contemporary continental forms (Dunning (1960, 138, 142, fig 2, nos 2–4). The St George's Street rims range between *c* 180mm and *c* 220mm in diameter; those from Granville House are either smaller (140mm, 160mm) and or larger (240mm). Many pots have distinctive finger impressions at the junction of the shoulder and the neck/rim (Dunning 1960, 138), as seen on Nos.9 and 15 and examples from Radley House, St Cross Road (Collis 1978, figs 6.21, 6.22). Nos.9 and 15 have a noticeable ridge at the junction of the rim and body, suggesting that the rims were wheel finished, and possibly added separately (Matthews in prep). Rim No.32 and a sherd with incised horizontal lines found in pit [6/019] (fill [6/016]) may well be from spouted pitchers.

Source. It is likely that this ware was imported from a source to the east of Winchester, probably in the area between Alton and Petersfield where there are outcrops of both Upper and Lower Greensand clay (A Vince pers comm).

Dating. In the western suburb fabrics MBK and MAF first appear in CP3, when they amount to *c* 4% of the assemblage. During the 11th century they become more common, although MBK is more common than MAF (together *c* 13%; Matthews in prep). In the eastern and northern suburbs they appear in CP4 (*c* 6% and *c* 3% of the stratified sherds respectively). The St George Street pit group also shows that the ware, and/or the related flinty fabric MAP, was still in use in the late 11th century (Dunning 1960, 137) and other excavations at 26–27 Staple Gardens suggest that it is most typical of this period (A Vince pers comm).

Coarse sand-tempered reduced wares with fine flint

Description. The main coarse sandy wares are MAC and MOE. For the purposes of this report the code MAC was used to describe a reduced fabric containing abundant fine rounded quartz sand up to 0.5mm but mainly *c* 0.2mm, with sparse angular flint up to 2mm. The texture is similar to, but coarser than, that of MSH, while the quartz sand is noticeably coarser than the MBK/MAF group (and lacks the black ironstone), but finer and denser than that in the sand, flint and chalk-tempered ware MBC.

Fabric MOE, as defined in the Winchester series, is reduced throughout, with a black or grey body and can contain flint. It contains abundant quartz sand ranging from 0.2mm to 1.8mm across (Denham et al nd). This code was used for nine sherds from handmade cooking pots containing abundant coarse sand, both rounded and angular, up to 0.8mm across with sparse fine flint and very occasional flecks of calcareous matter.

Fabric code MJO was used for sherds in a finer fabric than the above, but coarser than MDF; they contain abundant fine quartz sand, mainly *c* 0.4mm but up to 0.8mm with scattered fine flint and fine chalk.

Forms. The only example of fabric MAC is a small, thick-walled pot that is internally thickened at the neck with finger impressions inside the shoulder (No.51). No rims were found in the MOE group, but one sagging base in MJO has a white internal residue suggesting that it is from a spouted pitcher. None of the sherds are scratch-marked, although this is a common feature of this ware type (Holmes in prep).

Source. MOE is thought to be related to, if not the same as, the tripod pitcher ware MAD, and so should be of fairly local origin. MAC is a rarer type in Winchester, but the inclusions suggest it is also of local origin.

Dating. In the western suburb MOE first appears in CP3 but is very rare; it increases to *c* 5% of the CP4 assemblage (Matthews in prep). Rather more, therefore, might have been expected in an 11th-century assemblage such as that from Granville House.

Fine sandy reduced wares

Description. This group comprises a few sherds in slightly later fabrics. The first, MDF, contains dense fine to medium-grained quartz sand with moderate very fine black ironstone. The texture is similar to that of MBK/MAF, but the clay matrix is more silty. Fabric MNC, a later development of MDF, is the closest match for three finer sherds, although they are probably of late 11th-century to 12th-century date.

Forms. MDF was initially a handmade, but wheel finished ware, although later examples are wheel thrown. Both types are represented at Granville House, where a sherd from a wheel-thrown cooking pot was found in [6/012]. Two other sherds are from the base of a large jar (possibly MSH) and the bowl of a lamp, probably of pedestal form (No.28; cf Cunliffe 1964, fig 33.8; Collis 1978, fig 82.11; Barclay and Biddle 1990, fig 309, nos 3609–3627). A lamp in MDF was also found in a CP3 context in the western suburb (Matthews in prep). The three sherds in MNC are all undiagnostic.

Source. MDF seems to combine elements of both the MSH and MBK/MAF traditions, and MNC is clearly related to the latter. Given the increasing popularity of MDF from the late 11th and 12th centuries it is probably from a relatively local source, as should be MNC.

Dating. A few sherds of MDF were found in CP3 contexts in the western suburb, while in CP4 it amounts to *c* 5% (Matthews in prep). It went on to become the main local post-Conquest ware, marking the development of an organised ceramic industry (H Rees pers comm), and by the mid-12th century it comprises *c* 30% of the stratified material from the northern and eastern suburbs (Holmes in prep, a). Fabric type MNC is usually dated to the later medieval period.

Sand-tempered oxidised wares

Description. These wares are made of Reading Beds clay or similar white-firing clay such as Wealden clay. Fabric MEO is a relatively fine ware tempered with abundant quartzes up to 1mm across; it has oxidised surfaces, but can have a grey core. Fabric code MQB has been used here to describe a coarser ware with pimply inner surface containing moderate water polished Greensand quartz, mainly *c* 0.7mm, but up to 1.5mm across; the quartz is mostly white and grey but can be yellowish in colour and is occasionally iron-coated. Also present are fine iron oxides and sparse to moderate patinated angular flint up to 2mm.

Forms. All five sherds (five vessels) in MEO are from cooking pots and jars, although spouted pitchers are also known. The one rim sherd is too small to illustrate, but is everted with a bevelled edge ([6/012]). The two vessels in MQB are scratch-marked, one quite randomly (No.37; cf Cunliffe 1964, 103, fig 33.1), the other by applying horizontal bands of lines on top of all over diagonal striations to create a decorative effect (No.38).

Sources. Scratch marking is mainly found in Hampshire, Wiltshire and east Dorset (Dunning 1952, 34, fig 10). These wares are probably from a source located on or near the Oldhaven Beds (Reading Beds equivalent), either near the Hampshire/Wiltshire or possibly near the Salisbury (Hurst 1962a, 189), where there is another outcrop of the same clay, later used by the Laverstock potters ref). MEO is thought to be basically the same fabric as the tripod pitcher ware MAD (H Rees pers comm). The clay matrix is also similar to that of the flinty ware MFA although the sands are not the same.

Dating. Fabric MOE first appears in the western suburb in CP3, ie after 950, while MEO is first noted in CP4, when the two make up *c* 5% of the stratified pottery (Matthews in prep). It is more common in the 12th- to 13th-century deposits, when it amounts to *c* 13% of the stratified material (Holmes in prep). Scratch-marked wares are a post-conquest development (see discussion of dating).

Kennet Valley-type wares

Description. This class of pottery is coded in Winchester as fabrics MKP and MTE. The latter is superficially similar to the finer MBX and MAV, but in addition to sparse/moderate flint and quartz sand it contains limestone and calcareous matter, possibly algae, that has usually leached out and appears as pin-pricks in the surfaces. The examples from the western suburb are said to be more highly fired than MBX and MAV, with a tendency to laminate (Matthews in prep), although this cannot be said of the reduced sherds from Granville House. Similar wares from Newbury containing quartz sand, flint and limestone are Fabric 1 (Group A) and Fabrics 4 and 39 (Group B, more limestone; Vince 1997, 46, 51–2).

Forms. The jars made in MTE are distinctively thin-walled. The forms found in the western suburb typically have sagging bases, a body that is concave just above the base and then straight-sided to the shoulder, with necks/rimms that are more-or-less upright, sometimes/often with a hammerhead profile (Matthews in prep). This is quite different to the most complete example from Granville House (No.52), which has a simple everted rim with rounded body and base. The rim is wheel finished but the body is handmade, with a self-slip on the outer surface, while the inner surface is quite rough; the rounded base is more like those found in the MBK/MAF wares, but the fabric is clearly different. The other rims are more developed, being more upright and externally bevelled and/or beads (Nos 11, 19), similar to finds from pit M31 at St George's Street (Dunning 1960, 138, nos 5–7; Cunliffe 1964, 109, fig 36, nos 5–7).

Source. Fabric MTE is generally considered to be from a source to the north of Winchester, probably in the Savernake Forest. Kilns have been found at Enborne Street and Wheatlands Lane to the west of Newbury (Birbeck 2000, 35–40) are part of a wider tradition that is probably centred on the Kennet Valley (Vince 1997, 64; Mephams 2000, 63). Distribution is widespread, reaching the adjacent areas of Wiltshire, Berkshire, Oxfordshire and Hampshire, and similar wares are found in towns such as Newbury (fabrics A and B; Vince 1997, 46–2, fig 29) and Basingstoke (H Rees pers comm). The rims found at St Peter's Street, however, are quite different from contemporary forms found in Berkshire, for example at Newbury (Vince 1997, fig 31) or Faccombe Netherton (fabric I; Fairbrother 1990) and No.52 is similar to a 10th- to 11th-century find from Southampton (Mephams 1995, 35, fig 16.5; fabric F400). This supports the results of scientific analysis of similar wares from Staple Gardens, which indicate a source in South Hampshire for the Winchester finds, probably in the Itchen valley (A Vince pers comm).

Dating. In Berkshire and Wiltshire, Kennet Valley-type wares appear in the 11th century, but the precise date is unclear (L Mephams pers comm). Some of the Group A wares from Bartholomew Street, Newbury, are from pre-1080 deposits and elsewhere the ware type could have been in use by 1010 (Vince 1997, 64). This fabric type continued into the 12th century, when the Group B wares came into use (ibid, 52, 64). In Winchester the ware type seems to have been introduced around the same time as tripod pitcher ware, in the late 11th century (CP4, the Saxo-Norman phase; Matthews in prep). A date of *c* 1050 has thus been used for No.52 and other early or undiagnostic forms, while the developed forms Nos 11 and 19 have been dated to after 1070.

Greensand-tempered wares

Description. A few sherds stand out from the others in that they contain abundant mixed Greensand quartzes, as they could not be related to any of the existing codes, new temporary codes were created.

Fabric MSGQ1a is a micaceous ware with a fine silty matrix containing abundant fine black ironstone and abundant rounded Greensand quartz (0.5mm to 1.5mm) mainly rose-coloured and iron-stained and/or iron-coated. Sub-type 1a was used for the sandy wares, and 1b for sherds that also contain chalk (fabric MGX, noted above).

Fabrics MGSQ2 and MGSQ3 contain abundant quartz sand ranging from 0.2mm to over 1mm across, both rounded and sub-angular and some iron-coated. Fine black ironstone, red iron oxides and fine angular flint are also present. The two are very similar but

MGSQ2 contains rose quartz and has a slightly silty matrix with fine mica while MGSQ3 is coarser with mixed sands and red ironstone.

Fabric MGSQ4 is represented by a single reduced sherd with sparser, larger quartz grains, both angular and rounded, mainly *c* 1mm but up to 2mm across.

Forms. The sherds of MGSQ1a are from a pitcher with thick white residue internally, ([6/022], [7/006]), while the one sherd of MGSQ3 is from a small oxidised handmade vessel with a wall thickness of *c* 8–9mm ([4/002]). That in MGSQ4 is from a reduced handmade jar or cooking pot with everted rim ([6/016]).

Source. These are not local wares and are probably from a source near the Surrey-Hampshire borders. WGSQ1a is related to the chalky ware MGX and could be from the same general area as the MBK/MAF wares, but the others could come from sources further into Surrey.

Dating. These wares have not formally been recognised before and so their dating is unclear but they must be contemporary with the other finds and of 11th-century date.

Glazed sand-tempered wares

Winchester-type, tripod pitcher wares

Description. Winchester-type ware (MWW) is a fine wheel-thrown sandy ware made of Reading Beds clay with evenly sorted inclusions that vary from very fine to coarser in size. It is usually white to buff in colour but can have a reduced interior and oxidised exterior; glazes range from yellowish-red to dark olive (Hurst 1962a, 188; Hurst 1964b, 124; Biddle and Barclay 1974, 138–41; Collis 1978, 257).

Tripod pitcher ware (MAD) is handmade and noticeably coarser than the MWW, with a gritty texture (Hurst 1962b, 190). The fabric is a glazed equivalent of MEO/MOE, with evenly sorted quartz inclusions ranging from clear to pink, some iron-stained, usually less than 0.5mm across but up to 2mm; some flint and chalk can also be present. It is normally reduced, but can be oxidised or have oxidised surfaces.

Forms. The only form found in MWW in CP3 is the spouted pitcher. A range of decorative techniques was used, although rouletting is the most common, normally either notched or triangular (Hurst 1962a, 188; Biddle and Barclay 1974, 141). Later forms such as tripod pitchers (see dating), jars, bowls, cups, bottles and spouted pitchers were also produced (Biddle and Barclay 1974, 146–149) but the four sherds from Granville House are probably all from spouted pitchers, with part of a spout in [6/001].

The tripod pitchers in MAD are handmade and much larger than the spouted pitchers; they have rouletted decoration and in some cases applied thumbled strips. Sherds from at least three, if not five, examples were found at Granville House, including No.39, which has both notched rouletting and applied thumbled strips, and another with a thumbled strip around the neck. These can be compared with a near complete example found near the cathedral (Hurst 1962b, 190–2, fig 10), a find from the Easton water main trench (Collis 1978, fig 111.17) and others from Southampton (Platt and Coleman-Smith 1975, fig 137.41). Other forms made in Winchester ware also occur in fabric MAD (Biddle and Barclay 1974, 153) but no examples were found.

Source. No kilns are known, but these wares are believed to be of local origin (Hurst 1962a, 188; Biddle and Barclay 1974, 151). This is not impossible, as the Oldhaven Beds (southern equivalent of the Reading Beds) outcrop some eight miles away near Michelmersh, and in a narrow, intermittent band along the southern edge of the chalk deposits of the Hampshire Basin (A Vince pers comm). It is, however, also possible that some 'Winchester' wares from other sites are imports.

Dating. Undecorated sherds of Winchester ware have been found in 10th-century contexts on the Cathedral Green and Cathedral Car Park sites and in numerous later contexts (Biddle and Quirk 1962, 159, 161; Hurst 1962a, 188). The ware is thought to have first appeared around 950 (Biddle and Barclay 1974, 150), possibly as a local response to the importation of pottery from Stamford or France. It marks the start of CP3, and sherds of glazed pottery with applied thumbled strips, presumed tripod pitchers, were found in a furnace thought to date to pre-980 or 994 (Biddle 1965, 255; Biddle and Barclay 1974, 148, 152–3). Winchester ware was, however, most frequently discarded between *c* 1050 and *c* 1110, tailing off rapidly after this (Biddle and Quirk 1962, 168; Hurst 1962a, 188–9; Hurst 1964b, 124; Biddle and Barclay 1974, 154, fig 2). Although the pattern of use may not have been consistent across the city (Matthews in prep), production ceased *c* 1100, or at least before the appearance of developed Winchester ware (after *c* 1110; Biddle and Barclay, 137, 150–2, 154).

Tripod pitcher ware (MAD) is rather later than Winchester ware and is an indicator of CP4 (Biddle 1965, 256, note 1; see discussion of dating). The exact start date is debated. One of the first finds, from two pits associated with a lay building of the New Minster, probably in use between *c* 1066 and *c* 1110 (Biddle and Quirk 1962, 168, 170), was dated to *c* 1100 (Hurst 1962b, 190–2). Another find, from The Brooks, was associated with a Byzantine lead seal of *c* 1060–80 (Hurst 1962a, 188; Biddle 1964, 195, 197). It is not clear how long production continued but the ware is found with later glazed wares and may still have been in use in the mid/late 12th century (Matthews in prep; Holmes in prep). It is possible that the examples with decoration other than rouletting date to this later period (Matthews in prep).

Later sandy and glazed wares

Four sherds (three from [5/005], one from [6/014]) are in later oxidised fabrics with traces of clear glaze that probably date to the 12th or 13th century. One is a very fine fabric similar to the MBK/MAF wares but red throughout; the abundant black ironstone gives a peppered effect (recorded as fabric MMG). Another, recorded as fabric MMK, has a similar texture but a slightly more silty fabric with only scattered fine to medium flint and sparse red iron oxides but lacking the abundant black ironstone. Two sherds are in a coarser fabric with mixed rounded and angular quartz sand and ironstone in a micaceous inclusion-free matrix (recorded as fabric MMK)

Industrial vessels

Two crucibles are in a densely sand-tempered white-firing fabric similar to MSH, MEO and MDF MDL are represented, one by a rim (No.12), the other a base. ([6/016]). They were probably of the same form as a complete profile found in pit M31 on the Kingdon's Workshop site (Dunning 1960, 140, fig 3.13; Cunliffe 1964, fig 37.8). Elsewhere, however, similar forms have been interpreted as lamps (Barclay and Biddle 1990, fig

309, nos 3559–3566). One reduced sherd from [6/016] has thick white deposits over both surfaces (but not over the edges). It may have been used or reused in an industrial process, although the fact that it is grog-tempered ware suggests that it might be of Roman date.

Discussion

Dating

Dating is based on the ceramic phasing outlined above, the lack, or rarity of some wares, the combinations of other ware types, and subtle changes in rim form, notably the increasing preference for rims that are thickened or beaded (Matthews in prep). No early or Middle Saxon pottery was found, nor any Portchester ware or Michelmersh-type ware, while Late Saxon sandy ware is rare. While the assemblage includes both Late Saxon and Saxo-Norman types, the finds do not, therefore, help to clarify the ceramic sequence for the 9th or earlier 10th centuries.

The presence of both Winchester ware (MWW) and tripod pitcher ware (MAD) in pit [6/052], the earliest feature in TP6, suggests that the main period of activity is after 1050. As the former weighs only 1gm it might be taken as intrusive, but it is from the second fill of the pit ([6/044]), overlying the three sherds of tripod pitcher ware in fill [6/045] (weight 59gm). Unless these sherds are derived from the later cut feature [6/023], it seems likely that they are all stratified. Tripod pitcher ware was also present in [7/008], one of the earliest dumped layers in TP7. This means that although the earliest deposits in TP7 could date before 1050, most deposits in this area, and all those in TP6, date to after *c* 1050 and probably to after the Conquest. The sherds of Late Saxon sandy ware in both trenches should, therefore, be residual.

This is supported by the fact that although fabric MBX is the most common of all the wares (49% of the medieval sherds, *c* 46% by weight), the flinty variant MAV/MBE, which becomes increasingly common over time, amounts to 25% by sherd count (26% by weight). Furthermore, although most rims are of simple everted form with plain rounded tops, No.14 from [6/045] (MAV) is noticeably beaded, a trait that is more typical of the Saxo-Norman period. Developed rims are particularly common in [2/002]. None of these forms, however, are like those from the St George's Street pit group (Dunning 1960, fig 2, nos 5–7) and none appear to be wheel-thrown, which would point to a 12th-century date. Another chronological indicator is the fact that in the earlier phases sand-tempered wares are rare, whereas here they are relatively well represented and occur in a range of types, most of which are handmade.

Following the introduction of tripod pitcher ware there is a period of some 40–60 years before the introduction of developed Winchester ware, which appeared after *c* 1110 (Biddle and Barclay 1974, 153; King in prep; Matthews in prep) and is absent from the Granville House assemblage. Other diagnostic fabrics for the later 11th century, however, are the Kennet Valley-type wares and scratch-marked pottery. The latter may have its origins in the pre-Conquest period (Brown 1994, 143), but although the fabric of the gritty scratch-marked wares found in Southampton is similar to that of the late Saxon flint-tempered fabrics, the sandy wares are different and a new type, and together they

account for 58%–59% of pottery from Anglo-Norman contexts in the town. Vessels with deeply thumbled rims would seem to be a later development within the tradition (*ibid.* 99, 117) which can be seen as a type fossil of the post-Conquest period (*ibid.* 4, 8–9, 91, 95; figs 5, 6) and remained popular until *c.* 1250 (Hurst 1959, 34; Brown 1994, 8–9, 102; cf also Platt and Coleman Smith 1975, 17, figs 122, 123 and *passim*). The same dating applies to finds in a flint-tempered fabric from Norman contexts at Old Sarum (Stone and Charlton 1935, 185–186, fig 4, nos 2–4, 10) and at Abinger, Surrey (Dunning 1952). Thus although Dunning (1960, 138, 142) first thought that scratch-marked wares died out in Winchester in the early 12th century, they probably continued later than this, although never that common.

The dating of the medieval assemblage from Granville House could have a broad date range of *c.* 1000–1120. As a whole, however, the forms present are very similar to those from contemporary pits on three nearby sites, all dated to the late 11th century. The first is pit M4 on the St George Hotel site (Cunliffe 1964, 34, 96–102, figs 29–31; Hurst 1964a, 123), while the second pit M23 on the Royal Oak site (Cunliffe 1964, 38, 107, fig 34; Dunning 1960, 134–136). The third is pit M31 on the Kingdon's Workshop site (Cunliffe 1964, 46, 109, figs 37, 37; Dunning 1960, 137–44). Similar rims were also found in pit M30, which pre-dated the remodelling of the church of St Peter Macellis in the 12th century (Cunliffe 1964, 46, 109, fig 35, nos 13–15). Of particular interest in this regard are the groups from pits M25 and M27, which were dated to pre-1012 on the grounds that they predate the construction of the first St Peter's Church. Finds from pit M25 include a spouted bowl in flint-tempered ware, and a possible French greyware, while pit M27 the latter contained jars and possibly a spouted pitcher in flint-tempered ware and possible French greyware (*ibid.* 107; fig 35, nos 1–6). Also present in pit M25 were several sherds of scratch-marked ware (unillustrated, fabric not stated), which are problematically early (Cunliffe 1964, 45, 107) and the question should be asked whether they were in fact derived from the 12th-century pit M28, which cut pit M25 (*ibid.* 109).

