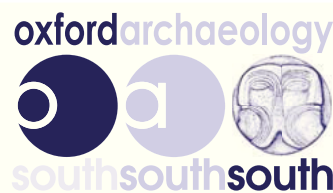


Park Way Newbury Berkshire



**Report on the Excavations, further
Evaluation and Watching Brief**



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on behalf of Standard Life**

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Park Way, Newbury, Berkshire:

REPORT ON THE ARCHAEOLOGICAL EXCAVATIONS, FURTHER EVALUATION AND
WATCHING BRIEF, 2008-9

TOGETHER WITH A GAZETTEER OF THE HISTORIC BUILDINGS

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prepared for Buro Four on behalf of Standard Life Investments

Oxford Archaeology
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Richard Brown managed the initial stages of the archaeology for OA, carrying out the evaluations in 2005 and producing the report. He also produced the Written Scheme of Investigations in consultation with Duncan Coe (OA 2008a). Thereafter the project was managed for OA by Steve Lawrence. The excavations were directed on site by Javier Naranjo-Santana.

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Recording of the standing buildings was mostly carried out by Georgina MacHugh, under the supervision of Jon Gill, who also wrote up the report (Appendix 2: Gazetteer of Historic Buildings).

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SUMMARY

This site comprised the backyards of a group of tenements along the east side of Northbrook Street in Newbury. Evaluations, small excavations and watching brief established that activity of medieval date, probably commencing in the late 12th century, was present across the site, and continued at a small scale until the late medieval period. The Tudor period witnessed the greatest density of activity, but use of the backyards continued throughout the post-medieval period until the present day.

The river Kennet, which flows through Newbury, is renowned archaeologically for the Mesolithic sites, often including waterlogged finds preserved in peat, that occur alongside it, and as over 1m of peat was known to underlie the site, an extensive programme of test-pitting was undertaken to look for Mesolithic activity. Very few struck flints were however found, and none certainly of Mesolithic date. Apart from a couple of residual sherds of Roman pottery, no evidence of later prehistoric, Roman or early medieval date was recovered.

Medieval ditches and pits (one of which contained a timber frame) of the 12th/13th centuries were found, together with evidence of hide preparation and leather-working, possibly including tawing or tanning. The earliest ditches or channels were not on the alignment of the plot boundaries, and evidence for plots at this date is fragmentary and inconclusive. A combination of flooding and deliberate dumping from the later 13th century onwards raised the level in a number of plots, and the dumping may have been the result of the laying out of the area as burgage plots.

A much greater variety of activity was recovered from the late medieval and Tudor period, including a number of preserved wooden structures and objects. These included a possible wooden building of very rough construction, one or more barrel-lined wells, other pits lined with barrels and with lime, interpreted as from hide-processing, various timber-lined pits of uncertain function, a toilet seat, a comb and a paint-brush. Groups of horncores and sheep metapodials demonstrate hide-preparation, and leather offcuts further evidence for leather-working and cobbling. Rich environmental samples were obtained from all three excavation areas, and included fuller's teasel, used in cloth-production, and a varied diet, as does a fragment of an olive jar from Spain.

More tentatively, one of the timber-lined pits adjacent to a long channel might indicate dyeing, and other pits with attached funnels, one containing a wooden lining interpreted as a sieve, indicate further industrial activity of unknown character. A number of rectangular pits may have been used for tawing/tanning, or for peat-cutting. A comparison of the 16th century Amyce survey with that of 1608 failed to match the owners and tenants to individual properties, and the excavated evidence only corresponded to a limited degree with the documented occupations.

In the post-medieval period, there is limited evidence for a tawyard or tanyard towards the north end of the site, and further barrel-lined wells, the latter possibly derived from the brewery known to have operated within the site. A historic map regression enabled some of the Watching Brief features to be identified more clearly. The evidence appears to bear out the documented decline in fortunes after the boom of the 16th century, and the resurgence of activity in the late 18th and early 19th centuries.

INTRODUCTION AND PROJECT BACKGROUND

This report deals with the fieldwork and building recording undertaken by Oxford Archaeology on the site of development at Newbury Park Way, Newbury for Buro Four on behalf of Shearer property group and Standard Life Investments in 2008-9. The document has been prepared in accordance with the terms of the Written Scheme of Investigation for archaeological mitigation (OA 2008a). The results of earlier evaluation trenching in 2005 are referred to where relevant. The Phase 2 evaluation trenches dug in 2008-9, which lay outside the area subject to excavation or watching brief, are included here. The results of the building recording are presented as a Gazetteer of Historic Buildings, and constitute Appendix 2 of the report. Due to its length, this is presented in a separately bound document.

Location and scope of work

Oxford Archaeology was commissioned to conduct a programme of archaeological excavation, building recording and watching brief on the site of a proposed retail and housing development in the centre of Newbury as required by the planning condition (WBC Consent 05/02843). The site is centred on SU 471673 (Fig. 1). The development site lies *c* 130m to the north of the River Kennet and is bounded by Northbrook Street to the west, Park Way to the east and Park Street to the north. The site comprises the backyards of Nos 13-47 Northbrook Street (sometimes abbreviated to NBS in this report), a mixture of post-medieval and modern buildings, and only affected the frontage of Nos 34-38a, although buildings to the rear of the frontage were affected more widely (Fig. 2).

The below-ground archaeological work (Fig. 2) began with evaluation trenches, and continued with the selection of three small areas for targeted excavation (Areas 1000, 2000 and 3000), supplemented by a watching brief on the rest of the basement car park area, and also including Block C in the north-west of the site. The modern property numbers and boundaries are used to locate archaeological features within the watching brief area, eg. Within plot 25, 29 etc. Further evaluation was carried out concurrently with the area excavations (Trenches 100, 101, 102/4000 and 103/5000) and a report summarising the findings was produced (OA 2008c). Evaluation to greater depth also took place on areas that were considered to have high potential for the identification of mesolithic layers (Test pits 1-5), though in the end no significant deposits were found (OA 2008b). A final trench (Trench 104) was excavated in January 2009. The results of all of the 2008-9 evaluation trenches are summarised in this report.

The proposed development area contains several listed buildings and these were dealt with under separate listed buildings conditions. The buildings recording was undertaken by Oxford Archaeology's Heritage Buildings department, and the report on this work is presented as a separately bound appendix to this report (Appendix 2, Gazetteer of Historic Buildings).

Geology and topography

The site lies within the floodplain of the River Kennet some 150m north of the river, and less than a kilometre south of the River Lambourn, about 1.5km west of the junction of these two rivers. The underlying Drift geology is alluvium (BGS Sheet 267, 1947) and it is known from previous investigations that it lies *c* 1m below ground level and has an average thickness of 1m. The waterlogged nature of the ground near the river to the south has produced layers of peat in many areas. The peat lies between *c* 1m and 2.3m below the ground surface and is up to 2.25m thick. Below the alluvium and peat are river gravels overlying the Reading Beds and chalk of the Seaford Chalk Formation.

The development site is located within the historic town centre of Newbury, behind the east side of Northbrook Street and west of Victoria Park. Northbrook Street follows the line of the original road between Oxford and Southampton, which continued south and crossed the Kennet at Bridge Street. The road from London to Bath (London Road and Old Bath Road) lies a little further north. These roads are generally considered to have originated in the medieval period. The location of medieval Newbury was probably determined by the presence of a natural crossing of the River Kennet at this point.

Archaeological and historical background

Early Medieval

Newbury was not a focus for settlement during the Anglo-Saxon period, its first documentary reference being a land grant of 1079 (Mepham in Vince *et al.* 1997, 153), when the area is thought to have lain within the lost manor of Ulvritone. Some early medieval pottery has been found in Market Place, and plough marks and ditches below medieval building layers in Bartholomew Street are believed to be Anglo-Saxon (Vince 1997, 10).

Medieval

Newbury may have been created shortly after the Norman conquest by Arnulf de Hesdin, lord of the lost manor of Ulvritone. The manor's value increased from £9 to £24 between 1066 and 1086 when 51 building plots were listed in Domesday Book. Money's 1887 History of Newbury contains an attempt to plot the layout of this 'new market town' and show its relationship to the manor of Ulvritone, but does not show any development north of the river apart from West Mills, although the bridge and roads are in place. From an early date the inverted Y formed by Bartholomew Street, Cheap Street and Northbrook Street formed the core of the town, but whether the last was established at the same time or slightly later is not known. The development area lies within this historic core.

To the north of the medieval town lies Speenhamland, now a suburb of Newbury. A 10th century Saxon charter mentions a settlement at Speen (Mepham in Vince *et al.* 1997, 153), and in 1225 when Speenhamland itself is first documented, it was still part of the manor of Speen.

Although no medieval maps survive, Astill (1978) has attempted to plot all the medieval features of the town. On the east side of Northbrook Street, where the development area is situated, the land has the typical medieval layout of long, narrow burgage plots. These are referred to in the report by their modern property numbers, whose subdivisions (for example Nos 25, 25a, 25b and c) sometimes indicate the larger plots from which they originated. Houses would have been erected along the front with an area of garden or industrial activity behind. Normally a back lane would have run along the rear of the properties, but here it appears that the rear of the properties was marked by a stream running south towards the river.

There is abundant evidence for the medieval town, with floor levels and pottery found in Northbrook Street, Bartholomew Street and Market Place. No complete medieval houses survive, though parts of Jack of Newbury's house at 24 Northbrook Street, and the rear of 50 Northbrook Street, both contain timbers which have been dated to *c* AD 1500 (OA 2005c, 18). Dendrochronological dating of roof timbers in other buildings has also demonstrated a late 15th century core (S Orr pers. Comm.). The rear wing of 63 Northbrook Street (demolished in the 1980s) was probably another such early building.

St Nicolas Church (also formerly St Nicholas) was first mentioned in 1080 and three chantries are recorded as founded in the church in 1330. The present building is post-medieval, but excavations in 1992 (OAU 1992) uncovered a section of medieval wall below the floor. A chapel of ease is said to have existed at the north end of Northbrook Street in Speenhamland, but the only evidence comes from the name given to cottages at that corner. No trace has been found of Newbury Castle, mentioned in 1152, and this is now thought more likely to have been at Hamstead Marshall (Vince 1997; Myres 1998; OA 2005c, 9).

The medieval timber bridge crossing the Kennet was better documented, although nothing now remains. It was once lined with shops, but collapsed in 1643. Corn, fulling and tanning mills are documented, and on all of the post-medieval maps, mills are shown on either side of the River Kennet. When Town Mills on the south bank was demolished, a medieval building was found inside, which suggests that some at least of the medieval mills were on the same sites as the later ones (The Borough Museum, Newbury. 1973).

Evidence for another medieval activity was found in 1996 in excavations north of the cinema site on the Park Way. Linear features found in peat deposits suggested peat cutting, and the lack of structures suggested that the site was outside the medieval town (Weaver 1996).

St Bartholomew's Hospital was granted a fair in 1215, another sign of prosperity, but documentary evidence suggests that the town was in decline in the later 13th century, reviving in the late 14th century (OA 2005c, 9).

Post-medieval

Newbury grew in size during the 15th century as the wool and cloth industries expanded. It reached its peak in the late 16th and early 17th centuries, receiving a charter of incorporation in 1596. Many clothiers are documented as having houses and shops in Northbrook Street, which is thought to have been the centre of the industry (Astill 1978).

Although life was disrupted by the Civil War, the decline of the cloth industry during the 17th century had the most severe effect on the town, and its fortunes only revived after the expansion of transport systems during the first half of the 18th century (OA 2005c, 14). With the rise of Bath as a health resort at the end of the 17th century, Newbury became an important coach stop on the Bath to London Road, and once the Kennet Navigation Canal opened up to Newbury in 1723 new industries such as brewing became established (ibid., 14).

The earliest maps of Newbury are William Stukeley's Plan of Newberry and Spinae, 1723, and the Map of Speen Manor commissioned by the Duke of Chandos in 1729/30 ('An Accurate Survey of Speen Mannour in the County of Barks belonging to His Grace Duke Chandos'). Like William Watts' map of 1750, these maps show very little detail, although Watts' map does include the road network between Newbury and Hungerford. The only recognisable building on this last map is St Nicolas Church, but it is clear from all three maps that the town was concentrated along the Y of Northbrook Street, Bartholomew Street and Market Place, with some development along the London Road.

Rocque's 1761 Map of Berkshire shows the limits of the town, and this is essentially the same as the area of the medieval town suggested by Astill. By this date, some building has begun to the rear of the burgage plots, notably on the west side of Northbrook Street. Within the development area, other buildings appear to have been erected to the rear of the houses on the street frontage.

Willis produced a map in 1768, and this was used for the frontispiece of Money's book in 1887 (see

Fig. 22). On this map, development is still concentrated along the central Y, but with expansion taking place at the bottom of Bartholomew Street in the general direction of Winchester. This map shows a stream along Northcroft Lane, and Speenhamland Water, to the west and north of the site, and along the backs of the Northbrook Street properties, including those within the development area, a stream appears to be contained within a man-made (or straightened) channel. There appears to be an open drain running partway down the west side of Northbrook Street. At the rear of the properties on the east side of Northbrook Street, and adjacent to the corner of the current development site on the bank of the river, was the Presbyterian Meeting House. Within the development area additional buildings have been constructed on the burgage plots.

From the end of the 18th century a variety of other industries operated within the town, some continuing into the 20th century. Town Mill was still working in 1962 although it and West Mill have both been demolished since. When the rear of 6-12 Northbrook Street was excavated (Hull 1997) rubbish deposits suggested that tanning and butchery had been carried out on the site. Brewing and malting became very important for Newbury's prosperity; on the 1839 Tithe map (see Fig. 23) a brewhouse is shown to the rear of 26 Northbrook Street, and by 1864 the 1st edition OS map shows a malthouse adjoining the brewery (marked on the detailed 1:500 version dated 1880-81; see Fig. 24).

Scope of archaeological mitigation

The approach to archaeological mitigation below ground was developed by Duncan Coe, Archaeological Officer for West Berkshire, following two desk-based assessments (OA 2000; BARAS 2003), and comprised evaluation trenching in several stages including test-pitting of the deeply-buried peats, and then targeted excavation of three small areas. A Watching Brief upon the remainder of the basement excavation was subsequently agreed. Work that has taken place on the site of the proposed development is summarised in Table 1.

Table 1. Sequence of site investigations

Event	Summary	Dates	Report date and bibliographic entry
Phase 1 Evaluation	10 Trenches (Tr 1-10)	August – September 2005	OA 2005a
Historic Buildings and Conservation Statement			OA 2005b
Phase 2 Evaluation	4 Trenches (Tr 100-103)	July, August and September 2008	OA 2008c (and 2008b)
Strip map and Sample Excavation	Basement Car Park Area	July – August 2008	
Historic Building Recording		2008 and 2009 during demolition	
Watching Brief	Basement Car Park Area	September to December 2008	
Phase 2 Evaluation	Trench 104	January 2009	

The Phase 1 evaluation (OA 2005a) consisted of 10 trenches and revealed a sequence of waterlain sediments comprising clays and peats overlying a gravel terrace of the River Kennet (Plate 1). In Trench 1 the peat sequence was cut into by a ditch (possibly belonging to a burgage plot), whose fill 129 contained late 12th century pottery. Over a large area the peat was capped by a distinct compacted layer, which also overlay the ditch, probably indicating reclamation from marshland in the soon afterwards, perhaps in the 13th century. There was also evidence of yard surfaces immediately to the rear of Northbrook Street probably dating to this period. Above the reclamation deposit was an accumulation of dumping and silting layers and in Trench 7 a probable tanning waste pit dating to the 15th century. Importation of garden soil in the middle of the 16th century

was noted across the site, as well as pits related to construction during this period.

On the basis of the results of the evaluation, three areas (1000, 2000 and 3000) were chosen for detailed excavation by Duncan Coe (see also Written Scheme of Investigations, OA 2008a). A series of further test pits within these areas were excavated below the medieval levels to greater depth to examine the potential for any Mesolithic deposits sealed by the peat.

A further stage of evaluation of areas not previously available was also requested. Four further evaluation trenches (100, 101, 102/4000 and 103/5000) were excavated at the beginning of the main programme of Strip, Map and Sample (henceforth SMS) excavation in the area to be destroyed in creating the new shopping centre basement car park. These were carried out to look for further areas of intensive past activity. With the exception of Trench 102, these all lay outside the area of previous evaluation, Trenches 100 and 101 at the very south end of the site, Trenches 103 and 104 at the north end. A report on the findings was produced (OA 2008c). Access to the area of Trench 104, which was to have been excavated at the same time, was not available until the very end of the programme. A contingency for further excavation had been provided in the Written Scheme of Investigations (OA 2008a) should the results have merited it, but this was not called upon.

SMS fieldwork methodology (Areas 1000, 2000 and 3000)

The Written Scheme of Investigations drawn up according to the requirements laid down by the West Berkshire Archaeological Officer Duncan Coe (OA 2008a) specified the excavation of three small areas to the east (the rear) of the properties fronting onto Northbrook Street. The largest, Area 1000, was 20m square, and lay towards the southern end of the site behind properties 22-24, incorporating parts of evaluation trenches 1 and 2 (Plate 2). This area was targeted because it was once owned by John Wynchcombe or Winchcombe (also known as John Smallwood and, colloquially, as 'Jack of Newbury'), a noted clothier. Area 2000 straddled the boundary between Nos 29 and 30, included most of evaluation trench 4, and measured 22m by 8m, its long axis being east-west. Area 3000 lay mostly behind No. 32, incorporating evaluation trench 7, and was *c* 23m long and up to 8.5m wide, with its long axis east-west. This area was chosen because evaluation trench 7 had found a pit provisionally dated to the 15th century containing tanning debris, a possible focus of late medieval industrial activity.

All fieldwork followed the methodology set out in the Written Scheme of Investigation (OA 2008a) and work was monitored by Duncan Coe of West Berkshire Archaeology Service.

The site was stripped using two mechanical excavators with wide, flat, toothless buckets under strict archaeological supervision, removing the overburden in spits until the first significant archaeological horizon, or failing that the natural drift geology, was encountered. All machining was carried out carefully to ensure close control over the depth of dig to avoid truncation of archaeological features and to keep initial hand cleaning to a minimum.

The extent of excavation was constrained by a number of post-medieval drain runs and cellars. Area 1000, for example, was crossed by a number of drains, while post-medieval cellars limited excavation in the north-east and south-west corners of Area 2000.

Archaeological features were mapped using a Total Station both during the mechanical excavation and immediately afterwards to provide an overall plan. This plan was subsequently updated during the course of the excavations.

The excavations comprised:

- the investigation of the intersections of archaeological features to phase the site,
- the excavation of structural features,
- the cutting of sections across linear features and the sampling by half-section of pits and other individual features.

A programme of test-pitting was carried out to investigate the deeply-buried peat deposits and underlying gravel for evidence of Mesolithic activity. The results of this were negative, a deposit model suggesting that this area was too low-lying for occupation (OA 2008b).

Outside the areas of detailed excavation the remainder of the proposed basement car park was subject to a watching brief, and revealed features were recorded in plan and (where present) artefacts collected from their surface (Figs 2 and 26). This included the stripping and mapping of Block C closer to the frontage in the northern half of the development. Surface finds were recovered, but no hand excavation was possible.

Archive

A summary quantification of the primary archive can be found in Appendix 1. The archive is currently held at the Oxford office of Oxford Archaeology, and will be deposited with the West Berkshire Museums Service under accession number NEBYM:2005.53.

ARCHAEOLOGICAL DESCRIPTION OF EXCAVATIONS

by Tim Allen and Kate Brady

General

The archaeological remains related mainly to medieval and post-medieval activity, and the site was characterised by pits, wells, postholes and linear features, which were fairly evenly distributed. There was only a limited degree of intercutting.

The features were cut through natural alluvium, peat layers and (in places) a gravel reclamation layer. Features cut into the peat often have irregular and poorly-defined edges. The underlying geology consisted of well-draining natural river gravels, but the depth of overlying peat, and the high water table, meant that this was not reached by any of the excavated features.

The remains provide evidence for land reclamation, settlement, and craft activity in the backyards of tenement plots in medieval, Tudor and post-medieval Northbrook Street. Reclamation appears to have taken place in several phases from the late 12th century onwards up until the end of the medieval period.

Prehistoric, Roman and early medieval (10,000 BC – AD 1070)

Due to previous discoveries of Mesolithic material within and below the peat deposits that occur in the Kennet valley below the town of Newbury, and in the context of the extensive use made of the Kennet Valley in the Mesolithic period, the peat deposits on this site were investigated by a series of test pits (OA 2005a). Across the site the natural riverine gravels were overlain by a layer of laminated peat. The interface/ contact horizon between the gravels and this peat layer was believed to represent an early Mesolithic horizon. Above this, peat and tufa layers were laid down, and probably indicate marshy areas that were periodically flooded with slow moving water. These were overlain by thicker peat deposits without tufa, which continued to accumulate through to the medieval period (OA 2008). The combined depth of these peat deposits was up to 1.4m in Area 1000, around 1.1m in Area 2000, 1.3m deep in Area 3000 (Plate 3) and 1.8m deep in Trench 104.

The surface height of the Pleistocene gravel has been plotted on a contour map (OA 2008). This contour map is included in the evaluation report on the possible Mesolithic horizon (OA 2008) and is not repeated here, but in summary the plotted data showed that the ground surface was at its lowest along the eastern side of the site (between 71.7m OD and 72.2m OD), with a further low lying area in the extreme north-west corner of the site. Higher ground was concentrated around the central west part of the site, with levels here between 72.5m OD and 74.7m OD.

A large quantity of flint was recovered from the interface between the peat and the gravel described above, but only a few flints (one from context 1049, three from 1224 and four from 2068; see Donnelly this volume) were worked, and there were no clear Mesolithic examples. The remainder of the flint from these horizons was natural in origin.

Area 1000

Area 1000 lay close to the southern end of the site in the rear of nos 22-24, incorporating parts of evaluation trenches 1 and 2, and was 20m square.

Medieval period (AD 1175-1400)

The uppermost peat deposit in this area, at the far south of the site, was layer 1042=1271. This was cut by two intersecting channels 1139=1201 and 1115 = 1259. It is not certain whether these were naturally formed fluvial channels or if they were deliberately cut to drain the site prior to occupation. Their sinuous and irregular profiles suggest that they were of natural origin, although due to the softness of the underlying peat, this could also be due to the natural erosion of a man-made channel.

Channel 1115 ran into the site partway down the west side on a west-east alignment (Fig. 4 S.1020; Plate 4), and curved southwards across the south-west corner, leaving the site in a southerly direction as feature 1259 (Fig. 4 S.1033). It was wide and shallow, varying in width from 3.5m to 5m, and increasing from 0.6m to 0.75m in depth as it ran south (Plate 5). The fills of the channel, including the earliest (1116, 1251 and 1261) contained pottery dated to AD 1075-1350. Gravelly fill 1116 is equivalent to layer 129 in evaluation Trench 1, from which pottery dated AD 1175-1250 was recovered. This very gravelly primary fill may have been deposited deliberately to aid drainage; later fills were more mixed. Part way along, and just east of the cut of later pit 1178, probable upper fill 1294 contained a piece of primary waste leather (SF 1005) and an iron nail.

Channel 1139 ran NNE-SSW from the north-east corner of the area (Fig. 5 S.1023/1027), and was traced to just north of the junction with 1259 (Fig. 5 S.1021). The channel was basically straight, but somewhat irregular in plan and profile (Plate 6). It was wide and shallow, measuring 2.2m in width and 0.4m in depth. Again, the fills (successively 1138-1134) contained animal bone and pottery dated to 1075-1350. One of the middle fills, 1036, also contained two leather shoe heel-lifts of post-medieval date (Mold this volume), but given that there is a coherent stratigraphic sequence of overlying deposits and features of medieval date, these must be intrusive, or have been mis-assigned.

The junction between 1139 and 1115 was obscured by a later gully (1107), and it is unclear whether the two channels merged, or whether one cut the other. The orientation of the fills in 1259 (Fig. 4 S.1033) indicates that the later fills were on the east side, so possibly 1139 cut into 1115.

Following the silting up of these channels, two pits were dug and filled up before much of the site was covered by layers of silt. On the west, a large subrectangular pit (1178) was cut into channel 1115. This feature was approximately 5m long north-south, up to 3.1m wide and 0.6m deep, with steeply sloping sides and a flat base (Fig. 6 S.1038). There were three fills, the lowest and uppermost of which together contained 12 sherds of pottery dated to AD 1175-1250. Five horncores were also recovered from the middle fill, possibly suggesting that this was industrial waste. This pit was only observed within the earlier channel, but had silt layer 1182=1281 slumped into its top.

Some 6m further east, pit 1272 was cut through the surface of the peat. The northern part of this feature had been removed by modern drain trenches. The southern half of the pit was sub-circular, measured 1m across and was 0.4m deep (Fig. 6 S.1039). Its peaty fill contained four sherds of pottery dated to AD 1075-1350. This feature lay between the two channels, and was overlain by a tufaceous silt, here called 1278.

Following this, the site was covered by several layers of silt, sandy silt or pale tufaceous silt mixed with peat (numbered variously 1203/ 1225/ 1060/ 1278/ 1280/ 1281/1282/1133/ 1189/ 1146/ 1039/ 1212). Some of these soils were thin (eg. Fig. 5 S.1022), and were probably deposited by flooding events, but others may have been dumped as an early levelling event (see Plate 8 below). This material contained pottery dated to AD 1075-1350 and AD 1175-1250, and probably also included layer 1147 on the east, from which limited excavation recovered an iron object, possibly from an

arrowhead (Scott this volume). Towards the north end of the site there was a change in layers (Fig. 5 S.1023/1027); 1030=1133, for instance, thinned out and merged into layer 1189, which continued to the north end of the trench in and over the top of channel 1139. The change may relate to different plots; the shift from 1030 to 1189 occurred only 1m north of a more distinct boundary between later reclamation soils (see Fig. 3 Phase 3; Fig. 5 layer 1051 and below).

To the south, these soils were in turn cut by a pair of gullies, which may mark the first plot division in this part of the site, before further reclamation soils were spread across this part of the site. Gully 1107=1169 was cut through the peat and extended on a broadly E-W alignment from the eastern limit of excavation for 14m (Plate 7). It measured 0.56m in width and 0.2m in depth and had a shallow profile and broadly flat base. Two sherds of pottery were recovered from the upper fill, dated to AD 1075-1350, plus a tile fragment of 13th-16th century type. In the east edge of the site this feature (here numbered 1169) was not excavated, though charcoal was noted in the top, and here it underlay the reclamation soil 1128 and may have cut turfaceous layer 1146 (Fig. 5 S.1022). At right angles to this beyond its west end was a narrow deep gully 1283, only 1.15m long. This feature was only 0.25m wide and 0.27m deep, with near-vertical sides and a flat bottom (Fig. 7 S.1041). It cut silt layers 1281 and 1282, and was probably overlain by reclamation soil 1266, though this had been removed by machine over the gully itself.

In evaluation Trench 1 at the west edge of the area, a shallow pit 150, some 4.5m wide and up to 0.34m deep, with steep sides and a flat bottom, was recorded cutting reclamation layer 138. This feature was originally interpreted as a ditch, but was not picked up within the excavation area, so was presumably a pit. It contained a sequence of silts, from one of which (127) came two sherds of pottery dated to AD 1250-1350.

Late medieval and Tudor period (AD 1400-1600)

The features discussed above were overlain by a number of dumped deposits to raise the ground level and reclaim the area for use (Plate 8). On the east this consisted of a variety of soils, the lower of which were 1030=1133 and 1128=1266 on the south, which was particularly gravelly. This was equivalent to 1182 further west. It was overlain by a more mixed soil in places, layer 1039=1132=1166=1291, but in places this in turn was sealed by a more gravelly and compact layer 1038=1051=1131. Together these soils covered most of the area, extending beyond the west, east and south limits of the trench (Fig. 3; Figs 4, 5 and 6). The layer consisted of compact mid orange grey gravel mixed with pale sandy silt lenses, and two sherds of pottery recovered from this layer were dated to AD 1375-1525. This layer was equivalent to layer 138=146 in Evaluation Trench 1. The northern limit of this layer was a fairly straight line running west-east, and may well represent the edge of one tenement, although no trace of the contemporary upstanding boundary survived.

On the north layer 1030 merged into layer 1189, and this was overlain by further soil layers 1187 followed by 1186, the latter overlain in the north section of the site (Fig. 5 S.1023) by a gravel and tile dump 1199, at the same level as layer 1038 further south. It is therefore possible that the whole area was raised in level at one time, but that the mix of materials used in the more northerly tenement was different. Layer 1087 (=1060) however, which was a loose brownish grey clay silt rich in peat with occasional charcoal inclusions, contained a large sherd of pottery dated to AD 1550-1700, and layer 1060 fifteen sherds of similar date and tiles of 15th-17th century date. Some level of intrusiveness in the north-east corner of the trench has already been demonstrated by the post-medieval shoe heel-lifts found in layer 1036 in the channel below, but alternatively the dumping here may well have been later.

At a later date, two postholes (1032 and 1035), just under 4m apart, may represent a fenceline

erected along this same boundary line (Plate 9). Both measured *c* 0.6m in diameter and 0.2m in depth and had steep straight sides and flat bases. Posthole 1032 contained the remnants of a post (1098) that extended beyond the top of the cut and also a horizontal timber, while posthole 1035 contained another upright and horizontal (Timbers 1034 and 1095; Plates 10 and 11). Both posts survived 0.45m long, and had been split from roundwood, 1034 having been trimmed to an approximate square of side 0.4m, 1098 being of triangular cross-section but similar dimensions. A fragment of brick was recovered from 1036, the fill of posthole 1035. Their alignment with the northern extent of the gravel reclamation layer suggests that they were marking the same plot boundary, and perhaps date to the early post-medieval period. Close to the east edge of the site a vertical poplar or willow stake (1029) had been driven into layer 1030 and the underlying peat just west of earlier channel 1139. This measured 0.1m in diameter and survived 0.21m high. It is likely that this stake belongs to the same boundary.

A small number of features were cut into reclamation layer 1128 at the south edge of the site. Three postholes, two of them (1121 and 1123) excavated, were of a similar size and may have formed another boundary on a broadly E-W alignment. Both were oval in plan, measured *c* 0.46m wide and 0.6m long, and were of a similar depth (0.2m to 0.28m). Posthole 1123 (Plate 12) contained two fragments of wood, probably the remains of a post (S. 1019), while posthole 1121 (Plate 13) contained a few small fragments of wood, along with one sherd of pottery of AD 1375-1525 date. None of the fragments was sufficiently well-preserved to analyse the wood. A third wooden post was recorded in plan 2.5m WSW of 1123, but was not excavated.

To the north of the gravelly reclamation layer, two pits were cut into a silty clay 1003 that contained stones and charcoal. Pit 1006 was sub-rectangular in shape and lay partially beyond the north-western limit of excavation. More of this feature was found during the Watching Brief, and was numbered 6486. Although layer 1003 was not further investigated, the level from which pit 1006 was cut makes it likely that 1003 was another reclamation soil. The visible part of pit 1006 measured 1.15m in diameter, 0.38m in depth and had a concave profile. Its loose coarse sand and silt fill 1007 contained a sherd of pottery dated AD 1375-1525, plus 2 tile fragments of 13th-16th century date. A sherd of a jug dated AD 1250-1400 was found in fill 6485.

Situated just to the south-east of pit 1006, pit 1004 was oval in shape with a gently sloping concave profile and measured 0.8m in diameter and a very shallow 0.1m in depth remained. The light grey silty clay fill 1005 contained a fragment of pegtile of 13th-16th century date.

North-east of this, pit 1019 was partially obscured by the northern limit of excavation. The part of the feature within the excavation was sub-rectangular in shape and measured 1.4m across and survived 0.34m deep cut through the lower reclamation soils. It had gently sloping sides and a cupped base, and was filled by a succession of dark grey clayey silts (Fig. 8 S.1002), though upper fill 1021 also had tinges of green, perhaps indicating cess. The lowest fill (1023) contained a 15th century rowel spur (SF 101; see Scott this volume). The upper fills (1021 and 1020) contained tile of 15th-17th century date and pottery. Most of the pottery was of late medieval date, AD 1400-1525, but there was also a waster sherd from a 19th century transfer-printed vessel. This last was probably intrusive.

In the north-east part of the area one well was dated to this phase (Plates 14; 15). Well 1065 was cut through layer 1030, the lower 0.3m of reclamation soils, and as the surviving top was exposed during machine excavation, it was probably cut through all of them (Fig. 8 S.1011). The top of the cut (1065) measured 1m in diameter, narrowing to 0.45m at the base. It was 1.2m deep and was almost vertical on the western side, with a slightly shallower gradient on the east side. The well was lined with a barrel comprising 24 oak staves (1053), which sat flush against the west side and the

base (see Wood report, S.Allen this volume; Plate 16). A variety of marks were noted on the outside of the staves (Plate 17). The narrow space between the barrel and the cut on the east, south and north sides was backfilled with fill 1066 (Plate 16), which contained a whetstone (SF 1003) of Norwegian Ragstone (Shaffrey this volume) and two sherds of pottery dated to AD 1400-1550 (and tile of 15th-17th century date), suggesting that it was constructed during this period.

The fill within the barrel was excavated in two parts. In the first, the fill was arbitrarily divided into two, but in the second a clearer sequence of deposits was established (Fig. 8 S.1015; Plate 18). The lower part of the fill (1057=1104-6 and 1111) contained no pottery, but a small amount of peg tile of 13th-14th century date was recovered from 1105, and 15th-17th century tile from 1104 (plus an iron nail) and 1057. The upper fills (1056=1101-2) contained further tile of 15th-17th and 16th-17th century date. Large fragments of a wooden bowl made of field maple (SF 1000; see Wood report by S. Allen below) were recovered from the base of layer 1102. The closest parallel for this is of 16th century date. Slumped into the top of the barrel was a compressed layer of grass or straw (1055), and this was overlain by a stoney clay backfill 1054, which included tiles and a brick of 16th/17th century date.

Post-medieval period (after AD 1600)

In the early post-medieval period, garden soils were deposited over the area (Fig. 5 S.1027 layers 1028=1130; S. 1022 layer 1127).

Situated *c* 4m west of well 1065 was the base of a circular cut (1026), which had a flat bottom and measured 0.6m in diameter but only survived 0.03m deep. It formerly held the base of a barrel, which although no longer present had left the impressions of four planks making up the base on the base of the cut (Fig. 3; Plate 19). The fill was a pale whitish grey limey material, that may have been related to the barrel's use or lined the cut. This feature was cut through layer 1028, so although not directly dated must have been of 17th century date or later. Unlike barrel 1065, it was clearly not intended as a well, but as an upstanding barrel, perhaps used as a water container for washing, or in some industrial process.

A well 1012 surrounded with a surface consisting of a single layer of bricks (1013), and lined with a wooden barrel (1016) was found in the north-western part of the site (Plate 20). One of the bricks was retained, and this was of 16th century type. Some of the bricks had clearly been reused, as they were coated in a white lime mortar, and some had been cut down to fit the surface around the top of the structure. The barrel was not central to the well cut, and around the barrel this was filled with a grey clayey silt 1014, from which came five fragments of 13th-16th century tile, clay pipe and an iron nail.

The barrel survived 1.2m deep and approximately 0.95m maximum diameter, and consisted of 28 vertical staves (Plates 21 and 22) held together by six horizontal bands around it (Fig. 9 S.1031). The top of the barrel was slightly damaged during machining; the bottom of the barrel was missing, allowing water to enter the barrel from the gravel below. Four of the staves were identified to species: two were hazel and two of poplar or willow. A variety of marks were observed on the outside of the staves (see also Wood report, Goodburn this volume; Plate 23). Some of the bands consisted of several strips tied together (Plate 24).

It was filled with a layer of sand (1242) at the very bottom, followed by a succession of organic fills (1243-6 and 1069-8), becoming increasingly clayey as it silted up (Fig. 9 S.1032; Plate 25). Fills 1243-5, which together represented an accumulation 0.3m deep, were sterile. Layer 1246, which was a middle fill probably representing the start of deliberate backfilling, contained a few bricks,

including one complete 19th century example. Above this was a silty clay 1067, containing part of a chamberpot and a pharmaceutical glass bottle dated AD 1770-1830 and bricks of 15th-17th century date. The uppermost fill, sealing both 1246 and 1067, was 1017, and this contained window glass dated AD 1770-1800 and further pottery and clay pipe of similar date.

North-east of pit 1006, the very base of pit 1025 was exposed after machining. There was a single dark brown silty clay fill with inclusions of charcoal and decayed wood, but no dateable finds. Due to its shallowness this feature was probably post-medieval.

A brick well 1350 dating to the 19th century was situated in the centre of the northern part of the site and was not excavated. Further drains and other brick-lined features of post-medieval date were observed in the east section, but were not investigated.

Area 2000

Area 2000 straddled the boundary between Nos 29 and 30, included most of evaluation trench 4, and measured 22m by 8m, its long axis being east-west.

Medieval period (AD 1175-1400)

In Area 2000, three pits, all cutting the top of the peat (2055), are dated to this period. Two pits were intercutting, and the later of these, pit 2060, was sealed by silty clay layers 2018 and 2017 (S. 2008). Pit 2057 (the earlier of the two) was oval in shape, with near-vertical sides and a flattish base (S. 2009). It measured 1.1m in length, 0.8m in width and 0.53m in depth. Its two fills (2058 and 2059) contained 23 sherds of pottery dated to AD 1075-1250. Cutting this on the north-west, pit 2060 was sub-circular in shape with near-vertical sides and a concave base. It measured 1.48m in length, 1.3m in width and 0.55m in depth. It was filled with greyish brown clay silt (2061), from which more than 60 sherds of pottery were recovered, all dating to AD 1075-1250. There were also a number of primary and secondary leather offcuts from the making of shoes (Mold this volume).

Pit 2049 was also sealed by layer 2018. It was oval, with steep sides and a flattish base, and measured 0.65m long, 0.48m wide and 0.24m deep (S. 2006). Its single, soft dark brown clayey silt fill (2050) contained tile of 13th-16th century date and a sherd of pottery dated to AD 1075-1350, together with a few animal bones.

These were the only features definitely sealed beneath layer 2018, or layer 2017 that overlay it (see Fig. 12). Layer 2018 is stratigraphically equivalent to layers 611 in evaluation trench 6, and 2017 to layer 610 and to 431 in evaluation trench 4. In the northern baulk the top of the peat was overlain by a sandy deposit including some tufa fragments 2063, and this may also correspond to silting 2018. This may have been naturally deposited due to alluviation, while 431 and 610 were interpreted as deliberate dumping for reclamation. They presumably correspond to the earlier phases of reclamation in Area 1000.

Two smaller features 2041 and 2045, possibly postholes, probably also belong to this phase, as they were overlain by layer 2063. They lay north of pit 2060, both were between 0.3 and 0.4m across and bottomed at roughly the same level, though one survived deeper than the other. Both had single fills of light yellowish or greenish-brown clayey silt with occasional charcoal flecks and small stones. Neither contained any finds, but 2045 was cut by pit 2043 dating to the 16th century (Fig. 12 S.2005).

Late medieval and Tudor period (AD 1400-1600)

Two pits of very similar size and fills, both in the northern half of the area, were dated to this period by finds. Their relationship to the general stratigraphic sequence was not established, as they were truncated by a series of later drain trenches. It is probable that these features were cut through the thick levelling or garden soil 2016, although no finds other than fragments of tile were recovered from this.

Pit 2043 was sub-rectangular in shape with steep sides and a flat base, and measured 1m in length, 0.9m in width and 0.52m in depth. There were four fills (Fig. 12 S.2005). The primary fill was a sandy clay 2048, probably due to natural erosion, containing a little 13th-16th century tile. This was overlain by 2047, an occupation deposit of dark silty clay with frequent charcoal and small stones, which contained one worn sherd of medieval pottery, tile of 15th-17th century date, animal bone, leather offcuts and a wooden paint brush handle (SF 2001). This was then followed by layer 2064, which largely consisted of the decayed remains of a wooden toilet seat, and the uppermost fill was a dark loose silty clay 2044 with frequent stones and charcoal. Layer 2044 contained an unworn sherd of pottery dated to AD 1500-1600, a fragment of residual 13th-14th century tile and leather offcuts from shoe-making or repair (SF 2000) of late 15th-mid 16th century date.

The second pit was 2051, which lay just 1.5m east of 2043, and was also sub-rectangular, though slightly smaller than 2043. It was 1.1m long and the main pit 0.8m wide, but with a shallow step on both sides increasing the width to nearly 1m midway along. The pit was 0.7m deep, with steeply sloping sides and a flat bottom only just over 0.2m wide (Fig. 12 S.2007). It had four fills, a primary natural silting 2054 with a little 15th-17th century tile, then a charcoal-rich dark silty clay occupation layer with frequent stones 2053. This contained rather more tile like that in 2054, plus half a dozen sherds of pottery dating to AD 1500-1650, together with leather from shoe-making or repair (SF 2002/2008). There were also animal bones in this fill. Layer 2053 was followed by a layer of decayed wood 2056, and this by 2052, whose description matches that of layer 2044 in pit 2043. Layer 2052 contained a sherd of pottery of date range AD 1500-1650, together with tiles of 13th-16th century date and further leather offcuts from shoe-making (SF 2004/2007). The leather pieces suggest shoes of late 15th-mid 16th century date.

The sequence of fills in both pits is identical, and the date of the material from both broadly contemporary, suggesting that these were either linked, or were at least both used for the same purpose in the same phase of use.

Post-medieval period (after AD 1600)

In the post-medieval period further dumping took place in this area, represented by layers 2008 and 2015 on the south and north respectively. The area was then divided by a west-east ditch 2019, which was broad (over 3m wide) and shallow (Fig. 12 S.2001). It is not certain from the records whether layer 2013 was within the ditch or beneath it, but it is very similar to layer 2016 north of the ditch, so was probably earlier.

This ditch presumably demarcated the plot boundary between Nos 28/9 and 30 on Northbrook Street, a boundary that survived until redevelopment. It was subsequently filled with a succession of deliberate backfill layers: compacted gravel, a lens of loose sand, tile rubble in a sandy matrix, capped with silty clay and stones (2002=2009). The infilled ditch was then cut by the construction trench for a wall of hand-made bricks with mortared stone foundations 2003, which has been dated to the 17th century (Plates 26 and 27). There was a brick drain alongside at the west end (Fig. 12 S.2001). The wall was later raised, and in places partly replaced, by a 19th century rebuild, using mass-produced bricks, the whole numbered 2001.

Area 3000

Area 3000 lay mostly behind No. 32, incorporating evaluation trench 7, and was *c* 23m long and up to 8.5m wide, with its long axis east-west (Plate 28).

Medieval period (AD 1175-1400)

Two perpendicularly aligned ditches in the western part of area 3000, both of which were cut into peat layer 3003=3141, and were sealed by layer 3002, were dated to this period. Ditch 3045 ran eastwards from the west edge for *c* 5.5m, and had an angled terminus coming to a point on the north. It was 0.7m wide and 0.2m deep with a concave profile, and contained three fills (Fig. 14 S.3011). The middle and main fill 3047 in particular had numerous lenses of both silt and peat, some containing reed fragments, indicating natural silting in waterlogged conditions. This fill included a sherd of pottery with a date range of AD 1075-1350. The uppermost fill was a more compact dark silty clay, and this and the primary fill both included much white sand and lime precipitation. The ditch was cut by later medieval pit 3049.

Ditch 3125 was aligned perpendicular and to the south of the terminal of ditch 3045. It began 1.5m from 3045, and ran south for *c* 5.5m into the southern edge of the area. This ditch was 1.32m wide with a squared terminal, and was 0.44m deep with vertical sides and a concave base (Fig. 14 S.3032). Its single fill (3126) was a dark brown peaty silt with very frequent flint nodules, suggesting a drainage function (Plate 29). The fill also contained three sherds of pottery dated to AD 1175-1250, and single fragments of leather hide edge and secondary waste (SF 3005).

Immediately north of the end of ditch 3045 was a driven stake (Timber 3121). This was a box-quartered piece of timber axe-trimmed at the end to a point surviving 0.24m long, and there were no associated finds, but in the absence of other uprights in this part of the trench, may have been associated with the ditch only 0.7m to the south.

Some 3m from the end of ditch 3045, and slightly north of its line, was a large posthole 3098, which was sub-circular, 0.58 x 0.5m across and 0.8m deep, with near-vertical sides and a concave base (Fig. 14 S.3019). The depth was only estimated due to rising water. There were three fills surrounding a wooden upright post 3115, the lower two fills being of peat, the uppermost 3101 a clay containing frequent sub-angular stones used as packing. The lowest fill 3099 contained two large sherds of pottery dated to AD 1075-1350. There were no other postholes in the vicinity, so its function is not known.

In the eastern part of the area, three pits probably dated to this period. Pit 3028 was circular and measured 1m in diameter and 0.28m in depth (Fig. 14 S.3006). The cut was lined with a wooden barrel, the upper part of which had been truncated by a modern service trench. Part of the inside of the barrel appears to have been lined with a firm whitish grey sandy clay (3030), which may have related to its use. Two main fills survived, a blackish brown peat at the base (3029) overlain by a dark greyish brown clay and occasional stones (3031). Some of the lining clay 3030 had collapsed onto layer 3029, and was covered by layer 3031. Layer 3031 contained one sherd of pottery dated to AD 1075-1350. On the east side several planks had apparently collapsed, or had been deliberately pushed in onto the top of layer 3031, indicating that the barrel had not filled before it was demolished.

North-east of this, pit 3004 was circular in shape and fairly small, measuring 0.64m in diameter and 0.37m in depth (Fig. 14 S.3000). It had two dark grey brown peaty fills (3005 then 3006), both of which contained tile of 13th-16th century date. The upper fill also contained some animal bone and

two large sherds of pottery dated to AD 1075-1350.

In the north-east corner of the trench was a sub-square pit 3007, most of which was excavated. This measured 1.2 by 1.1m, was 0.43m deep with very steep or vertical sides, and contained five fills (Fig. 14 S. 3001). The north side appears to have filled first, with sterile greenish-grey silty clays 3008 and 3014. A thin lens of very dark greyish black silt 3009 followed, probably collapsed from the sides of the pit. The colour of the fills may indicate that this was a cess pit. This was overlain by 3010, an occupation deposit of darker greenish-grey clayey silt containing animal bone, tile of 13th-16th century date and two sherds of pottery with a date range of AD 1075-1350.

The top of the pit was filled by a dark greyish black silt numbered 3011. There is some confusion about the numbering of this deposit, as it was also planned as layer 3012, although this number was also given to the cut of a feature elsewhere in the trench. Finds numbered as 3012, but of types recorded as found in 3011, included a later medieval iron horseshoe fragment (SF 3000) and a nail (SF 3001), over 40 tile fragments, including quarry tiles, dated to the 15th-17th century, and pottery dated to the latter half of the 16th century. This final fill had a very clean horizontal boundary with the layers below, which were tipping. It is possible that this fill actually overlay the pit, but that due to subsidence of the layers below, the pit outline was visible at a higher level, and so the overlying soil was interpreted as a fill. Deposit 3011 is very similar in date and character to layer 719, which is described in the next section of the report.

Late medieval and Tudor period (AD 1400-1600)

Fenceline

A line of features of similar dimensions and shape in plan (3049, 3096, 3038, 3055/3057, 3064) may represent a set of postholes holding a fence aligned east-west just south of boundary ditch 3045, although none of the features appears to have preserved a post or post-pipe. Posthole (6040) in the watching brief area just to the west may also have been part of this fence line.

Posthole 3049 cut the fills of the ditch, and was 0.85m square with steep or vertical sides surviving 0.18m deep, and a flat base (Fig. 14 S.3011). Its single firm grey clayey fill (3050) contained one sherd of pottery dated to AD 1250-1550 and tiles of 15th-17th century date.

Posthole 3096 was situated *c* 2.5m to the east of 3049. It was sub-circular, measuring 0.77m by 0.69m, with steep sides surviving 0.18m deep and a flat base (Fig. 15 S.3018). The dark peaty clay fill (3097) contained two pottery sherds dated to AD 1375-1500 and tile of 15th-17th century date. Lying on the base of the pit were two fragments of wood, one natural, the other (timber 3140) halved and bearing axe marks at both ends. This was probably an offcut placed in the pit, possibly to support the vertical post, no trace of which survived. It was worked with a similar small axe to that used on a timber in pit 3018, and it is possible that both timbers came from the same tree (Goodburn this volume).

A similar distance east of 3096 was a tri-lobed feature 3038, only the eastern half of which was excavated. The central part was of similar dimensions to 3096, with steep sides surviving 0.32m deep and a flat base (Fig. 15 S.3008). This was probably another post pit, and the shelving eastern part was probably caused during the removal of the post. The primary fill was collapse at the edges of the feature into the open post-pit, after which the pit was backfilled (layer 3040). This fill contained four sherds of pottery dated to AD 1375-1525, and is therefore broadly contemporary with the other postholes in the line. The unexcavated northern part of this feature may mark the position of another post.

Adjacent to feature 3038 and slightly cutting its southern side, pit 3039 was rectangular in shape, with vertical, very straight sides. It measured 1.34m in length, 0.64m in width and 0.2m in depth. This feature had a step at the north end, which may indicate two phases of use, but the whole feature was backfilled with a single fill 3042. This contained tile dated 13th-16th century and two small sherds of pottery dated AD 1375-1525. Only 0.25m south-west of pit 3039 was posthole 3043, which contained a central roundwood post (Timber 3002) axed at the tip and surrounded by fill 3044. There were no finds.

Some 2m east of 3038 was a group of three further features, the earliest 3052 being cut by 3055 to the west and 3057 to the east (Fig. 15 S.3012). These lay partly within the area of evaluation Trench 7, but were cut from below the base of the trench. Feature 3052 was oriented north-north-west, and had a sloping east side and base, with two fills, the lower (and main) fill 3053 containing tile of 15th-17th century date, and the upper fill (3054) a sherd of pottery dated AD 1375-1525. Feature 3055 was rectangular, nearly 1m long and 0.57m wide, with steep sides surviving 0.28m deep and a flat base. Its single fill 3056 contained a large quantity of tile of 16th century date. Cutting 3052 on the east side, and 0.3m from 3055, feature 3057 had sloping sides surviving only 0.12m deep and a flat base. Its single fill contained one residual sherd of pottery dated AD 1250-1400. Of these features, 3055 in particular could well have been another post-pit in this line.

This intercutting group of possible post-pits, and the multi-lobed feature 3038 with 3039 adjacent to its west, strongly suggests either that the posts in these positions were replaced on one or more occasions, or that two or more posts stood close together in each group. This may indicate a gate in the fence at this point.

Posthole 3064 was situated nearly 2m to the east of posthole 3055. It was truncated on the north by a Victorian cellar, and, like the postholes to the west, was within Evaluation Trench 7, but was cut from below the level to which the trench was excavated. The surviving part was rectangular in shape and measured 0.8m east-west and 0.54m north-south, with vertical sides surviving 0.42m deep and a flat bottom (Fig. 15 S.3014). The posthole contained four dark grey brown clayey silt fills. The second fill (3066) contained one sherd of pottery dated to AD 1075-1350, and the uppermost fill tiles of 15th-17th century date. This fill also contained one sherd of pottery dated either to AD 1550-1600, or to the Victorian period. On balance, the former seems more likely.

Taken together, the evidence suggests an east-west fenceline with posts 2.4m apart (centre to centre) dating no earlier than the later 15th century, and going out of use by the end of the 16th century. Deposits of industrial bone waste (sheep-goat metapodials) were recovered from features 3038, 3039 and 3064, suggesting that hide-processing was being carried out close by.

North of posthole 3038 was a small pit or posthole 3118. This was oval, long axis east-west, with steep sides and a cupped base, and the top of its dark clayey silt fill 3119 contained tile of 13th to 16th century date (and most likely 15th-16th century). This was presumably broadly contemporary with the posthole line, and thus probably associated.

Just north of post-group 3055/3052/3057 was a rectangular pit 3110, its long axis lying east-west, and measuring 1.2m by 0.7m across with vertical sides and a flat bottom. This had been dug to contain articulated parts of an adult horse skeleton, but was severely truncated, and only survived 0.12m deep (Plate 30). From the plan (Fig. 15) it seems very unlikely that a whole horse could have been fitted into the pit before it had been butchered, and it is not absolutely certain that only one animal is represented. The west end of the pit did not contain many bones, and here the horse overlay two pieces of wood nailed together (Timbers 3120 and 3122), which may represent part of a

door or window ledge. These pieces were considered to be post-medieval (see Goodburn-Brown this volume), and tile fragments with recessed nail holes characteristic of the 16th century were also found in the single dark grey silt fill 3111.

Building 3079

West of barrel-lined pit 3028, and also extending beyond the southern edge of the excavation, was a wooden structure (Group 3079; Fig. 16). The base of this consisted of three horizontal planks (Timbers 3071-3) up to 1.75m long and 0.4m wide, laid east-west and slightly overlapping to form a platform 1.8m east to west and at least 0.9m north to south on top of peat 3003 (Plate 31). The planks showed saw-marks on their surfaces and squared ends, and varied in width from 100-200mm.

Beyond the northernmost plank 3073 was a slot 3069, with a further plank (Timber 3074) laid on edge along its base (Plate 32). This was originally around 1.5m long, and had survived 0.24m high and was up to 0.24m thick (Fig. 17 S.3016). Like the planks forming the floor, this plank had saw marks. The slot was backfilled with a grey-brown sandy silt 3088, which contained two sherds of pottery dated AD 1375-1525.

Plank 3074 was held in place by a pair of vertical stakes 3075 and 3087 on the north side, and much larger and deeper stakes (Timbers 3077 and 3086) had been driven into the ends of the slot and into the underlying peat just south of the ends of the plank (Fig. 17 S.3022; Plate 33). Timber 3086 was submitted for dendrochronological dating, and was felled in the winter of AD 1444-5.

On the south side plank 3074 was abutted by a further fragment of sawn plank (Timber 3085), which filled much of the gap between plank 3073 and vertical 3074. This overlay the lower fill of slot 3069, but was not horizontal, as it lay tipped slightly downwards towards timber 3074 (Fig. 17 S.3016). It is however likely that it was laid horizontally, but tipped as the backfill of the slot settled.

The platform was overlain by a layer of light yellow sand and lime 3070, up to 0.12m thick in places, interpreted as originally forming a mortared floor (Fig. 17 S.3015). This extended over planks 3071 and 3086 to abut plank 3074 (Fig. 17 S.3016). Traces of this mortar were also found adhering to stake 3086 below the level of the floor, indicating that it was already in place before this timber was driven in.

On the west side, and just beyond the limits of plank 3071 and mortar surface 3070, a further driven stake (Timber 3080) was found, which presumably represented another upright around the structure like 3086 and 3077 (Fig. 17 S.3015; Plate 34). Just west of 3080 was the end of another horizontal plank (Timber 3081), this time only 0.21m wide and 0.04m thick, apparently laid north-south. This probably represents either the edge of a threshold or additional material to prevent erosion of the peat immediately around the structure.

North of 3081, and on the same alignment, a shallow and somewhat irregular hollow (3112) aligned south to north in the top of the peat 3003 was found just west of the plank structure (Fig. 16). This was filled with stones, brick and tile fragments (3114) in a matrix of peat (3113), which overlapped the west end of slot 3069 and continued northwards for nearly 1m beyond it (Plate 35), ending just short of another driven stake (Timber 3109). Tiles from deposit 3114 are dated to 13th-16th century, and possibly to the earlier part of this range. This deposit may have been further material laid down to stabilise the peat at the edges of the structure, or possibly even a rough foundation for a timber superstructure of some sort between the uprights.

Stake 3109 was rectangular in cross-section, up to 110mm by 50mm, and survived 0.76m long, tapering towards the bottom. This was not vertical, but leaning towards the east (Fig. 17 S.3013). Sharpened stake 3109 had a thin layer of soil down the sides numbered 3108, and so was interpreted as having lain within a cut 3063. The 'cut' here was probably caused by movement of the stake, which was no longer upright when found, causing a gap to open up around the stake, into which soil 3108 had fallen. Just 0.3m to the north-west was a more substantial upright post (Timber 3062) in possible cut 3059. This was flat-bottomed and 0.15m in diameter, and survived 0.88m long (Fig.17 S.3013). The 'cut' was only visible right at the base, leading to the suggestion that this was in fact the result of compaction of the peat, and that 3062 had been driven in, although not sharpened to a point.

The fact that these two posts were roughly in line with the uprights of Structure 3079 to the south, and were possibly linked by the spread of building rubble in hollow 3112, may indicate that they were all parts of one structure of two parts, the more southerly having a wood and mortar floor, the northern part perhaps an open-sided lean-to, or perhaps simply fenced on one side to provide a wind-break.

Only 0.2m north of the platform and of upright 3087 was another, slightly larger upright 3076 (Plate 36). This was a roundwood birch stake with the bark still intact, axe-trimmed to a point at the base, 62mm in diameter and surviving 350mm long. This was presumably also associated, although it was not overlain by mortar 3070.

Overall, the dating evidence suggests that this structure dates from the middle of the 15th century AD. It is unlikely that stake 3086 was utilised long after it was cut, and even if this was driven in after the lime mortar had been laid, this need not have been long afterwards.

No corresponding upright to 3080 was found beyond the east end of plank 3071, though this may have lain just beyond the edge of the excavation. Some 0.5m east of upright 3077, however, another smaller upright stake (Timber 3078) was found, at the edge of north-south gully 3116, and recorded as driven through the fill (3117). The gully had gently sloping sides and a flat bottom, and the fill was a brown organic silt with occasional charcoal, but without finds. It may represent a boundary earlier than, or contemporary with, Structure 3079, especially as it appears from the plan to widen westwards just beyond the structure, possibly respecting it. It passed very close to pit 3018 on the east side, but no relationship was recorded.

East of 3112, and halfway between the timber planking and uprights 3109 and 3062 was a bilobate shallow feature 3012 measuring 0.72m by 0.58m, with its long axis south-west to north-east. This had steep sides and a flattish base, and a single cream-grey gravel fill 3013 that contained a large sherd of pottery dated AD 1550-1700. Although the cream-grey gravel is reminiscent of the lime mortar found subsequently overlying the planking to the south, the pottery indicates that this feature was probably later than the timber structure, probably dating after AD 1600, and its position within it is therefore coincidental.

Other features

Some 7m east of 3064, and slightly to the north of the posthole alignment, was circular posthole 3015. This was 0.55m in diameter and 0.19m deep, and had vertical sides curving in at the bottom to a flat base (Fig. 18 S.3003). There were two fills, the lower of which (3016) contained tile fragments of 13th-16th century date. This feature lay below the base of evaluation Trench 7, and so had not been identified during evaluation. In the absence of other evidence, this is attributed to the

later medieval period. Although at some distance from the posthole line, and of different character, this could also have lain along the boundary between plots or working areas in this period.

South-west of 3015, feature 3018 also lay within the limits of evaluation Trench 7, but again lay below the base of the trench. It was sub-square, measuring 1.1m across and surviving 0.36m deep, with vertical sides slightly undercut at the base, and a flat bottom (Fig. 18 S.3004). It has a large piece of timber at the centre of the base (3139), which was covered by 3019, the lower of two blackish brown peaty clay fills (Plate 37). Both fills contained fragments of bone, but no other finds. There were cracks in the upper surface of the timber, perhaps indicating exposure either in the pit or beforehand; the underside was much better preserved. Timber 3139 showed axe marks very similar to those seen on timber 3140 at the base of post-pit 3096, which was of late 15th or 16th century date. It was tentatively suggested that they may be offcuts from the same larger timber (Goodburn this volume).

On the south edge of the site, and lying partly beyond the southern limit of excavation, was a sub-rectangular pit 3154. This measured 1.5m east-west, and at least 1.2m north-south. The south-east corner of the pit lay within the trench, suggesting that the southern edge lay not far beyond the baulk. The pit had vertical sides and a cupped or rounded base, and survived up to 0.5m deep (Fig. 18 S.3039). There were a number of worked timber offcuts in the bottom (Plate 38; Timbers 3157, 3158, 3159 and 3160), of which the woodworking on the first two appeared to be of post-medieval character (Goodburn this volume). Samples from these were submitted for dendrochronological dating, but did not produce a match. The timbers were surrounded by a black clayey peat deposit 3161, which also contained single fragments of tile and brick dated to the 15th-17th centuries AD. This fill was sealed by layer 3155, a light yellowish-grey clay, within which a further timber (Timber 3152) was found. This clay was not found elsewhere in the trench, and was probably a deliberate backfill layer sealing the pit top.

Just north of the north-east corner of pit 3154 was another upright stake (Timber 3153) driven into the peat. This survived 0.4m long and 94mm by 75mm across, and was a fragment of a sawn plank, later modified for use as a stake. Its date and purpose is unclear.

At the east end of the area an east-west slot revealed part of feature 3089. The limits of this were not clearly established, but it appeared to be at least 4.5m west-east and 2m north-south, with gently sloping sides and a flat bottom (Fig. 19 S.3017). The northern limit was not clearly distinguished in the section at the eastern edge of the site (Fig. 19 S.3021), but may have corresponded approximately to the edge of the deeper excavation just over 1m north of the slot. The main section along the east edge of the trench showed that this feature continued at least as far as the south edge of the trench. It was cut into peat 3090, and probably also into peat layer 3003 above this. A thin lens of silty sand 3091 covered the middle of the bottom, and this was overlain by two layers of peat 3092 and 3093, both containing pottery dated AD 1550-1600 and 15th-16th century tile and brick fragments. Layer 3091 was very similar to deposit 3023 further west, a grey gravelly silt 3023, only a small area of which was exposed in the base of ditch 3024 on its east side. This contained a residual sherd of pottery dated AD 1050-1375 together with several tile fragments of 15th-17th century type.

This feature probably corresponds to 'pit' 722 found in evaluation trench 7 to the north, which began 4m from the east end of the trench, sloping down to the east. Both 3089 and 722 were cut from a similar level, and 722 also had two main dark peaty fills, the upper of which (718) contained a scrap of sheepskin leather and a dump of sheep/goat bones with cut marks. Re-examination of the pottery from fills 718 and 719 has shown that the lower fill has material dated AD 1550-1650, ie of the same date as 3092. This suggests that 3089/722 occupied the easternmost 4.5m of the

excavation.

Rather than a cut feature, the deposits filling this 'feature' were interpreted as a series of rubbish deposits, including 719 and 718, 3023=3091, 3092, 3093 and 3094, dumped in the 16th and early 17th century to level up a fall-off in the underlying ground level. The ground to the east is still considerably lower, and just east of the trench there was a succession of boundaries marking a division between reclaimed and unaltered, or less altered, land. The limits of this fall-off appears to have been marked by ditch 3024 at a later date, as (where sectioned) it cut along the division between different deposits 3027 to the west and 3023 to the east.

As discussed above, the final fill of sub-rectangular pit 3007 (Fig. 14 S.3001 layer 3011), which was also called 3012 on plan, may in fact have been equivalent to layer 719. It contained a later medieval iron horseshoe fragment (SF 3000) and a nail (SF 3001), over 40 tile fragments, including quarry tiles, dated to the 15th-17th century and nine sherds of pottery dated to AD 1550-1600.

Post-medieval period (after AD 1600)

Ditch 3024, which was planned as running north-south and marking a divide between layers 3023 and 3027 to the west, was V-profiled and 0.32m deep, and had a single fill 3025 containing a fragment of a cup dated AD 1500-1650 and a quantity of roof and floor tiles of the 15th-16th century. The gully was not definitively traced further north, only the west edge being planned. The finds are believed to have derived from the layers through which the ditch was cut, as they are similar to those in pit 722 and feature 3089 to the west and east. The ditch may have formalised the limit of dumping at the east end of Area 3000.

On the south-west side of the site, two sub-square pits 3032 and 3034, both approximately 0.7m across, and lying only 0.35m apart, were found. Feature 3032 had been heavily truncated, but both features appeared to have near-vertical sides and flattish bases. The fill of pit 3034 contained a single tile fragment of 15th-17th century type. Three pieces of wood, a fragment of a large sawn beam (Timber 3036) and two thinner fragments of plank, had been laid on top of one another on the base of the pit, and probably represent a post-pad. Timber 3036 was submitted for dendrochronological analysis, but no match was found to provide a date for this.

Just east of ditch 3045 was posthole 3137, which was circular and just over 0.5m in diameter, with a bowl profile 0.2m deep. It had a single dark grey silt organic silt fill 3138, which included an iron nail (SF 3006), a fragment of wine bottle glass of early 18th century date and quarry tile of 16th-17th century date.

Running west to east along the north edge of the trench, and terminating just east of ditches 3045 and 3125, was ditch 3123. This had a squared end just like 3125, and was at least 7.5m long and 0.7m wide. Like 3125, it had near-vertical sides and a flat base, but its fills were more similar to those of ditch 3045, being two layers of silty peat, the lower (3124) darker grey than the upper (3127). An iron nail was recovered from the lower fill, and a small fragment of clay pipe from the upper fill, together with animal bone.

Evaluation trenches 100-104 (Figs 20 and 21)

Trenches 100 and 101 lay at the very south end of the site, south of the Area 1000 excavation and Jack Street, trenches 102-104 in the northernmost part of the site. All these trenches were oriented east-west.

Trench 100

This was 7m long and 2.2m wide, and was orientated WSW to ENE within plot 16 (ie the back of 16 NBS). It was excavated by machine down through recent deposits and an earlier garden soil to the surface of an alluvial layer, which was cut by two circular pits and a smaller sub-circular feature, possibly a posthole (Fig. 20). These features were then excavated by hand.

Approximately 1.6m of overburden sealed the archaeological horizon, and consisted of tarmac with layers of sand and hardcore below (5110 and 5111), modern garden soil (5112), levelling deposits of gravel or sand (5113 and 5114). In places this overlay a thin shelly layer with small stones (5109), possibly of fluvial origin, or alternatively a levelling horizon. Both 5114 and 5109 overlay an earlier garden soil 5115. This sealed the archaeological features, and the alluvial clay 5116 into which they were cut.

Pit 5102 was sub-circular, measuring 1.2m north-south by 1m east west, while pit 5104 was circular and 1.06m in diameter. Both were shallow with gently sloping concave sides and a rounded base; 5102 was 0.35m deep with a single dark greyish-brown sandy silt fill (5103) and 5104 was 0.26m deep with two fills. The lower fill 5105 was a dark brownish-grey silt containing occasional charcoal flecks and small stones, the upper fill 5106 a friable brownish-red silt with similar inclusions. There were no finds from either pit.

Between the two pits, and also cut into layer 5116, was a smaller feature 5107. This was 0.49 by 0.42m across, with sloping sides and a flattish bottom, but was only 0.08m deep. The single fill was a dark brownish-grey silt with occasional small stones, and again there were no finds.

The sequence of deposits is similar to that seen elsewhere across the site, but the date of the earlier garden soil varies, so dating the archaeological features is not possible. They are likely to be of medieval or early post-medieval date.

Trench 101

This was 10 metres long and 2.25m wide, and ran parallel to Trench 100 some 16m north-west of it, probably lying within plot 18. It was excavated by machine through recent deposits down to a horizon at which a chalk-lined well had been built, cutting through the early garden soil equivalent to that in Trench 100 (Fig. 20).

The tarmac was underlain by sand and hardcore deposits (5212 and 5211), and by a levelling deposit (5210) below that. This overlay a recent garden soil (5209), which sealed a soft layer of yellow mortar (5208) bedded upon a firm deposit of cobbles and small stones in a matrix of grey clay (5207). This layer overlay an earlier garden soil (5206). It was probably contemporary with the use of a chalk-lined well at the west end of the trench, which was also cut into garden soil (5206).

The chalk-lined well lay within a vertical-sided cut 5213, and was at least 0.8m deep, but was not bottomed (Plate 39). The chalk lining, which was numbered 5200, was built using blocks ranging from 0.18m square to 0.25m by 0.12m. The blocks were roughly finished, and no bonding was visible, but they were roughly faced on the side facing into the interior, and were laid in irregular courses. The gap between the wall and the edge of the cut on the south-east was filled with a friable dark brownish-grey silty sand with stone inclusions of various sizes and occasional tile fragments.

An extension was dug to expose more of the structure, and this showed that it was approaching 2.4m across, with walls up to 0.5m thick and an internal diameter of 1.2-1.4m. The interior was filled with a friable dark greyish-brown silty clay (5215) containing ceramic building material and

animal bones, overlaid by a loose yellowish-brown sand and silt (5216) and then by further brownish-grey silt (5217). There were no finds in these deposits. The backfill was covered by a layer of loose sand (5118), which overlay the chalk wall on the eastern side of the well but abutted the higher western side. A dump of brown silty clay (5219) was found on top of the wall, and was probably clay bonding material discarded when the uppermost chalk blocks were robbed. This overlay the edge of layer 5218. Both 5219 and 5218 were sealed by a thick layer of loose yellow sand, within which a brick drain (5222) had been constructed, the cut backfilled with silt (5221) and sealed by layer 5209.

Trench 102 (Fig. 2; not illustrated in detail)

This trench was positioned 20m north of Area 3000 towards the east end of plot 35 (Fig. 2). It was orientated east-west, was 16m long and 2.5m wide, and was excavated by machine to a depth of 0.8m. The eastern 6m were then deepened by machine to a depth of 1.75m, at which point it was abandoned, as the sides of the trench were very unstable and were repeatedly collapsing.

Below the concrete were gravel make-up deposits (4001 and 4005), which overlay a greyish-brown sandy loam containing much brick and other demolition material. This layer became brownish-grey towards the base, and was up to 0.6m deep (4002). This in turn overlay another demolition deposit 0.8m deep, consisting of brick and stone rubble in greyish-brown sandy matrix (4003). At the base of this was a thin layer of dark brownish-yellow sand (4004), which contained pottery of late 18th century date, and which was at least 0.28m deep, but was not bottomed.

Trench 103

This trench was excavated towards the north end of the site, and was oriented east-west towards the east side of plots 40 and 41 (Fig. 21). It measured 17m long and 2m wide, and was machined down to the top of the peat. Below the tarmac and its make-up (5002 and 5003) was 0.9m of brownish-grey silty clay with a little gravel (5004 over 5005), the lowest part (5005) being darker in hue. Below this was a thin layer of yellowish-brown gravelly silt (5006) over peat (5007). There were no finds from any of these deposits, but 5006 was perhaps similar to the medieval alluvial or levelling deposits seen in Areas 1000 and 2000 further south. Layer 5006 was cut by three features (Fig. 21). At the west end was a gully (5000), and towards the east end a series of slots forming three sides of a rectangle (5010). East of these a further feature (5008) was seen in section, but was not recorded in plan.

Gully 5000, which terminated partway across the trench, was 0.72m wide and ran for 1.2m into the northern baulk. It had sloping sides and a flat bottom, although the end of the ditch was steep, and it contained a single soft dark grey sandy silt fill (5001), which contained ceramic building material, animal bone and shell.

Feature 5010 consisted of two linear features running south-north into the top of a wider and slightly deeper feature aligned east-west. Only the junction between this deeper feature and the more easterly of the two south-north slots was investigated (S.5003). The deeper feature had near-vertical sides and a flat base, and survived 0.19m deep. It was largely filled by layer 5011, a brownish-grey gravel in a matrix of silty clay, which contained a little animal bone and leather. The leather comprised a length of turnshoe rand with stitching to attach a repair patch, and a hide edge. This fill was overlain by a grey-brown silty clay 5012 containing much tile and brick of 15th-16th century date, which was also confined to the deeper feature. Filling the top of this, and forming the sole fill of the north-south slots, was fill 5013, a darker brownish-grey silty clay with occasional stones, from which came a wooden comb (SF 5000).

Half a metre east of 5010 a bowl-profiled cut 5008 was seen in the north section, again cut into layer 5006 and filled by a dark grey silty clay 5009. There were no obvious inclusions and no finds.

Trench 104

This lay some 25m north-west of Trench 103, and on the same alignment, running east-west within plot 43 (Fig. 21). It was 10m long and 2.25m wide, with a northern extension at the east end 2.25m long that crossed the boundary wall between plots 43 and 44. This trench was dug by machine, stepping down from either end to reach the base of the peat in the centre of the trench.

The gravel at the base of the peat was only glimpsed underwater during machine excavation, and the lowest 1m of peat deposits could not be drawn as the water table was too high. There was nearly 2m of peat at this point, the lowest recorded deposit being a blackish-brown peat with many wood fragments (5330), and this was overlain by a dark reddish-brown peat with more wood (5329) only 0.25m deep. The uppermost peat was another blackish-brown peat with rather less well-preserved wood (5328), up to 0.33m thick. None of these deposits contained any evidence of human activity ie artefacts or evidence of burning.

The peat was overlain by a thick layer of dark greyish-brown silty loam (5304), with frequent small stones and occasional inclusions of oyster shells, animal bones and flint nodules. This also contained two fragments of late 12th-14th century pottery, and a smaller fragment of 17th-19th century date. The last is thought likely to be intrusive. Layer 5304 was exposed in the western half of the trench, and again at the very east end, so was presumably an extensive medieval soil that accumulated over the peat in this area. It was overlain by a thinner layer of similar soil (5303), blackened by peat inclusions in places, and containing occasional fragments of peg tile of 13th-16th century date. This appears to represent further garden soil of late medieval date.

Layers 5303 and 5304 were cut by two brick structures 5312 and 5316/7, the second of which appeared to have been cut from the surface of layer 5303. Structure 5316=5317 was a brick-lined pit, whose west wall (5316), only one course thick laid in headers, was apparently constructed on the surface of the peat below. The south edge (5317) only protruded by the thickness of a single brick from the north edge of the trench. It was planned as 1m long, and the single course of bricks observed lay just below the top of layer 5304 to the west. Bricks from 5317 included complete examples of 16th/17th and late 18th/early 19th century date.

No construction cut for wall 5316 was drawn, and only a single course of bricks was shown, whose tops lay just below the level of the surface of 5304 west of the structure, but as this was the point at which the trench stepped up, this is probably not significant. It is assumed that wall 5316 was built to line the edge of the structure, and that wall 5317 also continued down to the same depth. Walls 5316 and 5317 do not appear to have been constructed together, ie interlinked. Wall 5316 continued above the level of layer 5303 for a further 0.6m, the construction changing from all courses laid flat to alternating horizontal and vertical courses. West of the wall there was a faint indication of a soil accumulating against the edge of the wall, as if the structure had been free-standing above 5303, but this deposit was not numbered or described.

In the northern extension, plot boundary wall 5320 was built upon the surface of layer 5303. This was a brick wall surviving 1.3m deep below ground level, and sitting upon a shallow flint foundation. Layer 5303 thickened north of the wall, suggesting that this layer had been cut away when the wall was constructed.

In plot 44 to the north the wall was abutted by a thick blackish-brown silty loam with frequent small fragments of brick, stone and mortar (5324), within which oyster shells were also visible. This was probably further garden soil with an admixture of rubbish. It was overlain by a dump of mortar and tile fragments (5323), clearly demolition material used as hardcore, and this was followed by a thicker deposit of two layers of hardcore (5322) overlain by tarmac.

To the south in plot 43 wall 5320 was abutted by a layer of greyish-brown silty loam 5315, with similar inclusions to layer 5324, but more frequent, and also included charcoal, bone and glass fragments. Fragments of pottery and glass wine bottle date to the late 18th century. This was up to 1.5m deep, and infilled and covered brick structure 5316/7. At the west end of the trench it was numbered 5302, and here it was composed largely of brick, tile and mortar rubble.

Midway along the trench 5315 was cut through right to the surface of 5303 by a steep-sided and flat-bottomed feature 5319, which was filled with a dump of powdery pale grey mortar, brick and tile rubble (5314). On the west side it appeared to have been cut through by brick structure 5312, whose vertical cut (5318) corresponded with the eastern edge of the bricks below.

Like structure 5316/7, brick structure 5312 was oriented east-west, and only protruded 0.2m from the north section (see Fig. 21). A shallow cut 1.3m long had been made into the top of layer 5304, and this had been filled with a thin layer of mortar (5313) to form the base. Two courses of bricks were evident, the lower well-preserved, the upper fragmented. The bricks were laid in stretchers, and were bonded with a fine yellow sandy mortar like that used for the base. Above the surviving brickwork the structure had been filled in with a mixed greyish-brown silty loam with occasional bands of black peat (5311). This contained frequent oyster shells and fragments of brick and pottery of Victorian date.

The west side of this structure and its backfill were truncated down to the surviving bricks by a bulbous pit 5310, which bottomed within layer 5304, and had a steep-sided V-profile and a narrow flat base. The base of this feature contained large fragments of brick rubble, perhaps intended for drainage. Above this it was largely filled with greyish-brown silty loam (5308) containing frequent brick rubble. There was also domestic rubbish including animal bones and a ceramic sugarbowl of late 18th or early 19th century manufacture.

In the top fill 5308 was overlain by garden soil (5301) that covered the western end of the trench. It is possible that this soil also extended the full length of the trench, as the cuts for features 5010, 5018 and 5019 were all indistinct at the top, suggesting that cultivation had subsequently mixed them. A final layer of soil with large patches of mortar and rubble (5307) was dumped into the hollow in the top of the pit, prior to the construction of a north-south brick wall 5305.

Wall 5305, which continued both north and south of the trench (Fig. 21), was only one brick thick, and bottomed within layer 5301. On the west it was abutted by a light brownish-cream mortar with tile and brick inclusions (5300), make up for a concrete floor. Adjacent to it on the east side in section was a brick structure 5306, which extended 1.85m east of the wall, and was made of 19th or 20th century bricks bonded with a cream mortar. It survived nearly 0.5m deep, and its base was only just above that of wall 5305. The limits of this in a southerly direction were not recorded. This structure had been demolished and infilled with another greyish-brown silty loam (5309) containing much demolition debris, including pottery and glass dated to 1880-1930. Layer 5309 extended eastwards along the trench, but faded out just before pit 5325 (see below).

Visible in the surface of layer 5304 at the east end of the trench was a large sub-rectangular modern pit 5325, whose upper fills were excavated by machine (Fig. 21). The lower fill observed was a dark

grey-brown silty loam with frequent brick rubble (5327), and a sample brick proved to be of late 18th or 19th century date. This was overlain by over 1m of modern backfill (5326), which included wiring, plastic and carpet.

WATCHING BRIEF

Extent and scope of work

The southernmost and northernmost parts of the development area, the area south of Jack Street and that north of 39 Northbrook Street, were only investigated by evaluation trenches, the results of which have been described above. The central part of the site, from Jack Street north to 39 Northbrook Street, was subject to an archaeological Watching Brief (Fig. 2). The area between Jack Street and Marsh Lane, which included excavation Area 1000, only involved the recording of a very limited additional area, but the majority of the area from Marsh Lane northwards (25-39 NBS) was recorded.

The majority of the development site was to be occupied by a large building complex with basements, and so was taken down by machine by 3m or more (Plate 40). Watching Brief took the form of cleaning and planning (the majority using digital survey), numbering, photography and limited surface finds retrieval (Plate 41).

As the reduction in level was carried out in small areas at a time, sections at the edge of surviving areas were occasionally available for photography and for sketch sections, but the pace of work (see Plate 42) did not allow hand-excavation of any of the features, nor detailed recording in plan or section.

As the resulting plan shows, about 70% of the area was planned, and more than 340 features were recorded, plus a number of layers. Only some 80 features, or less than 25% of the total, produced any dating evidence at all (see Fig. 26), and in many cases this consisted of single fragments of pottery or ceramic building material, which may have been residual or, in some cases, intrusive. In all but a very few cases, the Watching Brief did not investigate the surviving depth of the revealed features, and so it is impossible to decide whether the recovered finds were from the top or bottom of the features from which they came, ie whether they date the construction, use or eventual backfill of these features.

Historic map regression (Figs 22, 23 and 24) and buildings survey information

A historic map regression was undertaken to trace the development of the properties, and in particular the date of appearance of various buildings within them. Historic maps for Newbury begin with William Stukeley's Plan of Newberry and Spinae, 1723, and the Map of Speen Manor commissioned by the Duke of Chandos in 1729/30 ('An Accurate Survey of Speen Mannour in the County of Barks belonging to His Grace Duke Chandos'). Then follows Rocque's map of Berkshire of 1761, but none of these earliest maps are detailed. The first detailed town map is Willis' Plan of the Town of Newbury and Speenhamland of 1768, held in the Berkshire Record Office (BRO/PM123; here Fig. 22), and although somewhat distorted in scale, this shows the main tenements, the lanes between them and the buildings within them. While the buildings are only shown in outline, the variation from tenement to tenement shows that Willis was attempting to present a true picture of the layout for each tenement, and where the layout is sufficiently distinctive, it clearly corresponds broadly to that of the later, 19th century plans of the corresponding tenements.

This is followed in 1817 by the Old Series no.12 map of 1817 at 1" to 1 mile. The Tithe map of 1839 is the second detailed map (Fig. 23), and is of a similar level of accuracy to the 25" to 1 mile Ordnance Survey maps that follow, beginning with the 1st edition map of 1864. A more detailed

version of this OS map at 1:500 scale was completed in 1880-81 (Fig. 24). This does not differ except in the level of detail from the 1864 map, so references below to the 1st edition OS map apply equally to the 1864 and the 1880-81 maps. Cornelius Davis produced a map entitled Ten Miles round Newbury in 1849, which included a larger-scale fairly detailed map of Newbury and Speenhamland, spanning the gap between the Tithe Map and the 1st edition OS map, but this is not as accurate in the east-west dimension as the maps that preceded and followed it. It is generally very similar to the 1839 Tithe map, but omits, or shows only as lines, some buildings already present on the Tithe map, so this map is not believed to represent a further detailed survey, and was probably copied from the pre-existing map, and is not illustrated. A 2nd edition 25" to 1 mile map was issued in 1900 and a third in 1933-4. A further OS map appeared in the 1960s. Note that modern property numbers have been added to the 1880-81 Ordnance Survey extract used in Figures 24 and 25 to help locate their positions relative to existing buildings.

The historic map evidence therefore provides a view of the number of tenements, and the degree to which these tenements were built up from the later 18th century, and where buildings were enlarged, demolished or newly constructed thereafter. The detailed historic maps were matched as closely as is possible given their level of accuracy to the overall excavation plan to see if excavated walls and foundations could be linked to specific buildings, and to assist in their dating (see detailed report below). Figure 25 uses the 1:500 OS map of 1880-81 to illustrate this process. In the description and discussion that follow, the modern property numbers added to the map have been used to refer to the historic plots.

All of the detailed maps show an arrangement of parallel long thin plots east of Northbrook Street, which have plausibly been regarded as burgage plots dating from the original layout of this part of the town (OA 2006, 10 and 12). On the accurate 19th century maps of 1839 and 1864, the plots towards the northern end of the street are not straight. The northern boundary of plot 37 runs ENE, so that this plot widens eastwards, before the boundary turns almost east again, and the same alignment is followed by subsequent plots to the north, which show a slight curve of the boundary southwards towards the east end. This shape probably reflects the reverse-S shape of the cultivation strips from which these burgage plots were created (or at least the ploughing used to mark out the plot boundaries), and although masked by the greater number of buildings, hints of the same are still evident in the plots further south, including the line of Marsh Lane itself.

The date of establishment of these plots remains uncertain, but the Amyce survey of the town carried out for King Henry VIII in the 1550s (NA LR2/187 Folio 112-116) has a long list of occupied tenements all the way along Northbrook Street, with only one possibly vacant plot at the very north end. As the Amyce survey also mentions previous owners for most of these tenements, we can be fairly sure that the plots were already established by the early 16th century. The survey of the standing buildings carried out as part of the development (Appendix 2) only identified one building with surviving 16th century elements (Appendix 2: Gazetteer OA 33), but this was towards the north end at Nos 44-5 Northbrook Street, suggesting that the street was built up this far by the 16th century. This question is considered further in the Discussion.

The 1768 Willis map (Fig. 22) shows the whole of the east side of Northbrook Street as built up, with only narrow entrances between the buildings to the backyards. The north end of this block of burgage plots is Speenhamland Water, a branch of the Kennet that ran west to east, and fed a north-south watercourse forming the eastern limit of the plots. This is straight, indicating that it was a man-made ditch, and emptied into the Kennet at the south end. There was no road marked at this end of the block of properties, although a number of widely-spaced buildings are marked alongside it. Towards the north end a particularly wide gap occurs, but there is a further building just south of Speenhamland Water. The land to the east was open ground called The Marsh.

Marsh Lane is evident, though not named, and the southern frontage of this, within plot 24, was completely built-up. This is the plot marked on the 1:500 OS map of 1880-81 as containing the remains of the house of Jack of Newbury (John Wynchcombe), who is reputed to have employed several hundred workers in the first clothing 'factory', so these buildings may represent part of the complex built by him. North of Marsh Lane there was a corresponding long building towards the east end, but the western half was largely undeveloped.

By the time of the 1839 Tithe Map (Fig. 23), the north side of Marsh Lane is also fully developed, with a single opening halfway along. There is an almost continuous line of buildings along the east side of the block, very little altered in Davis' 1849 map or the 1st edition OS map of 1864. A road fronting these buildings (Marsh Road) is only marked on the last of these maps, so may be a mid-19th century addition, but the degree of development by 1839 probably indicates that it was already in existence by then, but was simply not marked on the Tithe Map or Cornelius Davis' map of 1849. The 1817 Old Series OS map does not allow any detailed comparisons, but appears to have more buildings down the east side than shown on the 1768 map, though fewer than in 1839, suggesting a gradual development at this side of the block. Interestingly, Ebenezers, one of the properties named along Marsh Road on the 1st edition OS map, was still standing when the development began, and was of late 18th or early 19th century origin, ie built between the date of the Willis map and the 1839 Tithe map (Appendix 2: Gazetteer OA 11).

The 1st edition OS map (Fig. 24) shows that burgage plots 26 and 27 were occupied by a brewery, (marked as a brewhouse on the 1839 Tithe Map) with access both to Northbrook Street and to Marsh Lane. The brewery still survived at the start of the redevelopment, and buildings survey confirmed that it was of later 18th century date, presumably built soon after the Willis map was drawn (Appendix 2: Gazetteer OA 7-8). The Castle public house occupied No. 25, the corner of Marsh Lane and Northbrook Street, with a Baptist Chapel and Sunday School between this and the brewery. In 1839 there was a long narrow line of buildings along the south edge of plot 26, with open space to both north and south, but by 1864 the Baptist Chapel had a Sunday School behind it, the east end of the narrow building had been demolished to create one large yard.

East of the access on Marsh Lane was a malthouse (possibly an enlargement of the narrower building shown on the Willis map). This was also still standing at the start of the development, and the buildings survey confirmed that it was built in the early 19th century (Appendix 2: Gazetteer OA 4). Beyond this were cottages with front gardens along Marsh Road, which replaced a single building shown on the Willis map. North of the malthouse was a garden, bounded along the north side by a row called Brackley Cottages, fronting onto a lane with gated access to Marsh Road. This lane occupies the east part of plot 29. Within plot 28 there was clearly a division east-west between these cottages and the buildings to the west, and a little west of the end of the cottages the lane was blocked off by a building, emphasising the division of the former plots into two halves. Only the buildings at the Northbrook Street end are shown on the Willis map of 1768, but this arrangement of buildings was already evident on the 1839 Tithe Map, so it appears that these developments occurred either in the late 18th or early 19th centuries.

A narrow lane called Northbrook Place ran most of the length of plot 31, except for a building fronting onto Northbrook Street at the west end. Plot 30 to the south of this is shown as largely built up on the 1839 Tithe map, and the only open area (towards the east end) had buildings added by the time of the 1st edition OS map.

Plots 31, 32 (and possibly much of 33) were clearly held in common by this time, as behind the frontage of 32 were two rows of terraced houses with gardens backing onto Northbrook Place

within plot 31. Between them was another unenclosed area lined east and west by sheds and other small buildings. The building at No. 33 fronting onto Northbrook Street had only a short backyard, behind which was a long garden in front of the terraced houses to the south, and with a narrow access to Northbrook Place towards the east end. The garden was blocked off from Marsh Road by a separate property called Ebenezer's, built in the late 18th or early 19th century (Appendix 2: Gazetteer OA 11).

Plots 34, 35, 36, 37 and 38 all had similar arrangements, with buildings fronting Northbrook Street and Marsh Road at the ends, and long gardens between. A very narrow lane (Compton Place) gave access between Northbrook Street and Marsh Road between Nos 35 and 36. As previously described, north of this the plots have a slightly curved outline, probably reflects the strips from which these burgage plots were created. The greatest change evident between 1768 and 1839 was in properties 34-36, all of which had only narrow buildings on the Northbrook frontage in 1768, but had acquired substantial extensions by the date of the Tithe map. The building on the Northbrook Street frontage at 38a surveyed at the start of the redevelopment was possibly of 17th century origins (Appendix 2: Gazetteer OA 25-26), and the town house at 38 of later 18th or early 19th century date (Appendix 2: Gazetteer OA 23-24).

A number of small buildings extended behind the frontage of No. 37, and these may have been present in the mid-18th century, as the building on the Willis map also extends further east than those to the south. The buildings fronting onto Marsh Road: Ebenezer's, Compton's, and another within plot 38 to the north, may also have been present by the later 18th century, although these properties were mostly enlarged, or acquired additional buildings, during the 19th century.

The same general disposition of buildings is shown on the 1st edition OS map of 1864 (and the more detailed version of 1880-81), again indicating that the development of these plots had mainly occurred in the late 18th or early 19th century. One building straddling plots 31 and 32 behind the frontage was demolished between 1839 and 1864, enabling Northbrook Place to extend further west, and the location of the small buildings or sheds in the central area on the north side also changed between these dates.

The maps of 1900 and 1933-4 show relatively little change, the main one being the demolition of Brackley Cottages between 1900 and 1933, and the construction of two new buildings within their former gardens. There was also a little infilling on the north side of Northbrook Place, and buildings extend a little further back from the frontage in plots 34 and 35. It is not until after the 2nd World War that this pattern broke down, with the demolition of many of the buildings behind those in the Northbrook Street frontage. This included the rows of cottages that had formerly run along plot 32, with their gardens fronting onto Northbrook Place, and almost all of the buildings in plot 30. As a result, the historic line of Northbrook Place was lost, and this area is marked as a car park by the time of the 1960s 1:10,000 OS map.

Description of the archaeological features compared with the historic map evidence

General considerations

The historic maps have been compared with the recovered plan in an attempt to clarify the identification of the linear features, and also to assist in dating them. An overlay of the archaeological features upon the 1:500 Ordnance Survey map is shown in Figure 25. This has been helpful in a number of cases, though the inaccuracies of the historic maps earlier than the OS series means that it is not always possible to match features for certain. In a few cases this has shown that the recovered dating evidence consists of residual material, as might be expected, and more of the

features may in fact be later than indicated.

As described in the Scope of Work, the dating evidence recovered for archaeological features identified in the Watching Brief is very limited (see Fig. 26), and the reliability of this material, recovered from the surface, is open to question. Issues of potential residuality also complicate its use. These caveats mentioned, however, the material recovered during the Watching Brief is otherwise the only evidence available, and where the map evidence does not help, has been taken as providing a general indication of the period to which these features might belong.

Due to the uncertainties of dating, the description adopts a varied approach. Where relatively coherent areas were recorded, these are described together. Otherwise most of the features are described by type rather than individually, eg pile rows and wells, although single or clustered features of particular interest are described in more detail. Plans showing the numbered archaeological features and layers characterised by type are illustrated in Figures 27-9.

No excavation was carried out along the Northbrook street frontage, so the antiquity of this street and its properties relies on documentary/map evidence, and on the age of the oldest surviving buildings (see Appendix 2, Gazetteer of Historic Buildings). The closest area of excavation to this was that in Block C.

Block C: Plot 35 west (Fig. 27)

This area lay just behind the surviving buildings of plots 34 and 35 fronting onto Northbrook Street. It was excavated in stages, the eastern part being stripped and recorded first, then the western part, which consisted of three east-west strips that did not quite meet up. Consequently, the relationships between deposits in the separate strips was not always clear.

Stripping of loose brick and tile rubble 4100 revealed the remains of more than one building. Running east-west on the south were the concrete footings faced with breeze blocks of a later 20th century building 4101, just over 6m wide. Between these walls was a mixed layer of mortar patches and dark grey-brown sandy silt, 4115, containing brick and tile rubble. This was interpreted as a demolition layer reused as make-up associated with the building. It overlay a dark grey-brown sandy silt 4117, with small stones and much Victorian pottery including Willow pattern. This was 0.26m deep, and was interpreted as a garden soil. Below this was a very similar soil, at least 0.22m deep, but numbered 4118 due to a lens of charcoal separating the two, and a difference in inclusions, as 4118 contained oyster shell, small tile and brick fragments and stones. No Victorian pottery was found within it.

At the west end of this building, and with an uncertain relationship with 4115, were the remains of an earlier brick building 4116, whose walls were oriented north-south at a slight angle to those of 4101. All of the walls were 0.22m wide, and were constructed of thin red bricks bonded with a sandy yellowish-brown mortar. A sample brick was taken for examination from wall 4104, and this was 50mm thick, suggesting a 16th century date. All of the walls survived 4-5 courses high.

The east wall was 4102, which survived 3.76m long, and may have been used as a partition wall within the later building 4101. Abutting the west side of this wall at right angles was wall 4103, which survived only 2.4m long, beyond which was a gap just over 2m long before wall 4104 returned southwards parallel to 4102. This wall terminated in line with the north edge of 4103, and was 3.5m long, returning eastwards as wall 4105, of which only 2.4m survived.

Within the structure was a firm make-up layer consisting of a dark grey or black sandy silt with

patches of charcoal and mortar like that in the walls, numbered 4109. This was very similar to layer 4114 outside the building on the west, except that 4114 included small brick and tile rubble, and the two may both have been levelling in and around the building. Layer 4109 was overlain by a worn brick floor 4106, which abutted walls 4102, 4103 and 4104 (Plate 43). It comprised a single layer of bricks of various sizes, probably indicating patching on at least two occasions, and the surface was undulating, not flat. The bricks were stained black by soot or charcoal, and there were patches of a light glass-like black residue suggesting an industrial process. Two sample bricks were taken, one 50mm thick and possibly Tudor, the other 70mm thick and of late 18th or 19th century date.