While the overall amount of chalk-tempered ware (MBX and MAV) and flint-tempered ware is high, the range of vessel types and rim forms present is relatively narrow, and many of these wares could be redeposited. Together with the wide range of sand-tempered wares, which are more common in CP4 and CP5, the presence of a few developed rim forms, Kennet Valley-type wares, tripod pitcher ware and scratch-marked pottery (Nos 37, 38) all suggest that the main activity was probably between *c.* 1050/1070 and *c.* 1100. The assemblage can thus be seen as spanning the transition from Late Saxon to early medieval fabrics and forms. A few sherds could be of 12th- or 13th-century date but from *c.* 1100 until the late 16th or 17th century there is virtually no ceramic dating evidence and it seems likely that the area was open ground.

Pottery use and supply

The composition of the Granville House assemblage appears to be entirely typical of Winchester CP4 and CP5, with a high proportion of chalk-tempered vessels; it cannot, therefore, be used to comment on status, other to suggest that the local community had much the same domestic equipment as everyone else in town, with over 20 different

fabrics in use by the mid-11th century, although perhaps fewer decorated sherds are present than elsewhere in the city. None of the coarsewares have any stamped or applied decoration, and very few sherds are scratch marked, a technique that was initially functional (Brown 2002, 111), like the coarse slipping and rustication of early Saxon pottery, but in time it seems to have become more decorative, as noted above.

Cooking pots and jars with plain everted rims are the dominant form, present in a range of sizes. Of the measurable rims, 23 are between 108mm and c 190mm, 31 are between 200mm and 290mm. Six larger examples are of cauldron size (rim diameters 320mm, 340mm and 440mm), although there is no evidence for this form before the mid-12th century. Both sagging and rounded bases are present and clearly contemporary, pointing to regional traditions (Dunning 1960, 138; Hurst 1964a, 123), although rounded bases (in the MBK/MAF group) are very much in the minority. Evidence for use mainly comprises carbon-rich deposits, usually externally but also internally. A few sherds have external sooting and thick white internal residues (eg [7/006], fabric MGSQ1a and MGSQ1b) presumably from boiling water. Purple internal residues on sherds of MBX ([6/001], [6/042] and [6/046]) probably result from boiling madder. This has been noted elsewhere in Winchester, and has been chemically proven on a sherd from the Brooks, suggesting spinning and weaving on a domestic scale in the 11th century (H Rees pers comm). Winchester ware (MWW) and tripod pitcher ware (MAD) are rare, but it is never abundant on any site and its use may, therefore, possibly be associated with status. Developed Winchester ware may also have been a prestige ware, perhaps used specifically on religious sites rather than across the whole city (Matthews in prep).

The spouted pitchers in the chalk- and flint-tempered wares MAV and MBX are forms that were probably used at the table for storing beer or water; they include No.41, the rim of which is much more elaborately thumbbed than that from 82 Hyde Street (Collis 1978, fig 50.6) and another with oblique slashes around the rim (No.27; cf Cunliffe 1964, fig 34). The four glazed examples in Winchester ware, however, were quite possibly also status symbols, used for serving wine and the same might apply to the tripod pitchers, which have rouletting and/or applied thumbbed strips (No.39). Other forms comprise two lamps of pedestal or cresset form (fabrics MBC and MDF), a possible curfew (MBC?), and a possible dish (MAB). Two crucibles ([2/002], [6/016]) and a possible industrial vessel ([6/019]) indicate some form of industrial activity.

At present the origin of much of the pottery is unknown, but the bulk of it was probably from a fairly local source. Winchester and the surrounding area of the county are located on chalk deposits, and so these wares could be from any regional production centre on the South Downs. Flint is also widely obtainable in the Hampshire basin, but chalk- and chalk-and-flint tempered wares were clearly much more popular than those with flint alone. Most of the sand-tempered wares, including Winchester ware and tripod pitcher ware, were probably also from local sources. The most distinctive wares, both in fabric and form, are the MBK/MAF group and related fabrics, which are from a source close to the Surrey Hampshire borders, probably from the area between Alton and Petersfield, which are located on Upper and Lower Greensand respectively. A possible source might be near Bentley, located just to the east of the Upper Greensand deposits between Alton

and Farnham where a medieval kiln site dated to 1200-1250 has been found (Barton and Brears 1975). Of the minority fabrics, the Kennet Valley-type wares could be from the Savernake Forest (fabric MTE), but they could equally be from a source in south Hampshire (A Vince pers comm.). The scratch-marked wares were probably imported from the Salisbury area (Hurst 1962a, 189).

The lack of pottery from beyond the local region, such as Stamford, or from the continent is not surprising, as this is rare in Winchester as a whole (Brown 1994, 147; Matthews in prep). A few examples are, however, known, notably Badorf ware from pits near the cathedral (Dunning 1960, 137–8; 1962, 183–4), and a red-painted jar from Beauvais found on the St George's Street site (Dunning 1960, 137–8; Cunliffe 1964, 110, fig 36, no.1).

THE POST-MEDIEVAL POTTERY

Fabrics and forms

The post-medieval pottery listed in Table 3 seems to represent two phases of activity on the site. The earlier forms comprise two dishes in Surrey-Hampshire border-type redwares, one with slip-trailed decoration ([3/001]), the other plain ([3/003]), and part of a tin-glazed drug jar with decoration in blue ([5/005]). All are battered and could be of 17th-century date. The later finds, both from [2/001] comprise part of a bone china plate and part of a squat jar for a paste or relish, or perhaps some cosmetic cream.

Winchester code	MoL Fabric code	Expansion	Date range	SC	GM
none	BONE	bone china	1794-1900	1	6
none	REFW	refined white earthenware	1805-1900	1	23
none	RBORSL	Surrey-Hampshire border-type redware with slip-trailed decoration	1580-1800	1	63
none	RBORG	Surrey-Hampshire border-type redware with green glaze	1580-1800	1	13
none	TGW	tin-glazed ware	1570-1800	3	6

Table 3. The post-medieval fabric codes with sherd count and weight

Acknowledgements

Grateful thanks are due to Katherine Barclay and Helen Rees for access to the Winchester Excavation Committee and Winchester Museums pottery reference collections, to Helen for comments on the draft report and to Helen Rees, Lorraine Mephram and Alan Vince for their help and advice during the pottery analysis.

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THE MEDIEVAL AND LATER POTTERY: DISTRIBUTION BY TEST PIT

Lyn Blackmore

Test Pit 2

All the medieval pottery from trench 2 is from pit [2/003], which contained 48 sherds (1.328kg), 20 of which were recovered by sieving. Chalk-tempered wares are the most common (488g), with three sherds of MBX and 14 of the chalk-and-flint-tempered ware MAV, including a deep, flaring rim (Fig xx, No.1), a large internally thickened rim sherd (No.2) and part of a probable spouted pitcher with incised decoration (No.3). Also present are two sherds from a large cooking pot or jar in the coarser variant MBE (No.4).

Flint-tempered wares are less common (432g), but comprise five sherds of MAB, including the externally thickened rim No.5. Sand-tempered wares total 22 sherds (202g) from 16 vessels, of which six contain flint and/or chalk: three sherds in finer and coarser variants of MFA (Nos 6 and 7 respectively), one sherd recorded as MBC, and two of MAP, including No.8.

The others, mostly from the sieved samples, include a small jar in MBK (No.9) and a flaring rim from an oxidised jar in the related fabric MAF (No.10), a fine sandy fabric (MNC?), and coarser fabrics (recorded as MEO and MOE). The most striking find is No.11, the complete rim of a cooking pot in Kennet Valley-type ware (MTE). Also present are a tiny sherd from a glazed Winchester ware pitcher with rouletted decoration and fragments of two crucibles (No.12).

Although chalk-tempered wares dominate, some at least may be residual. From the wide range of fabric types, the relative frequency of the sand-tempered wares, especially the MBK/MAF group, the presence of Kennet Valley-type ware and the developed character of several rims (Nos 2, 4, 5 and 7), it is clear that this is a later 11th-century group. Quite how late is uncertain, but from the lack of tripod pitchers developed Winchester ware a date of c 1050–1070 might be suggested for the group as a whole.

Test Pit 3

The medieval pottery from this area is residual. Nine of the 13 sherds are chalk-tempered, mainly MBX, but including one with some flint (MAV). Two sherds are predominantly flint-tempered (MAB), while two are in the coarse sand-tempered ware with fine to coarse flint (MBC).

Test Pit 4

The silty loam [4/002] contained eight sherds of post-Roman pottery. Six of these are of late Saxon/early medieval date, with five sherds from two thick-walled jars in a coarse iron-rich fabric containing Greensand quartz (MGSQ2 and MGSQ3) and one chalk-tempered (MAV). The others are a tiny fragment of fine sandy reduced ware that most closely resembles the late medieval fabric MNC, and a sherd in a dense sandy fabric

similar to MBK but oxidised with a thin green glaze internally; this is probably the late medieval fabric MMG. If the latter are correctly identified they are small enough to be intrusive (derived from 4/001), but otherwise they suggest a date in the 13th century for this deposit, if not later.

Test Pit 5

As in Test pit 3 the medieval pottery from this trench would seem to be residual. A single sherd of chalk-tempered pottery was associated with the horse burial ([5/006], MBX), while ten sherds were recovered from the associated layer [5/005]. Three are chalk-tempered (MBX, MAV) but the remainder are from a sieved sample and extremely small. This makes identification difficult, but they would seem to be of later medieval date (H Rees pers comm); from written descriptions they would appear to be of the fine sand-tempered fabrics MMG and MML and the fine glazed redware with flint MMK. The overlying deposit [5/004] contained a single sherd from a finely sand-tempered cooking pot or pitcher with white internal residue; this was recorded as fabric MJO.

Test pit 6

First series of pits:

The Roman deposit [6/051] contained four sherds of medieval pottery, two chalk-tempered (MBX), one flint-tempered (MAB) and a thick base sherd in a sand-tempered ware with flint that was recorded as fabric MFA. These sherds are presumably derived from later features.

Pit [6/052] contained one of the largest single groups of pottery, amounting to 56 sherds (983g) from up to 41 vessels. The range of fabrics and forms suggests that most probably date to between *c* 1050 and *c* 1100 or 1120.

The lowest and deepest fill [6/045] contained the largest amount of pottery, with 25 sherds from 12 vessels (500g). Chalk-tempered wares are the most common, amounting to 16 sherds (343g) with four sherds of MBX, nine of MAV, including a simple everted rim (No.13) and a more developed rim with thick external bead (No.14), and three sherds in the coarser fabric MBE. The remainder are sand-tempered, with one sherd of Late Saxon sandy ware (MSH), four of MBK, including a large section of a cooking pot in the very fine variant of the ware (No.15), one in the sand-and-flint-tempered ware MAP and one of MOE. In addition to the coarsewares there is one small sherd from a spouted tripod pitcher with rouletted decoration, more of which was found in pit [6/019]. The latter dates this group to after *c* 1050.

The second fill, [6/044], contained relatively little medieval pottery, with 12 sherds from nine vessels (166g). Here coarse gritted wares are in the minority, with only two sherds of the chalk-tempered MBX (including No.16) and only one flint-tempered (MAB). Sand-tempered wares dominate, with seven sherds of MBK (four probably from No.15), one in a very fine fabric (recorded as MNC but probably earlier) and one flaring rim sherd in a coarse sandy ware with added flint (MAQ). The latter could be from a small jar, but the

finishing of the inner surface suggests that it is from a lid (No.17). Also present is a small sherd of Winchester ware with green glaze both internally and externally.

The uppermost fill [6/031] was the thinnest of the three but contained 14 sherds of pottery (12 vessels, 435g). Over half are chalk-tempered, mainly in the flinty variant MAV (six sherds, including No.18) but also in fabric MBX. Two others are in a coarse sandy ware with flint and chalk (MBC), two are from a cooking pot in Late Saxon sandy ware and two (including No.19) are from different cooking pots in Kennet Valley-type ware and probably of later 11th-century date.

No pottery was found in pit [6/061], which cut [6/052], but fills [6/037] and [6/048] of pit [6/049], which cut [6/061], contained six sherds (90g). Two are in the usual chalk- and flint-tempered wares (MAV, MBX), one is in the less common chalk-tempered ware MBE and one is sand-tempered (MBK). One sherd with incised wavy line decoration (No.20), probably from a spouted pitcher, is in the sand-and-flint-tempered fabric MFA. Pit [6/047], which also cut [6/061] and should be contemporary with [6/049] contained 77g of pottery, comprising four chalk-tempered sherds (MBX, MAV) and a thick base sherd in the Late Saxon sand-tempered fabric MSH.

Pit [6/047] was cut by pits [6/056] and [6/058]. Fill [6/042] of pit [6/056] contained nine sherds (91g), of which seven are chalk-tempered pottery (MBX, MAV), one is flint-tempered (MAB) and one is of Kennet Valley-type ware (MTE). No pottery was found in pit [6/058], but pit [6/021], which cut it, contained a small chalk-tempered rim sherd (MAV).

Pit [6/053] contained six small sherds of pottery (75g), one from fill [6/041], the others from [6/040]. Four are chalk-tempered (MBX, MAV), one is in the fine sandy ware MBK, and one is in a sandy chalk-and-flint-tempered ware (MBC).

Pit [6/053] was sealed by [6/017], which contained ten sherds of pottery, mostly chalk-tempered, but including one sherd each of Late Saxon sandy ware (MSH) and Newbury B-type ware (MTE). Of note is part of a spouted pitcher with thumbled rim (No.21, MBX).

Pit [6/013], which cut this deposit, contained the third largest group of pottery from this area, with 75 sherds (60 ENV, 962g) from fill [6/012], including several rim sherds; 23 of these sherds were recovered by sieving. Chalk-tempered wares are the most common, with 58 sherds; fabrics MBX and the flinty variants (MAV/MBE) are more or less equally represented. The former include jars with both simple and slightly thickened everted rims (Nos 22, 23), a jar with thumbled rim (No.24) and a bowl or lamp (No.25). The chalk-and-flint-tempered wares include a possible bowl (No.26) and a rim with incised decoration, probably from a spouted pitcher (No.27) which is similar to a find dated to *c* 1070-1100 on the Royal Oak site (Dunning 1960, 136, fig 1). The sand-tempered wares comprise two sherds recorded as fabric MDF, including part of a crudely made pedestal lamp (No.28), five sherds of the coarse sandy reduced ware MOE, three sherds of Kennet Valley-type ware, including a short, thick everted rim (not illustrated)

and a rim and body sherd in a finer, oxidised sandy fabric (MEO), the first occurrence on the site.

Second series of pits

The second series of pits all contained very little pottery, with no more than six sherds in any one feature.

Pit [6/055] contained four small sherds of pottery (65g), three chalk-tempered (two of MBX, one of MAV) and one in a coarse sandy fabric with coarse flint similar to MOE/MAQ but with sparse chalk (recorded as fabric MBC). Very similar pottery was found in the three fills of pit [6/054] ([6/032], [6/033], [6/036]), which cut [6/055] and contained one sherd of MBX and three of MAV (total 33g).

Pit [6/054] was in turn cut by pit [6/035] which contained four small sherds of pottery (26g), one of late Saxon sandy ware (MSH), two chalk-tempered (MAV) and a simple everted rim with slightly flattened top in the flint-tempered fabric MAB.

Pit [6/035] was cut by pit [6/015] which contained six sherds (67g) of which four are chalk-tempered (two MBX, including a simple everted rim with rounded top; two MAV). The others comprise a sherd of flint-tempered ware (MAB) and one from a pitcher or tripod pitcher in an oxidised fine sandy ware with splashes of clear glaze (MWW).

Third series of pits

The third series of pits contained slightly more pottery. None was found in pit [6/063], but 51 sherds (1.175kg) were recovered from pit [6/023]. Most are in the chalk-tempered fabrics MBX and MAV (70.5% by sherd count, 87.5% by weight), including the rims of nine different cooking pots, part of a spouted pitcher (MBX) and one scratch-marked sherd (MAV). The cooking pots have simple everted rims, but some are noticeably elongated and/or more flaring than before (Nos 29, 30, 31). One sherd is in the finer sand-and-flint-tempered ware MAP (No.32). The sand-tempered wares include four sherds of Late Saxon sandy ware (MSH), four of the fine fabric MBK, including a thumbled rim (No.33), two of the similar fabric MAF and one of the flint-tempered ware MAP. In addition there are five sherds from the base of a cooking pot in a micaceous coarse sandy fabric containing Greensand quartz (recorded as a new code, MGSQ1a). This has a thick white internal residue and external sooting and is probably the same vessel as that found in Test Pit 7 (7/006).

Pits [6/003], [6/005] and [6/007] contained no medieval pottery, but 59 sherds (45 ENV, 1.093kg) were recovered from pit [6/019] (37 from fill [6/016], 22 from fill [6/018]). As the pottery in both fills is the same in character it is considered together. Chalk-tempered fabrics (MBX, MAV) dominate with 38 sherds (26 ENV, 670g) including a large irregularly formed rim (No.34); these amount to c 64% of the group by sherd count (61% by weight). Two sherds are from flint-tempered vessels in MAB and MFA (a simple everted rim, No.35). Predominantly sand-tempered wares include part of a residual cooking pot in late Saxon sandy ware (No.36, MSH), one sherd each of MBK (fine variant) and MAF, one of the oxidised ware MEO and two of a coarse sandy ware (MQB)

that may be from Wiltshire. The latter both have neatly wiped/scratch-marked surfaces (Nos.37, 38). One sherd is from the base angle of a Winchester ware spouted pitcher with external sooting (MWW), while five sherds are from at least two tripod pitchers (MAD), one with rouletting and applied thumbled strips under a green glaze (No.39). Another sherd is from the neck of a jar in a reduced fabric containing Greensand quartz (recorded as MGSQ4). Also present are the base of a crucible and part of a possible industrial vessel or residual Roman sherd with white deposits on both inner and outer surfaces.

A further 14 sherds (14 ENV, 200g) were recovered from the topsoil [6/001]. As usual chalk-tempered fabrics MBX and MAV/MBE are the most common (ten sherds), including a thumbled rim (No.40). Two of the three sand-tempered sherds are in MBK and the reduced tripod pitcher-type fabric MOE, while one is a fine sand-tempered fabric recorded as MJO. Also present is part of the spout from a green-glazed pitcher in Winchester ware (MWW). Finally, eight sherds were recovered from the burrow fill [6/043], including the most impressive find from this trench, part of a spouted pitcher in MBX with deeply thumbled rim (No.41).

Test pit 7

The pottery from this test pit amounts to 170 sherds (106 ENV, 2.910), of which nine are from sieved samples. Most of this is from the dumped layers ([7/013], [7/012], [7/008], [7/007], [7/006], [7/001]), which together yielded 141 sherds (89 ENV, 2.489kg). One small sherd of chalk-tempered ware (MBX) found in the Roman deposit [7/014], is probably derived from the overlying deposit [7/013], which contained two sherds of MBX and one of chalk-and-flint-tempered ware (MBE). Layer [7/012] contained the first rim sherd from this area, which is of simple everted form with rounded/angled junction of the neck and body (No.42, MBX). The next deposit, [7/008] contained a larger group of 21 sherds (493g), although 12 are from a single vessel, a chalk-and-flint-tempered cooking pot with simple everted rim and rounded junction of the neck and body (No.43, MAV). The other sherds comprise one of MAV, seven of MBX and one from a thin-walled vessel in a sand-tempered fabric (MQB). Layer [7/007] contained seven sherds (67g), of which six are of MBX, and one is of Late Saxon sand-tempered ware (MSH).

The largest group of pottery was found in [7/006], which contained 72 sherds (53 ENV, 1.239kg). Most are chalk-tempered (65 sherds, 48 ENV), mainly in MBX but including three of MAV/MBE. Most sherds are from cooking pots (Nos 44–48) but one sherd is from a spouted pitcher with thumbled rim (No.49). Also present are one flint-tempered sherd (MAB), a base sherd in a sandy fabric (MGSQ1a) that is from the same pot as a sherd found in [6/002] and two sherds in the chalky variant of the same ware (MGSQ1b/MGX).

The uppermost layer in the series of dumps, [7/001], contained 34 sherds (16 ENV, 583g). As usual chalk-tempered wares are the most common by vessel count (MBX and MAV/MBE), including No.50) but four other vessels are also present. One is a possible dish in the flint-tempered ware MAB, while another is in the oxidised sandy ware MEO. The third, which joins with a smaller sherd from pit [7/003], is a small, thick-walled pot in a densely sanded handmade fabric that also contains flint (No.51; MAC). The most

complete find, represented by 19 joining sherds is a handmade cooking pot in Kennet Valley-type ware, of which approximately 25% survives (No.52, MTE, 19 joining).

Pit [7/003] contained 14 sherds (nine from sieved samples) amounting to 226g (7 ENV). Five of these are from No.52 (MTE), while another joins with No.51. The remainder are mainly chalk-tempered (MBX, MAV), including No.53 (MAV), but include two sand-and-flint-tempered sherds (MAF).

Fill [7/004] of pit [7/005] contained 15 sherds of chalk-tempered pottery (10 ENV, 195g), mainly MBX but including five sherds from a jar in the more flinty variant MAV.