To the west of structure 4116 the modern overburden was numbered 4119, and was up to 1.2m deep. It overlay layer 4122, an area of tenacious light grey clay with gravel, tile, chalk and charcoal inclusions. This contained a well-preserved ridge tile of 15th-17th century date and a fragment of wine bottle glass, the latter not closely dateable. Constructed upon 4122 were the remains of a brick building of which up to 3 courses of walling survived. Wall 4130 ran north-south, and was built over a shallow flint foundation of rough undressed nodules, with a bedding layer of mortar. The wall was 0.5m wide and survived 2.3m long, bounding a mortar bedding layer overlain by a brick floor 4129 to the west. The floor ran west for at least 3.3m. The end of a further brick wall running west at right angles was observed just before the west edge of the trench, surrounded by the floor on both the north and south sides. This wall was of similar width to 4130, but no further details are given.

The north edges of the floor and the wall were clearly defined, and both wall and brick floor clearly continued southwards, but the overburden was not removed here, and no trace of the building was seen in the adjacent trench 1.75m further to the south, (ie within plot 34), so these buildings presumably abutted the south wall of this plot, and were no more than another metre north-south.

Around 2.5m east of wall 4130 was a parallel wall 4133. This was another brick wall 0.5m wide, and was constructed of handmade rough red bricks set into a hard white lime mortar. It was traced for 1.4m, ending clearly on the north some 0.75m south of the end of 4130. Between these walls was a mortar floor 4134, overlain against wall 4133 by a deposit of heat-reddened clay and tile, from which an unfrogged brick of Tudor date was recovered. Although there was a disturbance immediately north of much of these deposits, wall 4130 was abutted on the east by a rammed chalk floor 4136 north of the end of wall 4133, indicating a division here. The chalk floor was 1.6m north-south, ending in a clear east-west line 0.55m beyond the end of wall 4130. East of this floor, which did not extend as far as the line of wall 4133, was a dark brownish grey peaty clay with ash and charcoal, layer 4132. It surrounded the north end and east side of wall 4133, but its relationship to the building, and to layer 4135, was not clarified. It was interpreted as a redeposited levelling layer. It is possible that it represents more of layer 4123, with the addition of charcoal and ash, perhaps derived from burning upon layer 4135, which was tentatively interpreted as the base of a hearth.

Only 0.25m north of the chalk floor was the southern edge of a spread of silty sand and gravel 4131, which extended along the whole length of the exposed building, continuing beyond the excavation to the west. At the east it faded out just beyond the line of wall 4133, just before a modern pile foundation. Its extent suggests that it was probably an external surface, possibly a path, associated with the building just to the south.

The recorded walls can be matched to those of two buildings shown on the 1st edition OS map of 1864, but are in areas without buildings on the 1839 Tithe map and the Willis map of 1768. They therefore probably belong to the buildings constructed in the mid-19th century. The area west of wall 4130, and that east of 4133, appear to belong to two separate buildings, the area in between

being shown open on the 1864, 1900 and 1933-4 maps, although the last of these marks an east-west division roughly in line with the end of wall 4133. This may perhaps mark the site of an external oven.

Block C: Plot 34 west (Fig. 27)

Some 3.5m south of structure 4116 were the remains of a roughly north-south wall 4107. The construction trench for this cut into an undated demolition layer of clayey silt with much mortar and tile and brick rubble, 4108. The wall was 0.33m wide but only survived 0.6m long, although traces of the robbed wall were visible over 1.6m. It was constructed with bricks 60mm thick bonded with a hard light grey mortar, and abutted the wall between plots 33 and 34 to the south.

Nearly 5.5m to the east was part of another brick wall 4110, constructed of very similar bricks and mortar, and on a very similar alignment, just east of south-north. Less than 1m to the south, a machine-excavated pit revealed a structure with brick walls on the south, west and east, enclosing an area just over 1.5m wide (E-W) and at least 2.6m long. The walls were built with unfrogged red bricks 60mm thick, and survived at least 1.2m high. Wall 4111 was offset slightly from wall 4110, and on a slightly different alignment, so the two were not necessarily part of the same structure. Inside the walls was a blackish sooty soil, but excavation of this was not observed, so its depth is uncertain, and no finds were recovered.

Wall 4112 apparently abutted the boundary wall between plots 33 and 34. These walls match a structure marked at the south-east corner of a building shown on the 1st edition OS map, but not on the 1839 Tithe map, so this was probably built in the mid-19th century.

West of this, overburden 4119 overlay 4120, an area of tenacious light grey clay and flint nodules, some up to 0.3m thick, that may have formed a foundation. This merged into a similar clay 4122 on the east, but with gravel, tile, chalk and charcoal inclusions. This contained a well-preserved ridge tile of 15th-17th century date and a fragment of wine bottle glass, the latter showing that the deposit was later 17th century or later. The limits of both layers were irregular. Layer 4122 overlay 4121, a similar but mid-grey silty clay with more chalk, flint and gravel, and also a dark grey/black clayey peat 4123, in whose top were frequent fragments of peg tile of 16th-18th century manufacture and pottery. None of these deposits was excavated.

Cutting 4122 was 4124, a square structure 1.8m across oriented east-west by north-south, lined with reused broken bricks loosely bonded with sandy clay. The bricks were unfrogged, 65mm thick, and date to the late 18th or 19th century. A line of bricks extended westwards from the north-west corner for 0.7m up to the edge of 4123, suggesting that there was originally a wall here. Internally the structure measured 1.3m across, and the exposed fill was a mixture of silt and rubble 4125. This lay within a building marked on the 1839 Tithe map, and still present in 1864 and 1900, and was interpreted as a latrine. East of 4124 overburden 4119 covered another make-up layer 4126, this time a mottled grey, yellow and brown silty clay containing similar inclusions to 4122, with which it was probably contemporary. This layer extended north across the full width of plots 34 and 35.

North-west of 4124, and also cut into 4123 and 4122, was the cut for a circular chalk-lined well 4127. This was 1.25m in diameter, and the lining consisted of small and unshaped lumps of chalk 0.15-0.2m across bonded with clay. It was filled with a loose greyish-green clayey silt 4128, and capped with brown clay. There were no finds, but as it cut 4122 it was clearly post-medieval, and the small diameter also indicates a late date. The colour of the fill suggested to the excavators that it might have been a cess pit, but the internal diameter was only 0.9m across, too small to have emptied, so use as a well is most likely.

The Watching Brief subsequently observed the excavation of a new manhole on the boundary between plots 37 and 38, and also recorded a section at right angles adjacent, again straddling the boundary. The soil sequence in the manhole, which was 3.7m deep, comprised 1.2m of modern make-up and demolition material 4137, over a cultivated soil horizon 4138, around 0.5m thick. Below this was a layer of light grey silty clay with flints, pebbles, chalk and mortar flecks and charcoal. This may have been equivalent to 4121 or 4122 in the adjacent plots, but there were no finds. At the base of this was a mixed horizon of similar clay, chalk and charcoal and patches of peat numbered 4140, and this overlay 1.6m of peat deposits, layer 4141, over the natural gravel. A sherd of post-medieval internally glazed redware, probably of 19th century date, was recovered from the surface of the peat.

In the section at right angles the boundary wall between plots 37 and 38, here numbered 4143, lay immediately below the general demolition spread, and had a thin bedding of cream-orange mortar. There were buildings marked within plot 37 on the Willis map of 1768, and on all subsequent maps up to and including 1933-4. This overlay a brown clay loam 4144 equivalent to the cultivated soil 4138, and this overlay a grey-brown sandy silt 4145 containing gravel, oyster shell and animal bone and occasional tile fragments, up to 0.6m deep. This may be equivalent to layer 4118 to the south-east. It overlay up to 1.6m of peat deposits 4146 over natural gravel.

The eastern boundary of the site (Figs 27 and 28)

At the east end of the site, along the west edge of Park Way, a succession of N-S boundaries was found. The most prominent were two broad lines 4-4.5m apart, the western (comprising 6080, 6159 and 6199) following the modern limit of the plots, the eastern (made up of 6081 and 6244) lying a little way east of the edge of the pavement. A short length of the base of a brick wall was recorded within 6159, and a brick culvert 1.22m wide running along the west side of 6199. The latter is presumably a culvert built to carry the open stream shown on Willis' map of 1768; a brick arch oriented north-south in evaluation trench 5 probably relates to it, perhaps taking water from plot 26 into the stream further east. The bricks used in the culvert were 70mm thick, indicating a date of the 18th or early 19th centuries, suggesting that the stream was culverted between 1768 and the Tithe Map of 1839, by which time the eastern frontage was built up.

The two broad north-south features also correspond very closely to the edges of Marsh Road on the 1st edition OS map of 1864, and subsequent editions in 1900 and 1933-4. The wall seen in 6159 may belong to a boundary wall rather than the culvert. The more easterly feature 6081 was not directly dated, but cut gully 6082, which contained Victorian pottery and a knife, so was presumably later 19th or 20th century. It was also recorded as cutting irregular feature 6229, which contained polystyrene, so appears to have been altered in the later 20th century.

Several east-west ditches or foundations end just short of the western of these, such as 6075, 6073 on the north and 6215 further south, and east-west ditch 6163 was cut by, but did not continue east of, 6159. Similarly 6082 on the east ran up to, but did not continue beyond, the eastern line. No east-west ditches were found crossing the area between the two north-south lines, supporting the possibility that the western line marked a long-standing limit to these burgage plots.

A number of smaller north-south features were found between the western and eastern lines; some such as 6241 and 6196 were probably drains or pipe trenches like 6248 further south, but 6156 and 6236, which terminated in line with east-west ditch 6163 to the west, may mark earlier phases of this limit.

Further south (just north of the junction with Marsh Lane) the limits of Marsh road were not recorded, but the western boundary of Marsh Road probably lay between the recorded areas, and as Marsh Road widened, the eastern limit was not reached.

Marsh Lane cottages (Figs 28 and 30)

North-east of boundaries 6476 and 6478 was a sub-rectangular pit 6472, some 1.8m long (east-west) and 1.3m wide, with a brick-lined circular structure 6474 in its south-west corner, surrounded by 6471, the stony loam fill of 6472. The brick-lined structure had an internal diameter of 0.9m, and measured 1.2m across. It was constructed of broken unfrosted half-bricks of late 18th or early 19th century date, laid in header construction, without obvious bonding. The fill inside the brick lining was similar to 6471 outside. East of this the end of a rectangular pit 6470, 0.6m wide and at least 1m long, was exposed, with a blackish-brown loam fill 6469 with frequent stones, brick and tile fragments. The pegtile fragments were of late medieval, 15th or 16th century type; the brick fragments were described as similar to the half-bricks used in structure 6474.

To the north of 6470, and at right angles to it, was a large roughly rectangular cut 6466, not fully exposed, but approximately 3.1m long and 1.2m wide, with timber lining 6475 along the west edge (Fig. 30; Plate 44). The timbers comprised at least three vertical planks with pointed ends surviving 1.2m long, and one horizontal. This was probably part of a horizontal plank lining held by vertical driven planks. Within the east side of cut 6466 there was a gravelly bedding layer 6467 topped by a floor 6468 consisting of a single layer of unfrosted bricks laid on edge, with traces of a sandy orange mortar between them. The bricks were mostly 0.26 x 0.10m x 0.065m, ie of late 18th or 19th century date. All of the features in this area lay within the front yards of Marsh Cottages, not present on Willis' 1768 map, but present on the 1839 Tithe map. Cut 6466 was probably a brick-floored shed, and 6474 a well, latrine or compost pit.

The north-east edge of floor 6468 was recorded as apparently overlain by a flint and silty loam layer 6473 with pegtiles and animal bone, which extended east to the limits of the site. There was however an unobserved strip between the main exposure of this layer and that containing brick surface 6468, and only the edge of 6473 was seen here. The pegtiles from 6473 were dated to the late medieval period, 14th-16th century. Spread 6473 ran east across the line of the former Marsh Road, and was cut by a modern north-south pipe trench 6248 within Park Way, but no trace of the wall bounding Marsh Cottages, nor of Marsh Road itself, was seen. It seems more likely that 6473 did not in fact overlie 6468, but was an earlier late medieval levelling layer dumped at the east end of the tenement block.

About 3m north of 6466 was an irregular linear feature 6249, also on a north-south alignment, some 3m wide and 9m long. This contained fifty two small roundwood or split roundwood stakes (collectively numbered 6251) up to 0.12m across, axe-trimmed to rough points, and spread all along the feature, but not in clear lines (Plate 45). These were surrounded by a mixed dark grey and yellowish brown gravel and rubble fill, including bricks and tile. They probably represent piles associated with post-medieval dumping, possibly to support the east wall of the Marsh Lane cottages.

It was cut by features 6250 and 6252. The first of these, 6250, was a square pit some 2.2-2.3m across, with traces of a timber lining in places. This had a mixed clay, gravel and brick fill. Feature 6252 was lined with a single thickness of bricks measuring 230mm by 110mm and 70mm thick, laid end to end and bonded with concrete. This structure was clearly of 19th or 20th century date, and was interpreted as the base of a cess pit. A single small rectangular pit 6247 was found east of 6249, with a mixed fill but no finds.

Evaluation trench 5 partly overlapped this area, and revealed that there was a brick drain running west-east just north of this area, and another wall with an arch on a NNE alignment north of that, the arch perhaps to relieve the weight of the wall, as is common in post-medieval walls (cf Hampton Court). This structure is likely to predate the row of Marsh Cottages established by 1839, but broadly corresponds to the likely position of a building shown on the Willis map of 1768.

Other pile groups and alignments

A second area of piles 6228, rather like those of 6251 described above, was found further north along the eastern edge of the site in plot 30. There were at least 13 circular uprights (not described in detail or sampled), covering an area of 3m east-west and 2m north-south. Some of the posts formed east-west and north-south lines, but they probably also represent a localised area of strengthening prior to the construction of the buildings shown on the 1839 Tithe map.

Around 10m north-east of this a single row of at least 17 wooden piles 6243 ran south-north for about 5m. The posts, which had been driven into the top of the peat, were up to 0.10m across, and were roundwood posts that had been axe-trimmed. The most regular had been trimmed into a triangular cross-section ie with three faces, though others were more irregular. This row lay just east of ditch 6159, and is likely to date from before the culverting of the stream, perhaps forming a barrier to animals grazing on the Marsh to the east.

Linear alignments of wooden piles were also observed running east-west along the south edge of Marsh Lane (6476 and 6480) and along the boundary between plots 25 and 26 (6391-6401).

The pile row 6476/6480 ran for over 12m, and consisted of a double row of at least 28 staggered uprights forming a band 0.42m wide, driven into 6471, a dumped post-medieval levelling layer (Fig. 30; Plates 46 and 47). The stakes were generally trimmed to a rectangular cross-section, though bark was commonly left on one or more sides. On the east, where the row was numbered 6476, they were on average 0.18m by 0.07-0.13m across and 0.7m long, trimmed to a point at the base. One post was retained (see Goodburn below, timber 6484). Towards the west end, where it was numbered 6480, the piles were smaller, and were overlain by a flint footing 6481. There were no associated finds, but these piles, which in places were close-set (Plate 47) may have formed supports for the wall at the front of the cottages along the south side of Marsh Lane.

A parallel line of long decayed timbers was sketched (but not recorded in detail) some 5m further north a little further west, lying horizontally on an east-west alignment in the surface of the peat. These were not contiguous with one another, but may possibly represent another form of wooden strengthening for buildings on the north side of Marsh Lane.

North of boundary ditch 6390 was a group of nine upright timbers, individually numbered 6392-99 and 6401, and collectively numbered 6400. All were squared, most 80mm across, the largest 100mm. 6401 was retrieved, and survived 0.35m long with the end trimmed to a point. The timbers ran in a rough double alignment on a broadly east-west alignment over a distance of 1.3m, and were generally 0.6m apart, but were very irregularly spaced. They presumably represent another row of piles supporting a wall foundation.

Preserved wooden pile rows were thus confined to the south and east parts of the site, but north and west of this there were several posthole alignments that may have performed a similar function.

Posthole lines

A band of postholes in angled rows of two or three was found along the boundary between plots 34 and 35. There were two groups with a gap in between, the eastern group numbered 6015-7, the western variously 6025-6, 6030 and 6031. The eastern group, which covered an area 3.75m east-west and 3.5m north-south, were generally circular and 0.45m across, and were filled with a greyish-brown silty clay containing stones, chalk and small brick fragments. No dateable material was found. Either of adjacent postholes or small pits 6022 and 6023 may also have been part of this group, but both were somewhat larger, being respectively 0.67m by 0.54m and up to 0.8m across. Feature 6022 cut adjacent ditch 6021, 6023 was cut by it. As 6021 contained late 19th or 20th century brick, it seems more likely that the posts were earlier than that this represents a 20th century foundation.

The western group, which ran for 12.5m east-west and covered a band up to 1.75m wide, were generally slightly larger, group 6026 averaging 0.5m across, groups 6025 and 6031 0.6m across and group 6030 0.55 by 0.90m, and varied in plan from circular to rectangular. They were filled with a brownish-grey silty clay including small stones, and in a few cases brick fragments. This western group may be made up of three separate lines of postholes, or a single line and another paired line, as only a single line was present at the west end of the group, but as ditch 6021 was converging on the line at this end, it is possible that further postholes had been removed by it here. No dateable finds were recovered from any of the postholes.

North of this, and roughly in line with the boundary between plots 37 and 38, was a band of postholes 6005 running for a distance of .28m east-west. For some of its length there were only single postholes, but for the rest there were two lines of staggered postholes. The postholes were sub-square, averaging 0.5m by 0.45m across, and were filled with a greyish-brown silty clay containing small brick fragments, chalk, flint and flint gravel inclusions. A few instead contained a light reddish-brown silty sand with flint gravel and fine sand. None of these contained any finds, but were most probably post-medieval.

A short line of postholes 6174-7 was found running north-south across plot 26 halfway along. They measured 0.5-0.7m long and 0.4-0.5m wide, and all were filled with grey silty clay, varying quantities of gravel, tile/brick and chalk fragments and flints. None contained any dateable finds. The exact position of these in an east-west direction is uncertain, as they were only sketch-planned, but it is clear that they lie east of foundation 6111 within an area that was open from 1768 onwards, and within a garden in the 19th and early 20th centuries.

A further line of three rectangular postholes, all numbered 6030, ran east-west along the boundary between plots 33 and 34. No finds were recovered, but the westernmost was cut by foundation 6027, which contained finds of 18th century date. The line was parallel to linear 6028, also cut by 6027, and itself containing finds of late 17th or 18th century date, and perhaps also dates to this period, though the postholes could be earlier. To the south similar posthole 6037 (replaced by 6033), though undated, may also have been associated.

Another short line of 3 postholes 6286, 6288 and 6290, the last still containing a wooden post, ran south-north across the southern half of plot 38 over a distance of 2m. All three were circular, 6286 only 0.3m across, the other two 0.5m in diameter, and all were filled with packing in a matrix of dark, brownish or greyish-black silty clay. Packing in 6290 (6291) was of small flints, that in 6288 (6289) broken tiles, and that in 6286 (6287) a mixture of both. The tile in 6289 was of medieval, 13th-14th century manufacture. The post in 6290 was at the north side, was squared off, and measured 0.13m by 0.10m across, but was not retained. Some 5m to the south-east, two more widely spaced postholes 6292 and 6294, both 0.55m by 0.35m, and with similar blackish-grey silty

clay fills, may also have been associated. Fill 6293 in 6292 included ceramic building material and oyster shell, but this was not kept, so neither feature is dated.

No buildings are recorded on any of the historic maps along the western part of the more southerly line, but the eastern group may partly lie within a group of buildings shown within plot 34 on the 1839 Tithe map and the 1864 1st edition OS map. On both the 1839 and 1864 maps there is a small building at the very western end of the northern group, and a larger one towards the east end, with a boundary wall running between them. These lines may therefore represent postholes dug to take posts supporting the foundations of boundary walls and perhaps buildings. The absence of a clear correlation between the southern line and the boundaries on the historic maps is not conclusive evidence that this was not the function of this line; it may have belonged to an earlier boundary. Line 6174-7 may perhaps have been a fence within the garden of plot 26.

Digging postholes to take posts however negates much of the strength of supports, and the exact alignment of the historic maps in relation to the modern one is not certain. None of the supposed postholes contained posts or post-pipes, and it is therefore alternatively possible that these features instead represent groups of small pits, perhaps 19th century planting pits for small shrubs in beds within the properties, rather than the boundaries themselves.

Boundary ditches, building foundations and other plot divisions

Plot 25

Features 6460 (possibly continuing as 6478) and 6462 or 6446, respectively 2.5m and 3.75m to the north, may mark the edges of Marsh Lane. Feature 6446 may have continued west as 6423. 6460 had a brown silt fill with many small chalk and flint lumps, and was possibly the foundation of the front walls of the cottages along the south side of the lane, but there was no dating evidence. These cottages are marked on Willis' map, and may have been present much earlier. Linear 6446 contained much decayed mortar flecking in its pale brown silty loam fill, so may also have been a foundation, possibly of the malthouse marked on the 1839 Tithe map, though a narrower building was already here from 1768 at least. 6462 may then have been a ditch within the lane, but is also undated.

There is a short linear feature 6443 filled with gritty sandy clay and much small stone and brick (6444) at right angles running north, which bisects the distance between Northbrook Street and Park Way. This may represent the east side of a large building marked from 1839 onwards, though not present in 1768. Alternatively it may be a drain running from the Brewery Yard down to Marsh Lane just east of this building. The bricks from the fill of 6443 were machine-made and 70mm thick, so of later 19th or 20th century date. At the north end was a brick-lined structure 6441, probably a well or cistern, constructed with similar bricks to those in 6443. This may have lain within the brewery building. A short north-south feature to the east (6454) was probably another robber trench relating to the malthouse shown on the 19th century maps.

The 1768 map marks an east-west boundary within plot 25, and a narrow lane between 25 and 26, but both had all but disappeared by 1839, the brewery thereafter straddling both plots. No trace of the boundary within plot 25 was found, but there were two parallel short east-west ditches 6374 and 6439 within 26b, ie in the narrow plot dividing 25 from 26 proper. Both features contained soft brown, organic silty clays, and 6439 contained 13th-14th century peg tile and a sherd of Roman pottery. Both features are likely to predate the historic maps, and may have been medieval; 6374 cut an earlier pit 6377, but there were no surface finds. Another wider ditch, perhaps 5m long, lay on the same line a few metres further east, but this had a grey silty clay fill 6391 with much granular tufa, and no finds. This part of the plot had a building upon it in 1839, but by 1864 it had gone, only

to be replaced by another building by 1900. All traces of these buildings had been removed by machine before recording began.

Plots 26-29

The same is not true of plots 26, 27 and 28, which the map regression has argued were also held in common by 1839. Robbed foundation 6171 represents the south-east corner of the buildings that appeared between 1768 and the Tithe map of 1839, and remained in use (with minor alterations) until the later 20th century. It was cut by 6168, which followed the south edge of the building west, and both were cut by a well 6170 inserted into the corner.

Feature 6168 also lay along the division between plots 26 and 27. Layer 6018 may have masked a ditch along this line in the stripped area to the east, as a tongue of 6018 extends eastwards along its line. Some 3m east of this is the squared terminus of an east-west foundation 6131 containing much brick, lumps of cement and chalk. It was thought to be equivalent to 6191 some 6m further east, although the fill was grey clayey silt, chalk and gravel, together with oyster shell and animal bone. East of, and running south and north from this line, were features 6192 and 6190, the former 3.2m long and 1.05m wide, the latter 3.9m long and 1.1m wide. Both had grey silty clay fills including frequent flints, chalk fragments and occasional fragments of tile. The tile in 6192 was a small fragment of glazed peg tile of 14th-16th century date, and those in 6190 fragments of tile of 15th-17th century date.

No features are marked on any of the historic maps in this position, which was a garden from the time of the 1839 Tithe map onwards, until the 1960s. Then a small rectangular building occupied an approximately equivalent position, so the planned features may belong to this, but the finds suggest that they are earlier.

6131/6191 is in line with the southern terminus of north-south feature 6111, another square-ended foundation, 1.5m wide and 16.4m long, and filled with mixed rubble, peat, tile or brick and tufa. The two may well have been contemporary, although there was no direct dating evidence. Foundation 6111 however corresponds closely to a north-south wall shown on the 1839 Tithe map, projecting southwards from a row of buildings that completely filled plot 28. Foundation 6111 also continued north of these across plot 29, which appears to have been a narrow lane open at the east end. Projections from the buildings to north and south suggest that there was a gate here, one of several along the length of plot 29. Both the north and south projections had gone by the time the 1st edition OS map was made in 1864, dating these features to the early-mid 19th century.

The N-S foundation 6111 extended further south than is shown on the 1839 map, ending only a few metres short of the malthouse, with whose west end it was in line. It perhaps represented the original division between the brewery to the west and Brackley cottages and their garden to the east. By 1839, however, the garden had already been extended west to the end of the building in plot 37, and only a stub of the original boundary remained.

Brackley Cottages were not built in 1768, but are present on the 1839 Tithe map, so were of late 18th or early 19th century date, built within tenement 28. East-west feature 6114=6150 may mark the northern edge of the cottages, or a drain immediately north of it. 6150 contained a sherd of Victorian pottery (ie post-1830). Narrower ditch 6137 may mark the south limit, although the finds from the latter were of 15th/16th century date. It is just possible that this represents an earlier plot boundary between 27 and 28. The various short north-south slots between them (6122, 6123-4, 6141, 6143, 6148-9, 6153-5) are thought likely to represent foundations belonging to the cottages, though the only one that was dated (6148) contained only 16th/17th century brick fragments.

Features 6123 and 6124 were wider, and neither contained any brick or tile, so may have been earlier. More than one phase of activity is clearly represented, but nothing was recovered to characterise the earlier activity. The latest phase included a brick structure 6116, consisting of three walls, the north wall being 4.5m east-west and the east and west walls 2.25m north-south.

A number of small pits and postholes in the same area may be associated with the construction; those cut by 6114 and 6137, like 6112, 6113 and 6138, are presumably earlier. Three intercutting postholes just north of the building, 6118 cut by paired postholes 6119 and 6121, may well all have been earlier, as 6119 contained quarry tile of 16th/17th century date, and they lay within plot 29, which was a lane once the cottages had been built. Just 3m to the east, oval posthole or small pit 6151 was of very similar dimensions and fill to 6120, and also contained 16th/17th century brick or tile, so may have been associated, though as its fill was loose it was described as probably modern. Two rectangular postholes (6136 and 6139) aligned north-west to south-east probably post-date the cottages, as 6139 contained a fragment of engineering brick of late 19th century or later date).

Further east, a drain running along the north edge of the cottages is marked by 6215 and manhole 6201 east of this. As stated earlier, these cottages were all demolished between 1900 and 1933-4.

West of 6111 was another large robbed-out foundation 6164 on a roughly north-south alignment across plot 28, 3.2m long and 1.2m wide. This probably corresponds to the division between the second and third building back from the frontage on the 1st end OS map of 1864, though as both buildings are also present on the 1839 Tithe map, is probably of earlier 19th century origin.

Plot 29 was largely open on the Tithe map of 1839, but was divided by several gates: one marked by 6111, one at the east end of the plot, and another further west in the vicinity of evaluation trench 4. A brick building found was found in this trench, and this corresponds to a building marked straddling plot 29 on the 1st edition OS map of 1864, and also on the maps of 1900 and 1933-4.

Plots 30-32

The 20th century boundary between plots 29 and 30 was marked by a brick wall whose foundations cut across Area 2000. Immediately to the north of this, a parallel interrupted boundary 6350 comprising a pair of short lengths probably marks an earlier phase of this boundary, as its fill 6351 contained a sherd of pottery of later 17th or 18th century date. 6350 was probably the same as feature 2019 partly exposed below the wall in Area 2000.

The line of north-south boundary 6111 was continued across plot 30 by foundation 6106, of identical character and so presumably date. This suggests that the development of the properties north and south of plot 29 was linked. A similar wide footing 6117 ran at right angles for 7.5m along the north edge of plot 29, and probably belongs to one of the buildings opposite to Brackley Cottages. This was cut by brick soakaway 6103, which was of 19th century or later date, at the west end.

Just west of this north-south gully feature 6105, 3.2m long but only 0.4m wide, had a sherd of 12th-14th century medieval pottery in its dark grey silty clay fill, together with oyster shell, charcoal and chalk fragments. It lay within a building that first appeared on the 1839 Tithe map, and could represent an associated partition wall, but more likely predated this. Two small irregular features to its west, 6101-2, were probably due to earlier tree-roots.

Further east, the boundary between plots 29 and 30 is probably marked by east-west feature 6188, filled with a greyish-brown clayey silt containing lenses of peat and tufa, and flint and tile

inclusions, oyster shells and animal bones. The tiles were dated to the 15th to 17th centuries. The slightly curving line of this feature would also suggest that this feature is earlier than the boundary walls indicated on the 1839 Tithe map.

The north edge of this plot at this end is marked by 6163, whose dark bluish grey silty clay fill contained much rubble at the east end. There was a building here on Willis' map of 1768, of which this probably marks the north wall. West of this building, only the south edge of the plot here was built upon until 1900, and here 6163 marks the wall fronting onto a lane called Northbrook Place.

Along the south edge of the plot, north-south trench 6221 corresponds to the east edge of a narrow building fronting onto plot 29, and feature 6211 at right angles may mark the north side. This building is first evident on the 1839 Tithe map, so was presumably of late 18th or early 19th century date. Within this building were two brick-lined wells, 6209 and 6210, the former of which was constructed of bricks of 18th or early 19th century type. This was probably a well-house. By 1900 it had gone, and this may be when pit 6212 containing the burial of an almost complete horse was dug across the corner (Plate 48). The horse burial 6224 had a sherd of late 16th/early 17th century pottery with it, and as features 6211 and 6221 which it cut were undated, it is alternatively possible that all of these predated the buildings, only the wells being associated with them (see also Rectangular and square pits below). The other horse burial found on the site, in pit 3110 in Area 3000 some 20m to the north-west, contained pottery of similar date.

Further to the west, irregular north-south slots 6183-4 and 6186 all had dark brownish grey silty clay fills with varying quantities of chalk and brick or tile fragments, a sample of which was dated to the 15th-17th centuries. 6186 roughly matches one side of a building that appears on the 1st edition OS map, but the others lie in areas open until 1900. It seems more likely that these represent earlier activity within the open plot, and it was suggested that they might result from peat-cutting.

A substantial east-west feature 6060, some 2.8m wide and filled with gravel, ran for 40m just north of the projected boundary line between plots 31 and 32. This carried a large diameter concrete pipe, so is in part clearly modern. On the north edge it cut an irregular spread of dark grey to black silt 6065, from which came a sherd of medieval pottery and animal bone, and several north-south slots: 6043, 6061 and 6062, none of which was dated. On the south it truncated pit 6099, which had a sherd of medieval pottery and tile fragments of medieval or Tudor date in its top. Just south of pit 6099 was a narrow gully 6094 running obliquely SSW, but this is otherwise undated. The line of this pipe lies within the largely open area to the north of Victorian Northbrook Place, and so does not follow the pre-existing layout.

In plot 32 slot 6345 ran east and then turned south at a sharp corner, partly enclosing a rectangular area of soil 6344 to the south. This corresponds to the north wall of a building shown on the 1839 Tithe map, and the corner is only a little short of the east end of the building on the map, so it was probably a grubbed-out foundation trench. The soil to the south was a dark brown peaty clay, and was interpreted on site as a possible pit, but may have been a floor within this building. Neither 6344 nor 6345 was dated; the latter cut a pit 6347 to the east, but this was also undated.

East of 6345 was well 6340, and in line further east was slot or ditch 6092, with a parallel shorter slot 6091 some 7m to the south. These slots contained respectively light and dark greyish-black silty clay fills with chalk and charcoal fragments. 6091 also contained flint gravel, animal bones and a sherd of 11th-14th century pottery, while 6092 had orange clay patches and larger flints, some burnt. These features do not correspond to anything on the historic maps, and are presumably earlier. On the same line as 6092, 10m to the east, is ditch 6039, which was numbered 3045 within excavation area 3000, where it contained a sherd of 12th/13th century date and was cut by a pit

containing late medieval or Tudor finds. Again, 6039 does not correspond to the boundary between plots 31 and 32 on the historic maps, lying 1m or more to the south. The 1839 Tithe map however shows the buildings ending south of the plot boundary, on the line of 6345, with a narrow passage along the north side, with whose south edge 6092 and 6039 are in line. This perhaps indicates that there was formerly a passage all the way along between plots 32 and 33, which was subsequently subsumed into plot 32.

At right angles to the east end of 3045, and 1.5m to the south, was ditch 3125, also dated to the 12th/13th centuries. Undated ditch 6043 just over 10 m to the west may also have been of similar date, as it ended on the north a similar distance from 6039=3045. It therefore appears that there was a local system of ditched enclosures in this part of the site.

East of these north-south features were two others within the Area 3000 excavation, which continued northwards up to and beyond the line of 6039. The more westerly (3116) was interpreted as late medieval, as it was recorded as cut by a post believed to be associated with Structure 3079, but this post was not conclusively proven to belong to this structure. The more easterly 3024 cut deposits of 16th/early 17th century date. Either or both of these features may be related to the cottages and their gardens built on the north side of Northbrook Place. These cottages were present on the 1830 Tithe map, but are probably the line of buildings shown on Willis' map of 1768, so date from the earlier 18th century or earlier.

Plots 33 and 34

The modern boundary between plots 32 and 33 is marked by ditches 6058, 6045 and 6027, the last equivalent to ditch 3123 in area 3000, where it contained a fragment of late 17th/early 18th century clay pipe. Ditch 6058 contained another fragment of similar date. Ditch 6027 formed an L, with a south-north arm extending up to and beyond the modern boundary between 33 and 34. Towards the north end 6027 cut 6028 running east, and ditch 6028 probably marks the boundary between 33 and 34 at an earlier stage. 6027 also cut the westernmost of a line of three rectangular postholes numbered collectively 6030 (see posthole lines, above). Pottery from both 6027 and 6028 was very similar, that from 6027 being dated 1550-1900, and that from 6028 between 1650 and 1900. Ditch 6028 also contained a shard of wine bottle dated later 17th to 19th century.

Ditch 6028 ran into another ditch 6038 on a slightly ESE alignment towards its east end, but 6038 is undated, and although 6028 was thought to be later, this relationship was not established for certain. 6038 is however parallel to another ditch on the same alignment, 6036, which was cut by the N-S arm of 6027 and was converging towards it at the east end. This had pottery and glass of late 18th or early 19th century date in its top, though it was noted that the finds may have been intrusive from deposits overlying the ditch. A third ditch on the same alignment, and at much the same distance north of 6038 as 6036 was to the south, was 6041, which was also undated. This however did not extend as far west as the others. These three ditches, which were 6.3m or 21 feet apart (centre to centre) were aligned slightly south of east, so on a distinctly different alignment to the modern property boundaries.

It is however clear that Marsh Road, having curved slightly west of north as far as the north side of plot 32, began to curve slightly eastwards again from here northwards, and these property boundaries may have been laid out in relation to this. The 1st edition OS map of 1864 shows that the group of buildings called Compton's, straddling properties 35a, 36 and 37, were angled slightly ESE, and these buildings were also present on the Tithe map of 1839.

Boundary 6027 ends at the north just 2m short of boundary 6021, which runs ENE for 37.5m, and

contained a late 19th or 20th century brick. Ditch 6021 is almost parallel to ditch 6058, and to the east-west arm of 6027, and probably marked the boundary between properties 34 and 35, although it does not correspond to a boundary on any of the historic maps up to the 1960s.

This group of features presents a problem in relation to the historic map evidence, in that neither the north-south arm of 6027, nor the long boundary 6021 or the three ditches on an ESE alignment, appear on any of the maps, even though the dating evidence might suggest that they should overlap with them. The most likely explanation for this is that, in the case both of 6036 and 6021, the late finds were intrusive in the tops of these features, and that the boundaries were in fact earlier. Stratigraphically, this leaves 6027 as the latest phase of boundary, dated, together with 6058, to the 18th century, as it cut 6028, which also contained finds of late 17th or 18th century date. Boundary 6021 may have been of a similar date, as it contained a shard of wine bottle, which while not closely dated, indicates a date after the mid-17th century. The ESE ditches that they cut will have been earlier, but probably later than the Willis' map of 1768, and contemporary with the establishment of Marsh Road. Boundary 6041 appears to be overlain, even if on a slightly different alignment, by the wall between plots 35 and 35a.

Some way west of ditch 6058 within plot 33 was a north-south feature 6336, parallel to the N-S arm of 6027, but shorter, as it ended at the line of the modern boundary between 33 and 34. Feature 6336 was an U-shaped linear containing a timber-lined slot or channel 6338 in its top (Fig. 30), and although it ran most of the way across plot 33, was therefore not a boundary. A sherd of pottery and a fragment of shoe-leather from inside the timber-lined slot were of later 15th or early 16th century date, but the timbers appeared to be fresh (Plate 49), and were probably made of North American pine, which was not used before the late 17th century. It is perhaps possible that the timber lining was inserted into an earlier, 16th century feature, as the fills around and between the timbers was very similar. There is nothing marked on any of the historic maps, so this may predate them, ie belong to the late 17th or the first half of the 18th century, although the level of detail on the Willis' map does not preclude a late 18th or even early 19th century date. This feature is believed to belong with well 6340 and pit 6329, and this group of features is considered together in the discussion.

Plots 35a, 36 and 37

The western part of plot 35a has already been described in Block C above. At the east end of the plots, north-south feature 6010, and 6011 which cut it, both probably relate to the block of properties called Compton's on the 1st end OS map. Slot 6010 however began at boundary 6041, and better fits the 1839 Tithe map, when this block of buildings extended further south.

In the middle of this plot a large rectangular feature 6312, 9m east-west and 3m north-south, was revealed, with a pale grey sandy loam fill containing frequent tile and brick fragments. This was machined down at the east end, and was at least 0.3m deep, tile becoming even more frequent lower down. The tile was accompanied by sherds of pottery, the whole being of 18th century date. East of this, but oriented north-south, was another similar cut 6270, only the east and south sides of which were exposed. This cut had a fairly sharp south-east corner, and was 3m wide east-west and 8m north-south. No sign of this was seen in the adjacent watching brief area, where layer 6301 was itself probably of late 17th or early 18th century date, so 8m was probably its full length. Just over 1m to the east was the south-west corner of a third large cut 6271. The south edge lay 4.5m north of that of 6270, and it measured at least 5m north-south and 2.5m east-west. Both 6270 and 6271 had similar dark brown clayey silt fills containing much tile, brick and mortar.

The size of these features, and their regularity in plan, suggests that they may represent the

footprints of buildings. No building is marked in this position on the Willis' map of 1768, or on any of the 19th or early 20th century historic maps. A building was developed on plots 34 and 35 in the mid-20th century that covered 6312 and 6270, but not 6271, and 6270 appears to cross from plot 35 into 36, which does not match these recent developments. It therefore seems likely that these features are earlier than this, and were infilled before this, in the early-mid 18th century. If they were not buildings, they represent the largest group of pits by far within the excavation area, and were backfilled with tile and brick from the demolition of one or more nearby buildings.

In the western part of plot 36 feature 6300, which was described as a wide ditch on an ENE alignment, was uncovered, although only the north side was clearly identified. It was believed to be about 4.5m wide, making it by far the most substantial boundary within the site. This feature was on a rather different alignment to the ditches to the south, and does not correspond to any boundary on the historic maps. There is however a distinct change of boundary alignment between the east-west boundary on the south edge of plot 36 and the east-north-east boundary on the north edge of 37. From this point northwards all the properties along Northbrook Street share an ENE alignment on the west, though east of this they revert to a more west-east alignment roughly halfway between Northbrook Street and Marsh Road/Park Way. Feature 6300 follows the ENE alignment, but continues beyond the point at which the modern boundaries revert to a more E-W alignment, making it less believable.

The surface fill of this feature (6301), a blackish-grey silty clay with mixed flints, tile/brick fragments, chalk and charcoal, contained tile and brick of late 17th or 18th century date. It was cut by pits 6302 and 6304. Pit 6302 was small, and its fill contained 17th century pottery and clay pipe stem, but 6304 was a very large oval pit (3.3m by 3m) containing several potsherds of later 17th or early 18th century date, together with a shoe welt of probable 18th century date. Layer 6301 therefore appears likely to date from the end of the 17th century, and the ditch (if such it was) to have been in use before this. It is noticeable, however, that the well-defined north edge of 6300 is exactly in line with a recent pipe-trench running to or from a large rectangular structure to the north-east. It is therefore alternatively possible that 6301 is a construction layer spread south from a pipe trench, cut by later pits whose finds are residual.

North-west of this, two broad north-south linear features, 6280 and 6282, ran almost up to the south side of the boundary between 37 and 38 just where it changed alignment. These features were both 1.6m wide, and were 3.7m and 4.0m long respectively, with greyish-brown and pinkish-brown silty clay and stone fills 6281 and 6283 (Plate 50). The fills also contained occasional tile and animal bone; the tile from 6281 was dated to the 15th-17th century, and that from 6283 to the 16th-17th century. They lay just within the row of buildings along the north edge of plot 37 on the Tithe map of 1839, so may possibly have been associated with this, like the brick well 6284 just to the west, which was constructed with bricks of late 18th or early 19th century date. The date of their finds however suggests that they were dug up against an earlier phase of the plot boundary (see also Rectangular pits, below).

Otherwise there are few clear boundaries except for posthole row 6005, along or just south of the eastern part of the northern boundary of plot 37, which has already been described.

Plots 38 and 39

At the east end north-south ditch or foundation 6068 crossed plot 38, and a wider feature 6073 returned eastwards from its north end. Both features had a brownish-grey silt fill containing stone and 17th/18th century bricks, and 6073 also contained charcoal and oyster shell. 6073 also contained 17th century pottery and later 17th century clay pipe. Just west of 6073 was 6253, a

square posthole 0.5m across with a blackish brown fill with many chalk and a few brick inclusions, but this was not dated. The linear features correspond to the west wall of an enclosed yard, and to the south wall of a building, marked on the 1839 Tithe map, and the Willis' map of 1768 also indicates a building in this plot. Finds suggest that the revealed features are late 17th century, suggesting that the buildings may have been erected at this time.

Within the area surrounded by 6068 and 6073 were two rectangular features oriented north-south side by side, 6070 and 6071. These were respectively 4.7m and 4.8m long, and 1.1m and 1.2m wide. Both were filled with a greyish-brown silt with patches of green silty clay and stone and brick inclusions. The first of these contained a sherd of pottery dated later 17th to 19th centuries. Due to the slight mismatch between the historic and the modern maps, these are shown overlapping the boundary between plots 37 and 38, but only the east one could possibly be associated with a building on the historic maps. Despite their stone and brick inclusions, 6070 also contained an assemblage of horncores (see bone report), and so may have been associated with industrial activity. Given their similarity, they both probably lay entirely within plot 38, within the yard shown on the historic maps.

Around 3m north of 6073 the boundary between plots 38 and 39 was marked by a parallel east-west slot 6075 with a greyish-brown silt fill containing stone, brick and mortar fragments, and also later medieval pottery and window glass. The building material suggests that this may have been associated with a building, perhaps indicating that the building at the south side of plot 39 was already in existence at the end of the medieval period, though none of the finds was building material, and these may relate to the ditched boundary that preceded the construction of the building. Between these parallel slots was a single undated posthole 6074. This was believed to be modern, and by the 1960s the buildings here had been demolished, so it could be of later 20th century date.

Both 6073 and 6075 stopped just short of north-south ditch 6080 that marked the course of the culverted stream forming the western boundary of Marsh Road. Close to the north edge of the stripped area ditch 6080 kinked eastwards, but was turning westwards again at the very edge of the stripped area. This kink was crossed by an east-west ditch (not numbered) that continued for 2m east of it into the baulk, where it appeared to be terminating.

Within plot 39 was a short length of brick wall 6257 orientated east-west. The bricks were described as unfrogged and of 18th century type, and were bonded with mortar. This was cut into an extensive blackish-brown clayey silt occupation layer 6256, which contained late medieval pottery, animal bone and late 17th or early 18th century clay pipes. The wall line may correspond to the south side of a smaller building within plot 39 shown on the 1864 OS map, but not on the earlier historic maps.

Soil horizon 6256 extended across most of plots 38 and 39 on the east, and this continued west as layer 6259 across much of the rest of these plots (see Fig. 27). This layer had finds of mixed date, and may represent either a garden soil or a layer of post-medieval dumping. Except at the east end, most of the recorded features cut this deposit, and so were of 18th century or later date. Towards the south side on the west, however, this layer was not recorded, and features 6260-65 and 6268 were not cut into it. The contrast between the area covered by 6256=6259, where few features were recorded, and those exposed immediately to the south of it, may indicate that more features were sealed by this deposit, which was not removed during the Watching Brief.

North of this the features in Trench 103 all predated the historic maps, but a variety of post-medieval brick structures were found in Trench 104. The match with the 1st edition OS map is not

exact in the east-west dimension (see Fig. 25), but it seems likely that the succession of brick structures encountered correspond to the easternmost group of buildings marked on the map. The dating evidence suggests that the earliest structures are either built of late 18th/early 19th century bricks, or are abutted by layers containing pottery of this date. This matches the absence of evidence for buildings on Willis' map of 1768, and their presence on the 1839 Tithe map, and indeed on all subsequent maps until after 1900. It seems likely that 5312 and 5317 match the small buildings attached to the northern boundary of the plot, as these were no longer present on the 1933-4 OS map. It is possible that the recently infilled large pit at the east end of the trench may have related to the larger building marked on the 19th century maps, which may have had a basement, but this is uncertain.

Wells

A total of fourteen probable wells was found during the watching brief, in addition to the three found during excavation in Area 1000 to the south. The dimensions and other details are shown in Table 2. The level of detail recorded unfortunately varied, and brick samples were not always kept, resulting in gaps in the information. Wells are listed by material type and then in date order, with undated examples last. As might be expected, they occurred down the west and east edges of the site, behind the properties on the frontages either side.

Table 2. Details of wells

Cut No. (lining if separate in brackets)	Lining type	Construction or brick date	Fill date	Build	Bond	Cut form	Diameter (ext) in metres	Diameter (int) in metres
1065 (1053)	Wooden	15th/16thC	16th/17thC	Barrel	Metal bands	Circular	1.00	0.95
1012 (1016)	Wooden	17th/18thC	E19thC	Barrel	Wooden bands	Circular	0.95	0.90
6165	Wooden			Barrel	Metal bands	Square	0.75	0.70
6368 (6369)	Wooden			Barrel?		Sub-circular	1.00	0.94
4127	Chalk			Uncoursed	Clay	Circular	1.25	0.90
5213 (5200)	Chalk			Poorly coursed	Clay?	Circular	2.20-2.40	1.20-1.40
6340 (6341)	Brick	17th/18th		Whole Headers	Clay?	Circular	1.52	1.00
6371 (6372)	Brick	17th/18th reused	Victorian	Single stretcher cut down	Metal bands	Circular	1.50	1.28
6386 (6388)	Brick	L18th/E19th		Single stretcher	Clay	Circular	1.40	1.18
6209	Brick	18th/E19th				Circular	1.35	
6474	Brick	L18th/19thC		Headers halved	None	Rectangular	1.20	0.95
6284 (6308)	Brick	L18th/E19thC		Single stretcher	Mortar	Circular	1.85	1.56
6046	Brick	18th/E19th		Single stretcher	None	Circular	1.30	1.00
1350	Brick	19C	Victorian			Sub- rectangular	1.10 x 0.90	0.85 x 0.65
6170	Brick	19C			Mortar	Circular	1.25	
6379 (6380)	Brick	L19th/20thC		Whole headers	Clay	Circular	1.50	1.10
6216	Brick	L19th/20thC		Engineering bricks halved		Circular	1.17	

6440 (6441)	Brick	L19th/20thC		Whole headers	Mortar	Oval	3.0 x 1.6+	2.55 x ?
6126	Brick					Oval	1.50 x 1.30	
6210	Brick					Circular	1.30	

The smallest of these, 6165, was a barrel-lined well within a square cut 0.75m across (Fig. 29). The barrel and the edge of the cut was packed around with a dark greyish-brown silty clay and occasional stones, and the inside had been backfilled with a lighter silty clay and much gravel. There were no finds. A second possible barrel-lined well was 6368, a sub-circular cut 1m across containing a probable wooden barrel 6369 made of staves 0.13m wide and 0.03m thick (Fig. 29). The staves were at least 0.4m long, but the full depth was not established. The packing around the barrel was not described separately, but the internal fill 6370 was a gritty clay that included tile of 16th/17th century date. Another small well was a chalk-lined example 4127 in Block C, with an internal diameter of only 0.9m (Fig. 27; see above). There was also a much larger chalk-lined well 5123 in Trench 101, with an external diameter of 2.2-2.4m, and an internal diameter of 1.2-1.4m (Fig. 20). Neither of the chalk wells is dated.

The other eleven wells were all brick-lined, and ranged in date from 17th/18th to late 19th/early 20th century. Most were lining circular cuts, but 6474 (Fig. 28) was built within a much larger rectangular cut 6472, similar to well 1350 in Area 1000 (Fig. 3). In neither case was the well central to the larger pit, and the fill of the pit around 6474 was a loam, and not very compact, so not providing a good seal for the well. Both of these were late examples, and it is possible that the pits were in fact earlier, and coincidental to the wells found within their limits.

The wells vary in size, though most are around 1.5m in external diameter, and between 1m and 1.2m across internally (Plate 51). Construction varied, some being lined with whole bricks laid in headers (eg Fig. 29. 6441) or stretchers (Fig. 27. 6308) bonded with mortar, others being bonded with clay (eg. Fig. 29. 6380 and 6388), and several having only a thin lining of cut-down half-bricks. Well 6371 (Fig. 29) had a particularly unusual construction, without apparent bonding between the bricks (6372), but reinforced internally with metal bands (presumably from barrels) held in place with wooden pegs. Lining 6341 within well 6340 (Fig. 29) was constructed of unfrosted handmade bricks of unusually long and narrow shape, 260 x 70mm and 60mm thick. These were probably of 17th or 18th century manufacture. Well 6440 (Fig. 29), which had a lining 6441 of whole bricks bonded with mortar, was much larger, and was probably an example of the domed cisterns constructed from the 18th century, which had pumps rather than using a bucket.

Use as wells is likely for all of these structures, but not proven. The barrel-lined examples could have had industrial uses, for instance in tanning or dyeing. In the case of the most poorly-constructed brick examples, such as 6474, it is possible that they may have been used for other purposes, for instance as composting pits.

Other brick structures

A number of other brick-lined structures were recorded during the Watching Brief, and details of these are given in Table 3.

Table 3. Details of other brick structures

Context No.	Lining	Construction or brick date	Fill date	Build	Bond	Cut form	Length	Width
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6403	Brick	17th/E18thC	18th/ 19thC	Alternate headers and paired stretchers	Mortar	Rectangular	1.25	1.00
6220	Brick	18th/E19thC			Clay	Trapezoidal	2.25	1.70
4124	Brick (reused)	L18th/19thC		Double broken stretchers	Clay	Square	1.80	1.80
6252	Brick	19C		Single stretchers	Cement	Rectangular	2.10	1.55
6103	Brick	19th/20thC		Double stretchers	Clay	Square	1.90	1.90
6201	Brick	L19th/20thC			Cement	Rectangular	1.60	1.40
6445	Brick	L19th/20thC		Alternate paired headers and stretchers	Mortar	Rectangular	1.50	0.7+

They include one small example 6403 in cut 6402 that may have been a soakaway, as its dark peaty loam fill 6404 contained frequent large flint nodules, and it sat directly upon the peat, without a base (Plate 52). It was however very well-built for such a function, and it was not certain that it was truncated, so may originally have had some other purpose, perhaps being a supporting platform. Structure 4124 in Block C, in contrast, was much larger, and although mortared, was made using broken bricks. This was probably a latrine, as was structure 6252, a brick-edged concrete base of similar area in the yard of one of the Marsh Lane cottages.

Structures 6103 and 6220 were soakaways in plot 29, the lane between Brackley Cottages and the line of properties in plot 30. Soakaways 6204 and 6205 were more within this same lane, and although not described in detail, 6204 was said to be like 6220 but better-preserved. Its concrete-like mortar lining however suggests that it was of considerably later date than 6220. 6201 was a drain manhole at the east end of this same lane linking to culvert 6199 in Marsh Road, while 6445 was a soakaway, or possibly another manhole, on the north side of Marsh Lane. It is possible that north-south feature 6443 was a drain leading into this.

Pits

A total of 91 further pits were found in the Watching Brief, discounting three in Area 2000 corresponding to those already excavated. Timber-lined pits interpreted as soakaways are also included, but not other modern soakaways. Three very large features: 6270, 6270 and 6312, have been described above as building footprints rather than as pits, though their function remains uncertain. Very few of the features described in the records as postholes actually contained preserved posts or evidence of post-pipes, so the distinction between small pits and postholes is predominantly based on size, and in the absence of excavation is somewhat arbitrary.

The characterisation of features by type is shown on Figures 27-29. Of the ninety one pits, fifteen were circular and six sub-circular, sixteen were oval and one an irregular oval, thirty nine were rectangular (and one more had rounded corners), two were sub-rectangular, and five were square. Of the remaining six, one was keyhole-shaped and five were irregular.

Rectangular and square pits

The term rectangular covers a wide variety of shapes, including a few elongated examples (eg. 6072, 6272 and 6428, the last surviving less than 0.2m deep) that may in fact have been parts of truncated ditches, and others such as 6247, largely filled with gravel, that were probably small soakaways. The most obvious larger soakaways have been excluded from this category. Table 4

gives summary information about fills, dimensions and dating.

Table 4. Rectangular and square pits

Context	Filled by	Length (m)	Breadth (m)	Colour	Composition	Lining or special finds	Date
6002	6002	3.25	1.70	Dk Gy-Br	Silty clay loam		
6034		2.30	1.50	Br-Gy	silt		
6070		4.70	1.10	Gy-Br	Silt	Horn cores	
6071		4.80	1.20	Gy-Br	Silt		
6072		1.60	0.70	Gy-Br	Silt		
6086		1.40	1.20	Mid Gy	silty clay		11-14thC
6127		1.40	0.80		Silty Clay		L17C
6128		1.70	0.70	Dk Gy-Br	Silty Clay		
6133		0.90	0.50	Dk Gy-Br	Clay		
6148		3.40	1.00	Dk Gy	Silty Clay		16/17c?
6167		2.00	1.30	Gy-Br	Silty Clay		Modern
6173		2.70	0.80	Mid Gy	Silty Clay		16/17C+
6212	6224	2.50	1.40	Dk Br	Silty Clay	Horse skeleton	L16/E17C
6221		3.30	1.00				
6222		1.20	0.70	Pale Br-Yell	Sandy-Clay		
6237		4.00	1.90	Br-Black	Peat		
6247		0.80	0.60	Dk Br-Gy			Modern
6260		1.20	0.70	Mid Gy	Clay-Silt		
6261		0.70	1.00	Mid Gy	Clay-Silt		
6262		0.40	0.70	Mid Gy	Clay-Silt		
6265		1.00	0.80	Dk Black-Gy	Clay-Silt		16/E17C
6266		3.30	1.60	Dk Black-Gy	Clay-Silt		14-E16C
6267		2.80	1.50	Dk Black-Gy	Clay-Silt		17/18C
6268		1.90	1.00	Dk Black-Gy	Silty Clay		
6272	6273	1.40	0.60	Pink-Br	Loamy-Silt		Modern
6276	6277	4.60	0.43	Pale Gy-Br	Silt-Loam		
6278	6279	2.10	1.60	Pale Br-Gy	Clay-Silt		16/17C?
6280	6281	3.70	1.60	Gy-Br	Silty Clay		15-17C?
6282	6283	4.00	1.60	Pink-Br	Silty Clay		16/17C?
6318	6319	4.00	1.50	Gy-Br	Silty Clay		16/17C?
6329	6330	2.80	2.20		Wood	Timber lining	
6329	6331	2.80	2.20	Br-Gy	Clay		15C
6329	6332	2.80	2.20	Green-Br	Silty Loam		
6329	6333	2.80	2.20	Lt Or-Br	Silty Clay		
6343	6344	2.30	1.80	Dk Br	Peaty Clay		
6352	6353	1.00	0.75+	Pale Br-Gy	Clay-Silt		L17/18C
6364	6365	1.15	1.05	Black-Br	Peaty Loam		

6364	6366	0.90	0.90		Wood	Timber frame	
6364	6367	1.15	1.05	Gy-Br	Clay loam		15-17C
6426	6427	2.40	0.65	Pink-Br	Loam		
6428	6429	1.78	0.48	Gy-Br	Silty Clay		
6436	6437	0.76	0.60	Gy-Br	Silty Clay		
6450	6451	1.25	0.55	Red-Br	Peaty Silty Clay		15-17C
6452	6453	1.00	0.65	Dk Gy-Br	Silty Clay		20C
6456	6457	1.20	0.35	Lt Br	Silty Clay		14-16C?
6470	6469	1.00	0.60	Black-Br	Loam		15-16C?
6472	6471	1.80	1.30	Dk Br	Loam		
6485	6486						
6079		1.2	1.2	Br-White	Silt		Modern
6211		1.9	1.9	Dk Br	Clay		
6356	6357	0.90	0.90	Mid Gy-Br	Silty Clay		
6360	6361	0.75	0.70	Mid Gy-Br	Silty Clay		
6364	6366	0.80	0.80			Timber frame	
6420	6421	1.50	1.50	Pink-gy	Silty Clay	Ash	
6420	6422			Pink-br	Silty clay		
6225		1.9	1.9	Green-Gy	Clay	Wood-lined	
6227		1.7	1.6	Mid Or-Br	Sandy-Clay	Wood-lined	
6250		2.2	2.3	Mid Br-Or	Clay		Modern
6412	6413	0.80	0.75	Pink-Br	Silty Clay	Upright timber	

Among the smaller pits, 6412 in plot 25 had a possible decayed upright timber against the south edge. This was around 0.2m square, but as the pit was 0.8m long and nearly as wide, this was not thought to have been a posthole. It may perhaps have formed part of a lining.

A definitely timber-lined pit was 6364 in plot 28. The pit was slightly longer than wide, with one rounded end. It contained a timber frame (6366) of vertical planks 0.9m square, packed round by flint nodules up to 0.18m across in a matrix of peaty loam 6365. The timber structure consisted of roughly squared planks typically 0.16m wide and 0.08m thick, salvaged examples of which were at least 0.5m long. There was no clear evidence as to how the frame was held in place. Internally the lined chamber was approximately 0.8m across. The inner fill 6367 was a soft clay with frequent mortar flecking and flint nodules, and included 15th-17th century tile. This may have been a cess pit, but lay only 2m from barrel-lined pit or well 6368, which contained 16th/17th century tile, so may well have been associated, and had an industrial use.

A similar association may be evident between square pit 6125 and well 6126 adjacent. Pit 6125 was 1.4m square, and had at least five small roundwood posts along the northern edge. The fill was a dark organic clay with a high percentage of wood in one corner, but was not dated. The adjacent well is also undated.

Three nearly square wood-lined pits 6225, 6227 and 6250 were found at the east end of plots 28, 30 and 26. No detail of the wood lining was given for the first two, but they were 1.9m and 1.7m by

1.6m across, and were filled with bricks and gravel respectively. No bricks were kept or described, and neither was dated. Pit 6250 was lined with timber posts, but were only visible around parts of the perimeter. This pit was 2.3m by 2.2m, was oriented with the corners to the north, south, east and west, and was filled with clayey gravel and brick. All three were interpreted as soakaways. A fourth wood-lined feature 6200, sub-rectangular and oriented east-west, was found just south-east of 6227. This was 2.50m or more long and 1.6m wide. The lining was of wooden posts and it was filled with gravel, with a strong smell of contamination.

Pit 6225 could have been situated just outside the south-east corner of the buildings in plot 30 fronting onto Marsh Road, and 6250 was towards the bottom of one of the yards of Marsh Cottages, but 6227 lay within the area of Brackley cottages, and 6200 within the buildings marked on plot 30, so if these were soakaways they must have been either earlier or later than the buildings. Timber lining is sophisticated for a soakaway, and may instead indicate that they had some other function originally, prior to the construction of the buildings. The most similar feature on site is square timber-lined pit 3229 in plot 34, but timber-lined pits can have a variety of industrial functions.

A larger timber-lined pit 6329 was found in plot 34, just north-west of the north end of timber-lined channel 6336 (Fig. 30). This measured 2.78m by 2.2m, and had vertical plank lining on the north and part of the west side. The timbers were up to 0.18m wide and 0.02m thick, but there were also squarer examples 0.12m wide and 0.08m thick. On the west the timbers were fewer and smaller, up to 0.10m wide, and were 0.03m thick. It is likely that further timbers existed on the east, but had been destroyed by piling. The main fill was a tenacious clay with some flint nodules and chalk flecking, animal bone and tile, the last manufactured in the 15th century. There were also patches of greener clay within it. The date of the finds from this pit is similar to those in the timber-lined channel 6336 adjacent, and it is possible that they had related functions.

Rectangular pits 6212 and 3110 containing horse skeletons have already been mentioned. Both were aligned east-west, but pit 3110 was much smaller than 6212, though neither is believed to have contained a complete animal.

Pit 6086 was originally recorded as the terminus of a ditch, but was not seen continuing west, so was instead a small rectangular pit. It had an unremarkable fill, but contained a medieval potsherd. Oval pit 6323 alongside was undated, but probably early, as it was overlain by a fallen tree-trunk. Adjacent postholes or small pits 6087-9 may also have been early; 6089 contained a sherd of later 13th to 15th century pottery.

Twenty two of the rectangular or sub-rectangular pits were large, ranging from 2.1m to 4.8m in length, and from 1m to 1.7m wide. A few more irregular examples (6169, 6264 and 6274) are also included in this group, due to their similar overall dimensions and orientation. Details of these pits are given in Table 4. This group were almost all oriented either east-west or north-south, the only exceptions being 6034 and 6276, which were aligned slightly east and west of south-north respectively.

The most distinctive examples occurred in pairs side by side: 6266 and 6267, 6280 and 6282 and 6070 and 6071, all orientated north-south. The first pair both cut layer 5269 dated to the late 17th or early 18th centuries, and contained no finds later than the 18th century, the second finds of the 15th-17th and 16th/17th centuries, and the last only one datable find, a potsherd of the late 17th-19th centuries from 6070. Pit 6280 had a wider cutout at the south end, and it is possible that this represented a step for access; a slot protruding from the north end of pit 6237, and another at the north-west corner of 6264, may perhaps have performed a similar function. This was not however a consistent characteristic in these larger pits.

Of the other large pits, 6173 and 6180 were roughly parallel and only 4-5m apart, with one large pit and a group of other smaller ones in between, so perhaps represent a related complex. Only 6173 produced dating material, tile and brick of the 16th/17th centuries or later. Features 6221 and 6207 lay only 3m apart, and were both aligned north-south, but were staggered, not parallel to one another, and neither was dated. Like 6173 and 6180, they lay at the east and west edges of a group of pits, but these intercut, and one of these, and a well, cut 6221. The two features were also dissimilar, 6207 being wide and sub-rectangular, while 6221 is long and relatively narrow with sharply-defined ends. 6221 was cut by pit 6212 containing pottery of the later 16th or early 17th century (see above), which could indicate an early post-medieval date, but the pottery may be residual, and 6221 can also plausibly be interpreted as a later building foundation (see Plots 29-32 above).

The remainder of the group occurred singly, and while some such as 6237, 6034, 6274 and 6485 were oriented broadly north-south, others such as 6002, 6278, 6318, 6343 and 6169 were east-west. Of the former, two were undated, the third of recent date, while of the latter, 6278 (Plate 53) and 6318 contained 16th/17th century finds, while 6002, 6169 and 6343 were undated.

A substantial proportion had either dark peaty clay or silty clay fills, often with some charcoal and oyster shell. These have been interpreted on site as resulting from peat-cutting for fuel, and subsequently being used for rubbish dumping. The slots extending from several, and considered above as possible steps for access, have also been seen as evidence of peat-cutting. A few pit fills, including those of 6282 and 6426, were described as pinkish-brown silty clays with frequent chalk, and the pinkish colour was suggested on site to relate to tanning, but the derivation of this coloration is unclear. Features 6070 and 6071 had greyish-brown silty clay fills with lenses of green clay, and 6070 contained a group of cattle horncores, probably derived from hide preparation. An adjacent but undated circular pit 6067 also contained cattle and sheep horncores and sheep metapodia, suggesting that there was an area of hide-processing in this plot.

The disposal of hide-processing waste does not demonstrate that 6070 and 6071 were tanning pits, but this is one possible interpretation of some of these features, and perhaps particularly the paired pits, all of which lie at the north end of the site, in plots 37, 38 and 39. The pits excavated by Shaw at The Green, Northampton were a mix of circular and large rectangular pits (Serjeantson 1989, fig. 3). Large rectangular pits, often backfilled with horncores and sheep metapodia, were a feature of the late medieval and early post-medieval sites at Ock Street, Abingdon, identified as tanneries (Anthony *et al.* 2006), and were also associated with the 16th/17th century tannery at Reading Oracle (Ford *et al.* 2013, 49-55).

Pit 6420 was 1.5m square but had rounded corners. Two fills were visible, the earlier 6422 a pale pinkish-brown silty clay with frequent grains of chalk all around the edges, the inner and later (6421) a pale pinkish-grey silty clay with smears of ash. The combination of chalk and ash, both of which were used in the dehairing of hides (Serjeantson 1989, 133), may indicate that this pit was connected to hide preparation, but there were no artefacts, so it is undated.

Three other small pits, 6160-62, the first two square, the third circular, ran formed a north-south line within the area of the properties on plot 30 fronting onto Marsh Road. They varied in size from 0.6m to 1.2m across, but all were described as modern pillar bases, although the buildings here were demolished by 1933-4.

Circular and oval pits

A summary table of these pits in order of size, giving some information about their top fills and their date, including any particular finds, is given below in Table 5. More details can be found in the archive.

Table 5. Circular and oval pits

Context	Filled by	Length (m)	Breadth (m)	Colour	Composition	Lining or special finds	Date
6007		0.75	0.5	Lt Gy	Silty clay		
6024		0.80	0.80	Br-Gy			
6067		0.90	0.90	Mid Gy-Br	Clay-silt	Horncores and metapodials	
6090		1.00	1.00	Pale Gy	Clay-silt		
6099		2.50	1.20	Green-Gy	silty clay	Butchered bone	
6112		0.60	0.40	Gy-Green	Silty Clay		
6138		0.70	0.30	Br-Gy	Silty Clay		
6142		0.60	0.60	Gy-Green	Silty Clay		
6166		0.80	0.90	Br-Gy	Silty Clay		
6181		0.90	0.80	Mid Gy	Clay-Silt		
6187		0.90	0.90	Mid Gy-Br	Silty Clay		
6219		0.90	0.90	Dk Yell-Br	Clay-Sand		
6254		0.90	0.90	Pink-Br	Sandy-silt		Modern
6255		0.9	0.9	Black-Br	Clay-Silt		L19C
6258		0.60	0.60	Black-Br	Clay-Silt		L17C
6325	6326	1.4	1.4	Lt Gy-Br	Clay-Silt		Med 13/14th C
6325	6327	0.9	0.9		Wood	Wooden frame	
6325	6328			Gy	Silty Clay		
6334	6335	0.80	0.80	White-Gy	Silty Clay	Charcoal in centre	
6347	6348	1.60	1.60	Dk Br	Peaty Clay		
6368	6369	1.00	1.00			Barrel-shaped planking	16/17C?
6368	6370	1.00	1.00	Lt Br-Gy	Silty Clay		
6377	6378	1.60	1.60	Gy-Br	Silty Clay		
6382	6383	1.10	1.10	Br-Or Gy	Clay		
6384	6385	1.10	1.10	Lt Br-Gy	Silty Clay		
6414	6415	0.72	0.72				
6414	6415	0.53	0.53		Wood	Circular frame. A sieve?	
6414	6416			Dk Gy-Br	Silty Loam		
6438	6414	0.53	0.53	Stone		Base	
6023		0.86	0.30	Gy-Br	silty clay		
6085		1.50	0.80	Pale Gy	Clay-silt		
6113		0.60	0.40	Gy-Green	Silty Clay		
6123		1.50	1.30	Br-Gy			
6124		1.50	1.30	Gy-Green	Silty Clay		
6151		0.80	0.60	Mid Gy	Clay-Silt		16/17c?

6178		2.10	0.90	Mid Gy	Silty Clay		
6179		1.10	0.86	Br-Gy	Silty Clay		
6180		2.90	1.20	Mid Gy	Silty Clay		
6298	6299	1.4	1.2	Red/Pink-Br	silty clay loam		
6302	6303	1.10	0.95	Black-Gy	Silty Clay	Clay Pipe	17C
6304	6305	3.3	3	Black-Br/Gy	Silty Clay	Clay pipe. leather shoe	
6323	6324	1.50	0.60	Br-Gy	Clay-Silt		
6362	6363	2.50	2.00	Pink/Or-Br	Clay-Loam		Modern ?
6405	6406	1.80	1.10	Lt Gy/Or-Gy	Clay Silt		
6405	6407	1.80	1.10	Dk Red-Br	Peat		
6408	6409	3.1	0.7	Gy-Br	Silty Clay		
6417	6418	1.45	1.30	Gy-Br	Silty Clay		
6458	6459	1.05	0.85	Gy-Br	Clay		
6464	6465	1.60	1.50	Gy-White/Or-White		Wood no structure	

There are no large concentrations of circular or oval pits on this site, though there are small clusters, mainly along the western half. It is difficult to judge the density at any one time, as so few are dated. For example, none of the group of five pits in the south-west in plots 25 and 26b is dated, nor any of 6178, 6179 and 6181 midway across plot 26, nor those in plot 28 underlying Brackley cottages, though the last are all presumably 18th century or earlier. So few are dated that the only observation that can be made is that circular and oval pits are present throughout the occupation of the site. There are probable medieval examples like 6325, 16th/17th century pits like 6151, 17th century examples like 6302 and 6258 and 18th century ones such as 6304, and finally late Victorian pits such as 6255.

Other than the barrel-lined pit 6368 already described, two pits are of particular note. Circular pit 6325 was 1.4m in diameter, and contained a square timber frame 6327 within it (Plate 54). The frame was constructed of four straight timbers 1.2m in length, overlapping at the corners so that the dimensions of the enclosed area were 0.8 by 0.7m (Fig. 30). The timbers themselves were squared off on the upper side, but rounded ie untrimmed beneath, and measured 0.08-9m across and around 0.10m deep. One piece from this structure was retained and proved to be of oak (see Goodburn this report). Outside the frame the pit was filled with a pale greyish-brown clayey silt 6236, the light colour due to frequent small chalk inclusions. A single sherd of 13th/14th century pottery was recovered from this. Inside the frame the fill was a grey silty clay, also with frequent chalk specks, that did not contain any finds.

Just north of pit 6420 on the western side of plot 25 was 6414, a small circular pit 0.55m in diameter cut into the peat, which contained a layer of stones 6438 on the bottom (Fig. 30; Plates 55 and 56). The stones were overlain by 6415, a wooden lining only 10mm thick and surviving 0.1m high. A dark wood stain some 0.18m wide was seen running into the southern side of this feature, possibly the remains of a wooden channel feeding into it (from pit 6420?). The combination of a circular pit fed by a narrow channel is also shared by slightly larger pit 6410 only 3m to the west. In pit 3415, several small upright pieces of wood were visible on the north side, and it is unclear whether these were in addition to the thin lining, or in place of it. If the latter, they may represent a sluice of some sort, allowing liquid to drain out on the side opposite to the feeder channel. Alternatively, they may simply have been a repair.

This structure was interpreted as a wooden sieve, gaps between the stones of the base allowing liquid to drain away into the peat below. Overlying the wooden stain in the channel, and filling the interior on abandonment, was a dark grey-brown silty loam 6416, which included a couple of sherds of possibly 16th century pottery and a shard of later, post-medieval glass.

West of 6415 was a circular pit 6410 with protrusions on the north and south, described as keyhole-shaped. This measured 1.2m north-south and 1m east-west, the 'shank' protruding to the north, but with a slight bulge also visible on the south edge opposite. It is unclear whether these were merely short funnels, or longer channels that had been truncated. The pit was filled with a pale grey clay 6411 containing frequent coarse gravel and small stones, but there were no finds.

Further north in plot 31 pit 6099 was one of the largest circular pits, with an estimated diameter of 2.50m, although only half was seen, the remainder having been destroyed by modern pipe trench 6060. This had a greenish-grey silty clay fill with charcoal and chalk flecks, and contained some butchered animal bone, but was undated. Possibly the greenish colour indicates that it had been a cess pit. Smaller pits 6112 in plot 28 and 6142 WHERE? also had similar fills, though 6112 was too small to have performed this function.

Pit 6334 within plot 34, and adjacent to large rectangular pit 6329, was 0.8m in diameter, and had a distinctive light whitish-grey fill with a concentration of charcoal in the centre. This may indicate a connection with tanning or some other industrial process, and was probably associated with 6329 and timber-lined slot 6336, although it was not dated.

In plots 38 and 39 three circular pits, 6254 and 6255 both 0.9m in diameter, 6258 only 0.6m across, were cut into late 17th or early 18th century layer 6256, in an area that remained open throughout the late 18th, 19th and 20th centuries. Pit 6255 was described as a rubbish pit containing 19th century pottery, tile and brick, and included glass of later 19th century date, while 6254 was described as a soakaway including very loose sandy silt, small flints and modern tile. Pit 6258 included bottle glass, but was not more closely dated.

FINDS REPORTS

Medieval and post-medieval pottery by John Cotter

Introduction

A total of 695 sherds of pottery weighing 17.012kg. were recovered. The total for rim EVEs (a measure of surviving rim circumference) was 9.74 EVEs. Aside from two residual sherds of Roman pottery, 61% of the pottery by sherd count and 38% by weight is of medieval date (up to *c* 1500,) with the remainder being post-medieval. The pottery is in a fairly mixed and quite fragmentary condition with the medieval assemblage generally occurring as smaller sherds and often showing evidence of wear - though there are exceptions including three or four complete vessel profiles. The more robust post-medieval wares tend to occur as larger fresher (and heavier) sherds and include several complete profiles - particularly amongst the latest industrial period wares. This distinction between smaller medieval and larger post-medieval sherds is clearly reflected in the average sherd weights for the two period groups. While the average sherd weight for the whole assemblage is 24.5g, that for the medieval wares is only 15.5g while that for the post-medieval wares is 38g. The latter figure is slightly exaggerated however by the presence of a complete late 19th-century stoneware flagon. The range of medieval fabrics and vessel forms present is typical of sites in Newbury (Vince 1997; Mephram 2000), and the range of post-medieval fabrics is typical for the region.

Methodology

A combination of factors have influenced the approach to the recording of the pottery assemblage and the shape of the present report. Foremost amongst these is the method of pottery retrieval which - owing to conditions imposed at the time of excavation - was mainly limited to the retrieval or sampling of sherds from the surfaces or upper fills of excavated features (pits etc) mainly for use as dating evidence. Except in one or two small test areas of this large site no features were completely excavated and therefore no complete context assemblages of pottery (pit groups etc) are available for study. This clearly has implications for the statistical validity of the present study as one cannot be sure if the very limited sample of pottery recovered is truly representative of the site as a whole. Nevertheless the frequency of individual fabric types recovered does seem to roughly correspond to their expected frequency based on other excavations in the town. An overly detailed statistical analysis of the assemblage has therefore been avoided. This is unnecessary furthermore given the availability of good published parallels for most of these types in the town, coupled with the relatively small size of the present assemblage and its variable condition. What follows therefore is little more than a quantified list of the various fabrics present and a summary report focusing on the more significant or interesting aspects of the assemblage.

As the assemblage is relatively small it has been catalogued in some detail, following standard procedure, in order to maximise its potential. The catalogue includes, per context and per pottery fabric, quantification by sherd count, weight and rim EVEs (where present). Other systematically quantified details include simplified vessel form and rim form. Rim forms were coded following a system of generalised codes devised by the author for a much larger assemblage from Winchester (Cotter 2011). Other details of note such as decoration, evidence of use and wear etc, were recorded in a comments field. Pottery clearly dating after *c* 1760, however, mainly the mass-produced or industrialised products of the Staffordshire/Midlands potteries, was recorded in a more summary fashion with details of fabric, sherd count and weight recorded only, plus comments for some significant pieces. Pottery spot-dates were provided for each context and these have been used by the excavator to assist in the phasing of the site. Full catalogue details may be consulted in the

project archive. As better parallels exist elsewhere, only a small number of more significant items was selected for illustration.

Pottery fabrics

The relatively small number of local medieval pottery fabrics were recorded using codes derived from an abbreviation of their common names, since there is no standard coding system for Berkshire. Although these have equivalent codes in the Oxfordshire County type series (Mellor 1994) the common names for some of the relevant wares in the latter publication been changed in recent years in the light of important kiln discoveries in Berkshire and subsequent research (Mephams and Heaton 1995; Mephams 2000). These changes are summarised below where necessary. Some well-known regional medieval pottery fabrics and all the post-medieval pottery fabrics were recorded using the codes of the Museum of London (LAARC 2007) which can be applied to most post-medieval types in south-east England. The types and quantities occurring at Newbury Park Way are summarised below in Table 6. This is followed below by a selective list, in roughly chronological order, describing the more significant medieval and some post-medieval fabrics in more detail.

Table 6. Breakdown of pottery according to fabric, giving number and weight of sherds

Fabric	Common Name	Date	No.	Wt (g)	EVEs
ROM	Roman wares	c 43-410	2	31	0
UNID	Unidentified wares	c 1050-1900	9	207	0.23
NEWB	Newbury B ware	c 1075-1350	312	5085	4.06
NEWC	Newbury C ware	c 1075-1500	53	623	0.1
NEWCU	Newbury C ware (unglazed)	c 1075-1500	15	158	0.07
SEOX	South-East Oxfordshire wares	c 1075-1550	3	63	0.08
MINE	Minety ware (NW Wilts)	c 1120-1550	1	14	0
BRILL	Brill/Boarstall ware (Bucks)	c 1225-1625	1	32	0
KING	Kingston-type ware (Surrey)	c 1230-1400	1	26	0
POTT	Potterspurty ware (Northants)	c 1250-1600	1	5	0
CBW	Coarse Border ware (Surrey/Hants)	c 1270-1500	11	124	0
OLIV	Seville coarseware (olive jar)	c 1300-1750	1	114	0
TUDG	Tudor Green ware (Surrey/Hants)	c 1375-1550	12	45	0.08
RAER	Raeren stoneware	c 1475-1550	3	32	0
CIST	Cistercian-type ware	c 1480-1600	23	269	0.69
FREC	Frechen stoneware	c 1525-1750	3	227	0
BORD	Border ware (Surrey/Hants)	c 1550-1700	9	183	0.36
PMR	Post-medieval red earthenwares	c 1550-1900	71	3438	1.59
TGW	English tin-glazed earthenware	c 1575-1825	7	92	0.07
CHPO	Chinese porcelain	c 1600-1900+	2	12	0.21
PMBL	Post-medieval blackware	c 1600-1900	1	3	0
VERW	Verwood-type ware (Dorset/Hants)	c 1650-1900+	6	211	0.13
ENGS	English stonewares (misc)	c 1670-1900	5	265	0.25
LONS	London stoneware	c 1670-1900	2	110	0
PMR FLP	Flowerpot (redware)	c 1675-2000	4	517	0.09
STMO	Staffs-type mottled brown-glazed ware	c 1680-1800	15	92	0.21
STSL	Staffs-type combed slipware	c 1680-1900	1	14	0.04
NOTTS	Nottingham stoneware	c 1700-1800	7	184	0
SWSG	Staffs white salt-glazed stoneware	c 1720-1780	12	156	1.13
ENPO	English porcelain	c 1745-1925	4	21	0.35
CREA	Creamware (Staffs/Yorks)	c 1760-1830	61	1454	0
BBASG	Black Basalt ware (glazed)	c 1770-1880	1	28	0
PEAR TR	Transfer-printed Pearlware (Staffs etc)	c 1780-1830	12	133	0
SYOSL	South Yorks-type white-slipped ware	c 1780-1900+	1	45	0
TPW	Transfer-printed wares (Staffs etc)	c 1780-1900+	19	573	0

REFW	Refined white earthenwares (Staffs etc)	c 1800-1900+	2	69	0
ENGS BRST	English stonewares with Bristol glaze	c 1835-1900	2	2357	0
Total			695	17012	9.74

ROM: Roman wares, c AD 43-410

Two residual sherds (identified by Paul Booth). The sherd from (1110) is Alice Holt ware and from a worn oxidised bead rim covered with thin white slip. The second sherd from (6376), from a post-Roman ditch, is a very hard, worn, greyware with fine grog inclusions plus quartz and flint grits. The surfaces are very weathered and stained black in places - possibly by the peaty soil conditions underlying the site. Possibly early Roman.

UNID: Unidentified wares, c 1050-1900

A variety of unidentified body and base sherds - mainly of late medieval/early post-medieval appearance.

NEWB: Newbury B ware, c 1075-1350

A range of sand-, flint-, and limestone-tempered wares. A total of 312 sherds were recovered making this easily the commonest fabric from the site (45% by sherds, 30% by weight, c 42% by EVEs). The fabric is generally dark grey or grey-brown with a coarse or gritty texture. It contains a range of coarse angular and sub-angular flint (up to 10mm across), algal limestone (or chalk) inclusions plus variable amounts of quartz sand and sparse coarse rounded quartz inclusions - in some cases heavily iron-stained or tinted orange-brown in colour. Vessels are handmade, sometimes with wheel- or turntable-finished rims. It mainly occurs here in the form of jars/cooking pots - most of which are clearly sooted from use, plus a few wide shallow bowls and much rarer jug/pitcher rims. Two production sites for this ware were discovered along the route of the Newbury Bypass in 1991-7 and a full and updated account of the ware and its regional implications has been published (Mephram 2000). Finds of the ware are widely distributed along the Kennet valley in east Wiltshire and through much of Berkshire as well as in neighbouring Oxfordshire and Hampshire and previously it was thought the source of this ware was in the Savernake Forest of east Wiltshire. The name given to the ware at Oxford is 'early to late medieval east Wiltshire ware' (Mellor 1994). It is now recognised that there were probably several sources producing very similar flint-tempered wares along the Kennet valley including the earlier flint-tempered 'Newbury A' ware (absent from this site) and the chalk-/flint-tempered 'Newbury B' ware described here. These go under several different names in the various reports they have been published in but Mephram suggests these are a 'ware tradition' and that the common name 'Kennet valley wares' should be used to describe these (Mephram 2000, 63). Newbury B ware is also redefined as 'Kennet valley chalk-/flint-tempered ware' (ibid.). There is little doubt however that the ware from this excavation was produced locally. The ware dates from c 1075 but does not occur in any quantity until the late 12th century. In the Newbury excavations report it was suggested that production of Newbury B ware continued as late as the late 14th or 15th century (Vince 1997, 65) and the Newbury kilns report also suggests production up to the late 15th century (Mephram 2000, 53, 60). However no convincing evidence for production as late as this has emerged from other find-sites of the ware and its presence in later levels at Newbury may well be due to residuality. Production probably ceased therefore around c 1350 (Lorraine Mephram, pers. comm.).

Jars/cooking pots

This is easily the commonest form in Newbury B, comprising 83% (by EVEs) of all vessel forms in

this ware. These are of typical medieval form with a wide rounded body and relatively straight lower walls plus a sagging base and fairly developed rims on a short flaring neck. Rim diameters are in the 160-460mm range but the smallest example here might in Newbury A ware (flint/sand only) and the largest example may be from a curfew or bowl. Excluding these two the certain range is 200-380mm but the most popular range is within 200-250mm. Thumbed decoration occurs on 63% of all jar rims, usually on the outer face or lip of the rim. The commonest type of rim is a thickened flat-topped rim with an internal bead or projection (Type B2A: 46%; Fig. 31.1-2). This is also generally the commonest rim type found in other published assemblages of the ware (Vince 1997; Mephram 2000). This is closely followed by related types including a lid-seated variant of the latter (F1X: 29.6%) although the data here is skewed by a single vessel with 100% rim survival. Simpler thickened flat-topped rims (B2) account for 9.8%. All other types - including plain and beaded rims - account individually for 3.5% or less and are represented by single vessels.

Jars/cooking pots appear to be handmade but possibly have wheel- or turntable-finished rims. This is clearly seen on the example mentioned above where 100% of the rim survives but has broken-off in a clean horizontal line where it was attached to the shoulder. Apart from thumbed rims other types of decoration on jars are very rare and decoration seems to be mainly confined to bowls (see below). The only rim with decoration is a robust piece from the widest diameter vessel in the assemblage (460mm) and is either from a storage jar or a curfew. This has a band of wavy combing on the outside of the neck and the top of the rim is decorated with faint oblique slash marks - in place of the usual thumbing. The rim also has a patch of sooting internally - adding weight to the possible curfew identification (Fig. 31.2). Three other body sherds - possibly from jars - also have combed wavy decoration and one thick (12mm) body sherd, possibly from a storage jar, is decorated with an incised wavy line. A few base sherds display external concavity of the lower wall - a characteristic of bases in this ware. Most vessels are sooted from use.

Bowls

A minimum of five examples were identified comprising 6.4% (by EVEs) of all vessel forms in this ware. Diameters are in the 260-400mm range. These are wide shallow forms mostly with thickened rims. Three of these have thumbed rims and four of the five examples also have incised, combed or stabbed decoration suggesting that bowls are much more likely to be decorated than jars/cooking pots. Three examples have varieties of the thickened flat-topped or hammerhead rims common on jars/cooking pots (B2A: Fig. 31.3-4) and two have plain upright flattened rims and very similar external decoration consisting of two horizontal bands of incised oblique marks. One of the latter has crude combing on top of the rim (Fig. 31.5) while the other has both light thumbing and deeply stabbed circular pits on the rim (Fig. 31.6). Only the unillustrated example is completely plain. The two complete profiles show clear evidence of external sooting.

Jugs/pitchers

Rims from only two examples identified. These comprise 8.6% (by EVEs) of all vessel forms in this ware. Diameters are in the 140-150mm range. The illustrated examples has a slightly collared rim and has traces of a pouring lip (Fig. 31.7). The other (damaged) jug rim has a similar thickened flat-topped rim on a vertical neck but much of its upper surface has flaked away although a pouring lip survives and possible traces of incised decoration on top of the rim (not illus.)

NEWC: Newbury C ware, c 1075-1500

A range of mainly medium and occasionally coarse quartz-tempered fabrics (sandy wares). These mainly occur in the form of glazed tripod pitchers and jugs and the code NEWC used here refers solely to glazed sandy wares of presumed local origin. The range of local sandy ware fabrics occurring at Newbury is described in detail by Vince (1997, 52-4) and has been summarised and

updated by Mephram (2000, 53). Newbury Group C is not a single industry but a disparate group of fabrics probably produced at several local production centres over many centuries and it can be difficult at times to separate the similar oxidised sandy fabrics one from the other or to closely date isolated sherds - particularly if small or plain. One of the production sites of this ware was at Ashampstead 14km. north-east of Newbury where evidence of a kiln has been found (Mephram and Heaton 1995). This was in production *c* 1175-1225, or slightly later, and produced a range of oxidised jugs and tripod pitchers decorated with characteristic painted line and dot decoration in white slip as well as incised and combed decoration. Unglazed jars (see NEWCU below) were also made there. Products of the later 13th and 14th centuries in Newbury include a variety of highly decorated jugs with either slip painting, applied strip decoration or all-over white slip under clear or green glazes. Undecorated glazed wares also occur and are mainly perhaps of later date. NEWC products have a wide distribution in west Berkshire and southern Oxfordshire where they were formerly known as 'Abingdon-type ware' (OXAG: Mellor 1994, 71-80). The group does not seem to include the similar medieval sandy wares produced at the Camley Gardens kilns at Maidenhead in east Berkshire, as these wares have not been positively identified from sites further west including Reading and Newbury (Mephram 2000, 53).

The collection from this site is relatively small (53 sherds) and highly fragmentary and has not therefore been illustrated as better parallels exist elsewhere. By sherd count it comprises 7.6% of the site assemblage and the single surviving jug rim comprises only 2.5% (by EVEs). Other featured sherds - almost all from glazed jugs and pitchers - include handle and base fragments plus body sherds - most of which are decorated in some fashion.

Jugs/pitchers

The sole rim is probably from a 12th-century pitcher with a flaring thickened flat-topped rim in an unusually coarse fabric with a cloudy yellowish glaze both inside and out. It is residual in a post-medieval context (101). There are several other sherds from 12th- to early 13th-century pitchers or tripod pitchers mostly with a light grey core and weakly oxidised surfaces under a yellowish or greenish-brown glaze. These appear to correlate with Fabrics 5 and 17 at Newbury (Vince 1997, 52-4). A few pitcher-type sherds are in a paler silvery-grey fabric throughout and look to the naked eye very like the fabric of yellow-glazed tripod pitchers in medieval Oxford ware (OXY: Mellor 1994, 63-71), a similarity compounded by their use of very similar decorative techniques. On probability these are likely to be local Newbury products but the possibility of some medieval imports from the Oxford area cannot be ruled out. The source of the Oxford pitchers is unknown but thought to lie to the north-east of the city. Oxford glazed pitchers are dated to *c* 1075-1300 (probably in decline by *c* 1250) so the local Newbury pitchers may likewise date from the late 11th century although Vince implies they are mainly of late 12th- and early 13th-century date (Vince 1997).

Pitcher-type sherds here include a short stubby foot from a tripod pitcher with traces of glaze (1212) (*ibid.*, fig. 36.83). There is also a fragment from a strap handle of crescent section with notched edges and an applied central strip with incised herringbone decoration. This is exactly paralleled by other examples from Newbury (*ibid.*, fig. 37.90; Hawkes 1997, fig. 66.71-2). Another pitcher handle is of square section with traces of diagonal slashing on the back (1120). The latter has a reduced black metallic glaze probably resulting from waterlogged soil conditions. Rare sherds with either combed horizontal bands or spaced incised vertical lines also occur (Vince 1997, fig. 36.83). One body sherd has a possible thumbled strip flanked by rows of notched decoration under a thick yellow glaze (1267). A few sherds, including a thumbled jug base, have white slip-painted decoration under a clear glaze and one jug shoulder sherd (1179) is decorated with a combination of slip lines and dots in exactly the same style as jugs from the Ashampstead kiln and from Newbury (Vince 1997, fig. 37.87-8, 100-101). The latter are therefore likely to be of late 12th and 13th-century date. Three body sherds in both coarse grey and fine oxidised sandy fabrics come from jugs

with an all-over external white slip under a green copper-flecked glaze. One of the coarse grey sherds is also decorated with two scale-like pellets in white slip and, unusually, also has a thin internal white slip but no internal glaze (308). The single small sherd in the fine oxidised fabric (1010) has an all-over white slip and traces of a vertical row of ring-and-dot stamps. Very similar pieces (in Fabric 17) are illustrated from Newbury (Hawkes 1997, fig. 67.110; Vince 1997, fig. 37.103). Vince dates these white-slipped jugs in Newbury from the late 13th century (*ibid.*, 53-4). The fine oxidised fabric of the piece here combined with its 'highly decorated' style is very similar to, though slightly coarser than, London-type ware jugs of the 13th-14th century but Vince makes no mention of this type occurring at Newbury and only three or four London-type sherds are known further north from Oxford (*pers. obs.*). A very small number of sherds have an internal as well as an external glaze.

Other forms

Three separate sherds from sagging bases have an internal dark greenish glaze and are sooted externally (306, 609, 610). These may be from cooking pots or pipkins and might be of late medieval date. Another grey body sherd, possibly from a jar, has a ?vertical thumbed strip with an external yellow glaze and also traces of internal glaze (1263).

NEWCU: Newbury C ware (unglazed), c 1075-1500

These are assumed to be jars/cooking pots as the sherds are unglazed and most exhibit sooting. The fabric is grey or brown and sandy. One sherd is oxidised. The small assemblage (15 sherds) includes only body sherds and a single large beaded rim from a wheel-thrown cooking pot (Context (hereafter Ctxt) 5304: not illus.). One probable cooking pot shoulder sherd is knife-trimmed externally in exactly the same way as medieval Oxford ware cooking pots (*c* 1075-1300, see above).

SEOX: South-East Oxfordshire wares, c 1075-1550

Three sherds are tentatively ascribed to this tradition although the two jar/cooking pot sherds could also fall within the NEWCU sandyware tradition (see above). This is a disparate group of sandy wares - similar in some respects to Newbury C sandy wares and not always easy to distinguish from them. There are also similarities with Brill/Boarstall ware (see below) although the latter tends to be finer. The several fabrics that comprise this tradition are grouped under the description 'late Saxon to late medieval south-east Oxfordshire wares' (Fabric OX162: Mellor 1994, 84-93, 143-47). Potters are recorded at Henley in the late 13th and 14th centuries and there is evidence of pottery production at Nettlebed in the late medieval period (*ibid.*). The pieces here are significantly paler than NEWC or NEWCU and compare well with fabric samples from Nettlebed.

The illustrated piece (Fig. 31.8) is from a medieval-looking jar/cooking pot with a ?wheel-turned beaded rim in a medium-coarse, very sandy, silvery-grey fabric with a darker grey external surface. The form is closely paralleled in Mellor (*ibid.*, fig. 33.1-13). The form and fabric is also very like cooking pots in medieval Oxford ware (OXY: *ibid.*, 63-71) but the latter is finer grained. A small reduced sagging base sherd (diam. *c* 110mm) with external sooting may also be from a cooking pot (127, not illus.). The other piece is from a jug base possibly of late 13th- or 14th-century date (127, not illus.). This has a fine very pale grey/cream fabric, quite similar to Brill/Boarstall, with sparse-moderate coarse red iron oxide inclusions (exactly as some Nettlebed samples). The exterior is covered with a crystalline copper-flecked green glaze as far as the base. The latter is flat with evidence of shallow external facets and traces of a pulled or thumbed foot - this feature, the glaze and the rough internal finishing distance it from true Brill/Boarstall jugs.

MINE: Minety ware (NW Wilts), c 1120-1550

Quartz and oolitic limestone-tempered ware often with a frosty greenish glaze. From the village of the same name in north-west Wiltshire. This was widely traded in the region during the late medieval period in the form of jugs, bowls and jars etc. The single sherd here is wheel-thrown and dates after c 1250 (3050). A few other sherds are known from Newbury (Vince 1997, 59).