1	TP2	2/001	2/001	modern	S	1805	1900	PM	??	BONE	PLATE		1	0	1	6							
	TP2	2/001	2/001	modern	S	1805	1900	PM	??	REFW	JAR SCYL		1	0	1	23							
	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MTE	KVW	? CP		1	0	1	205	108	100	x	11	paste/cream jar		
	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MBX	WEMCH	CP		2	0	2	10					upright beaded everted		
	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MBX	WEMCH			0	1	1	6							
	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MAV	WEMCHFL	CP EV		1	0	1	90	200			1			
	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MAV	WEMCHFL	CP	SA	3	0	3	87					2 sagging base; 1 base angle		
	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MAV	WEMCHFL	CP	?	1	0	1	108	340			2	cauldron? internal bead		
	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MBE?	WEMCHFL	CP	?	S	2	0	1	133	460	0.09		4	cauldron? external bead; thick wall, int soot	
	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MAV	WEMCHFL	JAR		4	4	7	38					4x4ENV 30g + 7g ws check		
1	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MAV	WEMCHFL	SPP	?	INCD		0	1	1	16			3		
TP2	2/002	2/003	cpit fill	S	1050	1150	M	MAB	WEMFLCH	CP	?	S	2	0	1	95	320	0.06		5	cauldron? external bead; thick wall, int soot		
1	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MAB	WEMFLCH	CP			0	3	3	3						
TP2	2/002	2/003	cpit fill	S	1050	1150	M	MBC?	WEMS+FL15	CP		S	1	0	1	8				x			
TP2	2/002	2/003	cpit fill	S	1050	1150	M	MBC?	WEMS+FL15	CURF	?	S	3	0	1	145				x			
TP2	2/002	2/003	cpit fill	S	1050	1150	M	MAP	WEMS+FL1B	CP EV	?	S	1	0	1	97	280					8	possibly MBC?
1	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MAP	WEMS+FL1B	MISC			0	1	1	1						
TP2	2/002	2/003	cpit fill	S	1050	1150	M	MFA	WEMS+FL6	CP			1	0	1	21							
TP2	2/002	2/003	cpit fill	S	1050	1150	M	MFA	WEMS+FLCH	CP			1	0	1	10	220					6	1 rim
TP2	2/002	2/003	cpit fill	S	1050	1150	M	MFA	WEMS+FLCH	CP EV			1	0	1	179	260		x	x	7	internal soot	
TP2	2/002	2/003	cpit fill	S	1050	1150	M	MOE	WEMS15	?	CP	S	1	0	1	8			x	HR			
1	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MBK1	WEMS1A				0	1	1	1						
1	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MBK2	WEMS1B	CP EV	SA	2	2	1	38	140					9	battered rim
1	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MAF	WEMS1D	CP EV		0	2	2	18	200				10	oxid rim, reduced body	
1	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MDL	WEMS2	?	CRUC	1	2	2	8	60				12	rim; MDL reduced	
1	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MEO	WEMS6	?	CP	0	1	1	1							
1	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MNC?	WEMS7	JAR		0	1	1	1							
1	TP2	2/002	2/003	cpit fill	S	1050	1150	M	MAD	WTPTCH	?	TPTCH	RLN	0	1	1	1						
TP3	3/001	3/001	dump	S	1580	1800	PM	??	RBORSL	DISH		A	1	0	1	63							
TP3	3/001	3/001	dump	R	950	1150	M	MBX	WEMCH	CP		A	1	0	1	15							
TP3	3/002	3/002	resid	R	1000	1150	M	MBX	WEMCH	CP EV			1	0	1	12	180						
TP3	3/002	3/002	resid	R	1000	1150	M	MBX	WEMCH	CP EV			1	0	1	7	160						
TP3	3/002	3/002	resid	R	1000	1150	M	MBX	WEMCH	CP		R	1	0	1	7							
TP3	3/002	3/002	resid	R	1000	1150	M	MBX	WEMCH	JAR	?	R	1	0	1	16							
TP3	3/002	3/002	resid	R	1000	1150	M	MBX	WEMCH	CP	?	LAB	2	0	1	20							
TP3	3/002	3/002	resid	R	1000	1150	M	MAV	WEMCHFL	CP EV		A	1	0	1	9	180						
TP3	3/002	3/002	resid	R	1000	1150	M	MAB	WEMFLCH	CP			1	0	1	17							
TP3	3/002	3/002	resid	R	1000	1150	M	MBC?	WEMS+FL15	?	JAR	A	1	0	1	30							
TP3	3/002	3/002	resid	R	1000	1150	M	MBC?	WEMS+FL15	?	JAR	?	1	0	1	7							
TP3	3/003	3/004	pit fill	S	1580	1800	PM	??	RBORG	DISH	?	GLI	1	0	1	13							
TP3	3/003	3/004	pit fill	R	950	1150	M	MBX	WEMCH	CP			1	0	1	6							
TP3	3/005	3/005	resid	S	950	1150	M	MAB	WEMFL1	?	CP		1	0	1	6				x			
TP4	4/002	4/002	dk earth	S	1250	1500	M	MMG?	HSOXGL	BOWL	?	GLI	1	0	1	7				x			
TP4	4/002	4/002	dk earth	R	1250	1500	M	MAV	WEMCHFL	CP		S	1	0	1	10							
3	TP4	4/002	4/002	dk earth	S	1250	1500	M	MNC?	WEMS7	?	JAR	0	1	1	1							
3	TP4	4/002	4/002	dk earth	R	1250	1500	M	MGSQ2	WGSQ2	?	JAR	S	0	4	1	15			x			
TP4	4/002	4/002	dk earth	R	1250	1500	M	MGSQ3	WGSQ3	?	JAR	S	1	0	1	56							
TP5	5/004	5/004	resid?	R	970	1120	M	MJO?	WEMS4	CP		SR	1	0	1	22				x			
2	TP5	5/005	5/005	dk earth	R	1250	1350	M	MML?	HSOXGL	JAR		0	1	1	1							
2	TP5	5/005	5/005	dk earth	R	1250	1350	M	MMG?	HSOXGL	JAR		0	1	1	1							
2	TP5	5/005	5/005	dk earth	R	1250	1350	M	MMK	HSOXGLFL	?	CP	GLI	0	1	1	3						
2	TP5	5/005	5/005	dk earth	S	1570	1800	PM	??	TGW	JAR	BAND	A	1	2	1	18	140					
TP5	5/005	5/005	dk earth	R	950	1150	M	MBX	WEMCH	CP			2	0	2	38							
TP5	5/005	5/005	dk earth	R	950	1150	M	MAV	WEMCH	CP			1	0	1	8							
2	TP5	5/005	5/005	dk earth	R	1250	1350	M	MBX	WEMCH	?	JAR		0	1	1	8						
TP5	5/006	5/006	sk cow?	R	950	1150	M	MBX	WEMCH	CP			1	0	1	16							
TP6	6/001	6/001	topsoil	R?	950	1120	M	MBX	WEMCH	CP		SR	6	0	6	100							
TP6	6/001	6/001	topsoil	R?	950	1120	M	MBX	WEMCH	JAR			1	0	1	8							

	TP6	6/001	6/001	topsoil	R?	950	1120	M	MBX	WEMCH	JAR	THR	1	0	1	21	220			40	oxid, deep rim			
	TP6	6/001	6/001	topsoil	R?	950	1120	M	MBE?	WEMCHFL	JAR		1	0	1	22					buff/white residue			
	TP6	6/001	6/001	topsoil	R?	950	1120	M	MAV?	WEMCHFLS	CP	?	R	1	0	1	5				white residue			
	TP6	6/001	6/001	topsoil	R?	950	1120	M	MOE	WEMS15	?	CP	SR	1	0	1	12				MSH?			
	TP6	6/001	6/001	topsoil	R?	950	1120	M	MBK2	WEMS1B	?	JAR	?	1	0	1	8				hard, very fine, reduced, wheelthrown			
	TP6	6/001	6/001	topsoil	R?	950	1120	M	MJO?	WEMS4	?	CP		SR	1	0	1	5						
	TP6	6/001	6/001	topsoil	R?	950	1120	M	MWW	WINC	SPP	GRGL		1	0	1	19			AV	SPOUT, oval			
5	TP6	6/012	6/013	pit fill	S	1050	1120	M	MTE?	KVW	CP		SR	2	0	2	30				1 neck/shoulder			
5	TP6	6/012	6/013	pit fill	S	1050	1120	M	MTE	KVW	CP			0	1	1	6	140			short, thick everted; too small to draw			
5	TP6	6/012	6/013	pit fill	S	1050	1120	M	MBX	WEMCH	CP			0	7	5	16							
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MBX	WEMCH	CP			19	0	15	337				3 base; 3 shoulder			
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MBX	WEMCH	CP			1	0	1	39	160	23		flattened top, ext beaded			
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MBX	WEMCH	CP EV			1	0	1	33	150	22		flattened top, slightly thickened			
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MAV	WEMCH	JAR			1	0	1	13	200						
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MBX	WEMCH	BOWL	?	S	1	0	1	15	120	24		int soot ?lamp			
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MBX	WEMCH	JAR	?	THR	1	0	1	4	240	25		sheared off?			
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MAV	WEMCH	BOWL	?		1	0	1	5	120	26		very fine fabric; packed chalk/flint			
5	TP6	6/012	6/013	pit fill	S	1050	1120	M	MAV	WEMCHFL	CP			0	6	4	20							
5	TP6	6/012	6/013	pit fill	S	1050	1120	M	MAV	WEMCHFL	CP			1	3	1	41				pale grey body			
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MAV	WEMCHFL	CP		SR	13	0	9	170				3 bases			
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MAV	WEMCHFL	SPP	INCD	S	1	0	1	28	280	27		deep rim w deep slashes around top			
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MAV	WEMCHFL	CP EV			1	0	1	19	240						
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MAV	WEMCHFLS	CP		R	1	0	1	5							
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MAB	WEMFL1	CP			5	0	5	99							
5	TP6	6/012	6/013	pit fill	S	1050	1120	M	MOE	WEMS15	CP EV		SR	0	5	1	24	180						
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MDF	WEMS3	LAMP PED		S	1	0	1	45	130	28		rim of bowl+edge of pedestal			
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MDF	WEMS5	CP		SR	1	0	5	8		x					
5	TP6	6/012	6/013	pit fill	S	1050	1120	M	MEO	WEMS6	?	CP	SR	0	1	1	2				possibly WEMS5/MDF			
	TP6	6/012	6/013	pit fill	S	1050	1120	M	MEO	WEMS6	JAR EV			1	0	1	3	160			rim			
	TP6	6/014	6/015	pit fill	S	950	1120	M	MBX	WEMCH	CP EV		SR	1	0	1	20	360			rim diam ?300-360mm; plain round top			
	TP6	6/014	6/015	pit fill	S	950	1120	M	MBX	WEMCH	CP			1	0	1	17							
	TP6	6/014	6/015	pit fill	S	950	1120	M	MAV	WEMCHFL	?	JAR	?	A	2	0	2	14			oxid ext; flint+?felspar			
	TP6	6/014	6/015	pit fill	S	950	1120	M	MAB	WEMFL1	CP		S	1	0	1	5				ironstone sand?			
	TP6	6/014	6/015	pit fill	S	950	1120	M	MWW	WINC	?	JUG	?	CLGL	1	0	1	11		x	oxid, thin glaze, thick wall			
	TP6	6/017	6/017	pit fill	S	1050	1120	M	MTE	KVW	?	CP		SR	1	0	1	3			base?			
	TP6	6/017	6/017	pit fill	S	1050	1120	M	MBX	WEMCH	CP		SR	6	0	5	78				2 bases			
	TP6	6/017	6/017	pit fill	S	1050	1120	M	MAV	WEMCHS	CP		S	1	0	1	6							
	TP6	6/017	6/017	pit fill	S	1050	1120	M	MBX	WEMCHS	SPP	THR		1	0	1	34	160	21		rim; base of spout but most missing			
	TP6	6/017	6/017	pit fill	S	1050	1120	M	MSH	WEMS2	CP			1	0	1	5							
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MISC	MISC	INDV	?	R	1	0	1	13				thick white residues int/ext; ?RPOT			
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MBX	WEMCH	CP		S	1	0	1	83	260	0.09	34	slightly rounded/flat-topped			
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MBX	WEMCH	CP		S	10	0	9	107							
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MAV	WEMCHFL	CP		S	8	0	8	104							
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MAV	WEMCHFLS	CP		S	1	0	1	25				sandier than usual			
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MAB	WEMFL1	JAR		A	1	0	1	18							
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MBC	WEMS+FL15	CP		SA	2	0	1	128				shoulder+neck, rim edge missing			
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MBC	WEMS+FL15	?	JAR		1	0	1	27			x	base angle			
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MFA	WEMS+FLCH	JAR			1	0	1	13	260	0.04		35	buff fabric		
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MQB	WEMS14	?	CP	SCRM	S	2	0	1	41			x	37	oxid int, grey ext	
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MQB	WEMS14	?	CP	SCRM		1	0	1	6			x	x	38	oxid ext, grey int
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MAF	WEMS1D	JAR	INCD		1	0	1	4							
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MDL	WEMS2	CRUC		R	1	0	1	9						base	
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MEO	WEMS6	CP			1	0	1	7			x	HR			
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MSH	WEMS9	?	CP		1	0	1	24	190	0.1	x	x	36	wheelmade, RDCD; coarser than WEMS2	
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MGSQ4	WGSQ4	?	CP		1	0	1	15			x	x		WEMS13; RDCD, late Saxon?	
	TP6	6/016	6/019	pit fill	S	1070	1150	M	MAD	WTPTCH	?	TPTCH	RLN	3	0	2	59				x		39	rouletting+applied strips (vert+horiz)
	TP6	6/018	6/019	pit fill	S	1050	1120	M	MBX	WEMCH	CP			3	0	1	37							RDCD, neck/shoulder
	TP6	6/018	6/019	pit fill	S	1050	1120	M	MBX	WEMCH	CP			5	0	4	71							

TP6	6/018	6/019	pit fill	S	1050	1120	M	MBX	WEMCH	CP EV			1	0	1	5	220		
TP6	6/018	6/019	pit fill	S	1050	1120	M	MAV	WEMCHFL	CP		S	8	0	1	218		bases+ shoulder; sparser/finer chalk	
TP6	6/018	6/019	pit fill	S	1050	1120	M	MAV	WEMCHFL	CP			1	0	1	20		sagging base	
TP6	6/018	6/019	pit fill	S	1050	1120	M	MBK1	WEMS1A	? CP			1	0	1	6	x	v hard fine fabric ?Michelmersh	
TP6	6/018	6/019	pit fill	S	1050	1120	M	MWW	WINC	? SPP	?		1	0	1	19		thick base, fine buff fabric	
TP6	6/018	6/019	pit fill	S	1050	1120	M	MAD	WTPTCH	? TPTCH	? GLE		1	0	1	18	AV	sagging base; MEO-type	
TP6	6/018	6/019	pit fill	S	1050	1120	M	MAD	WTPTCH	? TPTCH	? GLIE		1	0	1	16	AV	int/ext glaze; MOE-type	
TP6	6/020	6/021	pit fill	S	970	1120	M	MAV	WEMCHFL	JAR	?		1	0	1	5	240	bowl or dish?	
TP6	6/022	6/023	pit fill	S	1050	1150	R	RPOT?	RPOT	? JAR		R	0	0	0	0		1 sherd, 40g	
TP6	6/022	6/023	pit fill	S	1050	1150	M	MBX	WEMCH	CP EV			2	0	1	209	200	31 joining rims, iron oxides	
TP6	6/022	6/023	pit fill	S	1050	1150	M	MBX	WEMCH	CP EV			2	0	1	224	270	30 joining rims	
TP6	6/022	6/023	pit fill	S	1050	1150	M	MBX	WEMCH	CP EV		S	1	0	1	110	140	29 rim/body	
TP6	6/022	6/023	pit fill	S	1050	1150	M	MBX	WEMCH	CP EV		S	1	0	1	27	180		
TP6	6/022	6/023	pit fill	S	1050	1150	M	MBX	WEMCH	CP EV		S	1	0	1	20	200		
TP6	6/022	6/023	pit fill	S	1050	1150	M	MBX	WEMCH	CP EV		S	1	0	1	15	240	slightly lid-seated	
TP6	6/022	6/023	pit fill	S	1050	1150	M	MBX	WEMCH	CP EV		S	1	0	1	9	220		
TP6	6/022	6/023	pit fill	S	1050	1150	M	MBX	WEMCH	CP		SR	4	0	4	46		white int residue	
TP6	6/022	6/023	pit fill	S	1050	1150	M	MBX	WEMCH	CP		S	5	0	5	71			
TP6	6/022	6/023	pit fill	S	1050	1150	M	MBX	WEMCH	SPP			1	0	1	104		part of spout/body	
TP6	6/022	6/023	pit fill	S	1050	1150	M	MAV	WEMCHFL	? CP	?		1	0	1	5		sand+v fine flint+chalk	
TP6	6/022	6/023	pit fill	S	1050	1150	M	MAV	WEMCHFL	JAR			1	0	1	1			
TP6	6/022	6/023	pit fill	S	1050	1150	M	MBK1	WEMS1A	JAR		THR	1	0	1	7	240	33 oxid; finer than MSH	
TP6	6/022	6/023	pit fill	S	1050	1150	M	MBK1	WEMS1A	JAR			1	0	1	1		tiny chip rdc; cf WEMS rim	
TP6	6/022	6/023	pit fill	S	1050	1150	M	MSH	WEMS2	JAR			4	0	3	37		2 oxid; ??1050+	
TP6	6/022	6/023	pit fill	S	1050	1150	M	MGSQ1a	WGSQ1a	? CP		SR	5	0	1	53	x	WEMS10a; coarse GSQ; as 7/006	
TP6	6/023	6/023	pit fill	S	1050	1120	M	MBX	WEMCH	CP EV		A	1	0	1	7	200	flattened round top	
TP6	6/023	6/023	pit fill	S	1050	1120	M	MBX	WEMCH	CP		SR	6	0	5	75		1 base w white residues	
TP6	6/023	6/023	pit fill	S	1050	1150	M	MAV	WEMCHFL	CP EV		A	1	0	1	15	180	flattened round top	
TP6	6/023	6/023	pit fill	S	1050	1120	M	MAV	WEMCHFL	CP		SCRM	1	0	1	15		rough wiping/scratch marks	
TP6	6/023	6/023	pit fill	S	1050	1120	M	MAV	WEMCHFL	JAR			3	0	2	25		oxid, joining; as rim?	
TP6	6/023	6/023	pit fill	S	1050	1120	M	MAV	WEMCHFL	CP EV			2	0	1	40		shoulder/neck	
TP6	6/023	6/023	pit fill	S	1050	1120	M	MAV	WEMCHFLS	JAR			1	0	1	13		oxid ext	
TP6	6/023	6/023	pit fill	S	1050	1120	M	MAP	WEMS+FL1A	CP EV			1	0	1	15	180	HR 32 fine sand+sparse/mod flint	
TP6	6/023	6/023	pit fill	S	1050	1120	M	MBK2	WEMS1B	JAR			2	0	2	21	x	neck/shoulder; sparse flint	
TP6	6/023	6/023	pit fill	S	1050	1120	M	MAF	WEMS1C	CP		S	1	0	1	10	x		
TP6	6/034	6/035	pit fill	S	970	1120	M	MAV	WEMCHFL	JAR			2	0	1	14		WCFG?	
TP6	6/034	6/035	pit fill	S	970	1120	M	MAB	WEMFL1	CP EV			1	0	1	8	260	plain rim, slghtly flattened top	
TP6	6/034	6/035	pit fill	S	970	1120	M	MSH	WEMS2	JAR			1	0	1	4		oxid	
TP6	6/043	6/043	burrow	S	970	1120	M	MBX	WEMCH	SPP		THR	3	0	1	297	240	41 deep thumbd rim+spout	
TP6	6/043	6/043	burrow	S	970	1120	M	MBX	WEMCH	CP			4	0	3	79	220	1 rim simple top	
TP6	6/043	6/043	burrow	S	1000	1150	M	MDF	WEMS5	? JAR			1	0	1	56		HR handmade/base; could be MSH?	
TP6	6/046	6/047	pit fill	S	970	1120	M	MBX	WEMCH	CP		ASR	3	0	2	54		1 shoulder; 1 ext abraded; 2 pink int residue	
TP6	6/046	6/047	pit fill	S	970	1120	M	MAV	WEMCHFL	CP			1	0	1	3			
TP6	6/046	6/047	pit fill	S	970	1120	M	MSH	WEMS2	JAR			1	0	1	20		base? Thick wall 11-12mm	
TP6	6/037	6/049	pit fill	S	970	1120	M	MAV	WEMCHFL	JAR			1	0	1	21		base; flinty, oxid	
TP6	6/037	6/049	pit fill	S	970	1120	M	MBE	WEMCHFL	JAR			1	0	1	18		oxid int ?base	
TP6	6/048	6/049	pit fill	S	1000	1150	M	MBX	WEMCH	JAR			2	0	2	17			
TP6	6/048	6/049	pit fill	S	970	1120	M	MFA	WEMS+FLCH	SPP	?	INCW	1	0	1	10	x	20 oxid	
TP6	6/048	6/049	pit fill	S	1000	1150	M	MBK2	WEMS1B	CP		SR	1	0	1	24		abundant fine Greensand	
TP6	6/051	6/051	pit fill	I	1000	1150	M	MBX	WEMCH	CP		L	2	0	2	41			
TP6	6/051	6/051	layer	I	1000	1150	M	MAB	WEMFL1	CP			1	0	1	47		AV base	
TP6	6/051	6/051	layer	I	1000	1150	M	MFA	WEMS+FLCH	? JAR			1	0	1	26	y?	base; check fabric	
TP6	6/031	6/052	pit fill	S	1050	1150	M	MTE	KVW	CP		S	1	0	1	16	120	x HR 19 HR thought MAV	
TP6	6/031	6/052	pit fill	S	1050	1150	M	MTE	KVW	CP		S	1	0	1	10		sand, chalk, flint; MAV?	
TP6	6/031	6/052	pit fill	S	1050	1150	R	RPOT?	RPOT	? JAR			0	0	0	0		?AHSU, 24g	
TP6	6/031	6/052	pit fill	S	1050	1150	M	MBX	WEMCH	CP		S	3	0	3	112			
TP6	6/031	6/052	pit fill	S	1050	1150	M	MAV	WEMCHFL	CP		S	1	0	1	36	120	18	
TP6	6/031	6/052	pit fill	S	1050	1150	M	MAV	WEMCHFL	CP		S	2	0	1	22			

	TP6	6/031	6/052	pit fill	S	1050	1150	M	MAV	WEMCHFL	CP			2	0	2	16					
	TP6	6/031	6/052	pit fill	S	1050	1150	M	MBC	WEMS+FL15	CP			1	0	1	6				coarse sand, fine flint	
	TP6	6/031	6/052	pit fill	S	1050	1150	M	MBC	WEMS+FL15	CP	S		1	0	1	5					
	TP6	6/031	6/052	pit fill	S	1050	1120	M	MSH	WEMS2	CP			2	0	1	22		x	HR	HR thinks MEO? Wheelthrown, abundant sand, fine flint; rdcd	
	TP6	6/044	6/052	pit fill	S	950	1120	M	MBX	WEMCH	CP	S		2	0	2	83	160			sooting on rim	
	TP6	6/044	6/052	pit fill	S	950	1120	M	MAB	WEMFL1	JAR LAMP	R		1	0	1	5				white residue	
	TP6	6/044	6/052	pit fill	S	950	1120	M	MBC?	WEMS+FL15	PED	?	A	1	0	1	17	130			17	flaring base? Diameter uncertain
	TP6	6/044	6/052	pit fill	S	950	1120	M	MBK1	WEMS1A	CP			1	0	1	2				v v fine	
	TP6	6/044	6/052	burrow	S	970	1120	M	MBK2	WEMS1B	CP	S		4	0	1	40				joining neck/body; cf 6/045	
	TP6	6/044	6/052	pit fill	S	950	1120	M	MAF	WEMS1D	CP			1	0	1	9		x		neck	
	TP6	6/044	6/052	pit fill	S	950	1120	M	MNC?	WEMS7	CP			1	0	1	9		x			
	TP6	6/044	6/052	pit fill	S	950	1120	M	MWW	WINC	?	SPP	?	GRGL	1	0	1	1		x		GLIE
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MBX	WEMCH	CP EV			1	0	1	38	180			13	rim (plain) thick wall
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MBX	WEMCH	CP EV	A		1	0	1	10				rim, top missing	
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MBX	WEMCH	CP	SA		2	0	2	17					
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MAV	WEMCHFL	CP EV			1	0	1	21	240				rim, simple, slightly thickened
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MBE	WEMCHFL	CP	?		3	0	1	16		x	HR	part oxid	
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MAV	WEMCHFL	CP	SA		4	0	3	65					
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MAV	WEMCHFL	JAR	R		2	0	2	24				white residue	
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MAV	WEMCHFL	JAR ST	?		1	0	1	132	240			14	rim, necked; ext thickened at top
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MAV	WEMCHFLS	CP	SAR		1	0	1	20				base; more sandy than usual	
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MAP	WEMS+FL1B	CP	S		2	0	1	50		x		shoulder, joining	
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MOE	WEMS15	CP	?		1	0	1	4			HR	HR says ?MTE but not same as other examples	
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MBK1	WEMS1A	?	CP	S	1	0	1	6					
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MBK1	WEMS1A	CP	S		2	0	1	60	160			15	rim, soot int/ext
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MBK2	WEMS1B	CP	S		1	0	1	16				coarser than usual but not MAF	
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MSH	WEMS2	JAR			1	0	1	18				FIND: neck, thick wall	
	TP6	6/045	6/052	pit fill	S	1060	1120	M	MAD	WTPTCH	TPTCH	?	RLN	1	0	1	3		x		as 6/016; part oxid, thin GRGL	
	TP6	6/040	6/053	pit fill	S	970	1120	M	MBX	WEMCH	CP	S		2	0	2	12					
	TP6	6/040	6/053	pit fill	S	970	1120	M	MAV	WEMCHFL	CP			1	0	1	8					
	TP6	6/040	6/053	pit fill	S	970	1120	M	MBC?	WEMS+FL15	CP			1	0	1	13		x		coarser fabric	
	TP6	6/040	6/053	pit fill	S	970	1120	M	MBK2	WEMS1B	CP			1	0	1	25				shoulder, fine fabric	
	TP6	6/041	6/053	pit fill	S	970	1120	M	MBX	WEMCH	CP	S		1	0	1	17				sparse sand+flint	
	TP6	6/032	6/054	pit fill	S	1000	1150	M	MAV	WEMCHFL	JAR			2	0	2	6				WCFG? sparser chalk than usual	
	TP6	6/033	6/054	pit fill	S	970	1120	M	MBX	WEMCH	?	CP	?	1	0	1	15				some flint ?WEMCHFL	
	TP6	6/036	6/054	pit fill	S	970	1120	M	MAV	WEMCH	JAR			1	0	1	12			HR?	oxid int ?base; flinty	
	TP6	6/039	6/055	pit fill	S	970	1120	M	MAV?	WEMCH	CP	S		1	0	1	26					
	TP6	6/039	6/055	pit fill	S	970	1120	M	MBX	WEMCH	JAR			2	0	2	18				base?	
	TP6	6/039	6/055	pit fill	S	970	1120	M	MBC?	WEMS+FL15	CP			1	0	1	21		x		shoulder, thick wall	
	TP6	6/042	6/056	dump	S	1050	1150	M	MTE	KVW	?	CP		1	0	1	4			HR	HR said MAV but it's not	
	TP6	6/042	6/056	pit fill	S	1050	1120	M	MBX	WEMCH	CP	R		1	0	1	9					
	TP6	6/042	6/056	dump	S	1050	1150	M	MBX	WEMCH	CP			5	0	4	66					
	TP6	6/042	6/056	dump	S	1050	1150	M	MAV	WEMCHFL	?	CP	S	1	0	1	6					
	TP6	6/042	6/056	dump	S	1050	1150	M	MAB	WEMFLCH	?	JAR	A	1	0	1	6					
	TP7	7/001	7/001	layer	S	1050	1150	M	MTE	KVW	CP EV	SRA		19	0	1	272	140	0.2		52	rim, body, base; several join (as 7/002 ws <4>)
	TP7	7/001	7/001	dump	S	1050	1120	M	MBX	WEMCH	CP	S		7	0	7	105					
	TP7	7/001	7/001	dump	S	1050	1120	M	MAV	WEMCHFL	CP EV	S		1	0	1	110	210	0.18		50	
	TP7	7/001	7/001	dump	S	1050	1120	M	MAV	WEMCHFL	CP	S		1	0	1	18			HR		
	TP7	7/001	7/001	dump	S	1050	1120	M	MBE	WEMCHFL	CP			2	0	2	14					
	TP7	7/001	7/001	dump	S	1050	1120	M	MAV	WEMCHFLS	CP	S		1	0	1	3			HR		
	TP7	7/001	7/001	dump	S	1050	1120	M	MAB	WEMFLCH	DISH	?	A	1	0	1	25	400	0.04			int abraded
	TP7	7/001	7/001	dump	S	1050	1120	M	MAC?	WEMS+FL2	CP EV	S		1	0	1	18	140	0.06		51	handmade, uneven; joins 7/002 WS<4>
	TP7	7/001	7/001	dump	S	1050	1120	M	MEO	WEMS6	CP	S		1	0	1	18					base
	TP7	7/002	7/003	dump	S	1050	1120	M	MTE	KVW	CP			0	5	1	18					reduced; ws <4>; as 7/001
4	TP7	7/002	7/003	pit	S	1050	1120	M	MAV	WEMCHFL	CP			0	2	1	2					oxid, WS <4>
4	TP7	7/002	7/003	pit	S	1050	1120	M	MAV	WEMCHFL	CP EV	SR		2	0	1	185	240	0.18		53	rim/body; cess deposits; sparse flint
	TP7	7/002	7/003	pit	S	1050	1120	M	MAV	WEMCHFL	CP			1	0	1	9					cess deposits
4	TP7	7/002	7/003	pit	S	1050	1120	M	MAC?	WEMS+FL2	CP			0	1	1	4					joins 7/001; ws <4>; handmade

4	TP7	7/002	7/003	pit	S	1050	1120	M	MBK2	WEMS1B		CP				0	1	1	1								ws <4>	
	TP7	7/002	7/003	pit	S	1050	1120	M	MAF	WEMS1D						2	0	1	7								WESUR or WEMS+FL	
	TP7	7/004	7/005	pit	S	970	1120	M	MBX	WEMCH		CP EV		S		1	0	1	15	260	0.04						incl snail shell; orig rec as 7/002; simple rounded top	
	TP7	7/004	7/005	pit	S	950	1150	M	MBX	WEMCH		SPP	?	SR		2	0	1	17								orig rec as 7/002	
	TP7	7/004	7/005	pit	S	950	1150	M	MBX	WEMCH		CP		SR		7	0	7	81								orig recorded as 7/002	
	TP7	7/004	7/005	pit	S	950	1150	M	MAV	WEMCHFL		CP		SB		5	0	1	82								5x1; orig rec as 7/002; 1 burnt	
	TP7	7/006	7/006	dump	S	1000	1150	R	RPOT	RPOT						0	0	0									1 sherd 26g	
	TP7	7/006	7/006	pit	S	950	1150	M	MBX	WEMCH		SPP	?	THR	SA		4	0	1	185	180					49	rim/shoulder, body, base	
	TP7	7/006	7/006	dump	S	1000	1150	M	MBX	WEMCH		CP EV				1	0	1	6	120						44	rim	
	TP7	7/006	7/006	dump	S	1000	1150	M	MBX	WEMCH		CP EV				1	0	1	72	120						45	short neck, marked shoulder	
	TP7	7/006	7/006	dump	S	1000	1150	M	MBX	WEMCH		CP EV				1	0	1	39	140						47	flat topped rim	
	TP7	7/006	7/006	dump	S	1000	1150	M	MBX	WEMCH		CP EV				1	0	1	54	200						46	round topped rim	
	TP7	7/006	7/006	dump	S	1000	1150	M	MBX	WEMCH		CP EV				1	0	1	35	200						48	longer rim	
	TP7	7/006	7/006	dump	S	1000	1150	M	MBX	WEMCH		CP		SR		23	0	13	341									base/body w white/brown residues
	TP7	7/006	7/006	dump	S	1000	1150	M	MBX	WEMCH		CP				31	0	27	416									misc base/body
	TP7	7/006	7/006	dump	S	1000	1150	M	MAV	WEMCHFL		CP				2	0	2	24									base/body w white/brown residues
	TP7	7/006	7/006	dump	S	1000	1150	M	MBE	WEMCHFL	JAR					1	0	1	14									base
	TP7	7/006	7/006	dump	S	1000	1150	M	MAB?	WEMFL1	JAR					1	0	1	10									MCC?
	TP7	7/006	7/006	dump	S	1000	1150	M	MGSQ1a	WGSQ1a	JAR			SR		1	0	1	24									WEMS10a; base, sand, no chalk; as 6/022
	TP7	7/006	7/006	dump	S	1000	1150	M	MGSQ1b	WGSQ1b	JAR			SR		1	0	1	7						HR/AV			WEMS10b/MGX sparse chalk+sand
	TP7	7/006	7/006	dump	S	1000	1150	M	MGSQ1b	WGSQ1b	JAR			SR		1	0	1	12			x			HR/AV			WEMS10b/MGX moderate chalk+sand
	TP7	7/007	7/007	dump	S	1000	1150	R	RPOT	RPOT		CP				0	0	0	0									1 sherd, 16g
	TP7	7/007	7/007	dump	S	1000	1150	M	MBX	WEMCH		CP EV		S		1	0	1	19									neck
	TP7	7/007	7/007	dump	S	1000	1150	M	MBX	WEMCH		CP		S		5	0	3	35									
	TP7	7/007	7/007	dump	S	1000	1150	M	MSH	WEMS2		CP		S		1	0	1	13				x					
	TP7	7/008	7/008	dump	S	1060	1150	M	MBX	WEMCH		CP		S		7	0	7	109									
	TP7	7/008	7/008	dump	S	1060	1150	M	MAV	WEMCHFL		CP EV		SR		12	0	1	341	200	0.41						43	
	TP7	7/008	7/008	dump	S	1060	1150	M	MAV	WEMCHFL		CP		S		1	0	1	15					HR				more flint, sparse sand
TP7	7/008	7/008	dump	S	1060	1150	M	MQB	WEMS14	?	JAR				1	0	1	28				x					HR thought MAC	
TP7	7/012	7/012	dump	S	950	1150	M	MBX	WEMCH		CP EV		S		3	0	1	50	260							42	joining rims	
TP7	7/013	7/013	dump	S	970	1120	M	MBX	WEMCH		CP		S		1	0	1	20									earthy matrix	
TP7	7/013	7/013	dump	S	970	1120	M	MBE	WEMCHFL		CP		S		1	0	1	19					AV					
TP7	7/013	7/013	dump	S	970	1120	M	MBX	WEMCHS		CP		S		1	0	1	7									v fine flint, iron oxides	
TP7	7/014	7/014	dump	I	970	1120	M	MBX	WEMCH		JAR				1	0	1	11				x					Roman context	

507

63

437

10241

Context	Post-roman pottery report order	Archive Report order
2/003	1	40
2/003	2	41
2/003	3	42
2/003	4	43
2/003	5	44
2/003	6	45
2/003	7	46
2/003	8	47
2/003	9	48
2/003	10	49
2/003	11	50
2/003	12	51
6/052	13	1
6/052	14	2
6/052	15	3
6/052	16	4
6/052	17	5
6/052	18	6
6/052	19	7
6/049	20	8
6/017	21	9
6/013	22	21
6/013	23	22
6/013	24	23
6/013	25	24
6/013	26	25
6/013	27	26
6/013	28	27
6/023	29	28
6/023	30	29
6/023	31	30
6/023	32	31
6/023	33	32
6/019	34	33
6/019	35	34
6/019	36	35
6/019	37	36
6/019	38	37
6/019	39	38

6/001	40	52
6/043	41	53
7/012	42	10
7/008	43	11
7/006	44	12
7/006	45	13
7/006	46	14
7/006	47	15
7/006	48	16
7/006	49	17
7/001	50	18
7/001	51	19
7/001	52	20
7/003	53	39

BUILDING MATERIAL

Ian M. Betts

INTRODUCTION

The ceramic building material assemblage from Granville House comprised 55.82 kg (473 fragments) of building material from 49 contexts. Most of the building material is Roman in date, but there is also a small quantity of post-medieval material present. The assemblage comprises mainly roofing tile and brick, but combed box-flue, tesserae and various types of stone building material present.

FABRIC TYPE

A fabric reference collection has been established for the site at the Museum of London (MoL) comprising Roman fabric types WH1-WH9 and post-medieval types WH10-WH14 (the 'W' refers to Winchester and the 'H' the county of Hampshire). These have subsequently been compared with the fabric type series held by Winchester Museum Service whose fabric numbers are listed in Table 1. Both fabric series are available for consultation on request.

ROMAN

The majority of Roman material falls into three main groups. A set of silty tiles with varying amounts of quartz (fabrics WH1-WH2/WH4), tiles with few silty inclusions, but again with varying quartz (fabrics WH7-WH9) and tiles belonging to the calcareous group (fabrics WH5-WH6).

The earliest tiles are of silty type with varying amounts of cream coloured silty inclusions with dark red iron oxide inclusions. . At Granville Street tiles in fabric types WH1 and WH4 were both associated with first-century pottery in Contexts 1/002 and 2/006. These tiles were also found in the earliest deposits on The Brooks site at Winchester (Foot nd).

There is evidence that production these tiles took place some distance to the south-east of Winchester. Waster material very similar in appearance to fabric WH4 has been found at Bishop's Waltham adjacent to the Roman road from Winchester to Chichester (Foot nd).

Tile fabric WH5 and WH6 are of particular interest as these belong to the so-called calcareous group found in London (where they have been given fabric numbers 2453 and 2457) and along the south coast of England (Betts and Foot 1994, 27). Tiles in the same group have also been found more recently in Kent and Essex. There exceptionally wide distribution makes it difficult to determine their production source.

The tilery, or tileries, manufacturing calcareous tiles seem to have concentrated on the production of tegula and imbrex roofing tile, although a few bricks and combed box-flue tiles are known. All the examples from Granville House are roofing tile. In London they were brought in after many of the more local kilns had ceased operation, and the same may have happened at Winchester. Tiles in the calcareous group are dated from around the mid/late second to the end of the third century AD (Betts and Foot 1994, 31-32). This agrees with the evidence from Granville House, where both imbrex and tegula were found dumped in a medieval dump layer with Roman pottery dated AD 120-250.

The other distinctive later fabric is WH2 which is characterised by abundant large tabular fragments of whitish siltstone. Similar tiles were used throughout south Hampshire, the Isle of Wight and were also imported into London (MoL fabric type 3009) although scientific analysis will be needed to confirm whether they are from the same production source. At The Brooks, Winchester, the dating evidence suggests these tiles were used during the early fourth century AD, although a small amount of tiles in fabric WH2 or similar silty fabrics were found associated with earlier buildings on the site (Foot nd).

Fabric WH2 may be from the Braxell's Farm kiln in Hampshire which current dating evidence suggests is no earlier than late second or third century AD, not the first century AD as suggested by McWhirr (1979, 136). It lies just 4 km away from the site of the earlier Roman tilery at Bishop's Waltham.

Ceramic building material

All the building material is fragmentary; there are no tiles with surviving length or breadth measurements.

Roofing tile

Fabric types: WH1, WH2, WH4, WH5, WH6, WH7, WH8

The majority of Roman ceramic building material comprises tegula and imbrex roofing tile. Some of the imbrices are unusually thin (10-12 mm) which suggests a later Roman date. All these were found associated with pottery dated to 260/350-400 AD (Contexts 4/002, 6/022, 7/020).

The presence of tegula and imbrex in a variety of fabric types suggest that certain Roman buildings either on or near to the site had tiled roofs.

Tessera

Fabric types: WH1, WH2, WH4

The 76 plain red and orange coloured tesserae from the site provide evidence for a plain tessellated floor. One is cut from a combed box-flue tile suggesting that the floor is unlikely to have been laid down any earlier than the end of the first century AD when combing gradually began to replace scored keying. Many of the tessera show clear signs of wear in the top surface, including most from the main tesserae assemblage which was recovered from a post-Roman pit fill along with late Roman pottery (Context 7/004).

Brick

Fabric types: WH1, WH2, WH3, WH4, WH7, WH8, WH9

The majority of bricks are between 30-40 mm in thickness suggesting they are probably of *bessalis*, *pedalis* or *lydion* type (Brodribb 1988, 3). There are a few thicker bricks, measuring around 40-51 mm, which may be part of larger brick types. One of these (Context 6/046) has an area of combing, similar keying made by a nine tooth comb was found on a thinner (30-31 mm) brick from Context 6/043. This combing was presumably added as some sort of keying. Both are in the same fabric (WH2) suggesting they come from the same tiler.

Tegula mammata

Fabric type: WH1

Tegula mammata are generally rectangular *lydion* shape bricks with nibs attached to the upper surface. It is still uncertain how they were used; one possibility is that they were used nib side down as paving with the underside providing a sanded slip free surface. They seem to have been principally used in south-east England during the first– early second century AD. There is one definite (Context 1/002) and one probable example (Context 2/006) from the site. The former as combed lines added with a four tooth comb, although it is uncertain if this represents deliberate keying, whilst the latter has a deep groove in the base.

Flue tile

Fabric types: WH1, WH7

Apart from the example cut into a tessera referred to above only two other box-flue tiles were recovered, both with combed keying (Contexts 4/002, 6/030). These are almost

certainly from a masonry built hypocausted building, although this does not necessarily mean that such a building was located on or near the site. They could have been brought in as building rubble.

Form?

Fabric type: WH8

From a post-Roman pit fill (Context 6/018) is an unusual piece of curved fired ceramic. It would appear to be Roman although its function is not certain. It may be a spacer bobbin (used with wall tiles), part of a chimney or a roof finial, alternatively or it may be some sort of ceramic vessel (Fig 1).

Markings

A few tiles have signature marks; all appear to be of the usual semi-circular variety with between one and three lines. A paw print is present on the top of a tegula or brick from Context 6/048.

Daub and possible mud brick

Three small fragments of light brown and brownish-orange in coloured daub were recovered from Roman contexts (1/002, 7/016). One is characterised by a scatter of flint and white calcium carbonate inclusions (Context 7/016). Similar daub, but with a flat surface, was found in late Saxon-early medieval pit fill (Context 6/012). Presumably this is also Roman. All the daub is too small to determine its form or function.

A 61-66mm thick piece of totally reduced black coloured daub with small organic inclusions may be a mud brick, or perhaps part of a clay slab. This came from a late Roman stone and mortar layer over the possible internal floor surface (Context 7/016).

Wall Plaster

A single piece of rather weathered wall plaster was recovered from a late Saxon – early medieval dumping (Context 7/013). This is almost certainly Roman in date, it was found with residual late Roman pottery dated AD 260-400. The plaster has extensive areas of red paint together with small areas of blue (decoration?). As blue was an expensive artificial pigment it suggests it came from a fairly high status Roman building.