BRILL: Brill/Boarstall ware (Bucks), c 1225-1625

A smooth pink, buff or cream ware widely traded in the form of green-glazed and highly decorated jugs. Kilns known from the villages of Brill and Boarstall in west Buckinghamshire. Very common at Oxford (Mellor 1994, 111-140: fabric OXAM). Also occurs at Newbury where it is fairly rare (Vince 1997, 63, Fabric 16). The single sherd here is from the neck/shoulder of a bottle - a characteristic Brill/Boarstall product dating to c 1250-1400 (Fig. 31.9). It has a cream/buff fabric with a copper-flecked green glaze on the body below the shoulder angle.

KING: Kingston-type ware (Surrey), c 1230-1400

Sandy whiteware. Commonly traded in the form of green-glazed and highly decorated jugs (Pearce and Vince 1988). Represented here by a single body sherd with a brownish reduced copper glaze, possibly from a baluster jug?(3058). See also CBW below.

POTT: Potterspury ware (Northants), c 1250-1600

Wheel-thrown cream, buff or pale grey sandy fabric produced at Potterspury (Northants). Widely distributed in the Midlands, Buckinghamshire and in small quantities as far as Oxford in the form of glazed or unglazed jars and jugs (see Mynard 1992, fig. 131-6 for typology). The piece here is a thin-walled sherd from a sagging base, possibly from a jar (6075, not illus.). It has a black core, grey external surface and a cream internal surface with patches of decayed yellowish glaze inside and out. The identification here is tentative - it might alternatively be a local late medieval type unknown to the author.

CBW: Coarse Border ware (Surrey/Hants), c 1270-1500 (mainly after c 1350)

Coarse sandy whiteware produced at various centres along the Surrey/Hampshire border. Widely traded in the form of green-glazed cooking pots, bowls, dishes, jugs and other forms. The ware is really only common after c 1350 (Pearce and Vince 1988). Represented here by just eleven fairly small body and base sherds, mostly from green-glazed jugs (not illus). These cannot always be positively distinguished from coarser variants of Kingston-type ware. A couple of the sherds here, apparently from 13th-14th century contexts (306 and 1110), are unusually coarse with moderate rounded clear and iron-stained quartz inclusions up to 3mm across. One jug sherd has an external yellow glaze and a patchy internal green glaze. Another sherd with internal green glaze could be from a bowl.

OLIV: Seville coarseware (olive jar), c 1300-1750

A single worn body sherd from a globular olive jar/amphora (Fig. 32.10). This has a hard pale brown fabric with a darker greyish external surface - much of which has flaked away either due to scorching or weathering. The internal surface is fairly fresh and shows clear turning marks. The fabric contains moderate-abundant coarse rounded to sub-angular quartz (to 2mm) and metamorphic inclusions including rounded cream/pink schistose and possibly feldspars. These

coarse amphora-like storage jars were imported from Seville in south-west Spain usually as containers for oil, olives, honey or dried fruit etc. The medieval and post-medieval jars (typified by examples from the 1588 Armada shipwrecks) can sometimes be distinguished on the basis of form and by the fact that the post-medieval examples sometimes have an internal glaze. Several fabric variants have been identified at Southampton where they occur in small quantities from as early as the late 13th century (Brown 2002, 37-8, Iberian Coarsewares). This piece here appears harder and less sandy than most post-medieval examples and is therefore possibly earlier. As it is associated in its context with the base of a Tudor Green ware cup/jug it is probably of 15th- or early 16th- century date (Ctxt 6339): fill of wooden structure in ditch, Basement WB). Olive jars mainly occur in settlements close to the coast, or ports, and are rarely found as far inland as Newbury - although a few sherds are known from Oxford. This is the first example of the type reported from Newbury.

TUDG: Tudor Green ware (Surrey/Hants), c 1375-1550

Fine green-glazed sandy whiteware produced at various centres along the Surrey/Hampshire border. Widely traded in the form of thin-walled green-glazed drinking vessels (Pearce and Vince 1988). The small and fragmentary collection here includes plain flaring rims from a couple of wide cups and possibly a jug plus a pad base and a narrow strap handle. Probably not common in Newbury until after c 1430 (Hawkes 1997, 125).

RAER: Raeren stoneware, c 1475-1550

Grey stoneware with a clear ash or salt glaze. Sometimes with an iron wash. Commonly imported in the form of globular drinking mugs with a frilled base. Produced at Raeren (now in Belgium), near Cologne. The three sherds here represent two mugs including a frilled base (719, 3012).

CIST: Cistercian-type ware, c 1480-1600

Fine redware drinking vessels with a black or dark brown glaze in the Cistercian tradition. Originally produced in Yorkshire and the Midlands. By the early 16th century similar black-glazed vessels were produced at several locations across the south of England including Brill (Bucks) and Falfield (South Gloucs). Those from Newbury were probably from local or regional sources. The modest assemblage here represents around a dozen vessels. These include globular handled cups with short flaring rims and pad bases and taller more conical handled forms. Two sherds have traces of applied white clay pads - a typical Cistercian-type decoration.

FREC: Frechen stoneware, c 1525-1750

Grey sandy stoneware with a brown salt-glaze. Produced at Frechen, near Cologne, Germany. Commonly imported as bartmann jugs ('bellarmine') with an applied human face mask. The three sherds here represent two jugs. One is a moulded base of c 1550-1625 (915), the other a plain crudely finished bellarmine base of c 1650-1700 (3012).

BORD: Border ware (Surrey/Hants), c 1550-1700

Typical green- or yellow-glazed fine whiteware forms from the Surrey/Hampshire potteries (Pearce 1992). The small assemblage here includes pipkins, dishes and a base from a possible chafing dish - although this is rather coarse and might be a Verwood product.

PMR: Post-medieval red earthenwares, c 1550-1900

Ubiquitous red earthenwares, usually glazed. A variety of common domestic crockery forms present (not illustrated). As usual, this is the commonest post-medieval pottery type present. The 71 sherds here represent 10.2% of the assemblage (or 16.3% by EVEs). Many vessels here - particularly those from 18th- and early 19th-century contexts - are in a fine light orange or creamy-orange fabric with a bright orange or amber glaze. This is very similar to 'red border ware' (London code RBOR) produced at the same Surrey/Hampshire potteries that also produced the white border wares (see BORD). Although this source cannot be ruled out it is more likely that the Newbury area redwares were more locally produced - though perhaps from similar clays as the red border ware potteries? Most of the redware assemblage here is of 17th-18th century date (perhaps mainly 18th century) although a few pieces are almost certainly of 16th- to early 17th-century date.

The most likely source for these is the post-medieval production site at Inkpen - only 4 miles west of Newbury. Vince states that pottery waste from Inkpen matches exactly the fabrics of post-medieval redwares found in Newbury (Vince 1997, 65). Bowls form 43% of the assemblage, followed by jars at 37%, jugs at 16% and cups (a single example) at 4%. The bowls include the perforated bases from two separate strainers or colanders. Sherds from only four jugs were identified but two of these are probably of late Tudor date including a rim from a good quality copy of a Frechen stoneware drinking jug with a cylindrical neck and a neck cordon (3012). The five or six jars also include two unglazed Tudor period pieces in a much finer fabric similar to early post-medieval London area redwares, but most examples are heavily potted glazed storage jars dated by their association with industrialised Staffordshire tablewares to the 18th and early 19th centuries.

TGW: English tin-glazed earthenware, c 1575-1825

A fine buff or yellowish earthenware with a white tin glaze. Often with blue painted or polychrome decoration. Commonly used for tablewares. Produced in London from c 1570 and Bristol from c 1650. The small and fragmentary collection here represents at least four dishes including a mid/late 17th-century 'charger' with Chinese-style decoration and a pale blue-tinted 18th-century dish with decoration.

VERW: Verwood-type ware (Dorset/Hants), 1650-1900+

Sandy buff or cream earthenwares with clear yellow or greenish glazes. Produced at Verwood in Dorset and probably in neighbouring Hampshire. A minimum of four vessels identified. The only rim present is of complex lid-seated form and from a storage jar with internal yellow glaze (609). A dish sherd is also present.

SWSG: Staffs white salt-glazed stoneware, c 1720-1780

Ubiquitous white stoneware often with moulded decoration. Tea-wares and dishes etc. Also includes a small 'pharmacist's measure' shaped like a small teabowl.

ENGS BRST: English stonewares with Bristol glaze, c 1835-1900

The two vessels here include a complete cylindrical spirits flagon (height 275mm) with two stamps on the shoulder. One of these is a maker's stamp in a small oval 'PRICE/ H/ BRISTOL', and a much larger proprietor's stamp '3490/ PARKER & SON/ Wine & Spirit Merchants/NEWBURY' (Fig. 32.11). The form and the stamps date this piece to the late 19th or early 20th century. More specifically the Price, Bristol stamp dates the piece before 1906 when this stoneware manufacturer

ceased trading. A Mrs C. Parker grocer, wine, ale and porter merchant of Bartholomew Street, Newbury, is listed in Harrod and Co.'s Directory for 1876 (Harrod and Co 1876). Directories searched for 1854 and 1915 produced negative results

Summary

The two small sherds of Roman pottery recovered can be regarded as residual strays. No Anglo-Saxon pottery was recovered. Probably the earliest and certainly the most numerous pottery type here is locally produced Newbury B ware (*c* 1075-1350), mainly occurring as coarse jars/cooking pots and a few bowls and pitchers. While some of the Newbury-type wares (NEWB, NEWC, NEWCU) could potentially date from the late 11th century, the absence of any definite examples of Newbury A ware (*c* 1050-1250) coupled with the predominance of Newbury B ware suggests that significant occupation of the site did not occur until the late 12th century when Newbury B ware becomes common (see above). Medieval occupation of the site was probably at its most intense during the 13th and 14th centuries. Most pottery, including glazed and decorated Newbury C ware jugs, came from relatively local sources with much smaller amounts of pottery from regional sources including the Surrey/Hampshire green-glazed whitewares, Brill-Boarstall ware (Bucks.) and possibly south-east Oxfordshire wares and a possible vessel in Potterspury ware (Northamptonshire). A single sherd in Minety ware (north-west Wilts.) could be of high or late medieval date. No medieval pottery from as far as London was recognised and no continental imports until the late medieval or early post-medieval period (OLIV, RAER). The single sherd of Spanish olive jar (OLIV) probably dates to the 15th or 16th century and is a rare find from such an inland site as Newbury (Fig. 32. 10). It was possibly imported via Southampton or Bristol and might be linked to Newbury's prosperous wool trade during this period.

Apart from a few possibly late medieval examples of NEWCU, local late medieval (*c* 1350-1500) pottery types, especially cooking wares, are hard to recognise and their absence during this period could signal either a drop-off in occupation, or a decline in the use of ceramic cooking vessels in favour of metal ones, or a more rigorous system of rubbish disposal from the site. Most of the late medieval/early post-medieval vessels types identified are types of drinking vessel (TUDG, RAER, CIST).

The post-medieval assemblage is dominated, as usual, by ubiquitous post-medieval glazed red earthenwares (PMR) in a range of utilitarian forms. By the 17th/18th century most of this was probably coming from the Inkpen pottery a few miles west of Newbury. A few pieces of 16th- or early 17th-century PMR may be from other unknown local or regional sources. A few glazed whitewares from the Surrey/Hampshire Border ware potteries (BORD) and sandier cream-buff wares from the Verwood-type potteries of east Dorset (VERW) are also present. The remainder of the post-medieval assemblage is fairly unremarkable and similar to numerous other assemblages of this date in southern England. It is dominated by the ubiquitous late 18th- to early 19th-century 'industrialised' products of the Staffordshire/Midlands potteries, mainly tablewares in Creamware (*c* 1760-1830) and 19th-century transfer-printed wares. The latest definite piece in the assemblage is a complete English stoneware spirits flagon (Fig. 32. 11) with the marks of a Bristol potter and a Newbury wine and spirits merchant datable to *c* 1876-1906 (ENGS BRST).

Illustration catalogue

Fig. 31.1 Fabric NEWB, Jar/cooking pot profile. Heavily soot encrusted ext. Ctxt (2059).

Fig. 31.2 Fabric NEWB, Storage jar or ?curfew rim (sooted int.). Combed and incised dec. Ctxt

(1294).

Fig. 31.3 Fabric NEWB, Shallow bowl profile. Lightly thumbbed rim. Underside of base possibly knife-trimmed or wiped. Heavily sooted ext. Ctxt (1119).

Fig. 31.4 Fabric NEWB, Bowl profile. Incised wavy line dec int. and ext. plus slashes on rim. Heavily sooted ext. Ctxt (1276).

Fig. 31.5 Fabric NEWB, Bowl rim with incised dec. Ctxt (129).

Fig. 31.6 Fabric NEWB, Bowl rim. Lightly thumbbed with stabbed and incised dec. Ctxt (1212).

Fig. 31.7 Fabric NEWB, Jug/pitcher rim with trace of pouring lip. Ctxt (306).

Fig. 31.8 Fabric SEOX, Jar/cooking pot rim. Sandy silvery-grey fabric. Ctxt (307).

Fig. 31.9 Fabric BRILL, Bottle neck/shoulder. Fine cream/buff fabric. Mottled green glaze below shoulder. Ctxt (6485).

Fig. 32.10 Fabric OLIV, Seville coarseware. Body sherd from olive jar. Max length 114mm, max thickness 12mm. Worn ext. Ctxt (6339).

Fig. 32.11 Fabric ENGS BRST. English stoneware with 'Bristol' glaze. Complete cylindrical spirits flagon with maker's and proprietor's stamps. Date within *c* 1876-1906. Height 275mm. Ctxt (5309).

The ceramic building material *by John Cotter*

Introduction and methodology

The site produced a total of 1375 pieces of ceramic building material (CBM) weighing approximately 148.802kg. This total includes material from the 2005 evaluation (236 pieces) as well as the 2008 excavation (1139 pieces). Currently this material fills 29 museum boxes. This report however is based almost entirely on the material from the 2008 excavation. Owing to significant time and budgetary constraints a full detailed catalogue of the CBM has not been attempted and a summary rather than a fuller report is presented here.

A sample of *c* 60 out of the 177 contexts containing CBM was selected as the most important in terms of providing dating for the site and for shedding light on the character of the structures that stood here. Some of these contexts also produced datable pottery, but in many cases CBM was the only datable material available. It is recognised that this material often provides only very broad dates, and is compromised by the usual problems of re-use and residuality inevitable on a complex urban site as this.

A quantified summary catalogue (by fragment count) was made of all the main types of CBM occurring in the sampled contexts and a broad spot-date assigned to each. Measurements were recorded for nearly all complete objects (mainly bricks) or complete dimensions (eg tile widths) and details of fabric, glaze, manufacture and condition etc were recorded for any significant pieces or those with good associated dating.

The original sample of *c* 60 contexts mainly comprised those of known or assumed medieval date. This sample size was later expanded to 96 contexts to include more post-medieval contexts and

thereby gain a better impression of the range of medieval and post-medieval CBM in Newbury. The catalogued sample thus comprises 54% of all CBM-producing contexts on the site, and the 775 pieces in the catalogue comprise 68% of all CBM from the 2008 excavation. Material from another 28 contexts was later included in an attempt to clarify the dating of features found in the Watching Brief, but while added to the catalogue, was not included in the analysis. Full details remain in archive. Material from the 2005 evaluation has been excluded from the data and discussion here as this has already been the subject of a detailed catalogue and assessment by John Tibbles (Tibbles 2005). The latter is a microcosm of the larger excavation assemblage discussed below.

As well as the catalogued sample from the 2008 excavation, all the remaining material (from both the excavation and evaluation) was rapidly scanned for anything of significance. The remainder however proved to be remarkably similar in composition to the catalogued sample.

Condition

The CBM assemblage is generally in a fragmentary and sometimes worn condition but consists of a mixture of fresh and worn pieces. Apart from a dozen or so brick samples there are no complete items although many roof tiles survive as large fresh pieces with some measurable widths present.

Table 1 gives a breakdown of the types and quantities recovered. All of this is of medieval and post-medieval date, mainly the former. Flat roof tile (peg tile), as usual, constitutes the vast majority of this material. In contrast there is a surprisingly small collection of ridge tiles and only a couple of hip tiles (miscellaneous). There is a small/modest assemblage of brick. The small collection of floor tile mainly comprises plain late medieval and post-medieval quarry tiles but includes at least one medieval decorated floor tile. The miscellaneous sample includes a late 18th- or 19th-century chimney pot.

Apart from a few complete bricks of late 18th- or 19th-century date, a stamped brick of 20th-century date and a small piece of 19th-century brown stoneware drain pipe very little material could be ascribed to the 19th century or later (likewise with the pottery assemblage). This is almost certainly due to the machining-off of ‘modern’ contexts after the demolition of standing buildings here but it may also be due in part to the architectural ‘fossilisation’ of buildings here by the early 19th century and changing methods of rubbish disposal over time. Two fairly detailed studies of medieval CBM from Newbury have already been published. These comprise the CBM from Bartholomew Street (Vince 1997, 68-71) and Cheap Street (Beamish 1997) and both present some useful aspects of metrical data and detailed (floor tile) fabric descriptions based on a more detailed analysis than was possible here.

Table 7. Types and quantities of ceramic building material in the recorded sample (2008 excavation)

Type	No. Frags
Flat roof tile	703
Ridge tile	8
Floor tile	14
Brick	47
Miscellaneous	3
Total	775

Description

Flat roof tile (peg tile)

As might be expected this is easily the most abundant category of ceramic building material from the site. The 703 fragments identified comprise 91% of the CBM assemblage. This total however may include some fragments from the flat tile-like sides of ridge tiles, which cannot always be distinguished, although they tend to be thicker. Flat roof tiles of plain rectangular form are now known from later 12th-century contexts, or documentary evidence, in several English towns and cities including Newbury itself (Vince 1997, 69), London (Smith 1998–9), Canterbury (Horton 2001, 189, 193) and Eynesham Abbey, Oxfordshire (Mitchell 2003, 214). Once established the form remained virtually unchanged right up to the 19th century.

All the tiles here appear to be of fairly standard medieval/post-medieval flat rectangular form with a pair of circular nail (or peg) holes near the upper end. Tiles were formed in a wooden mould resting on a sanded surface. A common and distinctive feature of the medieval tiles here is that underside is often ‘sanded’ or gritted with a mixture of angular flint gravel and quartz sand. This has been noted in other tile assemblages from Newbury (Vince 1997, 68) and is also a fairly common feature of medieval tiles from towns along the Thames valley including Reading and Abingdon but is only very rarely seen at Oxford (pers. obs). Flint grits up to 3mm are not uncommon, often calcined and white, but are generally under 2mm. Sometimes the gritting is fairly superficial and mainly occurs near the edges of the tile and avoids the central area. Occasional or sparse flint inclusions have sometimes been accidentally wiped into the smoother upper surface of the tile during handling but a few tiles have a thin scatter or flint inclusions throughout the fabric. The impression gained from the assemblage here is that locally the practice of flint-gritting the undersides of tiles had probably died-out by the 17th century.

Virtually all the tiles here occur in a range of fairly similar-looking oxidised and generally quite smooth fabrics with orange-brown, reddish-brown, orange-red, light brown and buff-brown firing colours. Certain, fairly subtle, differences are sometimes noticeable in groups of tiles from different contexts and these must in some cases reflect either chronological differences or different production centres but it is fairly clear that nearly all roof tiles in Newbury were produced from a basically similar red-firing clay which shows little significant change throughout the medieval and post-medieval periods. At Bartholomew Street, all the roof furniture was judged to occur in the same range of fabrics - a hard to very hard oxidised red clay containing a scatter or rounded quartz sand and some angular flint fragments (Vince 1997, 68) and there is little doubt that the vast majority of tiles here also conform to this description. Some textural, colour and manufacturing differences in the assemblage here, however, may be significant and are briefly described below. There is a risk, however, in attaching too much significance to slight variations within the same basic range of fabrics. Ten roof tile fabrics, for example, were provisionally identified during the assessment of just 236 tile fragments from the evaluation stage at Newbury Park Way (Tibbles 2005), although the author rightly observed that some of these are simply the result of firing differences. A representative sample of ‘medieval’, ‘late medieval’ and ‘post-medieval’ tile fabrics has also been extracted from the present assemblage - particularly from contexts with good pottery dating. These, it is hoped, will form the basis of a Newbury tile fabric reference collection and a rough aid to the dating of local tile assemblages, but a more serious attempt to define the full range of Newbury CBM fabrics lies outside the scope of the present report.

No complete tiles have survived but several very large fragments have. These include a single tile with a complete measurable length of 280mm (but no width), a thickness of 16mm and with one surviving circular nailhole (diam. 10mm). A group of four fingerprints occurs on the lower exterior of the tile. This tile, from context 1011 in evaluation Trench 10, has a post-medieval looking fine

orange sandy fabric, and was associated with pottery probably of 17th/18th-century date. Ten other tiles have measurable widths. Six of these are apparently medieval (up to *c* 1600) and four are post-medieval. The medieval tile widths are within the range of 158-181mm and tend to be slightly thicker (14-18mm). The post-medieval tile widths are in the 155-165mm range with a thickness range of 12-16mm.

Except perhaps at their extremes, tile thicknesses here are of very limited help in distinguishing medieval from post-medieval tiles. It seems to be true however that medieval tiles show a wider range of thicknesses than post-medieval tiles. The medieval tiles have thicknesses in the 10-23mm. range but 13-15mm is about average, although this average is the same for post-medieval tiles. Half a dozen or so medieval tiles were noted as thin as 10-11mm but only one or two post-medieval tiles were as thin as this. Tiles up to 18mm thick are fairly common to both periods but the two or three medieval tiles in the 20-23mm range are obviously fairly rare and may include misidentified ridge tile fragments, which tend to be thicker. Post-medieval tiles tend to have a more uniform thickness, generally 13-15mm, and a somewhat neater more regular appearance with flatter edges. This is commonly associated with a cleaner brighter orange or orange-red fabric than the medieval tiles.

A few medieval tiles have been crudely bevelled-off along the inner edge - presumably by hand, and a few others exhibit an internal beading or moulding along the inner edge or a shallow furrow parallel to the edge. Generally the medieval tiles show more evidence of handling while still quite plastic - particularly on the edges which are often dented or show finger impressions. In addition the edges of at least two medieval tiles show coarse textile impressions (Ctxts 1182 and 5012). Nail holes (or peg holes) are nearly always circular and generally *c* 13-15mm in diameter, although a range of 10-18mm was noted. These taper in diameter from the outside to the inside. In two or three cases the nailhole does not appear to have successfully pierced the tile but the thin septum of remaining clay appears to have been subsequently pierced - perhaps by an iron nail - as the internal piercing was only *c* 8mm across compared to an outer nailhole diameter of 15mm. This feature has been noted before in Newbury (Vince 1997) and at other sites along the Thames valley. A small group of early tiles (*c* 1175-1300?) occur in a fairly distinctive light orange or brown fabric with distinctive 'recessed' nailholes (Fig. 33.1). The external nailholes are circular (10-15mm in diameter), but have a shallow flattened recess within and then a smaller diameter nailhole piercing straight through to the inside. The recess may have been caused by the ?wooden handle of the tool used to pierce the tiles (like an apple corer). Two of these also have peripheral groups of dents or scratches also caused during this process either by the tool or the tiler's fingers. Eight examples of this sort of nailhole piercing have been noted from four separate contexts. Five of these occur in the same early context group (Ctxt 1182, see below). Definite square nailholes (generally a post-medieval characteristic) occur on only three post-medieval tiles in the assemblage here but a few vaguer sub-square examples have not been included here. At least two tiles have unusual pentagonal nailholes (Ctxts 3111 and 3124) and these appear to be of early post-medieval date. The author has noted similar-shaped nailholes on 16th-century tiles from Hampton Court Palace, Surrey.

Glazed roof tiles are rare and the 33 examples noted here are assumed to be medieval. Most of these however are fairly small fragments and some might be from ridge tiles. Only in two or three cases do the fragments show a good quality clear or brown lead glaze on the outside. Presumably, as per usual, it was the lower half or third of the exterior that was glazed. In all other cases only splashes and specks of glaze occur both internally and externally. A few tiles have a greyish ash glaze along their edges caused by a reaction with the wood fuel in the kiln.

A group of 74 early tile fragments from a ditch context (1182) deserve closer attention because of their early date and fairly distinctive characteristics. These were associated with pottery datable *c* 1175-1250 (although up to *c* 1300 is possible). These include five examples with the distinctively

recessed nailholes described above (Fig. 33.1) and one or two pieces may have deliberate incised lines. These occur as large fresh and smaller fragments, only a few show wear. The fabric is consistent and probably represents the product of a single tiliary. It is predominantly light (almost creamy) orange to light brown with a pale grey core. Some are orange-buff. The basic fabric is remarkably smooth and almost free of visible inclusions although some are very finely sandy. Flint gritting occurs on the undersides of 11 examples and splashes or specks of clear glaze occur randomly on 17 examples. A few pieces have rare superficial inclusions of platy white shell up to 10mm across on the outer surface. Thicknesses are in the 12-15mm range. Some examples have a crude moulding or furrow along the inside (long) edge of the tile and several show evidence of handling and denting while still in a plastic state. One corner fragment has both a finger impression and a textile mark on its edge along with splashes of greenish glaze. The smoothest and most orange examples could be difficult to distinguish from some post-medieval tile fabrics also from this site, but the combination of characteristics seen in this early group of tiles should allow examples to be readily distinguished.

The smooth character of the fabric and the light orange or buff firing colour of some is reminiscent of early roof tile fabrics at Oxford including a pink-buff fabric (Oxford Fabric VIIB, c 1175-1300) and a slightly sandier orange-pink fabric common in 13th-14th century contexts at Oxford Castle (Fabric VIIIB) (Cotter 2006 and forthcoming). The source of the Oxford tiles is unknown and it is not suggested here that they come from Newbury (the Oxford tiles contain fine chalk which is lacking in the Newbury fabric), but the general similarity between them may reflect an early stage of tilemaking technology in the region and they may somehow be related.

A range of related late medieval (15th-17th century?) tile fabrics occur. These are mostly very hard-fired with orange or brownish fabrics and exhibit considerable unevenness and thickness variation and many examples are flint-gritted underside. The fabrics range from smooth to fairly sandy and some have sparse-moderate inclusions of flint grits and red iron-rich and white clay pellets. A fairly common type is generally quite thick, heavily quartz-tempered, dense, orange and fairly gritty. Another late medieval/early post-medieval type is fairly thick, orange-red and slightly or finely sandy and resembles a type of 16th-century roof tile found in Oxford. Post-medieval tiles tend to be characterised by a neater, more-uniform appearance and usually by a fine orange-red fabric or a sandy orange or orange-brown fabric with varying amounts of red and some white clay pellets and fine white clay streaking. No definite examples of 19th-century tiles were recognised.

Ridge tiles

Only eight pieces of certain or probable ridge tile were identified. Other less diagnostic pieces (body sherds and some edges) may have been recorded as plain roofing tile (see Miscellaneous below for hip tiles). The assemblage is mostly very fragmentary although one or two pieces are quite large and fresh. Most of the pieces identified are from the edges or lower corner of the tile which are usually thicker than roof tiles (up to 24mm thick) or sometimes distinctively knife-trimmed or bevelled-off internally. Several pieces are glazed ranging from splashes to a good quality brown glaze. No pieces of crested ridge tile were identified although these do occur on other sites in Newbury (Vince 1997; Beamish 1997). Ridge tiles occur in the same common oxidised fabrics as medieval roofing tile although none definitely later than the 15th/16th century was identified.

A corner fragment from a thick curved tile - possibly a ridge tile (or warped roof tile?) was identified from the early ditch context (1182, see above) associated with abundant early peg tiles and pottery of c 1175-1250. This has the same smooth orange-brown fabric as the tiles and bears specks of glaze. The largest fragment recovered (Ctxt 6289, 13th-14th century?) is in a similar fine

brown fabric with a grey core. This is from the end/lower corner of a ridge tile and represents most of the profile - possibly of flattened semicircular form. The sides vary in thickness from 15-17mm, reaching a maximum of 22mm at the thickened lower edge, which has probably been bevelled-off by hand. The vertical end shows evidence of knife-trimming. There are traces of a band of decayed glaze near the (missing) apex of the tile. Fragments of three separate ridge tiles were recovered from Context (5012, 15th-16th century?) including an example with flint gritting on the underside and an end-piece from the curved apex of a tile. The unusually low ratio of ridge tile to roof tile fragments at this site is noteworthy and is not typical of other medieval/post-medieval sites in Newbury or elsewhere in the region (eg. Oxford). This could suggest that other materials such as stone, slate, lead or wood, may also have been used to cover the ridges of buildings on this site.

Floor tiles

These are fairly rare with only 14 fragments identified. They are mostly very fragmentary - usually edge or corner fragments. Only two retain complete side widths. These can be divided into plain 'quarry' tiles (glazed or unglazed) for everyday flooring purposes, and a single example of a medieval decorated floor tile.

The quarry tiles probably date from the late medieval period through to the post-medieval period although most examples here are probably of 15th-17th century date. These are typically quite thick (28-50mm), and nearly all examples here have knife-trimmed bevelled sides, which distinguishes the thicker examples from 'Tudor' bricks. They have a limited variety of sandy orange-red or reduced grey-brown fabrics, some with inclusions of red and white clay pellets or white clay streaks (see Vince 1997, 70; Beamish 1997, 129-30). Most are probably of local manufacture. The upper surfaces of most examples show varying degrees of surface wear from centuries of human tread making it difficult in most cases to ascertain if they were originally glazed. Three examples however show evidence of glaze. One of these (Ctxt 3012) is a corner fragment in a smoother pink-buff fabric with a plain all-over white slip showing yellow under a clear glaze. Another flake from the upper surface of a tile is clear glazed. Another small, almost complete, square tile is 38mm thick with sides measuring 98 x c 110mm, and although the upper surface is worn-off there is a tiny speck of glaze on one of the bevelled sides (Ctxt 3138). The thinnest piece (20mm), which is very flat and plain, is probably of late 18th- or 19th-century date (Ctxt 6404).

The single medieval decorated floor tile, from context 3012, comprises two joining pieces with a complete width of 125mm and a thickness of 24mm (Fig. 33.2). The sides are neatly bevelled and the underside finely sanded. The firing colour is mostly light orange-brown but with a sandwich firing giving a darker brown surface and margins and a broad grey core. The fabric is fairly smooth or silty with a scatter of coarser quartz sand grains mostly under 0.5mm across. The upper surface is very thinly 'printed' with a design in white slip under a thin slightly worn clear glaze. The design is probably part of a multiple tile design - probably a large concentric circle running through adjoining tiles with a fretty fleur de lys in the corner with smaller cinquefoil rosette fillers. The design has not yet been paralleled but is possibly derived from earlier tiles of the Wessex school. A related design occurs on a few Wessex tiles from sites in Oxfordshire including Oxford Cathedral, Dorchester Abbey and Abingdon Museum (Haberly 1937, no. III). The thin 'printed' technique (indicating a date after c 1330) and refined redware fabric suggest a late medieval date, as do the associated quarry tile fragments (including the white slipped quarry tile above) and pottery finds of c 1550-1600. A date in the late 14th or 15th century might be suggested. The presence of the tile suggests that someone of reasonable wealth may have lived here at this time but the number of medieval decorated floor tiles recovered is considerably lower than that from other excavated medieval sites in Newbury (Vince 1997; Beamish 1997).

Brick

There is a relatively small to modest assemblage of brick comprising both loose excavated fragments and a number of complete brick samples taken from walls and other features. Not all complete brick samples were recorded however and the dimensions of only seven complete bricks were fully recorded, although dozens of thickness measurements were also recorded. Bricks here have been approximately dated by reference to regional and national typologies which consider both the general appearance of the brick and its surviving dimensions. The earliest examples here may date from the 15th century - in line with the general appearance of wall bricks in the region (eg. as at Ewelme in south-east Oxfordshire). There is however no definite evidence for this apart from probability, and by the 16th-century brick usage in the region was widespread.

Nearly all 'early' bricks here (15th-18th century) are orange or orange-red in colour with a fairly soft to fairly hard sandy fabric although a few over-fired hard purplish-brown pieces were noted. Many bear traces of white lime mortar. The dimensions of two complete 'Tudor' (probably 16th-century) bricks are recorded below and can be taken as fairly typical:

Length: 220mm, Width: 105mm, Thickness: 55mm (Ctxt 1013, well lining).

Length: 230mm, Width: 110mm, Thickness: 50mm (Ctxt 4104, Evaluation).

The two bricks above are of typical, fairly crude, handmade appearance with crinkled sides and occasional vegetation impressions on their sandier undersides. Thicknesses between 45-50mm were commonly recorded for 'Tudor' brick. Much above *c* 55mm thick, bricks here are judged to be 17th-century or later. By the late 18th or 19th century a few bricks up to 70mm thick are present but 'early' bricks are much commoner in the assemblage here. More than a few 'Tudor' bricks have patches of an accidental greyish ash glaze along their edges and occasionally over one of the larger sides. One 'Tudor' brick end (W108 x T45mm) has a hard light orange fabric with marly cream clay streaks with an arc of ash glaze over the corners of its sandy underside and partly along the sides (Ctxt 3092). A couple of 'Tudor' bricks occur in a rare light brown fabric. Some of the latest bricks (late 18th- or 19th-century) also occur in a light brown or orange-brown fabric. A couple of machine-made late 19th or 20th-century bricks were also noted. Apart from the latest stamped example none of the later bricks in the assemblage is frogged. The latter example, which is 20th-century date, is also the only brick with a maker's mark (PHORBES) stamped inside the frog. Fuller details of the brick assemblage may be consulted in the site archive. The relative paucity of brick from the excavations suggests that brick may only played a minor role or secondary role in the fabric of late medieval and early post-medieval buildings on this site. However this may be due in part to sampling and retention strategies during the excavation.

Miscellaneous

This category includes two hip tiles and a chimney pot. Hip tiles are usually small wedge-shaped tiles similar in function to ridge tiles but adapted to cover the hip join of a hipped roof. The top of one early post-medieval hip tile was found in Context (3012) associated with pottery of *c* 1550-1600. This has a single circular nailhole and has a dense smooth red fabric with a grey core and splashes of clear glaze. The other piece (Ctxt 3050), also from the top of the tile, is in a similar post-medieval looking fine red fabric (probably 16th-17th century). This is 15mm thick with a circular nailhole and with crude knife-cut edges. It has splashes of clear brown glaze inside and out and patches of greyish ash glaze externally. A single example of a chimney pot was also recovered (Ctxt 6487). This is probably of late 18th- or 19th-century date and has a fine wheel-turned orange-red (PMR) fabric with a flattened bead rim with traces of concentric grooving on top.

List of Illustrations

Fig. 33.1. Early peg tile corner fragments with distinctive ‘recessed’ nailholes. Late 12th or 13th century. From ditch Context (1182).

Fig. 33.2. Medieval decorated floor tile. Late 14th- or 15th-century. Pit Context (3012). Width 125mm, Thickness 24mm.

The clay tobacco pipes *by John Cotter*

A total of 25 pieces of clay pipe weighing 132g were recovered from 17 contexts (from both the evaluation and excavation phases combined). A full catalogue is available in the archive. This is a variable but mostly fairly scrappy and worn assemblage although a few pieces are quite fresh. It comprises four bowls, two mouth pieces and nineteen pieces of stem. Although stems are of limited use for dating, most of the stems here appear to be of 17th- and 18th-century date, with one stem perhaps dating to the 18th or early 19th century (context 909). The assemblage would be fairly unremarkable but for the presence of three separate stems with stamped circular makers’ marks. These are in the style of West Country pipes, which are quite often marked on the stem. Given the small size of the collection here it is quite fortuitous that three pieces are marked.

The earliest pieces in the assemblage are two fresh and complete oval-heeled bowls of *c* 1660-1680 from contexts 6073 and 6256 - the latter probably residual in an 18th-century context. Apart from milling around the rim both pieces are unmarked. The third bowl (context 1017) also complete, if somewhat chipped, is of West Country style with a short pointed spur. It is similar to Thomas Hunt of Marlborough’s ‘new-style’ spurred pipe bowl of *c* 1685-1730 (Atkinson 1965, fig. 2.V), although it could be by almost any Wiltshire or Hampshire maker of this period. As the remaining stem stub is badly chipped there is no way of knowing if it was ever marked like the pieces described below. Some burnish is visible in places.

The marked pipes - two of which are burnished - appear to be of late 17th- or early 18th-century date. Two are only partly legible due to incomplete stamping of the die and as all three can be paralleled at Newbury (Cannon 1997) and Marlborough (Atkinson 1965) they have not illustrated but are simply described below:

Unstratified: Two short joining stem fragments thickening towards bowl. Slightly worn, unburnished. On the upper side a maker’s mark in incuse letters ‘RICH/ARD/CVTTS’. Richard Cutts of East Woodhay, north Hampshire, *c* 1690-1731 (Cannon 1997, 131). Mark published in Marlborough report (Atkinson 1965, 92, fig. 2.75). At least four other examples with this mark known from Newbury.

Context 607: Short stem fragment with good quality burnish. Incuse mark of ‘W/Barns’ on top of the stem within a large circle (some letters illegible on right-hand side). Willian Barnes (Baines) of East Woodhay, active *c* 1700-1730. A common type from Newbury where at least 23 other marked examples are known (Cannon 1997, 131, fig. 69.3). Mark also published in Marlborough report (Atkinson 1965, fig. 2.88). Oswald says he was apprenticed at East Woodhay in 1723 (Oswald 1975, 171) but also has him listed as a Wiltshire maker who was apprenticed at Woodbury - also in 1723 (*ibid.*, 198). It seems likely that the latter is a typographical error.

Context 910: Short stem fragment with trace of bowl (the fourth bowl from this site) with a complete short spur. Some burnishing. Incuse mark of ‘RICH/ARD. S/YER’ on top of the stem (some letters illegible) within a faintly defined circle or oval. Richard Sayer of East Woodhay,

active from *c* 1670/80, but marks on stems probably date *c* 1680-1730. One of the commonest types from Newbury, where at least 47 other marked examples are known (Cannon 1997, 131). Higgins dates a pipe bowl from Southampton with this stem mark to *c* 1700-1730 (Higgins 2011, fig. 5.43. no. 11). There were probably two East Woodhay pipemakers of this name. Pipes with this mark have a fairly wide distribution in Hampshire and Wiltshire, including Marlborough (Atkinson 1965, fig. 2.76). Several pipes with this mark are also known from Oxford (Oswald 1984, fig. 53.17).

At Cheap Street, Newbury, where a large assemblage of clay pipes has been excavated, the largest proportion of pipes by far comes from the period *c* 1700-1730 - a date which seems to fit with most of the pipes here (Cannon 1997, 131). The three marked pipes recovered here are all by pipemakers from the nearby north Hampshire parish of East Woodhay and this mirrors, in a small way, the picture seen at Cheap Street, where 87% of the 171 marked pipes identified were those of East Woodhay makers.

Metals by Ian Scott

Introduction

The assemblage of metal finds from Newbury Park Way is quite small (38 objects, or 39 fragments), and includes 14 metal detector finds. Of the 24 metal finds from the excavation, all but 2 nails are stratified. Overall the assemblage comprises 22 iron objects, 11 copper alloy objects and 5 lead objects. The metal detector finds comprise 10 copper alloy objects, 4 iron objects and 3 lead objects; in contrast the finds from the excavation, are dominated by iron objects, which number 17. There are only 2 lead objects and a single copper alloy object.

Excavated assemblage

Contexts with medieval spot dates

Only 4 finds were recovered from contexts with medieval spot dates. A small open socket possibly from an arrowhead came from context 1147, which was one of a series of dump layers containing finds of 12th-13th century date. A late medieval horseshoe with broad branches came from context 1001, and a nail from context 1294, a fill of ditch 1115. A rowel spur of 15th-century type came from the lowest fill of pit 1019 (fill 1023; Cat. no. 1). The middle fills of the pit contained pottery of 15th-early 16th century date, and tile of 15th-17th century date.

Contexts with post-medieval spot dates

Six finds were found in post-medieval contexts and comprise part of a late medieval horseshoe (context 3012), a fragment of strip (context 3138) and 4 nails (contexts 1014, 1104, 3012 & 2052).

Contexts with 19th-century spot dates

There are 3 finds from contexts with a 19th-century spot date. These comprise a table knife blade of 19th-century type with bolster (context 6082), and 2 nails (contexts 3124 & 6150).

Finds from undated contexts

The finds from contexts with no spot dates total 10. They comprise a whittle tang knife of uncertain form, but possibly medieval in date (context 6207), 1 nail (context 2010), 1 lead offcut (context 5116), and 7 miscellaneous pieces. The latter comprise a fragment of strip (context 6372), a piece of wire (context 1054), 2 rod or bar fragments (6088 & 6424), a curved tapering point (context 6207)

and an undiagnostic fragment (context 5115).

The two unstratified finds are an incomplete nail and a doornail with a large, slightly domed and sub-rectangular head.

Metal detector finds

The 14 metal detector finds include a Charles I 'Rose' farthing, a badly preserved jeton, probably from Nuremberg, a pan weight with embossed letters which read either 'EB' or 'IR', a small lead pistol ball, and 2 thimbles, both machine-made. Other metal detector finds comprise a copper alloy drape ring, a lock escutcheon, a cast copper alloy pipe connector, 3 pieces of melted lead waste, and a copper alloy strip and small washer.

Illustrated finds (Fig. 34)

Fig. 34.1: Rowel spur with long neck and incomplete star rowel. Sides are deeply curved and meet to form a crest above rowel neck. One side is incomplete, the other ends in a figure of eight loop. 15th-century type. Fe. L extant: 169mm. Context 1023, SF 101 [Inventory no. 16].

The spur (context 1023) with its long neck and deeply curved sides rising to a crest above the junction with the neck is typical of a 15th-century rowel spur (Ward Perkins 1940, 106-08, 110-12 & fig. 35; Ellis 1991, 58-61 & fig. 19-29 & pl 1-2; Ellis 1995, 129-30, 144-47, figs 103-104). This example is 169mm long overall. This example is not excessively long. An example from the Chateau de Falaise, Normandy, measures 245mm long (Scott 2011, 353, pl. 2, no. 12). In France and Germany spurs of this type are dated to the later 14th century and 15th century (Dilly *et al.* 1999, 120, cat. no. 4.35 ; Gelbhaar 1997, 114 & Abb.8), but in Britain they have generally been dated to the 15th century and seen as developing during the course of the century (Ward Perkins 1940, 106-08; Ellis 1991, 58-61; Ellis 1995, 129-30).

Fig. 34.2: Pan weight. Cast weight with initials cast into the face. Cast in an open piece mould The letters may be I R or I B. The letter B may have been created by changing an R in the mould to B by the addition of crudely cut line. Cast in a leaded copper alloy. Wt: 9g. Cu alloy. D: 23mm x 22mm; Th: 3mm. Metal detector find [Inventory no. 30].

The object is a probably a pan weight and not a token. There are problems with determining the intend weights of archaeological material, particularly because of the variety of different systems of weights used historically (Biddle 1990, 910-17 ; Egan 1998, 301-09). The problem is more difficult for a single weight.

Such a small weight could have been used for weighing small high value items, for some of which troy measures would have been used. Such a small weight might have been used for weighing small quantities of highly valued spices. Unfortunately the weight - 9g - equates to 138.9 grains, which equivalent to 0.317 oz avoirdupois or 0.289 oz troy. These weights would appear not to be particularly close to a sub division of either the avoirdupois or troy ounce, being less than 1/3 of an ounce (95%) and heavier than ¼ of a troy ounce (115.6%). However it is possible that the weight was intended to be 6 pennyweights (dwt) (1.55g) giving a weight of 9.33g.

Discussion and conclusions

The finds assemblage is small and limited in the range of objects found. There are no personal effects, and only very few household items. However the investigation of features on the site was

limited, and this should be kept in mind. A comparison between the finds from hand excavation and from metal detecting is suggestive. Stratified finds from the excavations number 22, of which 20 are iron, and 1 each of copper alloy and lead. In addition there are 2 unstratified iron objects from the excavation. By contrast the 14 metal detector finds comprise 10 copper alloy objects, 4 pieces of lead and no iron finds. At the very least this suggests that more extensive investigation of the site would have brought to light a greater variety and range of finds

The most interesting find is the single long necked rowel spur of 15th-century date (Cat. no. 1), found in the lower fill of pit 1019. Fill 1020 of the same pit has pottery dated to the mid 19th century, but this may be settlement in the top of the pit.

Glass by Ian Scott

Introduction

54 sherds of glass including 24 sherds of window glass. The 30 sherds of vessel glass include 15 sherds of wine bottle and 9 sherds of indeterminate vessel glass. Most of the glass is from contexts with no dating (13 sherds), from contexts with late 18th- to early 19th-century spot dates (28 sherds), or from contexts with pottery of 19th-century date (11 sherds) (Table 8).

Table 8: Glass: Summary quantification by context and function (sherd and object counts)

Context		Identification									Totals
		wine bottle	soda bottle	pharmaceutical bottle	medicinal tonic	snuff bottle	jug	tumbler	uncertain vessel	window	
1017	Sherd count									9	9
	Count									6	6
1067	Sherd count			1		1				1	3
	Count			1		1				1	3
1147	Sherd count									1	1
	Count									1	1
3138	Sherd count	1									1
	Count	1									1
4004	Sherd count	2									2
	Count	2									2
4122	Sherd count	1									1
	Count	1									1
5309	Sherd count							1		1	2
	Count							1		1	2
5315	Sherd count	1									1
	Count	1									1
6021	Sherd count	1								1	2
	Count	1								1	2
6028	Sherd count	1									1
	Count	1									1
6036	Sherd count	1							6	6	13
	Count	1							1	1	3
6075	Sherd count									1	1
	Count									1	1
6150	Sherd count								3	3	6
	Count								1	3	4
6175	Sherd count	1									1
	Count	1									1
6255	Sherd count				1						1
	Count				1						1
6258	Sherd count	5									5
	Count	2									2
6373	Sherd count		1				1				2
	Count		1				1				2
6416	Sherd count									1	1
	Count									1	1
U/s	Sherd count	1									1
	Count	1									1
Total sherd count		151	1	1	1	1	1	1	9	24	54
Total object count		121	1	1	1	1	1	1	2	16	36

Assemblage composition

One sherd of thick colourless modern window glass comes from context 6075, which has a late medieval spot date, and 1 sherd of undated wine bottle comes from context 6028, which pottery ranging in date from the mid-17th to early 20th century. There is also an unstratified sherd of undated wine bottle.

Glass from undated contexts

The glass from undated contexts includes 3 sherds of window glass, 9 sherds from wine bottles and 1 sherd of undiagnostic vessel glass. The wine bottle includes the neck of a squat early 18th-century wine bottle (context 3138), and the complete base of an early 18th-century mallet-shaped bottle (context 4122); the remaining wine bottle includes 2 thick walled body sherds from early wine bottles (context 6258), 4 sherds of indeterminate date (contexts 6021 & 6258), and a sherd of modern wine bottle (context 6175). The window glass includes a modern sherd (context 1147), post-medieval glass (context 6021), and heavily weathered glass with grozed edges, possible of medieval date (context 6416).