Stone

Roofing

There are two varieties of stone which were probably used as a roofing material. The first is a purple coloured fine grained laminated sandstone (possibly Pennant sandstone) and the second a white limestone (possibly a type of Lias). Numerous fragments of fine grained sandstone, measuring 12-19 mm in thickness, were recovered from post-Roman contexts. One has part of what appears to be a 12 mm square nail hole (6/018) confirming

its use as a roofing material. Some of this sandstone has the same distinctive purple colour, whilst other fragments are light grey and, in one case, reddish-brown.

In south-east England stone roofing seems to have been used when many of the more local tileries making ceramic tegulae and imbrices fell out of use in the second and third centuries AD. In London many buildings were constructed with stone rather than tiled roofs during the last half of the fourth century AD (Betts and Foot 1994, 32). At Granville House the earliest stone probable roofing is associated with residual Roman pottery dated AD 120-250, but most was found with pottery dating to the period AD 260-400 suggesting a late Roman date. It is possible, however, that some could have been reused during the tenth – twelfth centuries AD.

Paving

Some of the thicker laminated and partially laminated fine grained sandstone may have been used for paving. One piece of purple sandstone, measuring 18 mm thick, from a late Roman context (7/017) has a smoothed top. Pieces of the same stone (23-26 mm thick), which may also be Roman paving, were found in two late Saxon-early medieval contexts (7/006, 7/008).

Moulding

A light grey oolitic limestone moulding was found in a Saxon-early medieval dump deposit (Context 6/045). This has two cut faces and a curved top surface and may be part of a stone basin (Fig 2). This is likely to be Roman in date as it was found with residual late Roman pottery of AD 270-400.

A stone fragment with a flat cut face made from a similar coloured oolitic limestone was recovered from a late Saxon – early medieval pit infill containing residual Roman pottery (Context 6/004). A very small piece of white coloured oolitic limestone from a stone and mortar layer (Context 7/016) may come from the same quarrying area, probably the Great Oolite series of the Cotswolds (Anderson 1990, 306-314).

Ashlar

A roughly square block of fine grained light grey sandy limestone was found with late Saxon – early medieval pottery dated AD 970-1120 in Context 6/046. As with the moulding this is almost certainly Roman and may be contemporary with the residual Roman pottery which dates to the period AD 180-250.

Rubble

From Roman contexts are hard chalk and a crudely laminated fragment of fine grained greyish-purple sandstone (22-23 mm thick), perhaps from the same quarry source as the roofing material. Hard chalk was found during excavations at Winnall Housing estate, Winchester, where it is described as probable Lower Chalk from southern England (Collis 1978, 86).

LATE SAXON – EARLY MEDIEVAL

A considerable number of Roman tiles were recovered from medieval contexts. A number of bricks and a smaller number of roofing tiles show evidence of slight overfiring or burning. It seems highly likely that these were used in crude hearths or ovens in the Saxon or early medieval period. The majority of this burnt material was found with pottery dated to the periods AD 970-1120 and AD 1000-1150.

At least four Roman tiles dating to the same period were reused as crude paving. A brick with a worn base was found in a pit fill with pottery of AD 970-1120 date (Context 6/018), whilst three further tiles, which could be either bricks or tegula roofing, also show signs of wear: one on the upper surface and two on their sanded lower surface (Contexts 6/014, 6/016, 6/046). Other bricks with probable worn surfaces were found in Contexts 6/040, 7/008 and 7/013. Roman tiles, especially bricks, were often used with their sanded base upper-most as the rough sand helped provide a non-slip surface.

No ceramic building material of medieval date was recovered from the site, although roofing and floor tiles and brick of this date have been found elsewhere in Winchester (Cunliffe 1964, 158-161, 187). A number of Saxon floor tiles are also known from Winchester (Keen 1981, 24). Their absence suggests that either there were no medieval building on or near the site, or if they were present they were of relatively low status and made of perishable materials such as clay, timber and thatch.

There are a variety of stone types from medieval contexts, but many of these were found with residual Roman material so it is very difficult to determine if these are of Roman or post-Roman date.

Daub

The majority of the small quantity of daub recovered came from late Saxon – early medieval contexts, although this could be residual Roman material. It is mainly light brown and black (burnt?) with small burnt-out inclusions of organic matter similar to those found in the possible mud brick described earlier. Two pieces of daub (Contexts 6/022, 7/007) have round wattle marks, one 12 mm in diameter, indicating they derive from some sort of wattle and daub structure.

Stone

Roofing

Mention has been made of the fine grained laminated sandstone found in late Saxon – early medieval contexts. This probably originally covered a Roman building, but it is possible some was used, or reused in the post-Roman period. Other stone roofing, or probable roofing, may also be Roman despite being found in post-Roman contexts.

Definite roofing material comprises a whitish-grey sandy and shelly limestone (12-15 mm thick) and probable Purbeck limestone from Dorset (18 mm thick), both of which show crude lamination. The latter is pierced by a 5 mm diameter round nail hole. The

probable roofing material comprises various pieces of fine grained shelly and sandy light grey coloured limestone. These measure 11-18 mm in thickness.

Probable paving

Again it is uncertain whether this is simply dumped Roman building material or possible paving that was used, or reused in the late Saxon – early medieval period. All were found associated with late Roman pottery.

As well as the fine grained purple sandstone mentioned earlier, there is possible paving cut from the two stone types used for roofing material: probable Purbeck limestone and light grey sandy limestone. There is also a greyish-white shelly and partly oolitic limestone. A number of fragments have a smoothed or partly smoothed top implying use as a flooring material. The probable Purbeck limestone has what may be a crudely cut bevelled edge, again a common feature of flooring material. The stone paving from the site measures 19-26 mm in thickness.

Rubble

Various fragments of light grey and white limestone were recovered from contexts dated AD 1000-1150. Some have a sandy texture whilst others are characterised by shell inclusions. Most were found with residual late Roman pottery so it is possible they may be Roman rather than medieval in date. A small fragment of chalk was recovered from Context [6/014].

POST-MEDIEVAL

Roofing tile

Fabric types: WH13, WH14

A few fragments of peg roofing tile were found in a chalk based surface (Context 3/005), one of which has a distorted (round?) nail hole. Another piece of post-medieval roofing tile, possibly a peg, ridge or hip tile was recovered from a clay silt layer (Context 3/002).

Brick

Fabric types: WH10, WH11, WH12

Post-medieval brick was recovered from Contexts 3/001, 3/002 and 3/005. Most are sharp or fairly sharp edged, suggesting an eighteenth- nineteenth century AD date. The fairly sharp edged bricks measure 108 mm in breadth by 57-59 mm in thickness (fabrics WH11, WH12), whilst the sharp edged examples (fabrics WH10, WH12), which may be slightly later, are 100 mm in breadth by 63-67 mm in thickness. A very small piece of brick (size unknown) was also recovered from Context 5/004.

DISCUSSION

The ceramic building material assemblage is predominantly Roman in date. Most of this material comprises roofing tile, brick and tessera, but less common types such as combed box-flue tile and keyed tegula mammata are also present. Some of this material could

have formed part of the one or more Roman buildings found on the site. The red and orange tesserae hint at the presence of a plain tessellated floor surface.

It is less certain if the solitary wall plaster and the two combed box flue tiles relate to any of the structural estimate found on the site. If they do then they suggest the presence of a building of masonry construction with at least one room with a hypocaust heating system. This may also be the source of the limestone block and limestone moulding found with pottery dated AD 970-1120 but assumed to be of Roman date. Alternatively, they may have been dumped on the site as building rubble from elsewhere.

Most of the ceramic building material fabric types have yet to be accurately date, although there is evidence for the use of silty fabric tiles in the early Roman period, imported calcareous tile in the mid/late second- third century AD and silty fabric tiles perhaps in the early fourth century AD. Sometime during the period AD 260-400 there seems to have been a change to the use of stone roofing and possibly flooring. Various types of stone roofing and thick material more appropriate for paving were recovered. Most consists of fine grained purple sandstone and white limestone.

A considerable number of Roman roofing tile and bricks were recovered from late Saxon - early medieval contexts. Some of these would appear to have been reused as paving as a number have worn upper and lower surfaces. Other tiles show evidence of burning suggesting use in hearth or oven structures. Roman tile is commonly reused on Saxon sites for hearth, ovens, rough paving and other purposes such as post-packing. In Lundenwic (middle Saxon London) there is ample evidence for the use of reused Roman tile in oven based or hearths (Smith 2003, 222-223).

A number of fragments of stone roofing and probable stone paving were recovered from late Saxon – early medieval contexts. It is unclear whether this is residual Roman or fresh material brought on to site during the post-Roman period. Most is probably residual Roman reused for rough paving or similar functions.

No building material of later medieval date was found on the site. The post-medieval building material collected comprises a few peg tiles and bricks. The latter is probably 18th or 19th century AD in date.

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Illustrations

Fig 17. Probable Roman curved fired ceramic of uncertain function (Context 6/018)

Table 1: Ceramic building material fabric types found at Granville House, Winchester

Date	MoL fabric no.	WMS fabric no.	Fabric description
Roman	WH1	2 & 4	Common dark red iron oxide (up to 4mm). Varying amounts of cream silty inclusions (up to 1 mm) and silty clay bands. Scatter of quartz (up to 0.2 mm) and occasional black iron oxide (up to 2 mm).
Roman	WH2	5	Common tabular cream silty inclusions (up to 4 mm) and thin silty bands and small quartz (up to 0.2 mm). Scatter of dark red and black iron oxide (up to 1 mm).
Roman	WH3	41? (a)	Frequent white calcium carbonate (up to 2 mm). Fairly common dark red and black iron oxide (up to 3 mm) and occasional silty inclusions (up to 9 mm).
Roman	WH4	10	As WH1 but with only occasional quartz (up to 0.2 mm).
Roman	WH5	17	Frequent yellowish-white clay inclusions (up to 6 mm), in often mottled clay matrix, plus scatter of iron oxide (up to 1mm). Some examples with frequent quartz (up to 0.8 mm). Can have red moulding sand.
Roman	WH6	20 (b)	Abundant calcium carbonate with a scatter of quartz (up to 0.2 mm) in background clay matrix hence mottled clay matrix.

Roman	WH7	38? (c)	Occasional shell fragments (up to 6 mm), quartz (up to 0.8 mm) and iron oxide. Can have light brown or red moulding sand. Fine slightly silty clay matrix. Occasional quartz (up to 0.4 mm) and dark red and black iron oxide (up to 0.6 mm) and white calcium carbonate (up to 4 mm).
Roman	WH8	26	Fairly frequent small quartz (up to 0.3 mm). Scatter of white calcium carbonate (up to 1 mm).
Roman	WH9	1 (d)	Sandy fabric with frequent large quartz (up to 0.6 mm). Occasional cream silty inclusions (up to 1 mm) and red and dark red iron oxide (up to 0.3 mm).
Post-medieval (brick)	WH10	-	Fine silty clay matrix. Occasional dark red and black iron oxide (up to 1 mm) and quartz (up to 0.2 mm).
Post-medieval (brick)	WH11	-	Fine silty fabric, common very small silty quartz (up to 0.1 mm). Scatter dark red iron oxide (up to 6 mm). Occasional cream silty inclusions (up to 2 mm).
Post-medieval (brick)	WH12	-	Sandy fabric with frequent quartz (up to 0.4 mm). Scatter dark red iron oxide (up to 1 mm). Occasional silty bands.
Post-medieval (roofing)	WH13	-	Fine fabric with only occasional quartz (up to 0.4 mm), dark red iron oxide (up to 2 mm) and thin lighter clay bands.
Post-medieval (roofing)	WH14	-	Fairly frequent small quartz (up to 0.2 mm). Scatter dark red and black iron oxide (up to 2 mm).

(a) Probably from same tiler as WMS fabric 41, but Granville House tile has a lot more calcium carbonate inclusions.

(b) In fabric reference collection as WMS fabric 20 but in Foot (in prep) is recorded as fabric 34.

(c) Granville Street tiles have slightly siltier background clay matrix.

(d) Lacks very large quartz and coarse moulding sand of certain tiles in WMS fabric 1. The latter should be classed WMS fabric 9.

PLANT REMAINS FROM GRANVILLE HOUSE, WINCHESTER (WINCM-AY 256)

INTRODUCTION

This report describes and discusses the plant assemblages from five environmental samples taken from test pits on the site of a former Victorian church building, located in

the centre of Winchester within the Medieval and Roman city walls. Assessment of nine samples from the site showed preservation of small to medium sized assemblages of charred plant remains, and further study of five was recommended (Roberts 2006). Four of the five selected samples (2/002), (4/002), (6/012) and (6/022) came from fills dated to the late Saxon/early medieval period, and one (5/002) from a 19th century construction backfill. Sample volumes ranged from 2 to 40 litres.

METHODS

The samples were processed by flotation by AOC staff, using a flotation machine, and the flots dried. The flots were sorted using a low-powered binocular microscope, and charred plant macrofossils were identified, quantified, and recorded. Identifications were made using the botanical reference collection of the Museum of London Specialist Services. Lists of plant taxa and their abundance from each sample are shown in Table 1.

RESULTS

All the samples under consideration contained charred wheat (*Triticum* sp.), barley (*Hordeum vulgare*) and oat (*Avena* sp.) grains, as well as variable numbers of seeds from wild plants and occasional examples of non-cereal food plants. Fragments of wood charcoal were also common in all samples. The majority of wheat grains were rounded in shape, without a pronounced dorsal ridge, and were identified as free-threshing wheat (*Triticum aestivum/turgidum/durum*), while less distinctive wheat grains were identified only to *Triticum* sp.. No cereal chaff was recovered, which could have confirmed which of these species were represented. Both straight and twisted hulled barley grains were seen in the samples, indicating that the more common, six-row variety was present. While oats were found in all the samples, it is impossible to distinguish cultivated oat (*Avena sativa*) grains from those of its wild relations, and as none of the distinguishing florets were found, it is possible that both wild and cultivated varieties were present. A few uncharred seeds of wild plants were preserved in two of the samples.

Fill (2/002) of pit (2/003) (AD1000-1150)

Charred grains of free-threshing wheat (*Triticum aestivum/turgidum/durum*), 6-row hulled barley (*Hordeum vulgare*) and oats (*Avena* sp.) were found in sample <1> from fill (2/002) of a Saxon/medieval cesspit, along with a single grain of probable rye (*Secale cereale*). Seeds of arable weed seeds including stinking mayweed (*Anthemis cotula*), bedstraw (*Galium* sp.), knapweed (cf. *Centaurea* sp.), fumitory (*Fumaria* sp.), sheep's sorrel (*Rumex acetosella*) and wild grasses were also present, along with seeds of sedge (*Carex* sp.), and a large, poorly-preserved seed resembling a pea (*Pisum sativum*) or other cultivated pulse.

A very small number of mineralised seeds in this sample, including one plum/sloe (*Prunus* sp.) stone, along with fragments of eggshell, fish and bird bone, and mineralised

fly puparia, confirm that the pit was used for the disposal of a variety of domestic refuse, and probably also as a cesspit.

?Pit or ditch fill (4/002)
(AD1000-1150)

The charred plant assemblage from sample <3>, from fill (4/002), contained thirty charred cereal grains, with roughly similar numbers of wheat (*Triticum* sp.), barley (*Hordeum vulgare*) and oat (*Avena* sp.). Apart from a single fragment of hazelnut (*Corylus avellana*) shell, the remaining charred items were all from arable weed seeds including bedstraw (*Galium* sp.), stinking mayweed (*Anthemis cotula*), chickweed (*Stellaria media*) and wild grasses (Poaceae). The plants remains recovered are typical of post-Roman charred assemblages and probably derive from household waste and accidental charring, but the nature of this deposit suggests that the remains may be mixed, and derive from more than one origin.

Fill (6/012) of pit (6/013)
(AD 970-1120)

Sample <5> contained a small assemblage of charred plant remains, again with similar quantities of wheat (*Triticum* sp.), barley (*Hordeum vulgare*) and oat (*Avena* sp.) grains. Charred seeds of wild plants came mainly from grasses (Poaceae), some of which were large and may have been poorly-preserved oat grains. Occasional large leguminous seeds (*Lathyrus/Vicia/Pisum* sp.) resembled peas or horse beans, but were too poorly preserved for accurate identification. Occasional fragments of eggshell were also seen in the flot, and all these remains are typical of general domestic waste.

Fill (6/022) of pit (6/023)
(AD 970-1150)

Sample <6>, from pitfill (6/022), produced the largest charred plant assemblage from this site, and contained over 70 grains of free-threshing wheat (*Triticum aestivum/turgidum/durum*), 6-row hulled barley (*Hordeum vulgare*) and oats (*Avena* sp.). Several large leguminous seeds may have been peas (*Pisum sativum*) or horse beans (*Vicia faba*), and a single flattened cotyledon resembled a lentil (*Lens culinaris*). All these were fragmented however, and their preservation poor, so identification could not be confirmed. Charred seeds from wild grasses and a variety of arable weeds were found, along with several, including sedge (*Carex* sp.), spike-rush (*Eleocharis palustris/uniglumis*) and wood-rush (*Luzula* sp.) which come from plants with a preference for damp or wet habitats, perhaps originating in wet hollows or ditches in or around the arable fields. Also recovered from sample <6>, and perhaps from the same origin, were several freshwater mollusc shells, identified as two species of the family Planorbidae (A. Pipe pers comm.), which also appeared to be blackened by fire.

The flot from this sample included clinker fragments and occasional shells of Foraminifera. The latter are single celled, marine organisms which may have arrived on site in the guts of fish or could perhaps be fossils from the soil matrix.

Modern construction backfill (5/002)

Charred grains from sample <2> consisted mainly of free-threshing wheat, with a few grains of barley and oats. Occasional seeds of wild plants came from common weeds of arable fields, including bedstraw, vetch/pea (*Vicia/Lathyrus* sp.), black bindweed (*Fallopia convolvulus*) and corn marigold (*Chrysanthemum segetum*).

DISCUSSION

There was little variation in the composition of the charred plant assemblages from the five samples studied. All included grains of free-threshing wheat, 6-row-hulled barley and wild or cultivated oats, which are typical cereals of the post-Roman period. The assemblages were relatively small and consisted mainly of cereal grain, with no chaff and variable but relatively small proportions of weed seeds.

Throughout the post-Roman period wheat has been the most important cereal consumed in the south of England, and would have been used not only for bread, sometimes mixed with rye, but also in pottage, a thick soup made of vegetables, cereal grains and sometimes meat (Wilson 1976). Oats and barley were reserved mainly for animal feed and brewing, but could also be included in soups and stews. Similarly, peas, beans, and sometimes other pulses, were used for both human and animal consumption..

Charred weed seeds were found in all the samples. The majority of these came from segetal and ruderal weed species, many of which, such as stinking mayweed (*Anthemis cotula*) and common chickweed (*Stellaria media*) will grow on both arable and disturbed waste ground, while corn cockle (*Agrostemma githago*), corn marigold (*Chrysanthemum segetum*) and cornflower (*Centaurea cyanus*) are particularly characteristic of cereal crops. All could be found growing in or around the edges of cereal fields, and are most likely to have been harvested with the crops, separated out (with the chaff) during cereal processing, and used as fuel in domestic or industrial hearths. This burnt hearth debris, including charcoal fragments, and cereal grains and pulses disposed of after domestic accidents or spillages, would then be discarded in pits or other waste deposits.

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THE REGISTERED FINDS

Nicola Powell

Fifteen small finds recovered from the test pit evaluation at Granville House, St Peter Street, Winchester were registered. Included in the assemblage were finds of copper alloy (including a possible single coin), iron, bone, stone and glass. A further few fragments were recovered as bulk finds, including glass and nails.

Copper alloy

Residual in a dark earth layer [5/005], dated to the post medieval period, was an incomplete Roman brooch <3>. A Nauheim derivative brooch, it dates to the mid 1st century and is an intrinsically interesting find. Part of the bow remains, along with the pin. The bow is plain, narrow and flat and the pin comes from what appears to be a three-turn spring. The area within this test pit (5) seemed much disturbed and included the disarticulated skeleton of a horse.

Pit fill [6/019] produced two finds of uncertain date; an incomplete hook <9> and a strip of copper alloy <5> bent over at one end. The latter may be the remains of a strap end. Examination by x-radiography reveals some decoration, including ribbed moulding and a knopped end or terminal and rivets. Differentiation in shading on the x-ray suggests the end and rivets may be of a different alloy. Several corroded lumps of copper alloy <6> and <12> from pit fill [6/018] and dump layer [6/045] respectively remain unidentified. The soil conditions were particularly unfriendly to the metalwork, with the copper alloy finds suffering as badly as the iron objects.

Coin

Similarly, the sole possible numismatic find <10> recovered from the site (layer [7/024]) is in very poor condition, being chipped, abraded and heavily corroded. The coin was x-rayed and shown to other specialists; however it could not be closely dated or indeed confirmed if it may be Roman in date.

Iron

As stated above, all the metalwork was in poor condition. The iron has suffered badly with corrosion and most of the objects are incomplete. Ironwork associated with structures includes part of a nail <2>, from a deposit with pottery dating to AD 50-100 [2/006] and a complete staple <14>, both from dump layer [7/006]. Also structural and included with the bulk iron finds is an incomplete nail residual in dump layer [7/007]. It appears to be Manning Type II, suggesting a Roman date.

Also recovered from dump layer [7/006] are the remains of a prick spur <13>. In fragmented condition, it retains the rounded back or base and the prick. The arms are broken shortly after the prick on one side, with the other longer. Other pieces of ironwork included with the spur may be more of the arms and an attachment or terminal. Indeed, the iron seems to have some mineral preserved organics, that may be the remains of

leather strapping (Goodman, L, pers com). As this type of spur was superseded by the rowel spur in the mid 13th century, this object can be given an earlier medieval date (11th to 12th century).