Glass from contexts with late 18th- to early 19th-century spot dates

The glass from contexts with late 18th- to early 19th-century contexts comprises 16 sherds of window glass and 12 sherds of vessel glass, including 4 sherds of wine bottle. The vessel glass also includes a complete 18th-century pharmaceutical bottle or phial and a complete cylindrical bottle embossed 'TRUE CEPHALICK SNUFF BY THE KINGS PATENT' (both context 1067). The latter bottle probably dates to the early 19th century. Cephalic snuff, which was sold as a medicinal compound, was available throughout most of the 18th and 19th centuries (Cox and Dannehl 2007, 'Cephalic snuff'). There are 6 small thin-walled vessel sherds possibly from a cylindrical pharmaceutical phial (context 6036). The wine bottle sherds include the neck and finish from a squat free blown bottle of early 18th-century date, the base of a free blown cylindrical bottle of mid to late 18th-century date (both context 4004). The remaining wine bottle is of uncertain date.

The window glass from contexts 1017, 1067 and 6036. The window glass from context 1017 comprises 9 sherds in metals in very pale green and pale blue, some of the glass is post medieval in date, but some has regular surfaces and could date after the 18th century. The single pale blue sherd from context 1067 could be post medieval or later. There are 6 sherds from context 6063, again pale blue and possibly modern.

Glass from contexts with 19th-century and later spot dates

Glass from contexts with 19th-century spot dates includes 3 sherds of window glass of 19th-century or later date from context 6150), and as single sherd of similar date from context 5309. The vessel glass includes part of a moulded medicine bottle (context 6255) and a Codd bottle embossed 'SOMERSET NEWBURY BREWERY' and made by Turner & Co of Dewsbury (context 6373). The medicine bottle dates to the later 19th century or early 20th century, while the Codd bottle can be more closely dated. The Somerset Brewery was located in Northbrook Street (Royal Counties Directory 1876, 451, Kelly's Directory of Berkshire 1887, 114, 248). During the 1840s and 1850s the brewery had been owned by John Satchell (Kelly's Directory of Berkshire 1848, 2005; Slater's Directory of Berkshire 1852, 25, 29). In 1854 Satchell and Somerset were operating in partnership as wine and spirit merchants in Northbrook Street. By 1899 the Brewery was operating as the Newbury Brewery Co (Kelly's Directory of Berkshire 1899, 130). The embossed Codd bottle must date to the 1870s or 1880s. The remaining vessel glass comprises a handle possibly from a jug (context 6373), part of a moulded tumbler (context 5309) and a fragment of opaque white glass possibly from the rim of a bowl (context 6150). This glass is of late 19th- or early 20th-century date.

Discussion and conclusions

The glass assemblage is small, with little or no glass dating earlier than the early 18th-century. In composition it is dominated by sherds of window glass (n = 24) and wine bottles (n = 15). Much of the glass, particularly the window glass, is not closely datable, but broadly the vessel glass falls into two groups dating to 18th and later 19th centuries respectively (Table 9).

Table 9. Breakdown of glass by function and date

Spot date	wine bottle	pharmaceutical bottle	snuff bottle	soda bottle	medicinal tonic	jug	tumbler	vessel	window	Totals
c1250-1500?									1	1
c1650-1900?	1									1
c1770-1800									9	9
c1770-1800?	3									3
c1770-1830		1	1						1	3
c1780-1830	1							6	6	13
Total	4	1	1					6	16	28
c1815-1900				1		1				2
c1830-1900								3	3	6
c1850-1900+					1					1
c1880-1930							1		1	2
Total				1	1	1	1	3	4	11
undated	9								3	12
u/s	1									1
Totals	15	1	1	1	1	1	1	9	24	54

The flint and burnt unworked flint by Michael Donnelly

Introduction

A mass of potentially struck flint was recovered from the Newbury Park Way excavations. These originated from three main sources; borehole grab samples, hand recovered samples and from the excavations themselves. The vast bulk of the material recovered was either obviously natural or represented very fresh looking angular shatter, almost certainly generated by the borehole mechanism. A very small amount of genuine struck flint was identified (Table 10). Additionally, some burnt flint was also recovered.

Table 10. The flint assemblage from Newbury Park Way

CATEGORY TYPE	Grand Total
Flake	11
Bladelet	1
Blade-like	1
Chip	1
Tested nodule/bashed lump	1
Grand Total	15
Burnt unworked flint no./g	35(1077g)
No. burnt (exc. chips) (%)	1/14 (7%)
No. broken (exc. chips) (%)	3/14 (21%)
No. retouched (exc. chips) (%)	0/14

Methodology

The artefacts were catalogued according to OA's standard system of broad artefact/debitage type, general condition noted, hammer type and presence/degree of platform preparation/abrasion noted, and dating was attempted where possible. Unworked burnt flint was quantified by weight and number.

Provenance

Flintwork was recovered from 7 contexts, mostly within or below the peat of pre-Medieval date. None of these produced assemblages of any significance, although context 2068 did yield several small flakes and a chip, all quite worn and unlike the freshly struck accidental shatter found in many of the samples.

Discussion

The assessment of the assemblage of flint from Newbury Park Way has revealed it to be almost entirely natural in origin. The vast majority consists of rolled and battered nodule fragments. Within this mass is a significant number resembling microdebitage/shatter and some of this may be real although it is impossible to be totally certain. The assemblage does not contain any classic elements such as regular flakes, blades or cores, but there are several pieces that are arguably genuine examples of struck flint. The assemblage from the bore-holes consists for the most part of very fine angular shatter/micro-debitage. Within the larger fraction (>10mm) there are very few genuine looking pieces which for the most part comprises irregular flakes. With the remaining mass of fine shatter, it is difficult to determine its true origins. It appears to be extremely fresh and given the nature of its recovery, the fact that the site sits within flint pebble gravel deposits and the general lack of larger debitage components (flake and blade blanks, segments, cores or core fragments) leads to the conclusion that much of it is mechanically generated shatter caused by the borehole excavation and extraction processes.

Worked stone by Ruth Shaffrey

Summary and quantification

A total of 5 pieces of stone were retained during the excavation. Three pieces are worked or of interest; two are unworked. Table 11 gives details of the worked objects.

Methodology

The stone was briefly examined and the worked or possibly utilised items were recorded into an Access database.

Description

Two pieces of possible roofing were kept: a fragment of purple slate from 6150 and a piece of micaceous sandstone from context 3093. No diagnostic features remain on either of these, so it is not possible to be sure they are from roofing.

A single whetstone was also recovered (1066, SF 1003). This is a fragment of a small rectilinear whetstone, perforated at one end for suspension and of a type that could be considered to be a personal belonging or part of a tool kit. This would have been suspended, perhaps at the waist. It is made of a grey schist, almost certainly Norwegian Ragstone, the most commonly occurring

whetstone material on medieval sites in England (Moore 1978, 72).

Catalogue of worked stone

Whetstone. Schist, grey. Probably Norwegian Ragstone. Fragment of rectilinear whetstone, perforated towards one end with approximately circular hole measuring 5mm diameter. Burnt and splitting along the bedding planes. Oblong cross section. Measures >39 mm x <15-17 mm x 12 mm thick. SF 1003. Ctxt 1066

Table 11. Stone objects and samples by lithology and function

Context	SF Number	Description	Notes	Size	Wt	Lithology
6150		Possible roof slate	Small fragment, no diagnostic features remain		20	Purple slate
3093		Unknown	Possible floor or roof stone. Fragment, burnt on one side. No diagnostic features remain		93	Fine grained micaceous grey sandstone
1066	1003	Whetstone	End fragment of rectilinear whetstone, perforated towards one end with approximately circular hole measuring 5mm diameter. Top end is also slightly damaged. Burnt and degrading so can see where it is splitting along the bedding planes. Oblong cross section. Whetstone is tapering towards lower end, although this does not survive	>39 x <15-17mm x 12mm thick	17	Schist, grey. Probably Norwegian Ragstone

A wooden cask and a wooden bowl by Steve Allen

Introduction

In January 2009 the author was asked to undertake the conservation of a stave-built cask from Newbury. Shortly thereafter fragments of a wooden bowl were delivered for assessment but at that time assessment work was not authorised. The bowl remained in wet packed storage and the cask staves through p.e.g. treatment until February 2012, when authorisation for the recording and reporting of these two objects was given.

Methodology

The cask and bowl were delivered to York separately. The cask arrived in February of 2009 and was promptly unwrapped, washed and placed in an appropriate treatment tank. P.E.G. treatment commenced in March of that same year and was completed by March 2012 - the cask staves are currently awaiting opportunity for freeze-drying. For recording purposes, the cask staves were temporarily removed from their treatment tank, recorded, then returned to the tank. No significant cleaning was required and the staves came to no harm during the process.

There were twelve fragments of the bowl, which were temporarily refitted for recording and illustration (Fig. 35). Following wood species identification the pieces were returned to their original packaging.

The overall condition of the wood was good, most of the wood being very well preserved. Minor damage had been suffered during burial by some of the cask staves- all damage is described in the catalogue. No abrasion or deterioration had been suffered during the course of the p.e.g. treatment. Some of the bowl edges were slightly abraded but comparison with the condition of adjacent surfaces makes it clear that the abrasion is the result of burial conditions or pre burial treatment, rather than excavation or subsequent storage.

Records were produced in the form of hand-written notes with an annotated sketch for the bowl together with a scale drawing. The cask staves were individually recorded, and tracings at 1:1 were made of the various marks present on the cask staves. These records were combined into an assembly drawing of the cask (Fig. 36), and illustrations of the cask markings (Figs 37 and 38). Sampling for species identification was carried out on the bowl and to confirm the provisional identification of Oak used for the cask staves. Samples were examined in transverse, radial longitudinal and tangential longitudinal sections under a microscope at x40, x100 and x250 magnification; all species identifications follow Schweingruber (1982).

Species and Common Names

The following list gives the common names of the scientific identifications used in this report and catalogue.

Acer campestre L.: Field Maple

Quercus spp.: Oak

Catalogue (all dimensions in m/mm) (Figs 35-38)

SF 1000. Fragments forming *c* 30% of a face turned wooden bowl. Cut from a halved blank, rim formed from the cleft face and the base nearest the sapwood/bark surface of the parent log. Heavy, sub rectangular cross section rim with pronounced external undercut. Pair of deep parallel grooves around the exterior *c* 22mm above the base. Prominent deep turned grooves defining the transition from wall of vessel to base. Flat base. Fresh axe marks with tool signatures surviving on outer face of base where waste wood cut away. Prominent turning marks over most surfaces. Localised dark patination on interior. Patches of localised charring. In twelve partially refitting fragments, some compression due to burial. *Acer campestre* L. *c* 265-290 dia, 90 deep. Thickness between 16 (rim) and 08 (wall/base). Context 1056

Contexts 1070-1093. Cask of 24 staves each cut from radially faced *Quercus* spp. heartwood. Upper end (as found) cut away in antiquity. Height from base to belly *c* 560mm (average from 24 staves), external diameter at belly *c* 784mm, internal diameter at belly 762mm, internal diameter at croze groove 602mm, estimated height of cask 1.2m, estimated volume 410 litres (or 108 Wine gallons). Part of one wooden barrel hoop (context 1114) was also found around the lower body of the barrel, but fragmented on lifting, and was not sent to York. All staves were identified as *Quercus* spp., radially faced, with chime bevel, howel and deep sub-rectangular cross section croze present at lower end. Individual features on staves as follows:

(1070) Incised marks on outer face at belly. Single 04 square Fe nail driven from outer face through stave between croze and chime bevel. Slight damage to one edge just above howel. 1.012m l, 115 w, 12 th. Height croze-belly *c* 650.

(1071) Slight damage at upper end- small fragment broken away and missing. 1.004m l, 85 w, 10 th. Height croze-belly *c* 600.

(1072) Single 05 dia. peg hole for cross batten through face between croze and chime bevel. Part of lower end broken away and missing at peg hole. 1.009m l, 80 w, 10 th. Height croze-belly *c* 600.

(1073) 1x 05 square Fe nail through face towards upper end. Slight damage to lower end at edge, below croze. 1.006m l, 96 w, 12 th. Height croze-belly *c* 600. (1074) 1x Fe nail through face between croze and howel.

- (1074) 1x bung hole through face at belly, 52 l, 59 w, bevelled towards inner face. Lower end broken away and missing just below croze. Broken into two refitting sections across bung hole. 965 l, 95 w, 12 th. Height croze-belly *c* 580.
- (1075) 1x 05 square Fe nail through face above belly. Incised marking on outer face at belly. 1.010m l, 88 w, 12 th. Height croze-belly *c* 640.
- (1076) No additional features. 1.004m l, 84 w, 14 th. Height croze-belly *c* 656.
- (1077) Incised marking on inner face below belly. Incised markings on outer face at and below belly. Longitudinal partial split from lower end. 1.019m l, 104 w, 13 th. Height croze-belly *c* 460.
- (1078) No additional features. 1.015m l, 147 w, 13 th. Height croze-belly *c* 600.
- (1079) 2x 10 dia through peg holes in face for cross batten between croze and chime bevel. Slight damage at lower end around outermost peg hole. 1.018m l, 120 w, 12 th. Height croze-belly *c* 520.
- (1080) Single 10 dia through peg hole in face for cross batten between croze and chime bevel. Slight surface damage to inner face around hole. 1.015m l, 72 w, 10 th. Height croze-belly *c* 490.
- (1081) Lower end badly distorted by compression damage. Broken away across croze groove but refitting. 961 l, 116 w, 12 th. Height croze-belly *c* 600.
- (1082) 1x 07 square Fe nail through face at croze groove. 1.009m l, 80 w, 11 th. Height croze-belly *c* 460.
- (1083) Incised markings on inner face below belly. 1.009m l, 105 w, 14 th. Height croze-belly *c* 590.
- (1084) No additional features. 1.016m l, 80 w, 10 th. Height croze-belly *c* 510.
- (1085) Incised marking on outer face at belly. 1.014m l, 109 w, 13 th. Height croze-belly *c* 510.
- (1086) Incised mark on inner face at belly. Incised mark on outer face at belly. Single 06 square Fe nail though face at croze groove. 1.013m l, 149 w, 16 th. Height croze-belly *c* 510.
- (1087) No additional features. 1.011m l, 88 w, 15 th. Height croze-belly *c* 510. .
- (1088) Incised mark on inner face at belly. Short longitudinal split at upper end. 1.015m l, 98 w, 14 th. Height croze-belly *c* 565.
- (1089) No additional features. 1.008m l, 103 w, 14 th. Height croze-belly *c* 520.
- (1090) Part of edge at lower end split away and missing. 1.002m l, 104 w, 14 th. Height croze-belly *c* 600.
- (1091) 3x 10 dia. through peg holes in face for cross batten between croze and chime bevel. Incised marking on outer face at belly. Slight damage at lower end around outermost peg hole. 1.014m l, 109 w, 15 th. Height croze-belly *c* 520.

(1092) Single 10 dia. through peg hole in face for cross batten between croze and chime bevel. 1.009m l, 87 w, 14 th. Height croze-belly *c* 580.

(1093) No additional features. 1.009m l, 80 w, 13 th. Height croze-belly *c* 640.

The fragmentary barrel hoop (1114) was retrieved as nine fragments (A-I), and two fragments were identified as oak (*Quercus spp*) by Dana Challinor. A third fragment was however identified as hazel (*Corylus sp.*), raising the possibility that this hoop was replaced or repaired at some time.

Discussion

The wooden bowl (Fig. 35)

The bowl is fairly deep with a prominent flat rim and minimal decoration, though the wood grain itself would have added to its appearance. The evident patination on the interior suggests an association with food preparation/consumption, though the lack of uniformity of this patination suggests it had a short life. This is emphasised by the freshness of the tool marks on the base, where an axe or similar has been used to hew away the waste core from the outside of the vessel. In normal use the base is the area that would have been most worn in life. The near absence of such wear suggests the bowl was broken and discarded fairly soon after manufacture. An area of highly localised charring at one of the breaks present might suggest the object was fire damaged and discarded, though why it was not recycled as fuel is unclear.

Around 60% of the bowl was not recovered. The burial conditions are such that had the rest of the bowl been present in this deposit, those missing fragments should have been found. Whether this is down to the sampling strategy or to genuine absence is unknown. It is clear though, from the locations where some of the fragments are missing, that the bowl was badly broken up before deposition and parts could well have undergone a different fate to those examined here.

The base of the bowl is similar to a thirteenth century example from Weoley Castle, Birmingham (Oswald 1962-3, 130, no. 10) while the overall profile is similar to a much smaller 12th century bowl from Deddington Castle, Oxfordshire (Jope *et al.* 1950, 55, no. 3). The closest parallel in form and size though comes from a sixteenth century deposit in Hull (Armstrong 1980, 67, no. 48). The bowl was found in one of the upper fills of the pit containing cask 1053, and tile of 15th-17th century date came from this and from lower fills, so a sixteenth century date is probably more likely.

The wooden cask (Figs 36-38)

The cask is incomplete, but in this case it was a deliberate act rather than accidental damage. The upper end of the cask, as found, has been cut away to a consistent height, resulting in stave lengths that, discounting burial damage, vary by only a few millimetres. It was cut in this fashion to facilitate its reuse. The majority of casks in the archaeological record are there because they have been reused for another function, typically as a lining for a pit or a well. A cask is, when empty, a well constructed cylinder that, with the heads knocked out can readily be sunk into a pit and fill packed behind it to create a fairly watertight, robust lining that will allow that feature to remain open without collapse for a considerable length of time.

Some casks require reinforcement as the hoops binding the staves may slip out of place during burial or use. The iron nail shanks found in staves 1070, 1073, 1075, 1082 and 1086 are relicts of this practice. Iron nails, indeed metal nails of any type, are not driven into or through the staves of

a cask in everyday use as they promote leaks and can split the wood. Additional hoops, fastened to the outside or inside of a cask to reinforce it for reuse are however invariably nailed in place, as a cheap effective means of fastening something which is not going to be recovered later.

Fastenings which are directly related to the normal use of the cask are almost always of wood. They include plugs cut to fill or seal a tap hole to test or identify the contents, bungs to close up a filling draining hole or pegs used to fasten a cross batten across the headpiece of a cask. There are no tap holes in the surviving portions of the cask but there exists one bung hole on stave 1074. This hole is slightly ovoid in shape owing to shrinkage and compression but would originally have been circular. The edges are slightly bevelled so the hole is slightly smaller on the inner face than on the outer. The bung itself is missing. This hole was cut to facilitate the filling of the cask with liquid—the cask would be laid with the bung hole uppermost, the curve of the belly placing the bung hole at the highest point of the cask and as the cask fills, the air escapes and allows the vessel to be completely filled.

Peg holes for the cross batten are present on staves 1072, 1079, 1080, 1091 and 1092.

The cask would originally have been held together by wooden hoops, lengths of halved roundwood, looped into a circle with ends overlapped and bound. No hoops or fragments of hoops were found on the staves and it is assumed these were lost during excavation. Their extent can be inferred from the location of incised marks on the outer surfaces of the staves as only exposed surfaces would have been available for marking.

Several sets of markings are present on this one cask, on both inner and outer faces. Outer faces are marked on staves 1070, 1075, 1077, 1085, 1086, and 1091 while inner faces are marked on staves 1077, 1083, 1086 and 1088. In each case the marks are fairly simple, consisting of various intersecting incised lines forming crude arrows, crosses or lozenges (except for the shallow, broadly cut 'square' on stave 1075 which has a very different character). These are not currently capable of interpretation as they are not closely paralleled on any published casks from elsewhere. Suggestions for their function range from makers marks, owners marks, references to origin or destination, references to contents or simple graffiti.

Those on the outer face are found in a zone around the belly of the cask, suggesting application after the assembly of the cask and the placement of its hoops. Those on the inside must have been made before the headpieces were attached (i.e. during construction) or after the headpieces had been removed (i.e. during or in preparation for reuse). The variety on the outside suggests a relatively long period of use for the cask before ending in its findspot.

None of the marks continue on to adjacent staves, though some could certainly have done so. This suggests they were carefully applied or that the cask had at some point been taken to pieces and rebuilt. There appears however to be just the one pair of peg groups for fastening the cross batten of the headpiece, which would suggest either very careful reassembly or that the cask remained assembled throughout its life.

It is almost impossible to state exactly what capacity a particular cask once had, particularly when so many different local units of measurement might have been used which might not necessarily have been those current where the cask was found. Casks are hand-built and therefore casks of apparently similar size will vary somewhat in actual capacity. Nonetheless the size of a cask must have meant something to its users, who must have been able to estimate its approximate capacity in order to use it.

To obtain an estimate of the capacity of the casks it is necessary to know the internal diameter at one or both ends, the internal diameter at the mid point and the straight line distance between the croze grooves. By treating each half of the cask as a truncated cone it is possible to arrive at an estimate of the capacity of the vessel. This will be an underestimate as in reality the sides of the cone are slightly curved rather than straight lines, but given the uneven nature of the interior surface other methods are equally unlikely to produce a precise figure for the volume. From the recorded data, the cask volumes are calculated in Table 12.

Table 12. Estimated volume of cask

Distance between croze grooves	Internal diameter @croze (lower)	Internal diameter @croze (upper)	Internal diameter @belly	Estimated volume in litres	Estimated Volume (1707 Statute Customary gallons)
1.12m (est. based on 2x distance lower croze to belly)	0.603m	0.603m (est. same as lower end)	0.762m	409.7	108.23

Under the 1707 Statute of Queen Anne, measures were standardised at 231 cubic inches (3.77 litres) to a Customary gallon. 63 such gallons made up a Hogshead, 84 a Firkin, 126 a Pipe and 252 a Tun. On the calculations above, this cask is 18 Customary gallons (85%) short of a Pipe, and 24 customary gallons (128%) more than a Firkin. It is unlikely that the cask was intended to pass for a Firkin but quite possible that it was intended to approximate a Pipe, the shortfall in apparent capacity being a result of the necessary assumptions made in calculating the estimated volume.

The Newbury Pipe can be compared with similar casks. The nearest published equivalents in capacity is an early 14th century cask from Waltham Abbey, Essex (Huggins 1973, 182) though a very recently excavated cask from Hungate of 18 staves is also known (Allen forthcoming, ST201) Both are major medieval ports or have good river connections where such casks are most likely to have been available for reuse, as would be the equipment to load and unload them when full.

Both wood species are native to the British Isles and could have been obtained locally. That said, the cask is probably not local but the place of origin cannot be identified. Both vessels are evidence of specialist woodworking craft activities- cooperage and wood turning and attest the use of specialist tools and practices. In dating terms, neither is intrinsically closely datable. The best parallel for the bowl is sixteenth century, though it could be earlier and the cask is unlikely to be earlier than the 13th century. The cask was placed into the ground for reuse during the 15th or early 16th century, but for how long it had been used prior to this is uncertain.

Summary analysis of the other waterlogged worked wood by Damian Goodburn

Background

The site at Park Way (in the rear of properties along Northbrook Street) lies in the central historic core of Newbury just north of the River Kennet. It is low-lying, sitting upon alluvial deposits over earlier peat layers, and as a result, the lower levels were waterlogged and contained preserved historic woodwork. All of the wooden finds came from features dug into the top of the peat deposits, which had ceased to accumulate by the time the plots were laid out, although some alluviation continued in places within the site.

The small size of the excavation areas meant that the context of the material found was not easy to establish, and the very limited time available during the Watching Brief, made detailed recording of

the structural material *in situ* impossible. This summary of the woodwork therefore represents a partial picture at best of what may have been on the site.

Quantification

A total of 68 larger bagged timbers or wood fragments were examined by this author, 31 of which were from staves or hoops from a post-medieval reused cask numbered 1016. A further 25 items, 24 of them from a late medieval cask 1053, were sent to the York Archaeological Trust (YAT), where they have been examined and reported upon by Steve Allen (see Allen this volume). At least 10 further items were recorded and discarded on site and not examined by this author who did not visit the site.

Condition of the timbers

A late medieval cask reused as a lining in structure 1053 in Area 1000, and part of a wooden bowl (SF 1000) from context 1056, were particularly well-preserved, and were sent to the YAT wet wood lab for conservation (see Allen above). Ancient decay, truncation by later activity, machine damage and some post-excavation decay of the remaining timbers and smaller woodwork was such that nothing else, except a brush handle (SF 2001) from context 2047 and a comb (SF 5000) from context 5013 were retained once they had been recorded in post-excavation (see Fig. 40).

Methodology

On-site recording of the wood comprised plans, sections and photographs, and pro-forma wood recording forms were also started for all of the larger pieces of woodwork. The site records also cover some timber structures and individual structural timbers that were not lifted. A woodwork specialist was not however involved in the excavations.

Further specialist examination was carried out by the author in line with the standards set by English Heritage (Brunning 1996), for such work. This involved unwrapping, cleaning, examining and (where relevant) sampling the material, and checking and completing the basic pro-forma 'timber sheets'. Further timber sheets were completed by the author for other items that were clearly of structural importance. In selective cases scale drawings were made and photographs taken. Small items such as abraded small twig or plank fragments (from deposits) were cleaned, examined and briefly described on an annotated woodwork list.

Nine samples were taken for microscopic species identification, and a table of the identifications made by Dana Challinor is given below. Four samples were submitted for tree-ring dating, and two were successfully dated (see Miles below).

General range of woodwork found and structural groups

Wood in the peat

A variety of fallen trees and branches were found in the naturally-accumulating peats. Some of this material might have been of prehistoric date, but none was worked. No Roman or Saxon woodwork was anticipated, and none was found.

Earth-fast posts set on wooden pads

Several examples of this type of construction were found on the site. In the earlier part of the

medieval period (c 11th to early 13th centuries), before timber frame carpentry was widely adopted, lines of earth-fast building posts were often supported in this manner (Milne 1992; Goodburn 2007 and forthcoming). Such posts were often spaced several metres from each other, the wall between being set on a raised, grooved sill beam that could (in some cases) also be used to support a floor. These posts were often set on post pads made from offcuts from the building process, while planks and smaller beams and posts were often split out of logs and then trimmed with axes. If rectangular, posts were hewn from whole or half logs, others often had triangular cross sections. This was particularly true for smaller driven uprights (ie stakes and piles). Though posts in larger buildings might be substantial, and generally rectangular or sometimes round, those in smaller, lighter walls were more irregular and slight, such that distinguishing building walls from fence lines is often very difficult.

Although early in origin, this 'earth fast' tradition of erecting posts continued in use for some ancillary buildings into the later post-medieval period, and even the last 100 years. However, in the later examples the pads and posts were often worked in more 'modern' ways such as with the use of saws etc. The late continuation of this timber wall construction system is exemplified by some of the woodwork found at this site. Planks, set in post holes, used to skid the post heel into place are also often found on wet sites and were also found at Park Way.

The site provided several preserved examples of these building practices. Post base 1098 was a quartered log of triangular cross-section, measured 0.4m across and survived 0.3m high, and had an associated plank fragment with it in posthole 1032. This posthole was associated with another, posthole 1035, containing a squared upright 1034 and another plank fragment 1095, laid flat. A fragment of 16th century tile was recovered from the fill of posthole 1035. The timbers of neither post group could be retained for specialist recording.

However, an example of a probable post pad from the bottom of pit 3018 was retained for detailed recording. Timber 3139 was an off cut section of cleft and hewn, half-log plank with well preserved, axe-cut ends (Fig. 39). The timber was 0.83m long x 340mm wide and 150mm thick, and was derived from a very fast grown oak with only c 40 rings to the bark edge. Thus, it had too few rings for tree-ring dating, for which an absolute minimum of 45 rings is needed. The axe marks were up to 95mm wide, though none were totally complete so the axe blade used would have been a little wider. This pit is undated, although a sample for C14 dating has been retained.

Another section of smaller, but similar oak timber, 3140, was found at the base of posthole 3096. This was also cross-cut with a similar small axe, and had the same patina as timber 3139. Indeed, it may have been a large piece of hewing (cutting with an axe) debris from making the timber from which 3139 was cut. These timbers are most typical of earlier medieval workmanship sometimes called ('treewrighting' to contrast with later 'carpentry', Goodburn 2007), but posthole 3096 is dated to the 15th or 16th century on the basis of associated ceramic building material. This would have been considered very 'rustic' workmanship by this time, when elaborate timber frame buildings set upon masonry dwarf walls were commonplace.

Three pieces of timber were found laid flat, one upon the other, within feature 3034, the lowest of which (3036) was of oak and had been sawn out of a hewn oak beam and also cross cut with a saw. It measured 0.33m by 0.28m and 0.09m thick. Above it were two fragments of thinner plank, which were not retained. All three probably comprised a post pad. A fragment of pottery of later 16th or 17th century date came from the fill surrounding the timbers. Timber 3036 contained some sapwood, and was submitted for tree-ring dating, giving a felling date range of 1638-64 (see dendrochronological report, Miles below).

The persistence of this building technique into the post-medieval period at this site may well have been partly due to the ground conditions, ie soft underlying peat, but is likely also to reflect a relatively low investment in the structures concerned.

A rectangular off cut found within pit 3154 was also originally thought to represent a post-base, as it had a regular shape and lay flat on the base of the pit, but it was only the largest of a number of off cuts found within this pit, and was probably not structural. Pit 3154 was dated to the 16th century (see Offcuts below).

Stake or pile alignments

Other truncated timber structures found, which probably range from medieval to later post-medieval date, on the grounds of materials used, condition and tool mark evidence, include alignments of large oak stakes (or small piles). Several pile or stake lines are noted, such as east-west pile line 6476, from which stake 6484 was retained. This was made from a cleft, quartered log of oak with an axe-hewn point, and survived 0.6m long by 110mm x 100mm. This timber serves as a sample of an E-W, double line of similar stakes or small piles. This feature was clearly the lower element of a light wall foundation capped with rubble flint work context 6481. Such a foundation is likely to have originally carried the sill timber of a framed building a little above the contemporary ground level. Although no datable artefacts are closely associated with this foundation it probably post dates the introduction of framed buildings set on raised sill beams from c 1180 onward ie is medieval or early post-medieval.

Two rows of upright, plank-form stakes or 'staves' formed the sides of a slot 6338 within north-south linear structure 6336. One stave from 6338 was retained, and given the same number. This was made by hewing a point on a sawn, softwood plank fragment. The use of softwood ie coniferous timber, identified as a type of pine, though not European *Pinus sylvestris* or 'Scots Pine' (Challinor below), suggests a very late post-medieval date, as the most likely origin of another species of pine is North America, although a southern European origin could not be ruled out completely. If the timber was North American, it is probably of very late 17th date at the earliest, and more likely of later date. Pottery from this structure was dated to the late 14th to mid-16th century.

Adjacent to this, and possibly associated, was a rectangular pit 6329, whose edges on two sides were lined with upright timbers numbered 6330. One of these was retained, and was found to be a section of tangentially faced, probably sawn, oak planking surviving 310mm long by 120mm wide and 70mm thick. Both ends appeared to have been broken, possibly during machining. This may have been a partially robbed out retting or tanning pit.

A range of other stake- or pile-tips, made from fairly small (<250mm dia.), fast-grown, probably coppiced oak stems, were lifted. They were used either whole or cleft into halves or quarters. For example, 3002, from posthole 3043 was a roundwood stake 80mm in diameter with a square hewn tip.

Timbers from Structure 3079 (Fig. 16)

Planks

Several sections of thin sawn oak planking were retrieved from this structure, including timbers 3072 and 3074. Two fragments of plank 3072 were seen, the longer one 0.72m long and 30mm thick, but neither piece had its full width. Manual saw marks from cutting out the planking were still visible. A broken fragment from plank 3074 was c 20mm thick. The planks had been laid flat,

slightly overlapping, and had a thick lime deposit adhering to the upper surface. While timber-lined pits were commonly used for slaking lime, there was no evidence of a pit cut in this instance. Perhaps the planks formed part of a mortar mixing surface, laid on or very near the surface and used in the same ways as sheets of 'shuttering plywood' are today for mixing small quantities of cement. Alternatively this group of planks may have belong to the floor of a largely demolished ancillary building. In that case planks were presumably laid to provide a firm foundation on the surface of the peat.

The associated uprights

A number of upright stakes were associated with this structure, though only a sample group were retained for study (eg stakes 3080, and 3086).

Stake 3086 was a cleft half log of oak with a three sided, axe-hewn tip. It survived 0.95m long by 150mm wide and 75mm thick. No bark survived, but it had full sapwood and was rather slow grown, and therefore just viable for tree-ring dating, which gave a felling date of winter 1444/5 (see Miles below). As the timber was in fairly fresh condition and showed no signs of previous use, this date can be taken as it stands. Stake 3080 was made from a cleft quarter log of oak and survived 1.13m long by 100mm wide and 70mm thick. Stakes 3078, and 3087 were similar and also of oak, but 3076 was a smaller roundwood stake of birch only 65mm diam. (see Challinor below).

Off-cuts of 16th century date

A collection of fairly crisp off-cuts of oak were found in Area 3000, of proportions that would fit with debris produced in an early post-medieval carpenter's yard. The largest group came from pit 3154, which also included a fragment of tile of 15th-17th century type. The off cuts included a sawn oak beam end with an incomplete deep stepped moulding (Timber 3158), which measured 380mm by 350mm. There was also what may have been a reworked medieval timber, a hewn beam sawn length ways to a box-halved cross section (Timber 3157). The largest piece (Timber 3152) was rectangular, surviving 0.58m tall and 280 x 200mm across, but this had not been retained. This was the first timber to be exposed in this pit, and was originally interpreted as a post-base, but was probably simply another off cut discarded into this pit. Timbers 3157 and 3158 were submitted for tree-ring dating, but neither could be dated.

A possible machinery fragment and a door ledge

Another pair of timbers of interest came from the base of pit 3110, whose fill also included tiles dated to the 16th century. Timber 3120 was decayed and frassy, but several features could be seen (Fig. 39). It was 0.66m long, 150mm wide and 65mm thick, and had been cut from a sawn slab of knotty oak. There was an unpegged barefaced tenon at each end, and two oak face pegs, 20mm in diam, one of which went right through. It does not appear to have been a conventional building timber, so an origin in some form of machine or possibly a wooden vehicle, is probable. As the timber was found in a pit containing a horse burial, perhaps the latter is more likely?

Timber 3122 was a small decayed and frassy oak batten surviving 0.54m long by 54mm wide and c 25mm thick. It was pierced by one nail at each end and another in the middle, and had probably been the sort of batten used as a 'ledge' in a light planked door.

Fragments of a curved frame or toilet seat (SF 2004) from context 2064

This was a small section of oak board 0.51m long by 100mm wide and 22mm thick, with an iron stained nail hole through it at either end. It had a neat curve cut along one edge, and although very decayed had clearly been part of some form of curved frame, possibly something like a toilet seat. It came from pit 2043, finds from which dated to the later 15th or 16th century.

Square frame 6327

This frame was found during the watching brief in a decayed condition, so only one fragment could be lifted, the remainder being left in situ. It was formed of four trimmed lengths of timber 1.2m long, overlapping near the ends to form a square 0.9m across internally. No details of the construction of the frame were recorded, but from the photographs it seems likely that the timbers had simple lap joints at the junctions.

The lifted fragment was a section of cleft oak quarter log, surviving 0.39m long, 100mm wide and 90mm thick. It was taken from a fast-grown tree and only had *c* 15 annual rings, so was not viable for tree-ring dating. No tool marks or sapwood survived.

A similar frame was found recently constructed as the base for a stone lining for a well at Pembroke College, Oxford, (OA 2013), and is dated to the later medieval period (15th century). It is possible that the example from Newbury Park Way was used in a similar way, although the fragment that was examined is rather slight for the base of a well, even accounting for the loss of sapwood by decay.

Structure 1018, a post-medieval cask 1016 used to line well 1012

This post-medieval stave built cask was found fairly intact, although truncated at the top, and comprised 31 staves of radially cleft and shaved oak (Fig. 9; Plates 21-4). Many of the staves had sapwood left along one edge. The dimensions of the staves varied, the longest measuring 1.15m, while the widths varied from *c* 105mm to 150mm and the thickness from 18mm to 25mm.

All the staves were cleaned and washed to identify construction details and any possible surviving coopers or merchants marks. In general there were few marks, but several marks were found on a couple (Fig. 39 staves 18 and 26). These marks were cut with a hooked cutting knife that was also combined with a compass point, so both fairly straight and circular marks could be made. These marks were found on the outside face of the finished cask but their full significance is uncertain (compare with the marks on the medieval cask discussed above by S Allen). Traces of the use of wide-bladed 'broad axes' just survived in places on the outside of some cask staves.

The bottom ends of the staves were cut with croze and howell joints to accommodate the end boards, or 'heading' which had been removed for reuse. While the main hoops were of cleft and shaved roundwood, one hoop of cleft oak lath appears to have been nailed to the outside of the cask to hold the staves in place for their reuse. This unusual hoop was lifted largely intact and had a diameter of 0.98m, a width of 55mm and a thickness of 8mm. The cleft and shaved roundwood hoops were made of a mixture of young willow and hazel.

The barrel had been inserted into a cut whose backfill included a fragment of clay pipe stem dating to the 17th or early 18th century, and was surrounded by reused bricks of 16th century date. The cask is tentatively dated to the 17th or 18th century. This is supported by the large amount of perishable sapwood left on the stave edges, which suggests that it was originally a cheap cask not

intended for a long life. As a bung hole was not found in the examination after the excavation it may have been that a cooper made the cask specially for the purpose of lining the well out of other casks or that it was a 'one journey, slack cask' made to hold dry goods originally (see Kilby 1977).

Several tree-ring samples were taken from staves of this cask, but due to its late date were not measured.

Small wooden finds of note

Two fragments of a double-sided comb (SF 5000 from context 5013) of boxwood (Fig. 40). They were found in the uppermost fill of ditch or slot 5010, the lower fills of which produced a 15th-16th century date. The comb had a flat edge on the side that was held, except for a protrusion 8mm wide and 6mm long at the very end. The uncut wood was 28mm thick. The side of the comb that included the teeth was angled; there were no teeth at the very edge, and the outermost teeth were very short, becoming gradually longer towards the centre of the comb. When the teeth reached 24mm long, the comb became straight, parallel to the edge that was held, giving an overall width of 52mm in the middle. A second fragment of the comb appears to indicate that there was a broad section that had not been cut into teeth. This probably indicates that the comb broke during manufacture, and so was discarded.

Brush handle (SF 2001 from context 2047) made of poplar or willow, with a narrow handle and a broad, flat brush head, similar to a modern paint-brush (Fig. 40). It came from a middle fill of pit 2043, finds from which date to the late 15th or 16th century. The handle was 64mm long, only 8mm wide at the junction with the head, but flaring to 16mm shortly before the end, which narrowed to a point. It was 8mm thick at the junction with the head, widening to 10mm further down. The head was 80mm wide and 58mm long, and was 10mm thick.

Discussion

The survival of structural and artefactual woodwork from the medieval period onward has been demonstrated by this project. It has shed some light on the character of timber buildings in the back yard plots, and the rather late use of simple, earth-fast posts in what must have been relatively short-lived, cheaply-built timber buildings. These 'rustic' structures had clearly lain alongside the remains of more elaborate structures with more solid footings of timber and stone rubble. Probable traces of late medieval and Tudor building operations, in the form of lime-covered planks and offcuts, have also been glimpsed.

The two fairly well-preserved coopered casks recovered also shed some light on variations in the craft. It is possible that the distinctive markings recorded on both may be traced to particular locations in the future. The comb and paint brush finds also remind us of the wide variety of wooden objects that were used in daily life and work but have usually completely decayed by the time that archaeological excavation takes place.

It is to be hoped that the results that have been obtained have demonstrated the potential for more in-depth archaeological investigations in the historic waterlogged core of Newbury in future.

Wood samples identified to species by Dana Challinor

Wood samples were submitted by Damian Goodburn. Hand-cut thin sections were obtained from each sample in three planes (radial, transverse and tangential). These sections were placed on glass slides and examined at between x40 and x1000 magnification. Identifications were made by

comparison with permanent reference slides and published keys. The results are given in Table 13.

Table 13. Species identification of selected wooden artefacts

SF number	Context number	Artefact type	Identification	Notes
2001	2047	brush handle	<i>Populus/Salix</i> (poplar/willow)	Ray structure tended to homogeneous, with procumbent cells, which is more characteristic of <i>Populus</i> . However, the differentiation between the species is considered to be unreliable (Gale & Cutler 2000).
5000	5013	comb	<i>Buxus sempervirens</i> (box)	
-	3076		<i>Betula</i> sp. (birch)	
-	6338	Stake line	<i>Pinus</i> sp. (pine)	Ray tracheid pitting indicates that the species is NOT <i>P. sylvestris</i> .
-	1053 D	Cask hoop	<i>Quercus</i> sp. (oak)	
-	1053 G	Cask hoop	<i>Quercus</i> sp. (oak)	
-	1053 G	Cask hoop	<i>Corylus avellana</i> (hazel)	
-	1029		<i>Populus/Salix</i> (poplar/willow)	
-	1018	cask	<i>Corylus avellana</i> (hazel)	
-	1018	cask	<i>Corylus avellana</i> (hazel)	
-	1018	cask	<i>Populus/Salix</i> (poplar/willow)	
-	1018	cask	<i>Populus/Salix</i> (poplar/willow)	
-	1067		Pinaceae: cf <i>Pinus</i> or <i>Abies</i>	Looks very modern; dry, but not <i>Larix</i> , <i>Picea</i> or <i>Cedrus</i>

Tree-ring dating of timbers from Newbury Park Way by Dr Dan Miles

Introduction and methodology

The project carried out by Oxford Archaeology involved the investigation of a series of tenement plots along Northbrook Street in Newbury, first established in the medieval period, and continuing in use until the present day. The redevelopment excluded most of the existing buildings along the west frontage, apart from one group of six properties (Nos 34-38a), but included the backyards, which ran east to the edge of a former north-south stream, which marked their limit.

Over the whole of the site natural gravel was overlain by more than 1m of peat deposits, which appear to have continued to accumulate until the start of the medieval period. A number of medieval and later features were cut into the peat deposits, and thus preserved organic materials, including pieces of worked timber.

The recovered timber was examined by Damian Goodburn (see above), and he judged four timbers suitable for dendrochronological analysis. Samples were therefore taken and sent to the Oxford Dendrochronology Laboratory. The samples were first frozen and then prepared through surfacing the slice with a hand plane. Once thawed the rings were measured under a microscope. A full description of the methodology can be found in the archive report, or online at www.Oxford-DendroLab.com.

Results

All samples were compared with each other, but no consistent cross-matching was found. Therefore each was then compared with the reference chronologies individually. Two were found to match satisfactorily: **new3036** and **new3086** (Table 14).

Table 14. Summary of tree ring dating

Sample no.	Description	Date Range AD	Heartwood/Sapwood boundary	Sapwood complement	No. of rings	Mean width (mm)	Standard deviation (mm)	Mean sens	Felling season and date/date range
new3036	Post-pad	1552-1630	1623	7+7NM	79	1.94	1.03	0.213	1638-64
new3086	Stake	1403-1444	1426	18C	42	1.72	0.41	0.203	Winter 1444/5
new3157	Post	-		22C	75	2.37	1.27	0.25	
new3158	Post	-			59	1.67	0.57	0.155	

Key: NM = not measurable; C = winter felling (ring measured); heartwood/sapwood boundary - last heartwood ring date; mean sens = mean sensitivity

Sample **new3086** was found to match with a last measured ring date of 1444. Despite having only 42 rings, the matches were extremely strong and consistent, with both multiple independent chronologies and the strongest being the nearest regionally. Sites from Hampshire were strongly represented (Table 15a). As this sample retained the bark edge, a precise felling date of winter 1444/5 can be given.

This timber was a vertical stake at the north-west corner of a timber structure partly uncovered within area 3000 of the excavation. Three sherds of pottery with a date range between AD 1375 and AD 1550 were recovered from a slot containing a vertical plank 3074 within this structure. The corner posts of the structure on the NW and NE were vertical stakes 3077 and 3086 just beyond the ends of plank 3074, and of these the better-preserved was 3086, which survived 0.98m long and was 80mm square. It had been box-halved and axed to a point at the base. The NGR of the wooden post was 447184.494 / 167431.315.

Sample **new3036** dated to span the years 1552-1630, which included 7 sapwood rings plus an additional 7 detached sapwood rings. This has produced a felling date range of 1638-64. Although the *t*-values of the matches with the reference chronologies are not outstanding, they are consistent and are well replicated (Table 15b). Had further samples been obtained from the same structure, this would have most likely improved the matches, and such results are to be expected from single samples.

Timber 3036 was probably used as a post-pad in square feature 3034, tile from which is 16th or 17th century in date.

Two other timbers, **new3157** and **new3158** were both found in pit 3154 just to the west, which contained a couple of fragments of tile of 15th-17th century date. However, the timbers failed to date conclusively. Sample **new3158** had severe grain drift of 40 degrees and was distorted, which certainly contributed to the failure of this sample to date.

Table 15a. Dating of site master new3086 (1403-1444) against reference chronologies at 1444

County or region:	Chronology name:	Short publication reference:	File name:	Spanning:	Overlap:	t-value:
Hampshire	10 The Close, Winchester	(Miles <i>et al.</i> 2003)	WCCLOSE2	1284-1443	41	5.33
Hampshire	Tudor House, Southampton	(Miles <i>et al.</i> 2009)	TUDORHS4	1289-1463	42	5.37
Hertfordshire	Barn at The Stables, Redheath	(Miles <i>et al.</i> 2006)	REDHEATH	1361-1470	42	5.4
Hampshire	Tudor House, Southampton	(Miles <i>et al.</i> 2009)	TUDORHS1	1331-1492	42	5.48
Hampshire	Church Farm, Barton Stacey	(Miles and Worthington 2002)	BRTNSTCY	1381-1539	42	5.88
Berkshire	Canon's Cloisters, Windsor Castle	(Miles <i>et al.</i> 2003)	wcc21	1299-1439	37	6
Hampshire	King's Somborne Manor	(Miles and Worthington 1999)	KNGSMBRN	1273-1503	42	6.17
Kent	Stonepitts Manor, Seal	(Arnold, Howard and Litton 2003)	KSMASQ01	1389-1497	42	7.46

Table 15b. Dating of site master new3086 (1403-1444) against reference chronologies at 1444

County or region:	Chronology name:	Short publication reference:	File name:	Spanning:	Overlap:	t-value:
East Midlands	East Midlands Master	(Laxton and Litton 1988)	EASTMID	882-1981	79	4.65
Hampshire	Blaegrove Cottage, Up Nately	(Bridge <i>et al.</i> 2011)	BLAEGROV	1347-1610	59	4.7
Hampshire	The Vyne, Sherbourne St John	(Miles and Worthington 1998)	THEVYNE3	1543-1653	79	4.73
Warwickshire	Wellsbourne Granary	(Miles and Haddon-Reece 1996)	WLSBRNE	1431-1639	79	4.75
Suffolk	Buck's Head, Debenham	(Arnold <i>et al.</i> 2003)	SDSASQ02	1561-1620	60	4.75
Derbyshire	Bolsover Castle	(Arnold <i>et al.</i> 2005)	BLSASQ01	1494-1744	79	5
Hampshire	Hampshire Master Chronology	(Miles 2003)	HANTS02	443-1972	79	5.21
Shropshire	Bletchley Manor	(ODL unpubl)	BLTCHMNR	1481-1593	42	5.41

Leather by *Quita Mould*

Methodology

This report is based on an examination of the wet, washed leather. A basic record (as defined in the RFG & FRG Guidelines 1993) of the entire assemblage has been made, including measurement of relevant dimensions and species identification where possible. The basic record for archive in the form of an Excel spreadsheet is provided in an appendix to this document. The information gathered has been correlated with the contextual information and site phasing. The leather has been summarized by area below as the independently datable items did not always agree with the site phasing.

All measurements are in millimetres (mm). No allowance has been made for shrinkage. Any shoe sizing has been calculated according to the modern English Shoe-Size scale, continental sizing is given in brackets. The shoe terms employed are those in common use in the archaeological literature, relevant seams and turnshoe, turn-welt and welted constructions are fully described in Evans and Mould 2005.

Leather species were identified by hair follicle pattern using a low-powered magnification. Where the grain surface of the leather was heavily worn identification was not always possible. The grain pattern of sheep and goat skins are difficult to distinguish and have been grouped together as sheep/goat when the distinction could not be made. Similarly, the term bovine has been used when uncertainly arose between mature cattle hide and immature calfskin. Shoe bottom components and repairs are assumed to be of cattle hide unless stated otherwise.

Description of the material

Introduction

A small amount of leather was recovered from the excavations undertaken at Park Way, behind the frontage of Northbrook Street, Newbury. A single desiccated waste fragment and a shoe of welted construction were recovered from the evaluations carried out in 2005.

A small quantity of waste leather associated with pottery of medieval date was recovered from cut features in excavation areas 2000 and 3000, and provides a little evidence for the leatherworking trades, most likely cobbling, in the locality at this time. Heavily worn shoe parts, apparently dating to the later fifteenth to the middle of the sixteenth century were also found in area 2000.

Evaluation trenches 2005

A ladies welted shoe of calfskin, of adult size 2(34), was found in fill 918 of pit 920 along with nineteenth century pottery. The oval-toed shoe was made straight with a low wooden heel 5mm high; though the two piece quarters survived no vamp remained making identification of the shoe style uncertain. Other diagnostic features present suggest it dates to the eighteenth or early nineteenth century compatible with the ceramic evidence. A desiccated, folded scrap fragment possibly of sheep/goatskin was recovered from fill 718 of pit 722 containing a dump of sheep/goat bones bearing cut marks and sixteenth century pottery.

Area 1000

Two lifts (SF 1002) from a large, low, D-shaped stacked leather heel from a man's shoe of post-

medieval date were found in fill 1136 of channel 1139 running along the eastern edge of the site. The ditch also contained medieval pottery, and has been attributed to the earliest occupation activity (AD 1075-1350). A piece of primary waste leather (SF 1005) cut from the leg of a cow and bearing four marks made by a C-shaped punch was found in context 1293. This was probably a late fill of channel 1115 in this area, and so dates to the late twelfth or thirteenth century.

Area 2000

A small quantity of secondary and primary waste was recovered from the lower fill (2061) of pit 2060. The secondary waste contains shapes that indicate it derives from the making of shoes or their repair. Primary waste, that is unusable areas of hide, was also present. A piece of turnshoe rand, a secondary waste piece and two pieces of primary waste were found in the upper fill of pit 2057 adjacent to pit 2060. The occurrence of a shoe part along with the waste leather suggests this to be sweepings from a cobbler's workshop where shoes were repaired. With the exception of the distinctive shoemaking waste produced in the Roman period, waste leather cannot be independently dated, but these two small groups of waste were each associated with pottery dating from AD 1075-1250. There is no reason to think that the waste leather is not of this date, and so associated with the earliest occupation activity.

A small amount of heavily worn shoe leather was recovered from pits 2043 and 2051. Part of a heavily worn turnshoe sole with its repair patch, known as a clump, was found in the upper fill (2044) of pit 2043, while parts of two shoes and three clump repairs were found in upper and secondary fills (2052, 2053) of pit 2051. Both were associated with pottery dating to AD 1500-1650. The shoe parts present, which include the right quarter of an ankleboot of calfskin, part of the vamp wing of thicker, bovine, leather and a wide rand with repair stitching, suggest a date from the late fifteenth to the middle years of the sixteenth century, compatible with the pottery recovered.

Area 3000

A piece of hide edge (primary waste) and a trimming of secondary waste (SF 3005) were found in the single fill (3126) of the N-S ditch 3126, and were associated with pottery dating to AD 1125-1250. A single hide edge (SF 3007) was also present in the lower fill (3161) of pit 3154, which also contained single tile and brick fragments of fifteenth-seventeenth century date.

Trench 103 /5000

A length of turnshoe rand with stitching to attach a repair patch and a hide edge came from lower fill (5011) of feature 5010. The upper fill contained much brick and tile of fifteenth/sixteenth century date.

Watching brief

A small mixed group of shoe leather including a turnshoe sole of adult size 2(34) apparently from a shoe of turn-welted construction and another sole from a welted shoe of adult size 5(38) were found with a piece cut from a sword scabbard in fill (6337) of north-south ditch 6336 (Fig. 41). The cut down sword leather of calfskin 1.22mm thick has crease lines running along each cut side. These are decorative impressed and darkened lines made by using a heated tool known as a creaser and commonly feature on scabbard leathers. The group was found associated with pottery dating to AD 1367-1550 and other dumped domestic rubbish; the shoe parts present suggest a deposition date between the middle of the fifteenth through to the middle of the sixteenth century, similar to the shoe parts from area T2000.

The bottom of a shoe of welted construction, likely to date to the eighteenth century, was recovered from fill 6305 of a large pit 6304 along with mixed rubbish including pottery dated to AD 1650-1725. The shoe was no larger than a child size 8(26), so presumably was that of a child.

Discussion

Leather of three different periods has been identified: medieval (12th/13th century), late medieval/early post-medieval (late 15th/16th century) and post-medieval (late 17th/18th century).

Although the quantity of medieval material is very small, the presence of primary and secondary waste, and the shapes represented among the latter, indicates that shoe-making or shoe repair was being carried out at this time. Refuse generated by this activity was thrown away here, principally in pit 2060 in Area 2000. The tanned skin from a cow leg discarded in Area 1000, together with the primary waste from Area 2000, may suggest that whole or half hides were being used, rather than trimmed hides from which the extremities had been removed prior to sale.

The material from the late medieval/early post medieval period also included worn shoe parts, repairs, and waste hide fragments likely to indicate refuse from shoe repair. The processing of animal bones on the site was clear at this period (See Strid this volume) but the leather recovered provides little direct evidence for hide processing. The post-medieval material consisted only of shoes parts and probably represents domestic rubbish disposal.

ENVIRONMENTAL REPORTS

Animal bones by Lena Strid

Introduction

This report encompasses hand-collected medieval mammal and bird bones from the backyards of plots at Northbrook Street, Newbury. The assemblage contained kitchen waste as well as industrial waste, the latter probably deriving from tawing and tanning. A full record of the assemblage, documented in a *Microsoft Access* database, can be found in the site archive.

Methodology

With the exception of layer 718 from the evaluation, only bones from securely dated ditches, pits and wells were recorded. These particular feature types were chosen as the most securely stratified assemblages, and ones mostly likely to allow questions of livestock husbandry and uses of animal products to be posed and addressed.

The bones were identified at Oxford Archaeology using a comparative skeletal reference collection, in addition to standard osteological identification manuals, such as Cohen and Serjeantson (1996), Hillson (1992) and Schmid (1972). All the animal remains were counted and weighed, and where possible identified to species, element, side and zone. For zoning, Serjeantson (1996) was used, with the addition of mandible zones by Worley (described in Strid 2012). Sheep and goat were identified to species where possible, using Boessneck *et al.* (1964) and Prummel and Frisch (1986). They were otherwise classified as 'sheep/goat'. Ribs and vertebrae, with the exception of atlas and axis, were classified by size: 'large mammal' representing cattle, horse and deer; 'medium mammal' representing sheep/goat, pig and large dog; and 'small mammal' representing small dog, cat and hare.

The condition of the bone was graded on a 6-point system (0-5). Grade 0 equating to very well preserved bone, and grade 5 indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable (Table 16).

Table 16. Bone preservation grading definitions

Grade 0	Excellent preservation. Entire bone surface complete.
Grade 1	Good preservation. Almost all bone surface complete.
Grade 2	Fair preservation.
Grade 3	Poor preservation. Most bone surface destroyed.
Grade 4	Very poor preservation. No original bone surface remaining.
Grade 5	Extremely poor preservation. Unlikely to be able to identify element.

For ageing of mammal bones, Habermehl's (1975) data on epiphyseal fusion for cattle, sheep, pig and horse was used. Tooth wear was recorded using Grant's tooth wear stages (Grant 1982), and correlated with tooth eruption (Habermehl 1975). In order to estimate an age for the animals, the methods of Halstead (1985), Payne (1973) and O'Connor (1988) were used for cattle, sheep/goat and pig respectively.

Sex estimation was carried out on morphological traits on cattle and sheep/goat pelves, sheep horn cores, and pig canine teeth, using data from Boessneck *et al.* (1964), Hatting (1983), Prummel and Frisch (1986), Schmid (1972) and Vretemark (1997). Metrical sex estimation was carried out on cattle metacarpals, using data from Mennerich (1968). Equid canines were used to indicate the

presence of male individuals.

Measurements were taken according to von den Driesch (1976), using digital callipers with an accuracy of 0.01mm. Large bones were measured using an osteometric board, with an accuracy of 1mm. Measurements were restricted to long bones of mature specimens.

Description of the assemblage

The assemblage consisted of a total of 1755 re-fitted bones, of which 1511 (86.1%) could be identified to taxa (Table 17).

Table 17. Number of fragments per taxon and phase in the Park Way, Newbury assemblage

	12-13th C	14-E15th C	L15-E17th C	L17-19th C
Cattle	21		80	63
Sheep/goat	20		137	114
Sheep	1		89	31
Pig	5		11	
Horse	4	1	150	1
Dog	1			
Red deer		1		
Rabbit			1	
Domestic fowl	2		3	
Galliform			1	
Goose			3	
Duck			1	
Indet. bird			2	
Medium mammal	6		50	2
Large mammal	10	4	100	
Indeterminate	6		61	2
Total (NISP)	76	6	689	213
Weight (g)	2385	440	30052	3784

The species present include cattle (*Bos taurus*), sheep/goat (*Ovis aries* / *Capra hircus*), pig (*Sus scrofa domestica*), horse (*Equus caballus*), dog (*Canis familiaris*), red deer (*Cervus elaphus*), rabbit (*Oryctolagus cuniculus*), domestic fowl (*Gallus gallus domestica*), goose (*Anser anser* / *Anser domestica*) and duck (*Anatidae*). The majority of the bones represent kitchen waste from the medieval and late medieval/Tudor tenements. One late medieval/Tudor horse burial and dumps of bones associated with tawing/tanning waste were also recovered from the site (see below). The post-medieval phase is solely represented by industrial waste dumps. There were no certain identifications of goat in the assemblage and since almost a third of the sheep/goat bones in the assemblage were certainly sheep it is likely that most, if not all, of the sheep/goat bones are sheep.

The bones were in a very good condition (Table 18). Only three bones were burnt, whereas a total of 53 bones showed gnaw marks from carnivores, probably dog. The good bone condition and the low number of gnawed bones suggest that the bones were disposed of rapidly and in a manner to avoid opportunistic scavenging.

Table 18. Preservation level for bones from the Park Way, Newbury assemblage.

Phase	Number	0	1	2	3	4	5	Burnt	Gnawed
12-13th C	76	28.90%	46.10%	22.40%	2.60%				
14-E15th C	6	22.20%	50.00%		16.60%				
L15-E17th C	689	27.90%	61.20%	9.10%	1.20%	0.60%		1	39
L17-19th C	213	59.20%	16.00%	23.90%	0.50%	0.50%		2	7

Livestock

Domestic mammals dominate the assemblage, which is almost always the case for medieval and late medieval/post-medieval urban sites (Sykes 2006, 164). When excluding the industrial waste dumps in layer (718), ditch (3024) and pits (1178, 3038, 3039, 3064) as well as the semi-articulated horse in pit (3110), sheep/goat is the most numerous animal. This suggests that both lamb and mutton were significant dietary components, but also reflects the importance of wool production in the region (see below). However, due to the larger size of cattle, beef would have been more commonly eaten.

The epiphyseal fusion data suggest that cattle and sheep/goat were mostly slaughtered as adults or sub-adults and pigs were mostly slaughtered as sub-adults or juveniles. The dental wear data is inconclusive regarding cattle due to the small sample size, although both juvenile and adult/senile cattle are present (Table 19).

Table 19. Newbury Park Way: Dental analysis of cattle, using Halstead (1985)

Phase	Number	0-1 months	1-8 months	8-18 months	18-30 months	30-36 months	Young adult	Adult	Old adult	Senile
L15-E17th C	5		3					1		1

The single ageable pig mandible came from an adult male pig. The sizeable dataset for sheep/goat teeth is dominated by adult sheep (Table 20), probably kept primarily for wool production. The ageable cattle horn cores come from animals of 3-7 years of age. A small number of bones from juvenile cattle, sheep/goat and unidentified large mammal were present.

Table 20. Newbury Park Way, : Dental analysis of sheep/goat, using Payne (1973)

Phase	Number	0-2 months	2-6 months	6-12 months	1-2 years	2-3 years	3-4 years	4-6 years	6-8 years	8-10 years
12-13th C	3					2		1		
L15-E17th C	16							10	5	1

Sexable bones were rare and as a consequence it was not possible to carry out an analysis of the sex ratio for each species. The available sexing data is presented in Table 21. Metric evidence indicates that the two cattle metacarpals belonged to cows.

Table 21. Sexed bones from the Newbury Park Way, assemblage.

Phase	Species	Element	Male	Female	Castrate
L15-E17th C	Cattle	Pelvis		1	1
	Cattle	Metacarpal		2	
	Pig	Tooth	1		
	Horse	Tooth	1	1	
L17-19th C	Sheep	Horn core			2

Measurements of sheep metapodials show a slight increase in height from the late medieval/Tudor period to the post-medieval period, possibly a result of breed improvement (Table 22). The dataset did, however, not indicate a change in width between the two periods.

Table 22. Greatest length and greatest distal width of cattle and sheep/goat bones from all phases in the Newbury Park Way, assemblage. Sheep metapodial measurements include bones from industrial waste dumps.

Species	Bone	Measurement	Phase	Number	Mean	Min	Max
Cattle	Metacarpal	GL	L15-E17th C	2	199	198	200
		Bd		3	54.3	49.5	59.4
Sheep/goat	Radius	GL	12-13th C	1	124.5		
		Bd	12-13th C	1	23.4		
			L15-E17th C	1	27		
	Tibia	Bd	12-13th C	1	25.3		
Sheep and sheep/goat	Metacarpal	GL	12-13th C	1	117.9		
			L15-E17th C	46	109.5	97.3	124.4
			L17-19th C	13	114.4	105	124.5
		Bd	12-13th C	1	24.3		
			L15-E17th C	50	23.7	21.3	26.4
			L17-19th C	15	24	21.8	26.1
	Metatarsal	GL	L15-E17th C	32	120.3	108	134.6
		L17-19th C	13	122.8	111.6	134	
		Bd	L15-E17th C	33	22.5	19.9	26.2
			L17-19th C	12	23.1	20.2	25.1

Other species

The remaining mammals, horse, dog, rabbit and red deer, were found in small numbers. Judging by epiphyseal fusion and bone surface structure, all dog and horse bones, including the above-mentioned semi-articulated horse burial, derived from adult or sub-adult individuals. The single red deer bone, a complete metatarsal, may have been part of a hide transported to the tanner (cf Serjeantson 1989). Since this element is only covered in hide and sinews there is no incentive to include it in a cut of meat, unless the entire limb is portioned from the carcass. Rabbits were not bred in backyards in the Middle Ages, but were kept in rural warrens and sold to the urban markets. Rabbit was rather expensive meat (Strid 2010, 207) and its scarcity in the assemblage may indicate that the inhabitants of Northbrook Street were not particularly wealthy. However, as rabbit is represented by a distal tibia, it may instead represent waste from a tawyer or furrier, if the feet were included in the skins sold to the craftsmen.

The horse assemblage included one burial of a semi-articulated adult male horse in pit (3110) and small dumps of articulate horse remains in pit (6212). The horse in pit (3110) consists of the ribcage, spine including a few neck vertebrae as well as some long bones from both front and rear legs. Calculations on radius and metatarsal indicated a withers' height between 1.45m and 1.48m.

Table 23. Horse bone measurements and estimated withers' height (May 1985) from all phases in the Park Way, Newbury assemblage.

Phase	Element	GL	Bp	Bd	Sd	Estimated withers' height
12-13th C	Metacarpal	209	45	45.6	34.4	127.5cm
L15-E17th C	Metatarsal*	282.5	52.5	52.1	35.8	148.0cm
	Radius*	352.5		84.2		144.9cm
	Tibia	336.5		66.7		132.8cm

*: From articulated horse burial.

No cut marks could be observed, but from the plan it seems extremely unlikely that the whole horse could have been deposited in the pit before it had been dismembered. The truncation of the pit may be responsible for the absence of the remaining skeletal elements, although they may never have been deposited in the pit originally. The horse remains in pit (6212) consists of one skull with mandibles, one set of first and second neck vertebrae (atlas and axis) with articulating occipital bone, a maxillary bone, fragmented left and right mandibles and a left and right pelvis with sacrum.

The avian assemblage included bones of domestic fowl, goose and duck, as well as small galliform, possibly partridge or quail. It is not clear whether the goose and duck bones belong to greylag goose/mallard or their domestic forms, as they are very similar skeletally and interbreeding may occur.

With the exception of a single juvenile fowl tarsometatarsus, all bird bones are adults. It is likely that domestic fowl were reared in backyards, primarily for eggs but also for meat and feathers. Geese require large areas for grazing and in the medieval period geese were therefore often kept outside the towns proper (Serjeantson 2006). No avian remains could be sexed.

Butchery marks

Butchery marks were noted on bones from cattle, sheep/goat, pig and domestic fowl, the majority occurring on cattle and sheep/goat. Indications of skinning were only found on one cattle skull, which had a cut mark just below the horn core, and two sheep metapodials: one metacarpal and one metatarsal. The metacarpal had horizontal cut marks anteriorly on the lower third of the shaft, whereas the metatarsal had horizontal cut marks posteriorly mid-shaft. Metapodials are only covered by skin and tendons, so cut marks on these bones are usually associated with disarticulation or skinning.

A sagittally split sheep skull indicates suspension of the carcass during the butchery process, as well as utilisation of the brain. The former process was also evidenced by axially split vertebrae: three from large mammals and two from medium mammals. Disarticulation of the carcass was carried out by heavy cleavers as well as by knives. Cut marks from knives were more common on sheep/goat than cattle, probably related to the larger size and robusticity of the cattle bones. Disarticulation with heavy cleavers occurred on two cattle scapulae where the glenoid process had been chopped off, the proximal end on one cattle tibia and the distal end of another cattle tibia. Similar butchery processes were noted on one pig scapula where the glenoid process was chopped off.

Portioning of cuts occurred on two transversally split large mammal vertebrae, one cattle pelvis where the ilium was chopped off and on two cattle scapulae, one of which had had its spine chopped off and one where the distal end of the shoulder blade had been chopped off. Ribs from 20

large mammals and four medium mammals had been chopped off into two or three portions. A single fowl tarsometatarsus had had its proximal tip chopped off, indication of severing the drumstick from the thigh.

Cut marks from filleting were recorded along the spine of a pig scapula and on one medium mammal long bone. Occasionally it can be difficult to tell whether cut marks derive from disarticulation or from filleting or skinning. This was the case for two cattle and one sheep/goat mandible with cut marks on the vertical ramus. They may have derived from filleting off the cheek meat or from disarticulation of the mandible from the skull. Horizontal cut marks at the proximal anterior metaphysis of a sheep/goat femur could have come from disarticulation or filleting. One sheep metatarsal had horizontal cut marks at the proximal metaphysis, a bit lower than the normal placement for cut marks on metatarsals (see below). The location would seem somewhat too low for disarticulation, which would argue for skinning, but whether the cut mark derived from disarticulation or from skinning is unclear. One sheep/goat humerus was split across at the lower third of the shaft, either for portioning or to facilitate marrow extraction.

Horn working was indicated by two fragmentary sheep skulls, on one of which the horn core had been chopped off above its base and on the other the horn core had been completely removed although due to fragmentation it was not possible to be more specific about the process by which this occurred. Butchery marks on metapodials from industrial waste deposits will be discussed below.

Pathology

A small number of bones from sheep/goat, horse and unidentified large mammal displayed pathological conditions. Oral pathologies, including infections of the gums and subsequent widening of alveoles and tooth loss were present on the mandibles of one horse and three sheep/goat mandibles. One of the sheep/goat mandibles also displayed occlusal caries on the first molar. One sheep metatarsal had a bone spur midshaft on the posterior side. This may be an ossification of a tendon attachment, perhaps caused by an infection. Ankylosing spondylitis, i.e. fusion of the vertebrae due to progressive inflammation, was noted on the 13th to 18th thoracic vertebra of the semi-articulated horse in pit (3110). Evidence of trauma was present as a partially healed fracture mid-rib on a large mammal. The fragment displayed bone growth at the break but had not fused with the other half.

Industrial waste deposits

Deposits of 274 sheep/goat foot bones and 66 cattle horn cores were recovered from nine deposits: one layer (718), three ditches or elongated pits (3024, 6070, 6194) and five pits or postholes (1178, 3038, 3039, 3064 and 6067), ranging in date from the medieval to the post-medieval period (Table 24). The chronological extent of the features containing these deposits suggests that this area of Newbury has a long history of industrial use.

Table 24. Industrial waste animal bone deposits from Park Way, Newbury.

Species	Element	12-13th C	L15-17th C				L17-19C			
		Pit	Layer		Ditch	Pit or posthole		Ditch		
		1178	718		3024	3038	3039	3064	6067	6070
Cattle	Horn core/ skull	5								61
Sheep	Horn core								2	
	Metacarpal		36		2	3			15	
	Metatarsal		25		4				13	
Sheep/ goat	Metacarpal		5		2	4	1	1	8	
	Metatarsal		13		1	3	4	3	9	
	Phalanx 1		18						51	
	Phalanx 2		3						10	
	Phalanx 3		1						6	
	Sesamoids								25	
Total fragments per context		23	102		18	11	9	8	142	62

Seventeen cattle horn cores came from ditch (6070). This feature also included 44 horn core fragments of varying size, suggesting that the deposit would have originally been more substantial. The remaining five horn cores came from a discrete deposit in pit (1178), suggesting that they represent a single event. Even though the majority of all cattle horn core fragments included parts of the frontal, parietal and/or occipital bone, no cut marks or chop marks could be observed.

In all three periods, the sheep/goat deposits mostly consist of metapodials. Ditch (6067) also contains two horn cores and several toe bones and sesamoids. The lack of phalanges (toe bones) in the other industrial waste deposits suggests that those feet were severed prior to deposition. Similar finds are known from Walmgate, York, but there it is the toe bones that are over-represented compared to the metapodials (O'Connor 1984, 36-39). There was a trade in waste products between crafts in the medieval and post-medieval periods, since what was waste in one craft was raw material in another. Feet could be rendered for glue or oil and metapodials could be used in bone working (Yeomans 2007). From the deposits alone it is not certain whether the general lack of toe bones indicates that the feet had mostly already been sold elsewhere and the metapodials dumped, or whether the deposits represent metapodials intended to be used as raw material, but dumped before this happened. The sheer number of metapodials would suggest that these do not represent a bone worker facing economic loss due to accidental rot. Instead, they were probably dumped as waste from a tannery.

In the Middle Ages, guilds normally divided the tanning process into heavy leather and light leather, referring to oak tanning of cattle hides, and alum tawing of sheep, goat and deer skin respectively. There are however indications that these restrictions were occasionally ignored and that both trades would use the same tanyard. Oak tanning usually requires several sunken vats for long-term tanning, whereas alum tawing was often carried out in separate vats and could be done in just a few months. The lack of certain sunken tanning vats suggests that the tawyers rather than tanners dominated the Northbrook Street site. The presence of the cattle horn core dump would indicate that tanners were also present in the area. The tanyard may have been located just outside the excavation area.

Cut marks were noted on 18 sheep metacarpals and 19 metatarsals from the late medieval/Tudor and the post-medieval phases. The cut marks on the metacarpals were generally placed on the upper third of the shaft or mid-shaft, whereas the cut marks on the metatarsals were generally placed at the proximal articulation. Perhaps the difference in placement relate to the skinning and butchery process. Carcasses were usually suspended from the hock during butchery, the first metapodial to be severed from the body would be the metatarsals, as the skin was removed from tail to head (cf the Holkham bible, fol. 20; Brown 2007). As the butcher would have the metatarsals roughly at eye-level the cuts may have been more precise for these bones, while the metacarpals were treated more roughly. However, this is only conjecture and a larger sample would be needed in order to discern whether there is a significant difference in the location of cut marks on metacarpals and metapodials. The lack of change in the placement of cut marks suggests that no major changes in primary butchery of sheep carcasses occurred in the early to mid-post-medieval period.

Discussion

The animal bone assemblage from Northbrook Street, Newbury is dominated by bones from sheep/goat and cattle. This reflects the suitability of the local environment, where sheep would graze on the nearby downs and cattle would graze on the floodplains of the Kennet and Lambourn rivers. Sheep and cattle were very important animals in Medieval society and their meat were in many cases more of a necessary by-product than the main reason for keeping them. The trade in English wool was extensive during the Middle Ages and large flocks of sheep grazed the downs. Cattle were kept for dairy products and for traction purposes. Without beasts of burden it would not be possible to cultivate sufficient cereals to feed the population. The only animal that was only used for meat was the pig. Ducks, geese and fowl were kept for eggs and feathers.

Other Newbury assemblages, from Bartholomew Street and Cheap Street, both south of the river, show very similar species frequencies for the three main domesticates. Sheep/goat are the most numerous taxon (46%), followed by cattle (38%). Pig is much more common at Bartholomew Street and Cheap Street than at the Northbrook Street site (Coy 1997a, 77; Coy 1997b, 135), which may be connected to the socio-economic status of the inhabitants of these plots. A high level of pig consumption is connected to high status sites as well as to rural villages (Albarella 2006, 80). This dichotomy of high-status diet and peasant food makes it difficult to interpret differences in pig abundance within an urban environment, as there are many factors which could influence the proportions of different meat eaten by the households. However, the non-industrial part of the Northbrook Street assemblage contains less than 300 fragments from these three taxa, which makes the analysis less secure (Hambleton 1999, 39-40) and these interpretation must therefore be regarded as tentative.

Despite sheep/goat dominating the assemblage, cattle were likely to have been the main meat provider due to their larger size. At Northbrook Street, sheep would have been the second meat provider, whereas pig would have taken this role in Bartholomew Street and Cheap Street. Age at death data for each of the domesticates is scant, but similar for all three sites. Cattle were slaughtered as sub-adults and as adults, representing young surplus animals fattened for the market and older oxen and milk cows past their prime. The sheep/goat assemblage is focussed on adult sheep, reflecting the use of sheep for wool. A small number of juvenile cattle and sheep indicate that veal and lamb was consumed as well as beef and mutton.

Animals that were utilized to a lesser degree were pigs, chicken, ducks and geese. Of these, ducks and geese were probably raised in the countryside and sold to the urban butchers, whereas pigs and chickens were raised in the backyards of the town. Pigs were kept solely for meat and with the exception of a few breeding animals were slaughtered young.

Other species in the Northbrook Street assemblage include horse, dog, rabbit and red deer. Small numbers of horse, dog and game are common on Medieval urban sites. There is no evidence for dog or horse being used for hide or meat in Northbrook Street. Horse and dog skins were commonly used in the Medieval period while their flesh was only eaten in emergencies. The rabbit and red deer bones may represent waste from tawing, although the rabbit bone could also be food waste.

The industrial waste deposits in Northbrook Street may indicate that some of the tenements were inhabited by tawyers. The absence of proven tannery vats would suggest that tanners were not living in these tenements, although a dump of cattle horn cores suggests that tanners may have been present in the area, if not on the site itself. Tanners and tawyers often worked outside the towns due to the smell. As access to fresh water were vital for their crafts, tanneries were often located adjacent to rivers or canals (Serjeantson 1989, 135).

Plant macrofossil remains by *Julie Jones*

Introduction

Four samples were examined from features revealed during excavation of burgage plots in Newbury. With houses fronting onto Northbrook Street, these long narrow plots typically had an area of garden or industrial activity to the rear. This area lies on the floodplain of the River Kennet, and it would appear that a stream ran down the back of the plots towards the river.

Two samples came from a barrel-lined well [1065] of later medieval date, c AD 1400-1550 and a third a secondary fill from pit [2051] dated AD 1500-1650. A fourth sample came from a broad shallow feature [3089] dated AD 1550-1650 that appears to have been used for rubbish disposal. An additional small sample from a medieval garden soil (context 5115) containing 11-13th century pottery was also examined. As this small flut (7ml) consisted largely of charcoal fragments and several elder (*Sambucus nigra*) seeds it was not thought worth further reporting.

The samples were processed by Oxford Archaeology to a minimum mesh size of 250 microns for the flut, which were then analysed by the author for preservation of plant macrofossil remains. The results are shown in Table 25. All results refer to fruits and seeds unless stated otherwise (bud, grain etc). Nomenclature and habitat information is based on Stace (1991). Preservation was primarily by waterlogging from the anaerobic conditions prevailing in the features, with material generally well preserved. Although charcoal was present in all samples, other charred plant remains were rare. Additionally there was some mineralised preservation in pit 2051.

Table 25. Plant macrofossil remains from Newbury Park Way

		1400-1550	1400-1550	1500-1650	1550-1650	
	Feature	Barrel-lined well [1065]		Pit 2051	Layer 3 089	
	Context	1111	1106	2053	3092	
	Sample	1018	1017	2002	3088	
	Size of flot (ml)	100	90	210		Habitat
DENNSTAEDTIACEAE						
<i>Pteridium aquilinum</i> (L.)Kuhn (pinnules)	Bracken		6	3	40	WEad
RANUNCULACEAE						
<i>Caltha palustris</i> L.	Marsh marigold		2			MP
<i>Ranunculus acris/repens/bulbosus</i>	Meadow/Creeping/					
<i>Bulbous Buttercup</i>		110	4	11	DG	
<i>Ranunculus flammula</i> L.	Lesser Spearwort		29			MPRw
<i>Ranunculus lingua</i> L.	Greater Spearwort		2		1	M
<i>Ranunculus sceleratus</i> L.	Celery-leaved Buttercup		45		15	MPR
<i>Ranunculus</i> subg. <i>Batrachium</i> (DC.)A.Gray	Water Crowfoot	1			1	APR
PAPAVERACEAE						
<i>Papaver</i> spp.	Poppy		2		8	CD
MORACEAE						
<i>Ficus carica</i> L.	Fig		19	40		
+3 min	3	#				
URTICACEAE						
<i>Urtica dioica</i> L.	Common nettle	2	130	70	450	DGHWp
<i>Urtica urens</i> L.	Small nettle		25		1	CDI
FAGACEAE						
<i>Quercus</i> sp (bud)	Oak		4			HSW
BETULACEAE						
<i>Alnus glutinosa</i> (L.)Gaertner (fruit)	Alder		1		1	RWw
<i>Alnus glutinosa</i> (L.)Gaertner (bud)	Alder				1	RWw
<i>Betula</i> sp. (fruit)	Birch	2			4	EW
<i>Corylus avellana</i> L. (nut frags)	Hazel	46	43	7	1	HSW
CHENOPODIACEAE						
<i>Atriplex</i> spp	Orache	3	52		16	CDn
<i>Beta vulgaris</i> ssp <i>vulgaris</i>	Root Beet			1		#
<i>Chenopodium album</i> L.	Fat-hen	2	507	1	47	CDn
<i>Chenopodium ficifolium</i> Smith	Fig-leaved Goosefoot		20			CD
<i>Chenopodium polyspermum</i> L.	Many-seeded Goosefoot		7			CD
CARYOPHYLLACEAE						

<i>Agrostemma githago</i> L.	Corncockle		1 frag	v.freq		C
<i>Cerastium</i> sp.	Chickweed				1	CDG
<i>Lychnis flos-cuculi</i> L.	Ragged Robin		15			GMSw
<i>Silene latifolia/dioica</i>	White/Red Campion		8		3	Cdlo/WH
<i>Stellaria media</i> (L.)Villars	Common Chickweed	2	97	10	7	CD
POLYGONACEAE						
<i>Persicaria lapathifolia</i> (L.)Gray					2	Cdow
<i>Persicaria maculosa</i> Gray	Redshank			3	13	Cdo
<i>Polygonum aviculare</i> L.	Knotgrass		17	1	83	CD
<i>Rumex acetosella</i> L.	Sheep's Sorrel		1		6	Ho, CGa
<i>Rumex obtusifolius</i> L.	Broad-leaved Dock				2	BCDG
	Feature	Barrel-lined well [1065]		Pit 2051	Layer 3089	Habitat
	Context	1111	1106	2053	3092	
	Sample	1018	1017	2002	3088	
<i>Rumex</i> spp	Dock		20	7	7	DG
CLUSIACEAE						
<i>Hypericum</i> spp.	St.John's Wort		6			GW
VIOLACEAE						
<i>Viola</i> c.f. <i>odorata</i> L.	Sweet Violet		2 frags			HSW
SALICACEAE						
<i>Salix</i> spp (buds)	Willow			2	1 frag	w
BRASSICACEAE						
<i>Brassica/Sinapis</i> spp.	Mustard/Rape/C ole		9	1	10	CD#
<i>Capsella bursa-pastoris</i> (L.)Medikus	Shepherd's Purse		23		1	Co
<i>Raphanus raphanistrum</i> ssp <i>raphanistrum</i> (pod)	Wild Radish		1 frag		1	CD
<i>Rorippa nasturtium- aquaticum</i> (L.)Hayek	Water-cress					BPR
ROSACEAE						
<i>Agrimonia eupatoria/procea</i>	Agrimony				3	GH
<i>Fragaria vesca</i> L.	Wild Strawberry		3	145		
2 min		HSW#				
<i>Malus</i> sp. (pip)	Apple			14+ freq frags		
1 min		HS #				
<i>Malus</i> sp. (endocarp)	Apple			freq frags		HS#
<i>Potentilla anserina</i> L.	Silverweed				1	DG
<i>Potentilla erecta</i> (L.)Raeusch	Tormentil		1			EGa
<i>Prunus avium</i> (L)L.	Wild Cherry			2		HW- edge
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.)Bonnier & <i>Layens</i>	Bullace/Damso n			8		DHS
<i>Prunus spinosa</i> L.	Blackthorn			8		HSW

<i>Rosaceae</i> indet. (thorn)			1	1		HSW
<i>Rubus</i> sect. <i>Glandulosus</i>						
<i>Wimmer & Grab</i>	Bramble		9	10	1 frag	DHSW
EUPHORBIACEAE						
<i>Euphorbia helioscopia</i> L.	Sun Spurge		14	2	1	CD
LINACEAE						
<i>Linum catharticum</i> L.	Fairy Flax				1	Gc
<i>Linum</i> sp. (capsule frag)	Flax				1	#
VITACEAE						
<i>Vitis vinifera</i> L.	Grape-vine			2		#
APIACEAE						
<i>Aethusa cynapium</i> L.	Fool's Parsley	1	38			C
<i>Apium nodiflorum</i> (L.)Lag.	Fool's Watercress	1			1	PM
<i>Berula erecta</i> (Hudson)Cov	Lesser Water-parsnip	3				
1 charred	1			MPw		
<i>Bupleurum rotundifolium</i> L.	Thorow-wax			1		C
<i>Conium maculatum</i> L.	Hemlock				2	Bw
<i>Daucus carota</i> ssp <i>carota</i>	Wild Carrot				8	Gs
<i>Torilis</i> spp.	Hedge-parsley				9	CGHW
SOLANACEAE						
<i>Solanum dulcamara</i> L.	Bittersweet	1	29		1	DHS
VERBENACEAE						
<i>Verbena officinalis</i> L.	Vervain				2	Gc
		1400-1550		1500-1650	1550-1650	
	Feature	Barrel-lined well [1065]		Pit 2051	Layer 3089	Habitat
	Context	1111	1106	2053	3092	
	Sample	1018	1017	2002	3088	
LAMIACEAE						
<i>Ajuga reptans</i> L.	Bugle		1			G(w), W
<i>Ballota nigra</i> L.	Black Horehound				1	HW
<i>Galeopsis tetrahit</i> L.	Common Hemp-nettle		1			CW
<i>Lamium album</i> L.	White Dead-nettle		40			HD
<i>Lamium purpureum</i> L.	Red Dead-nettle		220	8	2	CD
<i>Lycopus europaeus</i> L.	Gipsywort	8	3			FRw
<i>Mentha aquatica</i> L.	Water Mint	315	19		30	MPw
<i>Prunella vulgaris</i> L.	Selfheal			1	1	DG
PLANTAGINACEAE						
<i>Plantago major</i> L.	Greater Plantain				1	CDGo
SCROPHULARIACEAE						
<i>Veronica beccabunga</i> L.	Brooklime				6	BMPR
CAPRIFOLIACEAE						

<i>Sambucus nigra L.</i>	Elder		38	33	15	DHSWn
DIPSACACEAE						
<i>Dipsacus spp.</i>	Teasel			10 + frags	2 frags	DRW ?#
<i>Dipsacus sativus (L.)Honck</i>	Fuller's Teasel		1 frag	6	1 frag	#
<i>Dipsacus (receptacular bracts)</i>	Teasel			9		#
ASTERACEAE						
<i>Anthemis cotula L.</i>	Stinking Chamomile				30	CDh
<i>Centaurea cyanus L.</i>	Cornflower			2 frags		CD
<i>Cirsium arvense (L.)Scop</i>	Creeping Thistle		5			CDGH
<i>Cirsium spp.</i>	Thistle			1	4	DGMW
<i>Eupatorium cannabinum L.</i>	Hemp-agrimony	224 + 100's frag	35		2	w-shade
<i>Hypochaeris sp.</i>	Cat's-ear		1			GW
<i>Lapsana communis L.</i>	Nipplewort			4		DH
<i>Leontodon sp</i>	Hawkbit				1	G
<i>Leucanthemum vulgare Lam.</i>	Oxeye Daisy				2	G
<i>Picris echioides L.</i>	Bristly Oxtongue			1		DHWc
<i>Sonchus asper (L.)Hill</i>	Prickly Sow-thistle		32	2	11	CD
<i>Sonchus oleraceus L.</i>	Smooth Sow-thistle		4		1	CDW
ALISMATACEAE						
<i>Alisma sp.</i>	Water Plantain				1	APR
JUNCACEAE						
<i>Juncus sp</i>	Rush		43		40	GMRw
CYPERACEAE						
<i>Carex spp</i>	Sedge	115				
4 charred		633	9			
1 min		30	GMPRW			
<i>Carex paniculata L.</i>	Greater Tussock-sedge		22			
2 charred				BFMw,Ww		
<i>Eleocharis palustris/uniglumis</i>	Spike-rush			2		MPw
POACEAE						
<i>Avena sp (grain)</i>	Oat			1 min		#
<i>Poaceae indet.</i>	Grass	1	31		105	G
<i>c.f. Triticum sp. (grain)</i>	Wheat		1 charred	1 charred frag		#
	Feature	Barrel-lined well [1065]		Pit 2051	Layer 3089	Habitat
	Context	1111	1106	2053	3092	
	Sample	1018	1017	2002	3088	
SPARGANIACEAE						
<i>Sparganium erectum L.</i>	Branched Bur-reed	95 + freq frags				

9 charred		6		1	MPR		
TYPHACEAE							
<i>Typha spp.</i>	Bulrush		20	3			PR-reed swamp
OTHER REMAINS							
Animal bone				occ	occ	rare	
Beetle frags						freq	
Buds/bud scales						30+	
Cereal bran fragments					abund	rare	
Charcoal			v.freq	abund	abund	v.freq	
Egg shell				occ	occ	rare	
Fly pupae					occ		
5 min	occ						
Leaf fragments					occ	occ	
Mineralised concretions					occ		
Monocotyledon stem fragments			freq				
occ charred							
Moss frags				occ	occ	60+	
Mussel shell fragments				occ			
Oyster shell fragments				occ	occ	rare	
Snails (land & water)						<100	
Sheep ked (puparium)						1	
Trickling filter flies					occ		
4 min	freq						
Wood fragments			freq	abund	abund	abund	

Habitats

A: Aquatic. B: Bankside. C: Cultivated/Arable. D: Disturbed. E: Heath/Moor. F: Fens/Bogs. G: Grassland. H: Hedgerow. M: Marsh. P: Ponds, ditches - stagnant/slow flowing water. R: Rivers, streams. S: Scrub. W: Woodland
a: acidic. c: calcareous. d: dry soils. l: light soils. n: nitrogen rich soils. o: open habitats. p: phosphate rich soils. w: wet/damp soils.
cultivated plant/of economic importance.

Scale of abundance

occ: occurring only a few times
freq: occurring regularly
v. freq: occurring in every portion of the sample examined
abund: occurring in field of view all the time and dominating the sample

Results

Barrel-lined well [1065], Area 1000, AD 1400-1550

A barrel-lined well was found cut into one of the silted up drainage channels from the back of the burgage plot to the rear of Jack of Newbury's house, a 16th century textile merchant. Pottery from the construction cut fill was dated to 1400-1550. This was one of a number of pits and postholes in the area thought to relate to small scale industry.

Context 1111/1018

The basal fill of the well was very silty, with much of the preserved organic matter finely comminuted (<1mm), although it included frequent small wood and charcoal fragments. Many of the taxa recorded are plants of wet places, typical of marsh and fen and include branched bur-reed (*Sparganium erectum*), bulrush (*Typha*) and sedges (*Carex*), including greater tussock sedge (*Carex paniculata*). There were also monocotyledon stem fragments which may have come from any of these species, including several charred examples. Indeed some of the bur-reed and sedge nutlets were also charred. Hemp agrimony (*Eupatorium cannabinum*), water mint (*Mentha aquatica*), gipsywort (*Lycopus europaeus*) and lesser water parsnip (*Berula erecta*) are also marsh taxa and all these species would have grown where the water level was close to the surface in summer and flooded in winter. Water crowfoot (*Ranunculus* subg. *Batrachium*) prefers flowing water and fragments of caddis fly larvae also suggest periods when open water prevailed. This community would have found an ideal habitat to the rear of the burgage plot, as this area on the river Kennet floodplain was clearly wet, necessitating the construction of drainage channels. In addition there are a few taxa typical of disturbed habitats, including nettle (*Urtica dioica*), chickweed (*Stellaria media*) and orache (*Atriplex*) likely to have been growing locally in drier areas around the burgage plot although these only form a minor component of this assemblage.

Context 1106/1017

Wood and charcoal fragments form a large part of this overlying fill. Many of the wetland taxa present in the basal fill are still present, particularly sedges and rushes (*Juncus*), with a few additional species such as lesser spearwort (*Ranunculus flammula*), ragged robin (*Lychnis flos-cuculi*) and celery-leaved buttercup (*Ranunculus sceleratus*) and suggest a continuation of wet ground conditions. However some taxa present before, occur less frequently and now form part of a broader plant macrofossil assemblage. Elder, nettle and bramble (*Rubus* sect. *Glandulosus*) may have thrived in unkempt corners of the burgage plot, while both red dead-nettle (*Lamium purpureum*) and fool's parsley (*Aethusa cynapium*) are annuals of waste places and often occur along boundary features such as walls. Other taxa are more typical of ruderal habitats where there is periodic soil disturbance and may have occurred closer to the well where there would have been a degree of trampling from people accessing water. Small nettle (*Urtica urens*) frequently occurs around farm buildings and waste ground (Greig-Smith 1948) and is often associated with fat-hen (*Chenopodium album*) and knotgrass (*Polygonum aviculare*). Chickweed also likes moist nitrogen-rich soils, thriving where soil disturbance and enrichment occurs, particularly on rubbish tips and farmyards (Sobey 1981) and may reflect conditions at the rear of the plot.

There is also evidence of domestic food debris entering this feature indicating its primary function may no longer have been as a well, with fragments of oyster and mussel shell, animal bone and egg shell becoming incorporated. Seeds of fig (*Ficus carica*) and strawberry (*Fragaria vesca*) are likely to be food waste, although hazel (*Corylus avellana*) nut fragments and bramble seeds could be either food remains or have been growing locally on the plot. There were also several fragmented and charred cereal grains with one partial wheat grain, likely to have become charred on a domestic hearth. The only other evidence of economic interest is a single fragmented fuller's teasel (*Dipsacus sativus*) achene, hinting at the wool and cloth industries present in Newbury during this period.

Secondary pit fill [2051], Area 2000, Context 2053/2002, AD 1500-1650

There is a significant domestic component to this secondary pit fill, which once again is composed largely of wood, twig and charcoal fragments. Non plant inclusions include oyster, bone, egg shell and membrane, with much of the plant evidence coming from fruit remains including apple (*Malus*) pips and endocarp (the core), fig, grape (*Vitis vinifera*) and strawberry. *Prunus* fruits include cherry

(*Prunus avium*), damson (*Prunus domestica* ssp. *institia*) and sloe (*Prunus spinosa*). A single fruit of root beet (*Beta vulgaris*), may suggest the use of this vegetable for its leaves which taste like spinach or for the swollen red roots, typical of beetroot which was known in this form from the medieval period.

Although the evidence for cereals is limited to a single partial charred wheat grain and one mineralised oat grain, there are frequent remains of cereal bran in the sample flot, associated with fragmented seeds of corncockle (*Agrostemma githago*). Corncockle, an annual cornfield weed, is a known contaminant of flour in the medieval period so their presence together here is not unusual. Cereal bran is also often taken as an indicator for the deposition of faecal material, which will also account for the signs of mineralisation noted in several small hard concretions present in the sample as well as in the oat grain, some fig and strawberry seeds and fly pupae, including trickling filter fly (*Psychoda alternata*) pupae, the latter a species typically associated with human sewage. Occasional moss may also have had a sanitary use. The remaining taxa are from some of those disturbed ground species already described from the basal fill of the well, likely to have been growing locally around the burgage plot.

Further finds of teasel, with some of the achene faces showing the double rib as described by Hall (1992, p13), are indicative of fuller's teasel. There are also some poorly preserved receptacular bracts, although the lack of the central, slightly re-curved bristle-like spines means these cannot be definitely assigned to fuller's teasel.

Feature [3089], Area 3000, Context 3092/3088, AD 1550-1650

This broad shallow feature appears to have been cut into peat (3090) with a thin lens of silty sand at the base, overlain by two peat layers, the lower one (3092), from which this sample originates, overlain by 3093, both containing pottery dated to AD 1550-1600. It is thought that this feature may be the same as that revealed during the site evaluation, also containing two peaty fills, the upper of which included sheep/goat bones and a scrap of sheepskin leather, suggesting this area of the site was used for rubbish deposition in the 16th and early 17th century. The area to the east of these deposits appears to have been reclaimed or unaltered land at this time.

Plant remains in this peaty fill were abundant, varied and well preserved. As with the other contexts examined there is a small assemblage of wetland taxa, notably rushes and sedges. Additional species, including water-plantain, water-cress (*Rorippa nasturtium-aquaticum*) and brooklime (*Veronica beccabunga*) prefer stream-sides and marshland showing the continuing influence of wet conditions in this floodplain area. The majority of species though are ruderals, which colonise disturbed ground, much associated with human activity including here possibly construction, local industry or general footfall around the burgage plots. Many of the same taxa as found in the earlier deposits continue to occur, particularly knotgrass, with other Polygonaceae, orache, fat-hen, chickweed and nettle.