Bone

Of interest is a complete bone counter <1>, recovered from a deposit that included pottery dating from AD 1000-1150 [2/002]. It conforms to Crummy Type 1, being plain, with flat upper and lower surfaces, the upper surface having a bevelled edge, and so Roman in date and residual in this fill (1983, 91–92). With the Romans fond of board games, evidence in the form of counters and boards are very common on sites of Roman date. This counter, at 19mm, falls in the middle of the typical diameter range for Roman counters (MacGregor, 1985, 132). It is, however, difficult to correlate a counter to a particular game, as a counter may have been brought into play in a variety of games (ibid).

Stone

The dating of three stone hones or whetstones recovered from the site proved problematical. All were recovered from deposits with Roman and later material, in an area of rubbish pitting and dumping. A complete example <4>, from the fill [6/016] of a large pit [6/019], has a rectangular section, shaped end and hole for suspension. One edge is much worn through use. It is probably medieval in date and similar have been recovered from the centre of Exeter (Allan, 1984, 298–300). The other two hones <8>, from dump layer [7/013], and <11>, from a deposit in pit [6/003] (cutting pit [6/005]), are incomplete. Both are rectangular in section and show wear.

Glass

Deposit [6/016] (see above) also produced a fine small glass tessera <7>. Bright turquoise in colour and probably cast, it may have been used in a wall mosaic, being too delicate for use in a floor, unless it was used in a niche. Blue and green glass was especially popular for tesserae, with colour and material used to enhance the effect of light and shape (Dunbabin, 1999, 32). This can be clearly seen in the blue glass ‘eyes’ on the tail of the peacock in the Peacock Pavement in Leicester (Neal and Cosh, 2002, 99, fig 55). This mosaic, that dates from AD 140–145, uses opaque dark and light blue and yellow glass to highlight the exotic detail of the tail.

The site also produced a small amount of bulk glass, including fragments of Roman vessel glass and fragments of olive green post medieval bottle glass. One notable piece was recovered from the fill [7/004] of pit [7/005]. It is part of the corner of a jar or bottle and Roman in date.

Conclusion

The registered finds and bulk glass and iron objects recovered from test pitting at Granville House are all recovered from dump layers, rubbish pits and disturbed deposits. There were some stratified Roman deposits found in three of the test pits, but none of the

finds discussed above can support the dating. The intrinsically interesting and dated finds, the Nauheim derivative brooch <3>, the bone counter <1> and the mosaic tessera <7> are all residual in later disturbed contexts. The registered finds include dress accessories and personal adornment as well as structural ironwork, tools, a find associated with transport and even one associated with some fun and games. This is exactly what would be expected from a city with a long history of continued settlement and use.

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THE ANIMAL BONES FROM GRANVILLE HOUSE, ST. PETER STREET, WINCHESTER, HAMPSHIRE (WINCM-AY-256)

Alan Pipe

INTRODUCTION

This report quantifies, describes and interprets the hand-collected and wet-sieved animal bone assemblages recovered from a range of deposits, mainly pits and dumps, but with substantial quantities from floors, silt, dark earth and levelling deposits, at Granville House, Winchester.

METHODOLOGY

Bones from each context and sample group were recorded onto an Excel sheet (Table 1) in terms of species, skeletal element, completeness, body side, epiphysial fusion, dental characteristics and modification. Identifications of species and skeletal element referred to the MoLAS Environmental Archaeology Section reference collection and followed Cannon 1987; Schmid 1972; and Wheeler & Jones 1989. Epiphysial fusion and dental eruption and wear data were interpreted following Amorosi 1989. Dental eruption and wear for cattle, sheep/goat and pig were also recorded and interpreted following Grant 1982. Well-preserved, fully-fused bones were measured using Vernier callipers following the techniques and sequences given by von den Driesch 1976. Stature calculations from

measurement of complete longbones were based on conversion factors summarised by von den Driesch and Boessneck 1974.

RESULTS (SEE TABLES 1-5)

The fauna/general

The hand-collected and wet-sieved assemblages together produced a substantial and well-preserved group of 957 identifiable fragments derived from fish, amphibians, birds and mammals. The identifiable assemblage included salmon family Salmonidae, herring family Clupeidae, including herring *Clupea harengus*, mackerel *Scomber scombrus*, plaice *Pleuronectes platessa*, plaice/flounder *Pleuronectidae*, cod family *Gadidae*, eel *Anguilla anguilla*, frog or toad, probably common frog *Rana temporaria*, chicken *Gallus gallus*, mallard/domestic duck *Anas platyrhynchos*, ox *Bos taurus*, sheep *Ovis aries*, goat *Capra hircus*, sheep/goat pig *Sus scrofa*, equids including horse *Equus caballus* and, possibly, donkey *Equus*, cat *Felis catus*. In addition, there were considerable numbers of 'ox-sized' and 'sheep-sized' fragments, and single fragments of unidentifiable small passerine birds.

The research questions

RRA01 What is the species and body-part composition of the local fish diet?

Hand-collected and wet-sieved groups produced a small assemblage of marine/estuarine and, to a much lesser extent, migratory fish with no recovery of obligate freshwater species. In all cases, each species was represented by fewer than ten bones per context or sample. The fish assemblage derived largely from herring family, including herring, cod family and plaice/flounder, including plaice, but also included salmon family, mackerel and eel. The recovery is summarised as:- herring family, plaice/flounder and cod family from post-medieval dark earth [4/002] {2}; herring family, plaice/flounder and eel from post-medieval dark earth [5/005] {2}; herring and herring family, plaice/flounder and cod family, from pit fill [6/012] {5} of pit [6/013]; herring and herring family, eel, mackerel and plaice from medieval fill [7/002] {4} of post-hole [7/003]; salmon family and mackerel from floor deposit [7/015] {7}. In all cases the skeletal composition of each bone group was dominated by vertebrae from the posterior abdominal and caudal (tail) regions of the body perhaps suggesting that most of the fish arrived on-site after at least partial preparation elsewhere rather than complete. Distinct exceptions were fill [6/012] of pit [6/013] and medieval fill [7/002] of post-hole [7/003] where, respectively, head elements of herring, and both herring and plaice, were recovered, indicative of occasional in-situ preparation of at least some complete specimens of these fish.

All the recovered species occur around all British coasts and in major estuaries; the two migratory species, salmonid and eel, exploit and transit through rivers and streams throughout southern England where conditions are suitable for access.

RRA02 What is the composition and variation of the local meat diet with particular reference to chicken, beef, lamb, mutton and pork? (Tables 1-4)

In general, the meat diet for all deposits was dominated by beef and mutton with a smaller component of pork and only occasional recovery of chicken. With the exception of a single find of mallard or domestic duck from medieval rubble [7/008] there was no other evidence for poultry consumption. Apart from very occasional fragments from unidentifiable small passerine birds, probably of sparrow size, there was no recovery of wild mammal or bird species and certainly no evidence for exploitation of wild game.

Chicken was recovered from fill [2/002] of Saxon/medieval cess pit [2/003], 19th century backfill [3/002], fill [6/012] of pit [6/013], fill [6/022] of pit [6/023], medieval dump [7/001], fill [7/002] of medieval posthole [7/003], medieval silt [7/006], medieval rubble [7/008] and medieval dump [7/013]. In general the finds were of small numbers of bones derived from upper and lower wing, pelvis and leg; areas of good meat-bearing quality indicative of post-consumption waste, although there were small numbers of metatarsal (foot) bones and occasional recovery of chicken-sized phalanges (toe joints) suggestive of some degree of in-situ primary carcass processing. The largest deposit of chicken bone derived from fill [7/002] of medieval posthole [7/003] which contained at least one substantially complete carcass of a juvenile bird, perhaps with a few fragments of another, in addition to fish and elements of the major domesticates, cattle, sheep/goat and pig. In general, as the recovered chicken bones derived from adults with very few juvenile elements and no very young infants, there is probably little evidence for poultry breeding on-site. All complete metatarsals of chicken were sexed as female (Table 2), although the absence of recorded medullary bone suggests that the birds were not in lay at time of death.

In general, the assemblage represents post-consumption waste; it is numerically dominated by adult and young adult cattle and sheep/goat with a smaller component of adult and young adult pig, occasional infant lamb or kid and more occasional recovery of chicken. Epiphyseal evidence for all deposits (Table 2) demonstrates the predominance of adults for cattle, sheep/goat and pig with only minor recovery of juveniles and negligible recovery of infant, foetal or neonate sheep/goat and pigs.

Dental evidence (Table 4) for cattle, sheep/goat and pig similarly confirms a general absence of very young individuals with only medieval silt [7/006] producing a very young animal, a pig still in the first year of life. Cattle were generally in at least the second year of life with others in at least the fourth; Saxon/medieval cesspit [2/003] produced an animal in the third year. Sheep/goat generally showed animals in the fourth to seventh year, although individuals in pit [6/005] and deposit [6/043] were no more than two years old. Pigs were generally in at least the second year of life, with one animal from dump [6/042] in the first half of the second year. Overall, the impression is that there was little or no sustained in-situ stock breeding or rearing.

Areas of good (vertebrae, ribs, upper limbs) and moderate (head, lower limb) predominate, although the feet and toes are also present suggesting some non-intensive primary carcass processing.

The major domesticates showed no indication of old or injured animals and there was no evidence for age or work-related pathological change, suggesting that consumption also included animals in good condition probably reared for meat production rather than solely or largely those slaughtered after reaching the end of their working lives as traction, dairy or wool-producing animals.

RRA03 What are the estimated statures of horses, cattle, and sheep/goats? (Table 5)

Estimates of stature, in terms of 'withers'/shoulder height, were calculated for horse, ox and sheep/goat.

The equid skeleton from deposit [5/006] produced three estimates of stature based upon length measurements of left and right radius and a left metacarpal; respectively giving estimated statures of 1.094, 1.089 and 1.051 metres. Comparison with stature estimates for horses from archaeological sites throughout the London area places this animal at the extreme lower limit of the stature range for all London animals, equivalent to, or barely taller than, a modern Shetland pony (e.g. Rackham 1995, 170). The general slenderness of the major longbones, shown particularly by the narrow minimum midshaft widths suggests the possibility that this equid may be a donkey although the absence of maxillary or mandibular tooth rows precludes any identification based on dental characteristics (Armitage & Chapman 1979, 343).

Medieval silt deposit [7/006] produced a single estimated stature for ox of 1.101 m from a complete metacarpal, the only estimated stature from this species from the assemblage as a whole. This value compares exactly with the average withers height of 1.10 m for British Saxo-Norman and medieval cattle (Armitage 1982); and very closely with the range of 1.012-1.228 m for 11th-15th century AD cattle recovered from Southwark and the City of London (Rielly, pers.comm.).

Sheep/goat produced 11 stature estimates from undated deposits [6/012], [6/016], [6/022], [6/036] and [6/043]; and from medieval silt deposit [7/006] and medieval rubble [7/008]. These statures lay in the range of 0.547-0.629 m for the undated deposits and 0.599-0.613 m for the medieval examples. Again, all these values compare well with Saxo-Norman and medieval values for Southwark and the City of London where the range was 0.512-0.676 m with site means in the range 0.546-0.596m (Rielly, pers.comm.).

RRA04 What evidence is there for local horn and bone working? (Table 3)

Although tool marks not associated with butchery are rare throughout the assemblage, they provide very limited but definite evidence for bone working and preliminary preparation of horn.

Medieval deposits fill [7/004] and silt [7/006] each produced an ox metatarsal midshaft which had been sawn through transversely and then shaved with a knife on the lateral and

medial sides, perhaps during manufacture of 'pinner's bones' (Pipe, pers. obs.). The thick walls and long straight midshafts of horse, ox and red deer metapodials, particularly metatarsals, are suitable for manufacture of handles, eating utensils, tools and combs. Silt deposit [7/006] included a midshaft fragment of ox tibia, also a thick-walled, long, straight bone, which had been sawn transversely on the lateral side. Examination and measurement of the tool mark indicated use of a fine-toothed blade slightly thinner than 1.0 mm.

Ox and sheep/goat horncores are under-represented in the assemblage, both as complete and fragmented detached bones and those remaining attached to the skull. Ox horncore was recovered from dump [6/016], fill [6/022] of pit [6/023], medieval silt [7/006], medieval rubble [7/008], medieval dump [7/012] and ?Roman dump [7/014]; sheep/goat horncore fragments from post-medieval dark earth [4/002] and medieval silt [7/006]; sheep horncore from Saxon/medieval cess pit deposit [2/002], fill [6/012] of pit [6/013], fill [6/022] of pit [6/023], medieval silt [7/006] and medieval dump [7/007]; and goat horncore from fill [6/022] of pit [6/023] and medieval silt [7/006]. Although recovered widely, the numbers are small and only two examples show definite tool marks.

Saxon/medieval cess pit deposit [2/002] produced a sheep skull fragment on which the horncore had been chopped through at the base and detached. This suggests removal of the complete horn for future separation of the horn layer from the horncore.

Dump deposit [6/016] included an ox horncore showing shallow transverse chop marks all around the base, probably preliminary preparation to allow removal of the horn sheath. The general lack of skull, horncore and worked bone fragments in the assemblage suggests that there was little or no organised horn and bone-working local to the site and that these skeletal elements were generally removed and then taken elsewhere for preliminary and further processing.

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Table 2: Hand-collected and wet-sieved animal bone - epiphysial fusion

DATE	INTERP	PARENT	CONTEXT	TAXON	BONE	NOS.	FUSION (P/A)	FUSION (D/P)
modern	made ground		1/001	ox	scapula	1		fused
Roman	levelling		1/002	sheep/goat	metacarpal	1	fused	
Saxon/med	pit, cess	2/003	2/002	chicken	metatarsal	1	fused	fused
Saxon/med	pit, cess	2/003	2/002	chicken	radius	1	fused	fused
Saxon/med	pit, cess	2/003	2/002	chicken	tibia	1	fused	fused
Saxon/med	pit, cess	2/003	2/002	ox	metacarpal	1	fused	fused
Saxon/med	pit, cess	2/003	2/002	ox	radius	1		unfused
Saxon/med	pit, cess	2/003	2/002	ox	vertebra, caudal	1	fused	fused
Saxon/med	pit, cess	2/003	2/002	ox	vertebra, thoracic	1	fused	
Saxon/med	pit, cess	2/003	2/002	ox-sized	vertebra	1	unfused	unfused
Saxon/med	pit, cess	2/003	2/002	pig	calcaneum	1	unfused	
Saxon/med	pit, cess	2/003	2/002	pig	fibula	1		fused
Saxon/med	pit, cess	2/003	2/002	pig	innominate	1	fused	fused
Saxon/med	pit, cess	2/003	2/002	pig	metacarpal 3	1	fused	fused
Saxon/med	pit, cess	2/003	2/002	pig	metapodial	1		unfused
Saxon/med	pit, cess	2/003	2/002	pig	phalange 1	1	fused	fused
Saxon/med	pit, cess	2/003	2/002	pig	scapula	1		unfused
Saxon/med	pit, cess	2/003	2/002	pig	tibia	1		unfused
Saxon/med	pit, cess	2/003	2/002	pig	tibia	1		unfused
Saxon/med	pit, cess	2/003	2/002	sheep	metatarsal	1	fused	
Saxon/med	pit, cess	2/003	2/002	sheep/goat	metatarsal	1	fused	unfused
Saxon/med	pit, cess	2/003	2/002	sheep/goat	radius	1	fused	
Saxon/med	pit, cess	2/003	2/002	sheep-sized	vertebra, cervical	1	unfused	unfused
Saxon/med	pit, cess	2/003	2/002	sheep-sized	vertebra, cervical	1	unfused	unfused
19th century	backfill		3/002	chicken	femur	1	fused	
19th century	backfill		3/002	ox	vertebra, cervical	1	fused	fused
19th century	backfill		3/002	ox-sized	vertebra	1	fused	
19th century	backfill		3/002	pig	tibia	1		unfused
19th century	backfill		3/002	sheep/goat	femur	1	fused	
19th century	backfill		3/002	sheep/goat	metatarsal	1	fused	
19th century	backfill		3/002	sheep/goat	tibia	1	fused	
19th century	fill	pit 3/004	3/003	chicken	tibia	1	fused	fused
19th century	fill	pit 3/004	3/003	ox	femur	1	fused	
19th century	fill	pit 3/004	3/003	sheep/goat	radius	1	fused	
post-medieval	dark earth		4/002	ox	humerus	1		unfused
post-medieval	dark earth		4/002	ox	humerus	1		fused
post-medieval	dark earth		4/002	ox	phalange 2	1	fused	fused
post-medieval	dark earth		4/002	ox	radius	1	fused	
post-medieval	dark earth		4/002	ox	tibia	1		unfused
post-medieval	dark earth		4/002	pig	radius	1	unfused	
post-medieval	dark earth		4/002	pig	tibia	1		fused
post-medieval	dark earth		5/004	equid	metapodial	1	fused	
post-medieval	dark earth		5/004	equid	tibia	1	fused	
post-medieval	dark earth		5/004	sheep/goat	metatarsal	1		unfused
post-medieval	dark earth		5/004	sheep/goat	scapula	1		fused
post-medieval	dark earth		5/005	equid	femur	1		fused
post-medieval	dark earth		5/005	equid	vertebra, thoracic	1	fused	fusing

post-medieval	dark earth		5/005	pig	femur	1		unfused
post-medieval	dark earth		5/005	pig	humerus	1	unfused	unfused
post-medieval	dark earth		5/005	pig	metapodial	1	fused	unfused
	skeleton		5/006	equid	metacarpal	1	fused	fused
	skeleton		5/006	equid	phalange 1	1	fused	fused
	skeleton		5/006	equid	phalange 2	1	fused	fused
	skeleton		5/006	equid	radius	1	fused	fused
	skeleton		5/006	equid	radius	1	fused	fused
	skeleton		5/006	equid	sacrum	1	fused	fused
	skeleton		5/006	equid	tibia	1		fused
	skeleton		5/006	equid	vertebra, lumbar	6	fusing	fusing
	skeleton		5/006	equid	vertebra, lumbar	6	fused	fusing
	skeleton		5/006	equid	vertebra, thoracic	7	fused	fusing
	skeleton		5/006	ox	scapula	1	fused	
	skeleton		5/006	pig	metacarpal 3	1	fused	unfused
	skeleton		5/006	sheep	metatarsal	1	fused	
	fill	pit 6/005	6/004	ox	metacarpal	1		fused
	fill	pit 6/005	6/004	ox	radius	1		fused
	fill	pit 6/005	6/004	ox	vertebra, thoracic	1	unfused	unfused
	fill	pit 6/005	6/004	ox-sized	vertebra	1	fusing	fusing
	fill	pit 6/005	6/004	pig	tibia	1	unfused	unfused
	fill	pit 6/005	6/004	sheep	metacarpal	1	fused	unfused
	fill	pit 6/005	6/004	sheep/goat	radius	1	fused	
	fill	pit 6/005	6/004	sheep/goat	tibia	1	unfused	unfused
	fill	pit 6/005	6/004	sheep-sized	vertebra, lumbar	1	unfused	unfused
	fill	pit 6/013	6/012	chicken	radius	1	fused	
	fill	pit 6/013	6/012	ox	metacarpal	1	fused	unfused
	fill	pit 6/013	6/012	ox	radius	1	fused	
	fill	pit 6/013	6/012	ox	vertebra, lumbar	3	unfused	unfused
	fill	pit 6/013	6/012	pig	humerus	1		fused
	fill	pit 6/013	6/012	pig	metapodial	1	fused	
	fill	pit 6/013	6/012	pig	metapodial	1	fused	unfused
	fill	pit 6/013	6/012	pig	phalange 1	1	unfused	fused
	fill	pit 6/013	6/012	pig	phalange 1	1	fused	fused
	fill	pit 6/013	6/012	sheep	metacarpal	1	fused	fused
	fill	pit 6/013	6/012	sheep/goat	metacarpal	1		unfused
	fill	pit 6/013	6/012	sheep/goat	metatarsal	1	fused	fused
	fill	pit 6/013	6/012	sheep-sized	vertebra, lumbar	1	unfused	unfused
	fill	pit 6/013	6/012	sheep-sized	vertebra, lumbar	2	unfused	unfused
	dump		6/016	cat	ulna	1	unfused	unfused
	dump		6/016	ox	tibia	1		unfused
	dump		6/016	ox	tibia	1	unfused	
	dump		6/016	pig	tibia	1		unfused
	dump		6/016	sheep	metacarpal	1	fused	fused
	dump		6/016	sheep	metatarsal	1	fused	unfused
	dump		6/016	sheep/goat	tibia	1	unfused	
	dump		6/016	sheep/goat	tibia	1		fused
	fill	pit 6/019	6/017	ox-sized	vertebra, thoracic	1	fused	fused
	fill	pit 6/019	6/017	ox-sized	vertebra, thoracic	1	unfused	
	fill	pit 6/019	6/017	pig	tibia	1		unfused
	fill	pit 6/019	6/018	ox	metatarsal	1	fused	
	fill	pit 6/019	6/018	ox	phalange 1	1	fused	fused
	fill	pit 6/019	6/018	ox	phalange 1	1	fused	fused
	fill	pit 6/019	6/018	pig	tibia	1	unfused	unfused
	fill	pit 6/021	6/020	pig	vertebra, thoracic	1	unfused	unfused
	fill	pit 6/021	6/020	sheep-sized	vertebra, cervical	1	fused	fused
	fill	pit 6/023	6/022	chicken	radius	1	fused	

	fill	pit 6/023	6/022	horse	femur	1	fused	
	fill	pit 6/023	6/022	ox	humerus	1		fused
	fill	pit 6/023	6/022	ox	metacarpal	1	fused	unfused
	fill	pit 6/023	6/022	ox	metacarpal	1	fused	
	fill	pit 6/023	6/022	ox	phalange 2	1	fused	fused
	fill	pit 6/023	6/022	ox	scapula	2		fused
	fill	pit 6/023	6/022	ox	tibia	1		fused
	fill	pit 6/023	6/022	ox	vertebra, cervical	2	unfused	unfused
	fill	pit 6/023	6/022	ox	vertebra, lumbar	1	fused	fused
	fill	pit 6/023	6/022	pig	femur	1		unfused
	fill	pit 6/023	6/022	pig	phalange 1	1	unfused	fused
	fill	pit 6/023	6/022	sheep	metatarsal	1	fused	fused
	fill	pit 6/023	6/022	sheep/goat	radius	1	fused	fused
	fill	pit 6/023	6/022	sheep/goat	scapula	1		fused
	fill	pit 6/023	6/022	sheep-sized	vertebra, cervical	1	unfused	unfused
	cut	pit 6/023	6/023	ox	femur	1		fused
	cut	pit 6/023	6/023	ox	humerus	1		fused
	cut	pit 6/023	6/023	ox	radius	1	fused	
	cut	pit 6/023	6/023	ox	radius	1		unfused
	cut	pit 6/023	6/023	pig	tibia	1		unfused
	cut	pit 6/023	6/023	sheep/goat	femur	1		unfused
	dump		6/028	ox	femur	1	unfused	
	dump		6/030	ox-sized	vertebra	1	unfused	
	floor		6/032	ox	metatarsal	1	fused	
	fill	6/035	6/034	sheep-sized	vertebra, cervical	1	fused	fused
	dump		6/036	sheep/goat	radius	1	fused	fused
	dump		6/036	sheep/goat	tibia	1		fused
	dump		6/038	pig	tibia	1		unfused
	dump		6/039	sheep/goat	tibia	1		fusing
	dump		6/042	pig	femur	1	unfused	
	dump		6/042	pig	innominate	1	unfused	unfused
	dump		6/042	pig	mandible	1		
TOTAL						3		
	burrow		6/043	ox	calcaneum	1		
	burrow		6/043	ox	scapula	1		
	burrow		6/043	ox	tibia	1		fused
	burrow		6/043	ox-sized	rib	3		
	burrow		6/043	sheep	mandible	1		
	burrow		6/043	sheep	metatarsal	1	fused	fused
	burrow		6/043	sheep/goat	tibia	1		fused
	burrow		6/043	sheep/goat	tibia	1	unfused	unfused
	burrow		6/043	sheep-sized	rib	2		
TOTAL						12		
	rubble		6/044	ox-sized	mandible	1		
	rubble		6/044	ox-sized	rib	1		
	rubble		6/044	pig	ulna	1	unfused	
TOTAL						3		
	dump		6/045	cat	mandible	1		
	dump		6/045	ox	femur	1	fusing	
	dump		6/045	ox	ulna	1		
	dump		6/045	ox	ulna	1		
	dump		6/045	ox	vertebra, lumbar	1	fusing	unfused
	dump		6/045	ox-sized	rib	1		
	dump		6/045	pig	tibia	1		fusing
	dump		6/045	sheep-sized	rib	1		
	dump		6/045	sheep-sized	rib	1		
TOTAL						9		
	fill	pit 6/047	6/046	ox	sacrum	1		
	fill	pit 6/047	6/046	ox	vertebra, thoracic	1	unfused	unfused

	fill	pit 6/047	6/046	ox-sized	rib	1		
	fill	pit 6/047	6/046	ox-sized	rib	5		
TOTAL						8		
	fill	fil of 6/048	6/048	pig	scapula	1		fused
TOTAL						1		
medieval	dump		7/001	cat	humerus	1		
medieval	dump		7/001	chicken	scapula	1		
medieval	dump		7/001	ox	radius	1		
medieval	dump		7/001	ox	vertebra, cervical	1	unfused	unfused
medieval	dump		7/001	ox	vertebra, thoracic	1	unfused	unfused
medieval	dump		7/001	ox-sized	longbone	5		
medieval	dump		7/001	pig	metacarpal 3	1	fused	unfused
medieval	dump		7/001	sheep-sized	rib	3		
medieval	dump		7/001	sheep-sized	vertebra, lumbar	1	fused	fused
medieval	dump		7/001	sheep-sized	vertebra, lumbar	1		
medieval	dump		7/001	sheep-sized	vertebra, thoracic	1		
TOTAL						17		
medieval	fill	posthole 7/003	7/002	bird, unid.	phalange (wing)	1		
medieval	fill	posthole 7/003	7/002	chicken	coracoid	1	unfused	unfused
medieval	fill	posthole 7/003	7/002	chicken	coracoid	1	unfused	unfused
medieval	fill	posthole 7/003	7/002	chicken	femur	1	unfused	unfused
medieval	fill	posthole 7/003	7/002	chicken	femur	1	unfused	unfused
medieval	fill	posthole 7/003	7/002	chicken	fibula	1		
medieval	fill	posthole 7/003	7/002	chicken	furculum	1		
medieval	fill	posthole 7/003	7/002	chicken	humerus	1	unfused	unfused
medieval	fill	posthole 7/003	7/002	chicken	humerus	1	unfused	unfused
medieval	fill	posthole 7/003	7/002	chicken	innominate	1		
medieval	fill	posthole 7/003	7/002	chicken	innominate	1		
medieval	fill	posthole 7/003	7/002	chicken	metatarsal	1	unfused	fused
medieval	fill	posthole 7/003	7/002	chicken	metatarsal	1	unfused	fused
medieval	fill	posthole 7/003	7/002	chicken	radius	1	unfused	unfused
medieval	fill	posthole 7/003	7/002	chicken	scapula	1		fused
medieval	fill	posthole 7/003	7/002	chicken	scapula	1		fused
medieval	fill	posthole 7/003	7/002	chicken	sternum	1		
medieval	fill	posthole 7/003	7/002	chicken	tibia	1		
medieval	fill	posthole 7/003	7/002	chicken	tibia	1	unfused	unfused
medieval	fill	posthole 7/003	7/002	chicken	tibia	1	unfused	unfused
medieval	fill	posthole 7/003	7/002	chicken	ulna	1	unfused	unfused
medieval	fill	posthole 7/003	7/002	chicken	vertebra	10		
medieval	fill	posthole 7/003	7/002	eel	vertebra	3		
medieval	fill	posthole 7/003	7/002	herring	skull	1		
medieval	fill	posthole 7/003	7/002	herring family	vertebra, caudal	1		
medieval	fill	posthole 7/003	7/002	mackerel	vertebra, caudal	2		

medieval	fill	posthole 7/003	7/002	ox	horncore	1		
medieval	fill	posthole 7/003	7/002	ox	innominate	1		
medieval	fill	posthole 7/003	7/002	ox-sized	longbone	1		
medieval	fill	posthole 7/003	7/002	ox-sized	rib	4		
medieval	fill	posthole 7/003	7/002	pig	femur	1		unfused
medieval	fill	posthole 7/003	7/002	pig	metacarpal 3	1	fused	unfused
medieval	fill	posthole 7/003	7/002	pig	vertebra, cervical	1	unfused	unfused
medieval	fill	posthole 7/003	7/002	plaice	cleithrum	1		
medieval	fill	posthole 7/003	7/002	sheep/goat	radius	1		unfused
medieval	fill	posthole 7/003	7/002	sheep/goat	scapula	1		
medieval	fill	posthole 7/003	7/002	sheep/goat	scapula	1		
medieval	fill	posthole 7/003	7/002	sheep/goat	vertebra, thoracic	1	unfused	unfused
medieval	fill	posthole 7/003	7/002	sheep/goat	vertebra, thoracic	1	fused	unfused
medieval	fill	posthole 7/003	7/002	sheep-sized	rib	2		
TOTAL						56		
medieval	fill	cut 7/005	7/004	ox	innominate	1		
medieval	fill	cut 7/005	7/004	ox	mandible	1		
medieval	fill	cut 7/005	7/004	ox	mandible	1		
medieval	fill	cut 7/005	7/004	ox	metatarsal	1		unfused
medieval	fill	cut 7/005	7/004	ox	metatarsal	1		
medieval	fill	cut 7/005	7/004	ox	phalange 3	1		
medieval	fill	cut 7/005	7/004	ox	radius	1	fused	
medieval	fill	cut 7/005	7/004	ox	tibia	1		unfused
medieval	fill	cut 7/005	7/004	ox	tibia	1		
medieval	fill	cut 7/005	7/004	ox	vertebra, cervical	1		
medieval	fill	cut 7/005	7/004	ox-sized	longbone	2		
medieval	fill	cut 7/005	7/004	pig	skull	1		
medieval	fill	cut 7/005	7/004	pig	ulna	1	unfused	
medieval	fill	cut 7/005	7/004	sheep/goat	innominate	1	fused	fused
medieval	fill	cut 7/005	7/004	sheep/goat	maxilla	1		
medieval	fill	cut 7/005	7/004	sheep-sized	rib	4		
TOTAL						20		
medieval	silt		7/006	chicken	metatarsal	1	fused	
medieval	silt		7/006	chicken	metatarsal	1		
medieval	silt		7/006	goat	horncore	1		
medieval	silt		7/006	horse	calcaneum	1	fused	
medieval	silt		7/006	horse	mandible	1		
medieval	silt		7/006	horse	mandible	1		
medieval	silt		7/006	horse	tooth, mandibular	3		
medieval	silt		7/006	ox	astragalus	1		
medieval	silt		7/006	ox	atlas	1		
medieval	silt		7/006	ox	atlas	2		
medieval	silt		7/006	ox	axis	1		
medieval	silt		7/006	ox	calcaneum	1		
medieval	silt		7/006	ox	femur	1	fused	
medieval	silt		7/006	ox	femur	2		
medieval	silt		7/006	ox	femur	1		
medieval	silt		7/006	ox	femur	1		fused
medieval	silt		7/006	ox	femur	1		
medieval	silt		7/006	ox	femur	1	fused	
medieval	silt		7/006	ox	horncore	1		

medieval	silt		7/006	ox	horncore	1		
medieval	silt		7/006	ox	horncore	1		
medieval	silt		7/006	ox	humerus	1		fused
medieval	silt		7/006	ox	humerus	1		
medieval	silt		7/006	ox	humerus	1		
medieval	silt		7/006	ox	innominate	1		
medieval	silt		7/006	ox	innominate	1		
medieval	silt		7/006	ox	innominate	1		
medieval	silt		7/006	ox	innominate	1		
medieval	silt		7/006	ox	innominate	1		
medieval	silt		7/006	ox	innominate	1		
medieval	silt		7/006	ox	innominate	1		
medieval	silt		7/006	ox	mandible	1		
medieval	silt		7/006	ox	mandible	1		
medieval	silt		7/006	ox	metacarpal	1	fused	fused
medieval	silt		7/006	ox	metacarpal	1	fused	
medieval	silt		7/006	ox	metatarsal	1		fused
medieval	silt		7/006	ox	metatarsal	1	fused	fused
medieval	silt		7/006	ox	phalange 1	2	fused	fused
medieval	silt		7/006	ox	phalange 1	1	unfused	fused
medieval	silt		7/006	ox	phalange 2	1	fused	fused
medieval	silt		7/006	ox	radius	1		
medieval	silt		7/006	ox	sacrum	1	fused	
medieval	silt		7/006	ox	scapula	1		
medieval	silt		7/006	ox	scapula	1		
medieval	silt		7/006	ox	scapula	2		
medieval	silt		7/006	ox	scapula	1		fused
medieval	silt		7/006	ox	skull	2		
medieval	silt		7/006	ox	skull	1		
medieval	silt		7/006	ox	skull	2		
medieval	silt		7/006	ox	skull	1		
medieval	silt		7/006	ox	skull	2		
medieval	silt		7/006	ox	skull	1		
medieval	silt		7/006	ox	tibia	1		
medieval	silt		7/006	ox	tibia	1		
medieval	silt		7/006	ox	tibia	2		
medieval	silt		7/006	ox	tibia	1		
medieval	silt		7/006	ox	tibia	1		unfused
medieval	silt		7/006	ox	tooth, maxillary	1		
medieval	silt		7/006	ox	ulna	1		
medieval	silt		7/006	ox	vertebra, cervical	1	fused	unfused
medieval	silt		7/006	ox	vertebra, cervical	1	fused	fused
medieval	silt		7/006	ox	vertebra, cervical	1	fused	fused
medieval	silt		7/006	ox	vertebra, lumbar	1	unfused	unfused
medieval	silt		7/006	ox	vertebra, lumbar	1	unfused	unfused
medieval	silt		7/006	ox	vertebra, lumbar	1		
medieval	silt		7/006	ox	vertebra, thoracic	2	unfused	unfused
medieval	silt		7/006	ox	scapula	1		
medieval	silt		7/006	ox	vertebra, thoracic	1		fused
medieval	silt		7/006	ox-sized	longbone	2		
medieval	silt		7/006	ox-sized	rib	24		
medieval	silt		7/006	ox-sized	vertebra, lumbar	1		
medieval	silt		7/006	ox-sized	vertebra, thoracic	2	unfused	unfused
medieval	silt		7/006	pig	humerus	1		fused
medieval	silt		7/006	pig	humerus	1		fused
medieval	silt		7/006	pig	humerus	1		fused
medieval	silt		7/006	pig	innominate	1	fused	fused
medieval	silt		7/006	pig	innominate	1	fused	fused
medieval	silt		7/006	pig	mandible	1		

medieval	silt		7/006	pig	maxilla	1		
medieval	silt		7/006	pig	metapodial	1	fused	unfused
medieval	silt		7/006	pig	metatarsal 4	1	fused	fused
medieval	silt		7/006	pig	scapula	1		fused
medieval	silt		7/006	pig	skull	1		
medieval	silt		7/006	pig	tooth, mandibular	1		
medieval	silt		7/006	pig	ulna	1	unfused	unfused
medieval	silt		7/006	sheep	astragalus	1		
medieval	silt		7/006	sheep	horncore	1		
medieval	silt		7/006	sheep	metacarpal	1		fused
medieval	silt		7/006	sheep	metacarpal	1	fused	fused
medieval	silt		7/006	sheep	metatarsal	1		
medieval	silt		7/006	sheep	metatarsal	1		
medieval	silt		7/006	sheep	metatarsal	2	fused	unfused
medieval	silt		7/006	sheep	metatarsal	1	fused	fused
medieval	silt		7/006	sheep	skull	1		
medieval	silt		7/006	sheep	metatarsal	1	fused	unfused
medieval	silt		7/006	sheep/goat	calcaneum	1		
medieval	silt		7/006	sheep/goat	horncore	1		
medieval	silt		7/006	sheep/goat	humerus	1		fused
medieval	silt		7/006	sheep/goat	humerus	1		fused
medieval	silt		7/006	sheep/goat	maxilla	1		
medieval	silt		7/006	sheep/goat	metacarpal	1		
medieval	silt		7/006	sheep/goat	radius	1		
medieval	silt		7/006	sheep/goat	radius	1		
medieval	silt		7/006	sheep/goat	skull	1		
medieval	silt		7/006	sheep/goat	tibia	1		
medieval	silt		7/006	sheep/goat	tibia	1	fused	
medieval	silt		7/006	sheep/goat	tibia	1		fused
medieval	silt		7/006	sheep-sized	rib	13		
medieval	silt		7/006	sheep-sized	vertebra, lumbar	1	unfused	unfused
medieval	silt		7/006	sheep-sized	vertebra, lumbar	1	unfused	unfused
TOTAL						159		
medieval	dump		7/007	ox	innominate	1		
medieval	dump		7/007	ox	mandible	1		
medieval	dump		7/007	ox	metatarsal	1		unfused
medieval	dump		7/007	ox	sacrum	1		
medieval	dump		7/007	ox	tooth, maxillary	1		
medieval	dump		7/007	ox	ulna	1		fused
medieval	dump		7/007	ox-sized	humerus	2		
medieval	dump		7/007	ox-sized	longbone	4		
medieval	dump		7/007	ox-sized	rib	3		
medieval	dump		7/007	ox-sized	vertebra, thoracic	1		
medieval	dump		7/007	pig	innominate	1		
medieval	dump		7/007	sheep	horncore	1		
medieval	dump		7/007	sheep	metacarpal	1	fused	fused
medieval	dump		7/007	sheep	metatarsal	1		fused
medieval	dump		7/007	sheep/goat	maxilla	1		
medieval	dump		7/007	sheep/goat	metacarpal	1	fused	
medieval	dump		7/007	sheep/goat	metatarsal	1	fused	unfused
medieval	dump		7/007	sheep/goat	tibia	1		
medieval	dump		7/007	sheep-sized	rib	2		
TOTAL						26		
medieval	rubble		7/008	chicken	tibia	1	fused	fused
medieval	rubble		7/008	chicken	ulna	1	fused	fused
medieval	rubble		7/008	mallard	tibia	1		fused
medieval	rubble		7/008	ox	astragalus	1		
medieval	rubble		7/008	ox	astragalus	1		
medieval	rubble		7/008	ox	atlas	1		

medieval	rubble		7/008	ox	calcaneum	1	fused	
medieval	rubble		7/008	ox	femur	2		
medieval	rubble		7/008	ox	femur	1		fused
medieval	rubble		7/008	ox	horncore	1		
medieval	rubble		7/008	ox	horncore	1		
medieval	rubble		7/008	ox	innominate	1		
medieval	rubble		7/008	ox	maxilla	1		
medieval	rubble		7/008	ox	metacarpal	1	fused	unfused
medieval	rubble		7/008	ox	scapula	1		
medieval	rubble		7/008	ox	tibia	1		
medieval	rubble		7/008	ox	calcaneum	1	fused	
medieval	rubble		7/008	ox	tibia	1	fused	
medieval	rubble		7/008	ox-sized	rib	9		
medieval	rubble		7/008	ox-sized	skull	2		
medieval	rubble		7/008	ox-sized	vertebra, lumbar	1	unfused	unfused
medieval	rubble		7/008	pig	femur	1	unfused	
medieval	rubble		7/008	pig	femur	1		
medieval	rubble		7/008	pig	innominate	1		
medieval	rubble		7/008	pig	skull	1		
medieval	rubble		7/008	pig	vertebra, thoracic	1		
medieval	rubble		7/008	sheep	metatarsal	1	fused	fused
medieval	rubble		7/008	sheep/goat	innominate	1		
TOTAL						38		
medieval	dump		7/012	ox	horncore	1		
medieval	dump		7/012	ox	tibia	1		
medieval	dump		7/012	ox	scapula	1		
medieval	dump		7/012	ox-sized	rib	1		
medieval	dump		7/012	ox-sized	vertebra, thoracic	1		
TOTAL						5		
medieval	dump		7/013	chicken	tibia	1		
medieval	dump		7/013	ox	astragalus	1		
medieval	dump		7/013	ox	astragalus	1		
medieval	dump		7/013	ox	femur	1		
medieval	dump		7/013	ox	humerus	1		
medieval	dump		7/013	ox	innominate	1		
medieval	dump		7/013	ox	phalange 1	1	fused	fused
medieval	dump		7/013	ox	phalange 2	1	fused	fused
medieval	dump		7/013	ox	radius	1		
medieval	dump		7/013	ox	radius	1	fused	
medieval	dump		7/013	ox	scapula	2		
medieval	dump		7/013	ox	scapula	2		fused
medieval	dump		7/013	ox-sized	rib	1		
medieval	dump		7/013	ox-sized	sacrum	1		
medieval	dump		7/013	ox-sized	vertebra, thoracic	1	unfused	unfused
medieval	dump		7/013	pig	metatarsal 3	1	fused	fused
medieval	dump		7/013	pig	scapula	1		
medieval	dump		7/013	sheep-sized	rib	2		
medieval	dump		7/013	sheep-sized	vertebra, lumbar	1		
TOTAL						22		
?Roman	dump		7/014	ox	atlas	1		
?Roman	dump		7/014	ox	horncore	1		
?Roman	dump		7/014	ox	horncore	1		
?Roman	dump		7/014	ox	horncore	1		
?Roman	dump		7/014	ox	mandible	1		
?Roman	dump		7/014	ox	phalange 1	1	fused	fused
?Roman	dump		7/014	ox	radius	1		
?Roman	dump		7/014	ox	skull+horncore	1		
?Roman	dump		7/014	ox	tooth, maxillary	1		
?Roman	dump		7/014	ox-sized	rib	2		

?Roman	dump		7/014	ox-sized	vertebra	1		
?Roman	dump		7/014	ox-sized	vertebra, cervical	2	unfused	unfused
?Roman	dump		7/014	ox-sized	vertebra, lumbar	1	fused	unfused
?Roman	dump		7/014	sheep	metacarpal	1	fused	fused
TOTAL						16		
	floor		7/015	frog/toad	femur	1		
	floor		7/015	mackerel	vertebra, caudal	1		
	floor		7/015	salmon family	vertebra	3		
	floor		7/015	sheep-sized	rib	2		
TOTAL						7		
	dump		7/017	ox	mandible	1		
	dump		7/017	ox	tibia	1		
	dump		7/017	ox-sized	rib	1		
TOTAL						3		
	floor make-up		7/019	pig	metapodial	1	fused	unfused
TOTAL						1		
	? floor make-up		7/020	ox	tooth, maxillary	1		
	? floor make-up		7/020	ox	vertebra, thoracic	1	unfused	fusing
TOTAL						2		
	dump		7/024	ox	innominate	1		
TOTAL						1		
GR/TOTAL						957		

Table 3: Hand-collected and wet-sieved animal bone - modification

DATE	INTERP	CONTEXT	TAXON	BONE	AGE	BURNT	GNAWED	BUTCHERED	WORKED
modern	made ground	1/001	ox	innominate				transverse knife cut	
modern	made ground	1/001	ox	scapula	adult			chopped across spine	
Roman	levelling	1/002	ox	mandible				chopped anterior lateral	
Roman	levelling	1/002	ox	metatarsal				split midline	
Roman	levelling	1/002	ox-sized	rib				transverse chop	
Saxon/med	pit, cess	2/002	ox	atlas				split midline	
Saxon/med	pit, cess	2/002	ox	innominate				chopped anterior/posterior	
Saxon/med	pit, cess	2/002	ox	metacarpal	adult			split midline	
Saxon/med	pit, cess	2/002	ox	radius	subadult			chopped lateral	
Saxon/med	pit, cess	2/002	ox	vertebra, thoracic	subadult			split midline	
Saxon/med	pit, cess	2/002	ox-sized	rib				chopped medial	
Saxon/med	pit, cess	2/002	ox-sized	vertebra				split midline	
Saxon/med	pit, cess	2/002	ox-sized	vertebrae, lumbar				split midline	
Saxon/med	pit, cess	2/002	pig	innominate				chopped midshaft	
Saxon/med	pit, cess	2/002	sheep	skull				split midline	horncore chopped at base
Saxon/med	pit, cess	2/002	sheep	skull				split midline	
Saxon/med	pit, cess	2/002	sheep/goat	metatarsal	subadult		canine/slight		
Saxon/med	pit, cess	2/002	sheep/goat	radius				chopped lateral	
Saxon/med	pit, cess	2/002	sheep-sized	longbone		charred			
19th century	backfill	3/002	ox	humerus				split midline	
19th century	backfill	3/002	ox	vertebra, cervical	adult			chopped posterior	
19th century	backfill	3/002	ox	vertebra, cervical				chopped transverse	
19th century	backfill	3/002	pig	ulna				chopped proximal	
19th century	backfill	3/002	sheep/goat	innominate	adult			chopped across acetabulum	
19th century	backfill	3/002	sheep/goat	vertebra, lumbar	adult			split lateral	
19th century	fill	3/003	chicken	tibia	adult			knife cut distal articulation	
19th century	fill	3/003	ox	femur	adult			chopped across proximal articulation	
19th century	fill	3/003	ox-sized	rib				midshaft chopped	
post-medieval	dark earth	4/002	ox	humerus				split midline	
post-medieval	dark earth	4/002	ox	humerus			canine, slight		

post-medieval	dark earth	4/002	ox	humerus				split midline	
post-medieval	dark earth	4/002	ox	innominate				chopped transverse	
post-medieval	dark earth	4/002	ox-sized	rib				chopped medial	
post-medieval	dark earth	5/005	equid	femur	adult			chopped distal	
post-medieval	dark earth	5/005	ox-sized	vertebra, lumbar				chopped transverse	
post-medieval	dark earth	5/005	pig	femur	juvenile			chopped distal	
post-medieval	dark earth	5/005	pig	ulna				knife cut posterior	
	skeleton	5/006	ox	atlas				chopped midshaft	
	skeleton	5/006	ox	mandible				coronoid chopped	
	skeleton	5/006	ox	scapula				chopped anterior distal	
	fill	6/004	ox	calcaneum			canine, severe		
	fill	6/004	ox	metacarpal				chopped lateral	
	fill	6/004	ox	metatarsal				split midline	
	fill	6/004	ox	radius				chopped lateral	
	fill	6/004	ox	scapula				split latero-medial	
	fill	6/004	ox	vertebra, cervical				split midline	
	fill	6/004	ox	vertebra, thoracic	subadult			split midline	
	fill	6/004	sheep/goat	tibia	subadult			split midline	
	fill	6/004	sheep-sized	vertebra, lumbar	juvenile			split midline	
	fill	6/012	ox	innominate	adult			ventral split midline	
	fill	6/012	ox	radius	adult			split midline	
	fill	6/012	ox	scapula				split latero-medial	
	fill	6/012	ox	tibia	adult			split midline	
	fill	6/012	ox	vertebra, cervical	adult			chopped transverse	
	fill	6/012	ox	vertebra, lumbar	subadult			split midline	
	fill	6/012	pig	humerus				chopped distal	
	fill	6/012	pig	innominate	adult			chopped across acetabulum	
	fill	6/012	pig	innominate				chopped medial	
	fill	6/012	pig	mandible	young adult			split midline	
	fill	6/012	sheep	horncore	adult			chopped proximal	

	fill	6/012	sheep/goat	innominate	adult			chopped through acetabulum	
	fill	6/014	ox	innominate				chopped transverse	
	dump	6/016	ox	horncore	adult				chopped around base
	dump	6/016	ox	tibia				split midline	
	fill	6/017	ox	innominate				chopped anterior	
	fill	6/017	ox-sized	rib				chopped midshaft	
	fill	6/017	ox-sized	vertebra, lumbar				split midline	
	fill	6/017	ox-sized	vertebra, thoracic	adult			split midline	
	fill	6/017	ox-sized	vertebra, thoracic	subadult			chopped transverse	
	fill	6/017	pig	tibia	juvenile			chopped lateral 7	
	fill	6/017	sheep/goat	scapula				chopped medial	
	fill	6/018	ox	metatarsal			canine, severe		
	fill	6/018	ox	phalange 1	adult			knife cut anterior 7	
	fill	6/018	ox	skull				split/chopped transverse	
	fill	6/018	ox-sized	rib				chopped transverse	
	fill	6/018	pig	innominate				chopped across acetabulum	
	fill	6/020	ox-sized	rib				chopped transverse	
	fill	6/020	pig	vertebra, thoracic	juvenile			split lateral	
	fill	6/020	sheep-sized	vertebra, cervical	adult			chopped anterior	
	fill	6/022	ox	horncore	adult			chopped ventral posterior	
	fill	6/022	ox	humerus	juvenile			chopped distal/split midline	
	fill	6/022	ox	humerus			canine, severe		
	fill	6/022	ox	innominate				chopped transverse	
	fill	6/022	ox	metacarpal				chopped posterior	
	fill	6/022	ox	scapula				split latero-medial	
	fill	6/022	ox	tibia				chopped distal	
	fill	6/022	ox	ulna				chopped proximal	
	fill	6/022	ox	vertebra, lumbar	adult			split lateral	
	fill	6/022	ox-sized	rib				chopped transverse	
	fill	6/022	sheep/goat	radius	adult			chopped proximal articulation	
	fill	6/022	sheep/goat	scapula	adult			chopped lateral	
	cut	6/023	ox	femur				split midline	
	cut	6/023	ox	femur				split midline	
	cut	6/023	ox	humerus				chopped distal	
	cut	6/023	ox	innominate				chopped transverse	

	cut	6/023	ox	radius				chopped anterior	
	cut	6/023	ox	ulna			canine, moderate		
	dump	6/030	ox-sized	rib				chopped transverse	
	dump	6/031	ox-sized	rib				chopped transverse	
	floor	6/032	sheep-sized	rib				chopped transverse	
	fill	6/034	sheep-sized	vertebra, cervical	adult			chopped posterior	
	dump	6/036	ox	innominate				chopped across acetabulum	
	dump	6/036	ox	scapula				chopped transverse	
	dump	6/039	ox-sized	vertebra, lumbar				split midline	
	dump	6/042	pig	femur	juvenile			chopped proximal	
	burrow	6/043	ox	calcaneum				chopped anterior	
	dump	6/045	ox-sized	rib				chopped medial	
	dump	6/045	sheep-sized	rib				chopped medial	
	fill	6/046	ox-sized	rib				chopped transverse	
medieval	dump	7/001	ox	vertebra, cervical	subadult			split midline	
medieval	fill	7/002	ox	horncore	adult			chopped transverse	
medieval	fill	7/002	ox-sized	rib				chopped transverse	
medieval	fill	7/002	sheep/goat	scapula				chopped transverse proximal/distal	
medieval	fill	7/002	sheep/goat	scapula				chopped transverse	
medieval	fill	7/004	ox	innominate				chopped posterior	
medieval	fill	7/004	ox	metatarsal			canine, severe		sawn transverse/shaved lateral medial
medieval	fill	7/004	ox	radius		charred			
medieval	fill	7/004	ox	vertebra, cervical				chopped transverse	
medieval	silt	7/006	ox	atlas				split midline	
medieval	silt	7/006	ox	axis				chopped transverse	
medieval	silt	7/006	ox	calcaneum			canine, severe		
medieval	silt	7/006	ox	femur	adult			chopped proximal	
medieval	silt	7/006	ox	femur	adult			chopped proximal articulation	
medieval	silt	7/006	ox	femur	adult		canine, severe		
medieval	silt	7/006	ox	femur				chopped transverse	
medieval	silt	7/006	ox	humerus				split midline	
medieval	silt	7/006	ox	humerus				split midline/chopped distal	
medieval	silt	7/006	ox	humerus				chopped distal	
medieval	silt	7/006	ox	innominate				dorsal knifecut	

medieval	silt	7/006	ox	innominate				chopped anterior	
medieval	silt	7/006	ox	metacarpal				split midline	
medieval	silt	7/006	ox	metatarsal	adult				sawn midshaft/knife shaved
medieval	silt	7/006	ox	metatarsal				sawn proximal midshaft	
medieval	silt	7/006	ox	sacrum	adult			split midline	
medieval	silt	7/006	ox	scapula				chopped transverse	
medieval	silt	7/006	ox	scapula				split latero-medial	
medieval	silt	7/006	ox	tibia				split midline	sawn lateral shaft/blade <1.0mm
medieval	silt	7/006	ox	vertebra, cervical	adult		canine, severe		
medieval	silt	7/006	ox	vertebra, cervical	adult			sawn posterior	
medieval	silt	7/006	ox	vertebra, lumbar	subadult			split lateral	
medieval	silt	7/006	ox	vertebra, lumbar	subadult			split midline	
medieval	silt	7/006	ox	vertebra, lumbar				split midline	
medieval	silt	7/006	ox	vertebra, thoracic	adult			split lateral	
medieval	silt	7/006	ox-sized	vertebra, lumbar				split midline	
medieval	silt	7/006	ox-sized	vertebra, thoracic	subadult			split midline	
medieval	silt	7/006	pig	humerus			canine, severe		
medieval	silt	7/006	sheep/goat	calcaneum				hole lateral	
medieval	silt	7/006	sheep/goat	humerus				split midline	
medieval	dump	7/007	ox	ulna	adult			chopped transverse	
medieval	dump	7/007	ox-sized	longbone		charred			
medieval	dump	7/007	ox-sized	rib				chopped transverse	
medieval	dump	7/007	sheep	horncore	adult			chopped proximal/distal	
medieval	dump	7/007	sheep/goat	metacarpal			canine, slight		
medieval	dump	7/007	sheep/goat	tibia				chopped transverse	
medieval	rubble	7/008	ox	astragalus		calcined			
medieval	rubble	7/008	ox	atlas				split midline	
medieval	rubble	7/008	ox	calcaneum			canine, moderate		
medieval	rubble	7/008	ox	horncore	adult			chopped proximal/ventral	
medieval	rubble	7/008	ox	horncore	adult			chopped proximal	
medieval	rubble	7/008	ox	innominate				chopped transverse	
medieval	rubble	7/008	ox	tibia				chopped distal	
medieval	rubble	7/008	ox	calcaneum				chopped distal	
medieval	rubble	7/008	ox	tibia	adult			chopped through acetabulum	

medieval	rubble	7/008	ox-sized	vertebra, lumbar	sub-adult			split lateral	
medieval	rubble	7/008	sheep/goat	innominate				chopped transverse acetabulum	
medieval	dump	7/012	ox	horncore	adult			chopped ventral	
medieval	dump	7/012	ox	tibia				chopped distal	
medieval	dump	7/013	ox	astragalus	adult			chopped transverse	
medieval	dump	7/013	ox	femur				split midline	
medieval	dump	7/013	ox	humerus				split midline	
medieval	dump	7/013	ox	innominate				chopped dorsal	
medieval	dump	7/013	ox	radius				split midline	
medieval	dump	7/013	ox	scapula	adult			chopped across spine	
medieval	dump	7/013	sheep-sized	vertebra, lumbar				split midline	
?Roman	dump	7/014	ox	atlas				split lateral	
?Roman	dump	7/014	ox	horncore	adult			chopped proximal	
?Roman	dump	7/014	ox	horncore	adult			chopped dorsal/ventral	
?Roman	dump	7/014	ox	radius				chopped transverse	
?Roman	dump	7/014	ox	skull+horncore	juvenile			chopped proximal	
?Roman	dump	7/014	ox-sized	vertebra	juvenile			chopped proximal	
?Roman	dump	7/014	ox-sized	vertebra, cervical	subadult			split lateral	
?Roman	dump	7/014	ox-sized	vertebra, lumbar	subadult			split lateral	

Table 4: Hand-collected and wet-sieved animal bone /dental eruption and wear (after Grant 1982)

DATE	INTERP	PARENT	CONTEXT	TAXON	BONE	SEX	dpm4 (G)	PM4 (G)	M1 (G)	M2 (G)	M3 (G)	AGE (yrs)
Saxon/med	pit, cess	2/003	2/002	ox	mandible						1	2.0-2.5
Saxon/med	pit, cess	2/003	2/002	ox	mandible				12	7		1.5 +
	skeleton		5/006	ox	mandible			12				3.0 +
	fill	pit 6/005	6/004	sheep	mandible		12					<2.0
	fill	pit 6/013	6/012	pig	mandible			7				>1.0
	fill	pit 6/013	6/012	sheep/goat	mandible			12	12	12	8	3.0-4.0
	dump		6/016	pig	mandible	female		10	15	12		>1.0
	dump		6/016	sheep/goat	mandible					12	12	4.0-6.0
	fill	pit 6/019	6/018	sheep/goat	mandible			14	15	12	12	4.0-6.0
	fill	pit 6/023	6/022	ox	mandible		15					<3.0
	dump		6/039	sheep/goat	mandible			13	12	12	10	3.0-4.0
	dump		6/040	pig	maxilla					6		1.0 +
	dump		6/042	pig	mandible						2	1.0-1.5
	burrow		6/043	sheep	mandible		12		12			<2.0
medieval	silt		7/006	pig	mandible		10		5	1		<1.0
medieval	silt		7/006	pig	maxilla			6				1.0+
medieval	dump		7/007	ox	mandible			12	12	12	12	>3.0

Table 5: Hand-collected and wet-sieved animal bone from WINCM-AY-256/measurements and stature (mm)

DATE	INTERP	CONTEXT	TAXON	BONE	SIDE	SEX	MEAS 1	MEAS 2	MEAS 3	MEAS 4	MEAS 5	MEAS 6	MEAS 7	MEAS 8	MEAS 9	MEAS 10	STATURE (mm)
Saxon/med	pit, cess	2/002	chicken	metatarsal	left	female	64.5	11.8	5.7	11.3							
19th century	fill	3/003	chicken	tibia	left		106.4	102.4	19.8	6	10.3						
	skeleton	5/006	equid	metacarpal	left			168	164	37.2		24.3			74	33.5	1051.2
	skeleton	5/006	equid	phalange 1	left		68.8	35			21	31.7					
	skeleton	5/006	equid	phalange 2	left		35.5	34.5			29	32.4					
	skeleton	5/006	equid	radius	right		251					28		56.5	46.2		1089.3
	skeleton	5/006	equid	radius	left		252					28.5		57.2			1093.7
	skeleton	5/006	equid	scapula							61.5		42.5				

	fill	6/004	ox	astragalus	left		65.8	60									
	fill	6/012	sheep	metacarpal	right		125.5			23.7		14.2		8.8	25		613.7
	fill	6/012	sheep/goat	metatarsal	left		135.5			20.6		12.1		10	24.3		615.2
	dump	6/016	sheep	metacarpal	left		118.5			22.7		13.3		8.6	24.8		579.5
	fill	6/022	sheep	metatarsal	left		138.5				20.7		12.5		10	24.9	628.8
	fill	6/022	sheep/goat	radius	right		152			32.2		17.9		26.8			611
	dump	6/036	sheep/goat	radius	right		136					15		26.9			546.7
	burrow	6/043	sheep	metatarsal	right		129.5			20.8		11.8		9.5			587.9
medieval	silt	7/006	ox	astragalus	right		59	54.4									
medieval	silt	7/006	ox	metacarpal	right		179			53		26.8		19.2	52.5		1100.9
medieval	silt	7/006	sheep	astragalus	right		29.5	27.5									
medieval	silt	7/006	sheep	metacarpal	left		122.5			22.8		14.7		10	26.3		599
medieval	silt	7/006	sheep	metatarsal	right		135			19.5		12		10.6	23.5		613
medieval	dump	7/007	sheep	metacarpal	left		123			23.3		13.8		9.4	25		601.5
medieval	dump	7/007	sheep	metatarsal	left									9	22.2		
medieval	rubble	7/008	chicken	tibia	right		93.1	90	16.2	5	10.3						
medieval	rubble	7/008	chicken	ulna	right		60.9	7.7	11.7	3.7	8.9						
medieval	rubble	7/008	ox	astragalus	left		58	53.7	32.5	36.1							
medieval	rubble	7/008	ox	horncore	right		128										
medieval	rubble	7/008	sheep	metatarsal	left		132			19		11.5		8.6	22		599.3
medieval	dump	7/012	ox	horncore	left		175										
medieval	dump	7/013	chicken	tibia	right		115.5	111.5	21.7	6.9	12.2						
medieval	dump	7/013	ox	astragalus	left		64.5	60.6	35.5	40							
medieval	dump	7/013	ox	astragalus	right		57.9	53.3	31.9		37.2						
medieval	dump	7/013	ox	scapula	right					22.4	14	9.5	25.9				
?Roman	dump	7/014	ox	horncore	right		127	44									
?Roman	dump	7/014	ox	horncore	right				31.8	136							

APPENDIX C

OASIS ID: AOCARCHA1-33172

Project details

Project name	Granville House, St Peter Street, Winchester
Short description of the project	An archaeological investigation was conducted by AOC Archaeology Group, at Granville House, St Peter Street, Winchester, on behalf of Tinos Homes. A series of archaeological investigations were carried out on the site between February and April 2006 and these were allocated the site code WINCM AY 256. The investigations on site revealed Roman floor layers composed of clay and chalk dating from the 1st to the mid 4th century. The site appears to have been abandoned until the 11th century after which there is a brief period of intensive pitting until the mid 12th century when the site is once again abandoned. No later activity was recorded on site, possibly due to later truncation during the construction of the overlying Victorian Methodist Church constructed in 1875.
Project dates	Start: 15-02-2006 End: 11-04-2006
Previous/future work	No / No
Any associated project reference codes	WINCM-AY-256 - Sitecode
Type of project	Field evaluation
Site status	Local Authority Designated Archaeological Area
Current Land use	Other 3 - Built over
Current Land use	Other 2 - In use as a building
Monument type	CHALK FLOORS Roman
Monument type	CLAY FLOOR Roman
Monument type	PITTING Early Medieval
Monument type	PITTING Medieval

Monument type	PITTING Roman
Significant Finds	CERAMIC POTTERY Roman
Significant Finds	CERAMIC BRICK MATERIAL Roman
Significant Finds	BUILDING MATERIAL Roman
Significant Finds	CERAMIC POTTERY Roman
Significant Finds	CERAMIC BUILDING MATERIAL Medieval
Significant Finds	BUILDING MATERIAL Medieval
Significant Finds	HONE STONE Medieval
Significant Finds	ANIMAL BONE Medieval
Methods & techniques	'Test Pits'
Development type	Urban residential (e.g. flats, houses, etc.)
Prompt	Direction from Local Planning Authority - PPG16
Position in the planning process	After full determination (eg. As a condition)

Project location

Country	England
Site location	HAMPSHIRE WINCHESTER WINCHESTER Granville House, St Peter Street, Winchester
Postcode	SO23 8
Study area	500.00 Square metres
Site coordinates	SU 4813 2967 51.0638114518 -1.313078508420 51 03 49 N 001 18 47 W Point

Project creators

Name of Organisation	AOC Archaeology Group
Project brief originator	Local Planning Authority (with/without advice from County/District Archaeologist)
Project design originator	AOC Archaeology Group
Project director/manager	Mark Beasley
Project supervisor	Catherine Edwards
Project supervisor	Daniel Eddisford
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Tinos Homes

Project archives

Physical Archive recipient	Winchester Museum
Physical Contents	'Animal Bones','Ceramics','Environmental','Glass','Industrial','Metal'
Digital Archive recipient	Winchester Museum
Digital Contents	'Animal Bones','Ceramics','Environmental','Glass','Industrial','Stratigraphic','Survey'
Digital Media available	'Database','Images raster / digital photography','Spreadsheets','Survey','Text'
Paper Archive recipient	Winchester City Museum
Paper Contents	'Animal Bones','Ceramics','Environmental','Glass','Industrial','Stratigraphic','Survey'

Paper Media available	'Context sheet', 'Drawing', 'Map', 'Matrices', 'Microfilm', 'Photograph', 'Plan', 'Report', 'Section', 'Survey', 'Unpublished Text'
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Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	GRANVILLE HOUSE, ST PETER STREET, WINCHESTER, HANTS: AN ARCHAEOLOGICAL ARCHIVE REPORT
Author(s)/Editor(s)	Edwards, C
Date	2007
Issuer or publisher	AOC Archaeology Group
Place of issue or publication	London
Description	Unpublished report with illustrations and appendices

Entered by	Catherine Edwards (catherineedwards@aocarchaeology.co.uk)
Entered on	26 October 2007