Much of the sample however consists of wood chips, twigs and charcoal fragments. Although species identification has not been made an indication of taxa present can be suggested from the fruits of alder (*Alnus glutinosa*) and birch (*Betula*), hazel nutshells and buds and bud scales from oak (*Quercus*), alder and willow (*Salix*). Several wood fragments showed clean cut edges suggesting chopped or worked wood and this together with the charcoal may have originated from domestic or industrial use, later disposed of in this feature. Inclusions of oyster, bone and egg shell are also likely to have originated from the burgage plots. The only evidence for food remains comes from a single fig and a small waterlogged fragment from a cereal grain, with several tiny bran

fragments, but not the evidence for fruit remains seen in (2053). The abundance of moss stem fragments may however have had a sanitary use, while the presence of trickling filter flies, fly pupae and perhaps some of the other beetle remains points to the disposal of human waste.

There are only slight hints of local cloth manufacture from the assemblages recovered. One fragment from a teasel achene may have come from fuller's teasel, as found in well fill (1106) and pit fill (2053). A single flax (*Linum usitatissimum*) capsule fragment was also found and although flax fibre was used for linen production, this plant also has many other uses. The seeds were used for oil, with the extraction process involving the crushing of the enclosing capsules, which produced a by-product which may have been used for fodder, fertiliser or possibly fuel (Smith 1999, 20). A single puparium from a sheep ked (*Melophagus ovinus*) also suggests the presence of sheep's fleece. This blood-sucking wingless fly spends its entire life cycle in sheep's wool and can cause damage or loss to the fleece.

Discussion

Woollen and cloth industries are known to have expanded in Newbury during the 15th century, with further growth in the late 16th and early 17th centuries, with many clothiers documented as having houses and shops in Northbrook Street, thought to have been the centre of the industry. Three of the samples examined from later medieval deposits from the burgage plot to the rear of Jack of Newbury's house have provided limited evidence associated with textile production. This comes from fuller's teasel achenes, although the receptacular bracts were too poorly preserved to suggest these also came from fuller's teasel, the heads of which were used for cloth fulling. The spiny bracts, which cover the whole teasel head, were used to finish the cloth, as they tease the fibre ends from the woollen cloth to raise a nap (Ryder 1994, 23). Fulling mills are known to have existed in Newbury and are shown on post medieval maps either side of the River Kennet. The sheep ked found in feature [3089] also suggests the presence of sheep or fleece on site, which is interesting in light of the sheep/goat bones and sheepskin leather from this feature found in the site evaluation.

Other evidence is of a more domestic nature and reflects the disposal of food waste, particularly into pit [2051], but also to a degree into the barrel-lined well. Much of the waste disposal into pit [2051] consists of fruit remains, including apple, bullace, cherry and grape and there is some suggestion from both mineralised examples of fig and strawberry, plus abundant cereal bran fragments that there may have been a faecal element to this. Mineralised concreted organic matter and the presence of organic and mineralised fly pupae and trickling filter flies support this suggestion. Remains of moss are also often taken as an indication of sanitary use. Other food remains include oyster, mussel, egg shell and animal bone fragments.

Many of the other plant remains recovered from these features reflect the local environment of the burgage plot and may have been deposited there by natural means - have fallen, been blown or washed in, or, like the domestic waste have been deliberately placed there. The area to the rear of the burgage plot was clearly prone to flooding signified by the construction of drainage channels and it is thought that a stream ran along the rear of the properties towards the river and many of the plant remains found particularly in the basal fill of the well and the shallow feature in Area 3000 support this. Here we have a community of plants typical of wetland, which thrive where the water table is high for much of the year. While some of this material may have found its way into these features naturally, evidence of charred stems and seeds from the well may suggest otherwise. Sedges, rushes and associated taxa may have been gathered as flooring and subsequently used as tinder. The high proportion of charcoal is also likely to have come from domestic or industrial hearths/ovens, which together with wood fragments perhaps from wood-working around the plot, all later found their way into the well with other domestic waste. Clearly by this time the well's

primary function, like pit [2051] and feature [3089] was as a repository for the disposal of rubbish from around the burgrave plot.

DISCUSSION

The phasing

The features have been grouped for phasing purposes into five: medieval, late medieval/Tudor, post-medieval, Victorian and modern (see Fig. 26). This rather broad phasing has been used due to the general paucity of finds, and the broad date ranges of much of the pottery and ceramic building material that constitute the vast majority of the finds. The development of the site was clearly much more complex than this, as excavation Areas 1000 and 3000 show, but any more detailed phasing would result in the loss of any overall impression of the pattern of activity over time.

The medieval period includes all material with date ranges between the late 11th and the mid-14th centuries. Where pottery of this date range is accompanied by ceramic building material of medieval (13th-16th century) type, this has been regarded as contemporary with the pottery, unless stratigraphic considerations make it likely that the pottery is residual. The late medieval and Tudor periods have been combined, partly because the date ranges of many of the finds run from the 15th to early 17th centuries, but also because the historical division between these periods was not significant to most of those living at the time. The changes brought about by the Dissolution of the Monasteries only took effect in the middle of the Tudor period, while the documentary record suggests that an era of prosperity related to the wool trade began in Newbury in the 15th century, and continued until the late 16th century (Yates 2008, 73-4 and 83-5).

A figure showing evidence for craft and industrial activities over time across the site is illustrated to accompany the discussion (Fig. 42).

Medieval activity

The overall impression obtained from the evaluation trenching, limited area excavations and the watching brief is that activity before the late medieval period was limited. In Area 1000 close to the south end, channels or ditches of late 11th to mid-13th century date (and in one case not earlier than the late 12th century) provided the earliest evidence, and were on alignments that did not correspond to those of the plot boundaries.

By the 13th century there is evidence for a variety of trades connected to leather-production and working. Pits cut into the ditches in Area 1000 (plot 24) contained pottery of the late 12th to mid-13th century, and one of these contained a group of horncores, evidence either of hide preparation or horn-working. In Area 2000 (plots 29 and 30) three further pits were found dating between the late 11th and mid-14th century, two of them intercutting, and the later of these contained leather offcuts from shoe-making. Two ditches were found in Area 3000 (plot 32), one possibly marking the boundary of one of the plots, and the other, which contained pottery of late 12th to mid-14th century, and single fragments of leather hide and secondary waste. All of this evidence suggests related activities of an industrial character appropriate to the edge of town.

Also in Area 3000 was a circular clay-lined pit 3028 containing a barrel, the interior of which was lined with a whitish sandy clay, possibly indicating decayed lime. Barrel-lined pits with an internal layer of lime were found at Abingdon in the Tudor period (Pine and Taylor 2006, 57-60), and were interpreted as receptacles for soaking hides and skins to remove hair or fur with alkaline solutions (Anthony *et al.* 2006, 87-8). Similar pits containing lime of late 15th to 17th century date have also been found at The Green, Northampton (Shaw 1996). Few examples of earlier date seem to have been recognised, however, and as only a single sherd of pottery was recovered from the pit at

Newbury, it is possible that this feature in fact belongs to the late medieval/Tudor phase. Newbury did not become a significant town until the late medieval period (Yates 2008, 70-73), and the absence of barrel-lined wells of medieval date from excavations in Bartholomew Street and Cheap Street supports the view that this may have been a later feature.

In Area 1000 this activity was overlain by a series of layers dating to the later 13th century or later. Finds included an arrowhead; three 12th century arrowheads were found at Bartholomew Street and a 12th/13th century example at Cheap Street, all supposedly residual from when Newbury Castle was besieged in the Civil War between Stephen and Matilda (Vince 1997), but probably a more general reflection of the level of military activity during this time.

These soils were cut by two gullies and a pit. The pit contained a sherd of mid-13th to mid-14th century pottery, the gullies tile of 13th-16th century date. It is possible that the gullies represented an early phase of plot division in this area. A somewhat more substantial east-west ditch at the west end of Area 3000 continued westwards as 6039, surviving some 20m long roughly along the boundary between plots 32 and 33. A probable continuation, 6092, was undated, but was parallel to 6091 marking the south edge of plot 32, which also contained medieval pottery. Another similar gully 6439 ran along the north edge of plot 25, while a north-south gully 6105 in plots 29/30 also contained a sherd of medieval pottery.

The pits in Area 2000 mentioned above were overlain by layers of silty clay, which were thus also laid down after the mid-13th century. Their sand and tufa inclusions make it possible that they were deposited by alluviation rather than deliberate dumping, and the same may be true of some layers in Area 1000. It is probable that a combination of flooding and subsequent deliberate dumping occurred.

There were few other features containing only medieval pottery from the watching brief, and all of them in the western half of the plots. These comprised a layer or possibly a pit fill north of gully 6105 in plot 32, one of a group of three postholes in a north-south alignment in plot 38, one of a pair of large rectangular pits in plot 39, and two adjacent pits in plot 33, 6086 and 6325. The pottery in the large rectangular pit was residual, as this pit cut a layer of late medieval or later date, but does demonstrate that medieval activity extended this far north. Pit 6086 was sub-rectangular, with a single grey clay fill. Pit 6325 contained a square timber frame in the base (Fig. 30).

A similar frame to that in 6325 was found at the base of a probable well on the site of Pembroke College, St Aldates, Oxford, and was dated by dendrochronology to the 15th century AD (S Teague pers. Comm.). In Newbury, the base of a timber-lined well of 14th century date, constructed using four half-lapped planks forming a square 0.7m across, was found at Cheap Street (Lobb and Richards 1997, figs 48-9). Another well, this time of 13th century date, was also found there, but was lined with timber upright stakes (*ibid.*, 89 and fig. 48). The base of a timber-lined well of 13th century date with an internal dimension of around 0.8m was also found at Bartholomew Street (Vince 1997, 17 and fig. 6); the lining consisting of split logs, but these did not overlap, and how they were held in place was not described. In the early 15th century a square timber frame only 0.7m across internally was constructed to support a stone-lined circular well, but no details of its construction were obtained (*ibid.*, 23 and figs 9 and 11). Slightly larger timber-lined pits or wells, one of the 14th and another of the late 15th/16th century, were also found at this site. These were 1.1m and 1.3m across internally respectively; in both the timbers were however not jointed like those at Northbrook Street, but were instead held in place by verticals at the corners (*ibid.*, figs 8 and 13).

There is therefore good evidence for a variety of similar medieval wooden structures at Newbury, though none matches its construction precisely. Those with dimensions most like that at Northbrook

Street were interpreted as wells, one of which was described as timber-lined, the others presumably supporting walls of some other material, though no details were given. The pit containing the frame at Newbury Park Way did not contain any evidence that it had supported a stone, flint or other lining, as would be expected for a well, but may have been a frame supporting a wooden tub or other similar structure, perhaps connected with malting or tanning.

The limited evidence suggests that a significant level of use of this area began in the later 12th/early 13th century. Initially this low-lying area may have been used on an informal and occasional basis, but the presence of east-west ditches and gullies, although few in number, suggests that this was regularised by the laying out of plots and tenements during the 13th century. It has been suggested that the development of the east side of Northbrook street was a planned extension of the town, later than Bartholomew and Cheap Streets south of the Kennet (Astill 1978, 50; OA 2006, 12). The investigations did not provide good corroborative evidence for a planned extension, nor confirm the date at which this might have occurred, but such a development may have followed, or conceivably have prompted, the grant of borough status in 1189 (*ibid.*, 9).

It should be noted that the previous sizeable excavations in Newbury in Bartholomew and Cheap Streets have focussed on the frontages rather than the backyards (Ford 1986, 1989, 1991; Vince *et al.* 1997), and have found better-preserved and longer sequences of medieval activity. Until comparable investigation is carried out on the Northbrook Street frontages and the backyards of properties in Bartholomew and Cheap Streets, it would be unwise to place too much emphasis on the apparent differences in levels of activity.

Late medieval and Tudor activity

Further dumping, both more extensive and more substantial, followed this phase of activity. This was most clearly evident in Area 1000, where the soil and gravel dumping was up to 0.3m deep, and contained pottery dated between the late 14th and early 16th centuries. In Areas 2000 and 3000 there were larger areas of later disturbance, such that no extensive areas of intact medieval soils survived except at the east end, where Area 3000 contained a sequence of dumped layers of 16th/early 17th century date. Spread 6473 at the east end of plot 25 just north of Marsh Lane was probably part of the same process of levelling-up.

A considerable depth of mixed soil appears to have been present right across the site, and medieval finds were recovered from two soils in Trench 104 at the very north-western limits of the site. Elsewhere in the northern part of the site the deposits appear to have been of post-medieval date, for example 6256 and 6259 in plots 38 and 39, or 4122/4121 in plots 34 and 35 (Block C) on the west. As these deposits often directly overlay the peat, it is likely that these soils were either laid after the removal of earlier soils, or (as in the case of 4118 and 4117) the mixing of the upper parts of earlier soils by cultivation and other activities in post-medieval backyards and gardens.

Over much of the site these mixed deposits were removed by machine during the Watching Brief, archaeological recording taking place close to the surface of the peat, where cut features were better-defined.

Several possible plot boundaries are dated to this period: 6137 in plots 28/9, 6188 between plots 29 and 30, and 6075 between plots 38 and 39. The curving west end of 6188 was not tested by excavation, so may not have been genuine. Activity of late medieval date and Tudor date was somewhat more common than that of the medieval period. It is possible that some of the brick walls recorded in Block C were of Tudor date, rather than being later structures incorporating earlier bricks, but if so, their function was not clarified, although one contained a chalk floor and an oven.

Area 2000 (plot 30) included a couple of pits of this period, both of which contained domestic rubbish together with offcuts from shoe-making or repairing. The remains of a toilet seat found in one of the pits, together with a wide variety of waterlogged and mineralised plant remains, indicates that this was a cess-pit. Fragments of fuller's teasel from this also suggests that cloth-making was also carried out either on this plot or in the vicinity.

Further evidence of leather-working, and most likely cobbling, of this date was recovered both from feature 6336 in plot 33, and from ditch 5010 in evaluation trench 103 in plot 41. Linear feature fill 6337 contained shoe-leather including two welted soles and the cut-down remains of a dagger scabbard, while ditch fill 5011 contained a sole with stitch-marks from a repair and a fragment of hide edge.

Area 3000 (plots 31/2, mainly plot 32) had a wider variety of evidence, including a fence line, a wood and mortar structure 3017, a scatter of pits and a midden or dump of domestic refuse. Postholes of the fence line incorporated deposits of sheep-goat metacarpals, which elsewhere have been associated with hide-preparation (Serjeantson 1989; Hamilton-Dyer 2006, 29). A much larger number of these was also recovered from series of pit fills or dump layers at the east end of the tenement, indicating that tawing or tanning was being carried out very close by. A scrap of sheepskin leather and a sheep ked from one of these dump layers, and fragments of hide edge from ditch 3124 and one from pit 3154, provide further evidence of hide preparation.

Despite one earlier potsherd, barrel-lined pit 3028 has also been suggested to belong to this phase, and such features were used in hide-preparation before tanning. Another barrel-lined pit (6368), backfilled in the 16th or 17th century, was found in plot 28, but the base of the barrel was not reached, so it is unclear whether this was for industrial use. Some 10m east of 6368 was a slightly smaller barrel only 0.75m in diameter, within a square pit 6165. This was undated, but was perhaps associated with 6368. Pairs of barrels in close proximity at Abingdon and Reading Oracle were associated with tanning or dyeing (Pine and Taylor 2006, 58-60; Ford *et al.* 2013, 52-5). A pair of barrel-lined wells was however found on plot 24 (see Area 1000 and below), and the fact that the pair in plot 28 lay within the western half of the plot, not near to the stream, may indicate that they had a domestic, rather than an industrial, purpose.

The function of structure 3017 in Area 3000 is difficult to pin down. Unfortunately, recent deposits had truncated this almost to the surface of the mortar, so it was not possible to determine whether the surviving structure lay in the base of a substantial pit, or was virtually free-standing. There were no finds over the lime layer to indicate its function, and only one vertical timber was found, along the north edge. This, together with the fact that the planks sat upon the surface of the peat, supports the view that the planking did lie within a cut of sorts, but does not allow us to distinguish between a slight cut-out, perhaps for a slightly sunken-floored building, and a deeper pit.

As has been pointed out, the irregular stone-filled feature to the west could have been structural, perhaps representing the foundation for a timber sill, although the rather haphazard arrangement of vertical posts, despite the size of some, argues against a sophisticated structure, and casts interpretation as a building into doubt. Parallels for small ancillary buildings of the Tudor period in the backyards of plots in towns are unfortunately rare. The use of planking to stabilise any structure when built on the surface of the peat does seem practical, but a better approach would have been to dump material to provide a stable foundation above the potential water level. Alternatively this structure may have been the lining of a pit below ground, together with a rough covering structure to keep out the rain.

At Morlands Brewery, Abingdon, two rectangular features of late 15th/16th century date also had timber planking at the base overlain by a lime mortar (Pine and Taylor 2006, 58 and fig. 2.14). One of these pits contained substantial deposits of cattle horncore fragments and sheep metapodials. Both were of the same phase, and physically very close to, a series of barrel-lined pits whose plank bases were overlain by a layer of lime 'mortar'. The pattern of timber planking sealed by a lime mortar-like substance, and a backfill of sheep metapodials, was almost ubiquitous here, and the whole complex was interpreted as a tannery. Lime-slaking, often in timber-lined pits, was also carried out to create a mortar for building purposes, and for a variety of other functions (D Goodburn pers. Comm.). In a semi-urban environment like this, it is most likely to have been used either in hide preparation or to make small quantities of lime mortar for local buildings. A mortar-mixing area of similar date represented by a spread of mortar abutting a timber slot with upright posts was found at Reading Oracle (Ford *et al.* 2013, 48 and fig. 2.9). This was not however carried out upon timber-planking, and at Northbrook Street an association with tanning (given the barrel-lined pit adjacent) seems more likely. The location of this structure was close enough to the stream that bordered the eastern side of these plots to make this plausible.

A number of timber offcuts were also recovered from this area, and clearly indicate that carpentry had been going on close by. The material was preserved due to the waterlogged conditions, and of itself need not necessarily indicate an unusual degree of woodworking, ie a carpenter's workshop, on the plot. The main argument in favour of a workshop is that wood chips were common in the midden deposits at the east end of the plot, some of them cleanly cut (see Jones above). All of the material was found discarded or reused, however, and it could have derived from temporary activity in relation to the construction of a building, or its alteration, on the site. The paint brush handle may also derive from this. The fact that the wooden offcuts were not burnt as fuel could imply a surplus of wood, but this is not relevant to the pieces used as post-bases, and for the rest, may simply indicate an owner wealthy enough not to worry about their disposal. No likely sawpits were found in the immediate vicinity; the possible example from Reading Oracle was 5m by 2m and over 1m deep (Ford *et al.* 2013, 48 and fig. 2.9), and a carpenter's workshop, while possible, remains unproven.

A partial horse burial was also found in this area, and a second some 20 m to the south-east, also associated with a sherd of 16th/17th century pottery. These animals may simply have been buried in the backyard when they died, rather than having any connection to the other activities carried out in these plots. If (as seems likely) horses were stabled within the plots, some may have been housed towards the east end, close to the stream running down the eastern boundary, and handy for the marshland grazing beyond that, rather than immediately behind the buildings on the frontage. Burial within the plots indicates that the animals were not sent to the knacker, either because they were diseased, or perhaps for sentimental reasons. In the latter case, they may have been buried close to where they had lived.

South of Area 2000, and adjacent to the barrel-lined well or pit 6368 in plot 28, was a sub-square pit 6364 lined with vertical planks, the structure being 0.9m across. This was one of a pair of sub-square pits of this period with a vertical plank lining, the other being a larger example 6329 in plot 34. In neither case was it clear how the vertical timbers were kept in place, nor did the fill give any clue to their function. They may have been cess pits, but the proximity of 6364 to two barrel-lined pits may indicate an industrial complex of some sort.

Linear slot 6336 was truncated at the north end, and pit 6329 was close by to the north-west. Their broad contemporaneity might indicate that their function was related, and it has been suggested (Ford pers. Comm.) that their relative positions were similar to those of structures recovered by excavation at a documented 17th century dyehouse at the Reading Oracle (Ford *et al.* 2013, 111-2).

The dyeing vat pits at the Oracle were larger than 6329, being 10m and 6m by 5m, but they were lined with timber upright planks of similar type. The pits were fed by a timber-lined channel 1m across and deep with a rounded base, not entirely dissimilar to the profile of 6336. Feature 6336 however only had timbers lining the sides of a smaller slot within the main feature, and this may have been a later modification. In the absence of a clear relationship between the slot and the pit, or of any supporting finds, association as a dyeing complex remains speculative.

Other large rectangular or sub-rectangular pits oriented north-south belong to this period: pit 1006=6486 on the edge of Area 1000 in plot 24 and 6280 and 6282 paired in plot 37. There were also three east-west orientated pits: 6212 in plot 30, 6318 in plots 34/5 and 6278 just north of 6280 in plot 38. A tentative association with tanning has been suggested for such pits; Serjeantson (1989, fig. 3, after Shaw 1984) shows two complexes of tanning pits at Northampton that have both circular and rectangular pits. Rectangular pits have also been found at Abingdon associated with tanning and hide-processing (Anthony *et al.* 2006). There are however no definite indicators at this Newbury site, and the position of most of these features in the centre of the plots, remote from running water, and indeed from contemporary wells, perhaps makes this less likely.

An alternative possible interpretation for these features is peat-cutting for fuel. A pair of fairly large features found during an evaluation north-east of the site on the east side of Park Way were interpreted as the result of medieval peat-cutting (Weaver 1996, 3-4, 7-8 and fig. 5), due to their sharply stepped sides. The full extent of this activity was not established, but the features were more than 1m wide and at least 3m long, and contained a few sherds of later medieval pottery. The depth of peat underlying this part of Newbury would certainly have made its use as a fuel possible, and small-scale cutting within the backyards of the plots may have occurred, and have continued into the Tudor period.

If domestic peat-cutting were the reason for the excavation of this group of features, the relatively similar size of most of them would suggest that peat was generally cut in quantities of a particular volume, rather than on an entirely *ad hoc* basis. Peat-cutting might also explain the rather irregular hollow found at the east end of excavation Area 3000, later backfilled with domestic and industrial debris. In the absence of excavation of any of the large rectangular pits in this case, however, the suggesting of peat-cutting remains uncorroborated.

A group of features in plot 25 may also indicate industrial activity of this date. Circular pit 6414, lined with a thin wooden frame and with a wood-lined channel running into it from the south, appears to have been abandoned in the 16th or early 17th century, so presumably belongs to this period. It was suggested that it functioned as a sieve, or possibly as a washing container, as there were stones in the base, but with gaps between them, implying that water or some other liquid had drained away through the base of the feature. It might therefore have performed some role in hide or cloth preparation, or perhaps in the cleaning and preparation of grain for brewing? Another similarly shaped pit 6410 lay to the west, and although undated may perhaps have performed a similar function, although this was not excavated. A possible association was also suggested between pit 6415 and undated pit 6420 to the south, whose fills contained chalk and ash, both used in the dehairing of hides, but if so, it seems unlikely that liquid from this pit was being channeled into 6414. Industrial activity here seems likely, but its nature and duration remains unclear.

In Area 1000, which was excavated because of the known use of John Wynchcombe's plot for cloth-working, evidence for the late medieval and Tudor period was less informative than had been hoped. Only a single achene of fuller's teasel gave any indication of cloth-working. The only metal find of note, a rowel spur of 15th-16th century date, did come from a pit within this plot, and gives some indication of the status of its owner.

A wooden barrel-lined well was also found in plot 24. There were therefore two barrels definitely in use during this period, and another two (one in Area 3000 and one in plot 28) probably of similar date. Reused barrels such as this do not necessarily reflect consumption on the plot, as they could be sold on for reuse, but they may provide physical evidence for the considerable number of pipes of wine documented as imported via Southampton in the mid-late 15th century (Yates 2008, Appendix II), rather than for local beer. In the case of plot 24, where the plot owner is known to have been a man of substance, it is also likely that the barrel reflects John Wynchcombe's own consumption, and other owners and tenants along the east side of Northbrook Street included members of other wealthy families (Yates 2008, 89 and 94; see Documentary evidence below). Unfortunately, the study of marks on casks has not progressed to the point where the origin of these barrels can be determined.

The contents of the barrel in plot 24, and of the cess pit in Area 2000 (plot 30) also suggest the diet of well-to-do occupants, as they include figs and strawberries, oysters mussels and (in the cess pit in Area 2000) grape pips. Fig and oysters were also present in the Area 3000 midden deposits, as were other elements of the diet including eggs. Local fruits included apple and cherry, damson and sloe. It is doubtful whether the marsh habitat indicated by the majority of the waterlogged plant remains in the base of the barrel in Area 1000 is a true reflection of the contemporary environment, as the industrial scale of cloth-production indicated in Deloney's poem would suggest that this plot was heavily built-up by the early 16th century, if not before. It is more likely that the seeds, none of which was radiocarbon-dated, were residual from the peat into which the barrel-lined well was cut; the base of the barrel was open, making this very likely.

Documentary evidence

The limited scale of excavation on this site did not justify detailed documentary research. As mentioned previously, however, the general character of the tenements, a series of long thin strips at right angles to Northbrook Street, encourages the view that these had largely remained intact since the street was first laid out, probably in the later medieval period. Although there are no earlier detailed maps of Newbury, there were earlier surveys, and it was considered worthwhile to try and relate these to the surviving tenement layout in whose backyards the development was being carried out. The principal aim was to attempt to identify the occupations of the owners and tenants in the Tudor period (the late 15th to early 17th centuries), to which the majority of the excavated features belonged.

The earliest detailed survey of Newbury is the Amyce survey, carried out in the 1550s for Henry VIII, which lists properties and their owners street by street (TNA LR2/187 Folio 112-116). This was followed in 1608 by a manorial survey, which also gives the owners and (where appropriate) tenants (BRO/N/AM1/37). Transcriptions of both of these surveys were kindly supplied by Joan Dils. Both surveys usually mention the previous owner, and the later survey sometimes more than one. This survey also gives measurements (in rods and occasionally acres) for each property, and includes limited information about the property, such as 'house, buildings, garden and curtilage'.

Both surveys proceeded street by street, and the 1608 survey distinguished the west and east sides of the street, though the Amyce survey does not, proceeding north along the west side and returning south down the east side. Unfortunately neither survey mentions any further geographical details such as the names of minor streets, eg Marsh Lane. The property once lived in by John Wynchcombe, or Jack of Newbury, is however marked on the 1st edition OS map of 1864. Provided that this attribution is accurate, it provided a reference point for the Amyce survey, in which the house occupied by John Wynchcombe is mentioned.

Comparison of the names given in both surveys has revealed three names in the 1608 survey that also appear in the Amyce survey, enabling us to attempt to locate the 1608 survey relative to the Amyce survey. Matching names is not however straightforward, as it is clear from the lists of past owners that several individuals moved from one tenement to another along this side of Northbrook Street, or owned several tenements, so that it is not always clear which tenement is meant. The Bullocks however appear to have occupied the same tenement for several generations, and so have been used as a fairly firm anchor for relating the two surveys (see Table 26).

Table 26. Comparison of owners and tenants on the east side of Northbrook listed in the Amyce and 1608 surveys, together with their occupations

Owners and tenants on Northbrook Street east side, 1550s				Owners and tenants on Northbrook Street east side, 1608			
Owner	Occupation	Tenant	Occupation	Owner	Occupation	Occupant/ Tenant	Occupation
Robert Devenyshe				Nicholas Fuller		William Allen	Weaver (1602)
Richard Millett	Shoemaker (1613)			William Doggett			
Thomas Dolman	Clothier			John Hunt	Gent (1627)	Richard Waller	
John Bedford de la Pole				William Hunt	Woollen draper (1601 & 1636)		
				Richard Booke			
				Sandersons	Draper (1552)		
John Wynchecombe	Gent (1557)	John Wynchecombe		Roger Weston		Roger Weston	Clothier (1620)
				Humphrey Taylour			
				David Morrall			
John Wynchecombe	Gent (1557)	Matthew Childe	Glover				
Thomas Bromehall				Richard Watts		Robert Norrys	Maltster (1644)
Chantryof Blessed Mary				William Biddle			
				Bullocks			
Robert Sanderson	(Heir of John Sawndersone draper?)			William Sa(u)nders	Mercer (1641)	Thomas Cobbet	
				John Sa(u)nders	Broadweaver (1625)		
				Brian Chamberlyn			
Henry Whyte(way)	Woollen draper (1568)						
Heirs Henry Norres, Knt		John Myllet					
		Thomas Store?					
William Swanne							
William Payne							
Lawrence Wodrowes							
Elizabeth Bullock	Widow			George Bullock		George Bullock	
George Bullock				Thomas Bullock			
				Robert Bullock			

Richard Bond		Thomas Benet	Brewer	Thomas Arrowsmythe		Thomas Arrowsmythe	Clerk (1613)
				Hugh Shepleyn			
				Thomas Arnolde	Yeoman (1599)		
				Robert Arnolde			
Robert Arnold		formerly					
		Thomas Benet	Brewer				
Thomas Benet	Mercer						
Edmund Flo(w)ry	Weaver (1570)						
Thomas Essex, Knt							
Richard Wyllet							
Heirs of John Knight	Fuller	Edmund Sharpe					
Heirs of John Knight	Fuller	Edmund Sharpe					
Christopher Storye	Called Giblex Whytes						
Robert Harys							
Richard Bridges		Vacant - The Bullground					
John Erley							
Richard Pare							
John Warrens							
Christopher Po(u)nde	[Richard Ponde] currier (1619)						

Parish registers for Newbury do not include occupations until AD 1700, so it was not possible to obtain the occupations of the owners and tenants from these. On the advice of Margaret Yates, the names recorded in both surveys were checked against the Probate Index of the Archdeaconry of Berkshire for Newbury, as this gives occupations for most of the individuals recorded. This work was carried out by Ellie Thorne, archivist at the Berkshire Record Office, and provided occupations for a fair proportion of the inhabitants (see Table 26). We are grateful to both of them for their assistance.

The measurements given in relation to the 1608 survey are in rods, or 5.5 yards, just under 5m. One rod is the length given for most of the properties, and does broadly correspond to the length of the frontage of the individual plots on Northbrook Street marked on the 1st edition OS map, especially if narrow lanes between the plots were originally more common. A rod can also mean an area of 5.5 yards square, but this makes no sense in relation to the area of the plots.

The length of the frontage of Northbrook Street from Jack Street to No. 38a, the length covered by the excavations and watching brief (and excluding the limited evaluation trenching further south), is 145m, equivalent to 28 rods. Unfortunately, the number of properties listed in the 1608 survey along the east side of Northbrook Street is only seven, five of which are only 1 rod wide, and a sixth 2 rods wide. Even allowing for the 2 rods plus 1 acre for the seventh property in the 1608 survey, however, it is clear that this list is incomplete, so tenants cannot be matched exactly with properties.

The Amyce survey lists more owners along the east side of the street, probably approaching 20, and

the rents may indicate that some of these were of double width, and later plot numbers do include subdivisions eg 25a, 25b etc., supporting this. Variations in rent may however be due to a variety of factors other than simple plot size. Without measurements, no exact correlation of tenants to properties can be made. While it is possible that not all of the plots were occupied from the start, and likely that those nearest the river and the centre of town would have been built upon first, parts of buildings with timbers dating to c1475 are known at both ends of the east side, at No. 24 (part of John Wynchcombe's house) and at No. 50, north of the former course of the stream called Northcroft Ditch, and north of Park Street (OA 2005c, 18 and fig. 3).

There is also a bundle of early deeds relating to properties in Northbrook Street, for whose investigation the resources of the project were not sufficient. These are likely to shed further light on the properties, and should be the first priority for any researcher following up this line of enquiry.

For the present, the table of occupants and their occupations gives an impression of the activities known for the 16th and early 17th centuries, and the status of the inhabitants. In the mid-16th century these include a glover (south of Jack Street), two broadcloth manufacturers (Thomas Dolman and John Wynchcombe), the latter operating on an industrial scale on either side of Marsh Lane, probably two woollen drapers, a brewer and a mercer, whose tenement was previously occupied by a weaver. Drapers and mercers were usually merchants retailing or wholesaling cloth, rather than manufacturers, and the latter also dealt in other dry goods. Although no occupation is given for Robert Sanderson, the will of John Sawndersone (AD 1552) states that he was a draper, and was clearly well-to-do (Yates 2008, 89). It is therefore possible that Robert was his heir, and also a draper. John Knight had been a fuller, though the occupation of his tenant Edmund Sharpe is unknown.

The only hint of a connection with leather production is Christopher Ponde, as the occupation of Richard Ponde, possibly a descendent, was that of a currier. Curriers applied dressing, finishing and colouring to the tanned hide to make it strong, flexible and waterproof. The leather was stretched and burnished to produce a uniform thickness and suppleness, and dyeing and other chemical finishes give the leather its desired colour. It is not however certain that he lived on the east side of Northbrook Street, as the point at which the list changes from the west to the east side of the street is uncertain.

John Wynchcombe is known to have been one of the richest residents of Newbury, as is Thomas Dolman, who bought the manor of Shaw in AD 1544, and John Sawndersone was also a man of wealth (Yates 2008, 94). It would appear that the most wealthy individuals in Northbrook Street were concentrated in the southern half of the street. Further north, however, William Benet was clearly a mercer of substance (though not on the scale of Wynchcombe or Dolman) as he supplied 550 kerseys to London merchant Thomas Gresham in AD 1549 (Yates 2008, 94 note 133). Thomas Benet (mercero) was probably his heir. John Knight, whose heirs held two tenements, had been granted three fulling mills in Newbury by the king, so was a wealthy individual (Yates 2008, 90 note 111), though it is not clear whether he had lived in Northbrook Street, or had simply held land there. Investment in Northbrook Street was clearly desirable; one of the other tenements was owned by the heirs of Henry Norres, knight.

In 1608 the pattern of occupations is largely unchanged, although the families involved have changed. There was a weaver, occupying a property owned by a fuller, a woollen draper, a clothier, a mercer and a maltster. The Bullock family provided the greatest continuity, but their occupations are unknown. Beyond them was a clerk.

Interestingly, the mercer William Saunders occupied a property formerly owned by a broadweaver,

who had obtained it from Brian Chamberlyn, one of the five most wealthy clothiers of the mid-16th century, but who went bankrupt in AD 1571 after the collapse of the Antwerp market. This side of Northbrook Street had therefore been occupied, or used, by the majority of the most prominent men of the cloth industry in the 16th century.

The documentary evidence indicates that activities related to the clothing industry dominated this side of the street during the 15th to early 17th centuries, with brewing/malting a secondary activity. Links with the leather industry are relatively slight, comprising a glover near to the river Kennet and a currier, who may have lived on either side of the street.

When the archaeological evidence is compared with that given by the documents, there is only a limited degree of overlap between them. Evidence for cloth -making was slight, although fuller's teal was identified in three locations. In the case of plot 24, owned by John Wynchcombe, this may have been because it was where John himself lived, or perhaps because his large-scale production (described in Deloney's poem of 1596-7) focussed on the spinning, weaving and carding of the wool at this property (Yates 2008, 90-93). The fulling was probably carried out at a mill, and the dyeing at one of his other recorded tenements, of which there were several in Northbrook Street (Amyce survey). The barrels may have come from the brewing indicated in the documents, rather than barrels imported containing wine or dry goods.

Otherwise the archaeological evidence suggests hide-processing and preparation, probably including tawing or tanning, cobbling and perhaps a carpenter's workshop. Actual tanning pits have not been confirmed, the evidence largely relating to the earlier stages of hide preparation. The scale of this, involving small numbers of circular (and possibly rectangular) pits, was clearly more similar to that recorded at Abingdon (Anthony *et al.* 2006) than to the large-scale complexes of pits known at Reading and at Northampton (Ford *et al.* 2013; Serjeantson 1989). The limited scale of hand-excavation is the reason why so few finds related to any of these activities were recovered.

It is possible that more than one process was taking place on a single plot, either because the occupants were engaged in more than one trade, or because parts of the plots were being sublet. We do not know at what date the buildings present on the later 18th century Willis' map at the east end of the plots became established. It is perhaps possible that areas towards the east end of some plots had already been divided off for separate activities by the Tudor period, but the excavations and watching brief were not able to confirm this.

There were elements of timber-framing of possible 16th century date within the buildings recorded at Nos 44-5 Northbrook Street (Appendix 2: Gazetteer OA 33), confirming the view that the street frontage was built up all the way to the stream at the north end by this time, but this lay beyond the northernmost extent of the below-ground investigations, so no useful correlation can be made between the two.

Post-medieval

Although it covers a longer time, the scale of activity on the site between the mid-17th and the early 19th centuries for which there is dated evidence was no greater than that of the previous period, and a correspondingly smaller range of activities is represented.

A complex associated with hide-preparation probably existed within, or very close to, plot 38. One of a pair of parallel, long rectangular pits orientated north-south contained a deposit of cattle horncores, and was dated by a sherd of pottery of mid-17th to 19th century date. An adjacent but undated circular pit also contained both cattle and sheep horncores, as well as sheep metapodia. These features all lay at the east end of the plot, close to the stream, and so in a suitable location for tawing or tanning. A pair of shorter and broader rectangular pits was found further west within this

plot, and may also have been connected to tanning. This was the only property with a standing building that may have been contemporary with backyard industrial activity, as the building occupying the frontage at No. 38a probably had 17th century origins (Appendix 2: Gazetteer OA 25-26).

Further rectangular pits like those of the late medieval/Tudor period were found across the site, and some of these may also have been used for tanning, but in the absence of excavation, they could also have been created by peat-cutting, or by a variety of other activities.

While shoe-leather from both adults and children was found in this period, none of the material need have been anything more than domestic rubbish (Mould this volume), in contrast to the evidence from 6-12 Northbrook Street, which included both sheep metapodials and leather offcuts suggesting hide-preparation and leather-working (Hull 1997).

A barrel-lined well was found within Area 1000 with a surround of used bricks. Certain features of the barrel, including the absence of a bung-hole, suggested either that this barrel was made specifically to line the well, or was put together using staves from several barrels. The impressions of the timbers forming the base of a barrel were also found in Area 1000, but no associated finds. The relatively shallow level at which these occurred, roughly the same as the brick surround around the post-medieval well, suggests that this was an upstanding barrel of this period, not one sunk deeply into the ground. These barrels may have been obtained from the brewery just across Marsh Lane.

Most of the wells that were found belong to this period, and as stated earlier, were concentrated in two zones towards the west and east edges of the site, associated with buildings on Northbrook Street or along Marsh Street (later Park Way). One of these (6340) lay only just south of timber-lined channel 6336, and may have been used to obtain water for whatever this channel was used for. If the pottery used to date pit 6329 was residual, then this may possibly have been a dyeing complex of the post-medieval period, but if not, it is unclear what the channel was used for. Another well lay immediately adjacent to a pair of rectangular pits in plot 37, but as the pits were believed to date to the Tudor period, this may be coincidental.

Victorian and later

The excavations have provided physical evidence for a number of buildings evident on the historic maps of 1839 onwards, and have uncovered a variety of features associated with them. Most of these are unremarkable. One large brick-lined well in plot 25, whose top had been truncated, was probably a 'bottle' or pump-driven cistern, like an example found at Cheap Street in 1988 (Hawkes *et al.* in Vince *et al.* 1997, 146), or at 6-12 Northbrook Street (Hull 1997). This lay within the brewery marked on the 1st edition OS map, where large quantities of water would have been required.

Conclusions

The archaeological investigations have addressed the general research aims set out in the Written Scheme of Investigations (OA 2008a, 10) as far as has been possible given the limited scale of excavation and the conditions of the watching brief. A record has been made of the archaeological features and deposits present, artefactual evidence has been recovered and analysed where possible, and environmental remains of good quality have been found and analysed. This has shed some light on the exploitation of local and non-local resources, but obtaining a well-dated chronological sequence of archaeological deposits has only been possible to a limited degree, due both to the

small scale of the excavation areas, and to the degree of later disturbance and truncation within these areas. The speed at which the watching brief took place did not allow a chronological sequence to be seen, let alone investigated adequately.

Specific research aims relating to the Mesolithic and to later prehistoric, Roman and early medieval periods (OA 2008a, 11 - Aims 1.1 and 1.2) have been addressed within the limits of the archaeological mitigation strategy, and although no early waterlogged wooden artefacts were found (Aim 1.3), the preservation of medieval and early post-medieval wood was good, allowing the recovery of a variety of artefacts and structural evidence.

Evidence for the development of this part of the historic core of Newbury (Aim 1.4), and in particular the date at which the burgage plots were laid out, was not as clear as might have been hoped, but this is a reflection of the limited areas that were excavated, and of the limitations of the following watching brief. No evidence relating to Newbury castle (Aim 1.5) was recovered.

The documentary review confirmed the strong association of the east side of Northbrook Street with the cloth industry in the late medieval and Tudor periods, and also with brewing. Physical archaeological evidence for this in the backyards of the properties (Aim 1.6) was however slight.

Probable evidence of hide preparation in the form of skin/hide fragments and a parasite, groups of sheep metacarpals and barrel and other timber-lined pits with lime was found, though in the absence of excavation the function of the barrels in plot 28 could not be confirmed. Industrial activities were less clear in the post-medieval period (Aim 1.7), although an area where tawing or tanning was carried out was identified.

The desk-based assessment of potential (OA 2000) recognised an explosion of the numbers of buildings built on the rear of the burgage plots between Willis' map of 1768 and the Tithe Map of 1839. It suggested that the canalisation of the stream that ran down the east edge of the plots was accompanied by drainage and levelling, the latter taking the form of soil dumping. The archaeological investigations confirmed the expansion of activity from the late 18th century, although evidence for increased dumping to level up of this date was not recorded, dumping appearing to be of earlier date.

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APPENDIX 1. SUMMARY QUANTIFICATION OF THE PRIMARY ARCHIVE

Appendix Table A. Quantification of the paper archive

Record type	SMS Area	Phase 2 Evaluation	Total
Context records	973	96	1069
Additional sheets	22	1	23
Plans A1	7	-	7
Plans A4	40	10	50
Sections A1	4	-	4
Sections A4	68	10	78
Sample registers	15	3	18
Level sheets	15	1	16
Small find registers	4	1	5
Bulk find sheets	13	1	14
Environmental transfer lists	5	1	6
Black and white films	13	1	14
Colour films	13	1	14

Appendix Table B. Quantification of the finds archive

Material	SMS Areas 1000, 2000 3000	Phase 2 Evaluation	Total
Animal bone	1348 (42,738g)	61 (224g)	1409 (42,962g)
Ceramic building material (CBM)	1105 (112,619g)	36 (18,756g)	1141 (131,375g)
Clay pipe	13 (116g)	4 (10g)	17 (126g)
Copper alloy	12 frags	-	12 frags
Flint, burnt unworked	11 (972g)	9 (117g)	20 (1089g)
Flint, worked	14 (??g)	1(1g)	15 (??g)
Glass	47 (756 g)	5 (198g)	52 (954g)
Leather	25 pcs	6 pcs	31 pcs
Iron	22 frags	1 frags	23 frags
Pottery	400 sherds (6260g)	27 sherds (538g)	427 sherds (6798g)
Shell	120 (1299g)	3 (14g)	123 (1313g)
Slag	0	12 (33g)	12 (33g)
Stone	4 (146g)	1 (4g)	5 (150g)
Wood	78 frag	3 frag	81 frag

APPENDIX 2: GAZETTEER OF HISTORIC BUILDINGS

See separate document, *Park Way, Newbury. Berkshire. Appendix Two: Gazetteer of Historic Buildings*



Scale 1:25,000

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Figure 1: Site location

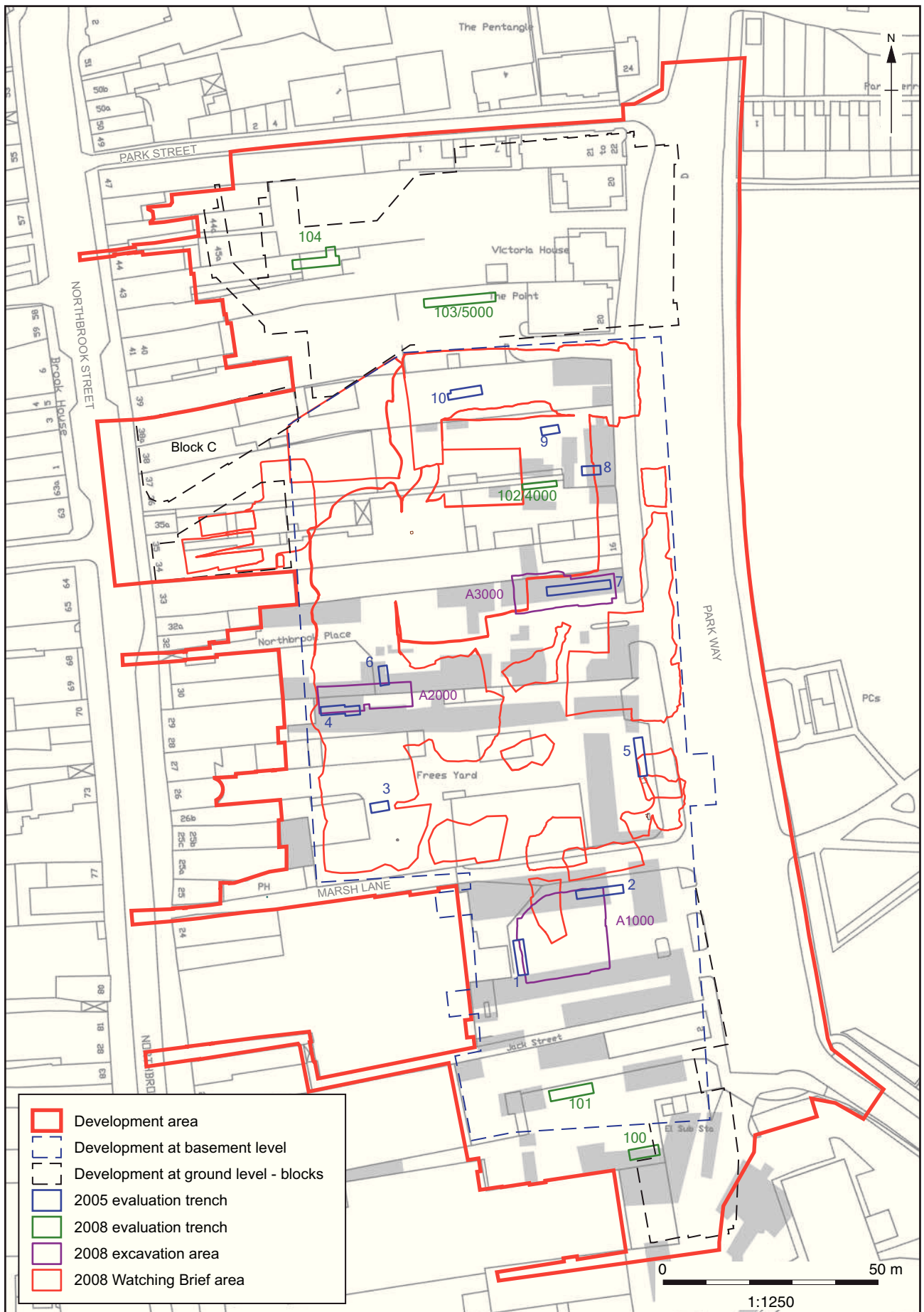


Figure 2: Location of archaeological works and distribution of all archaeological features

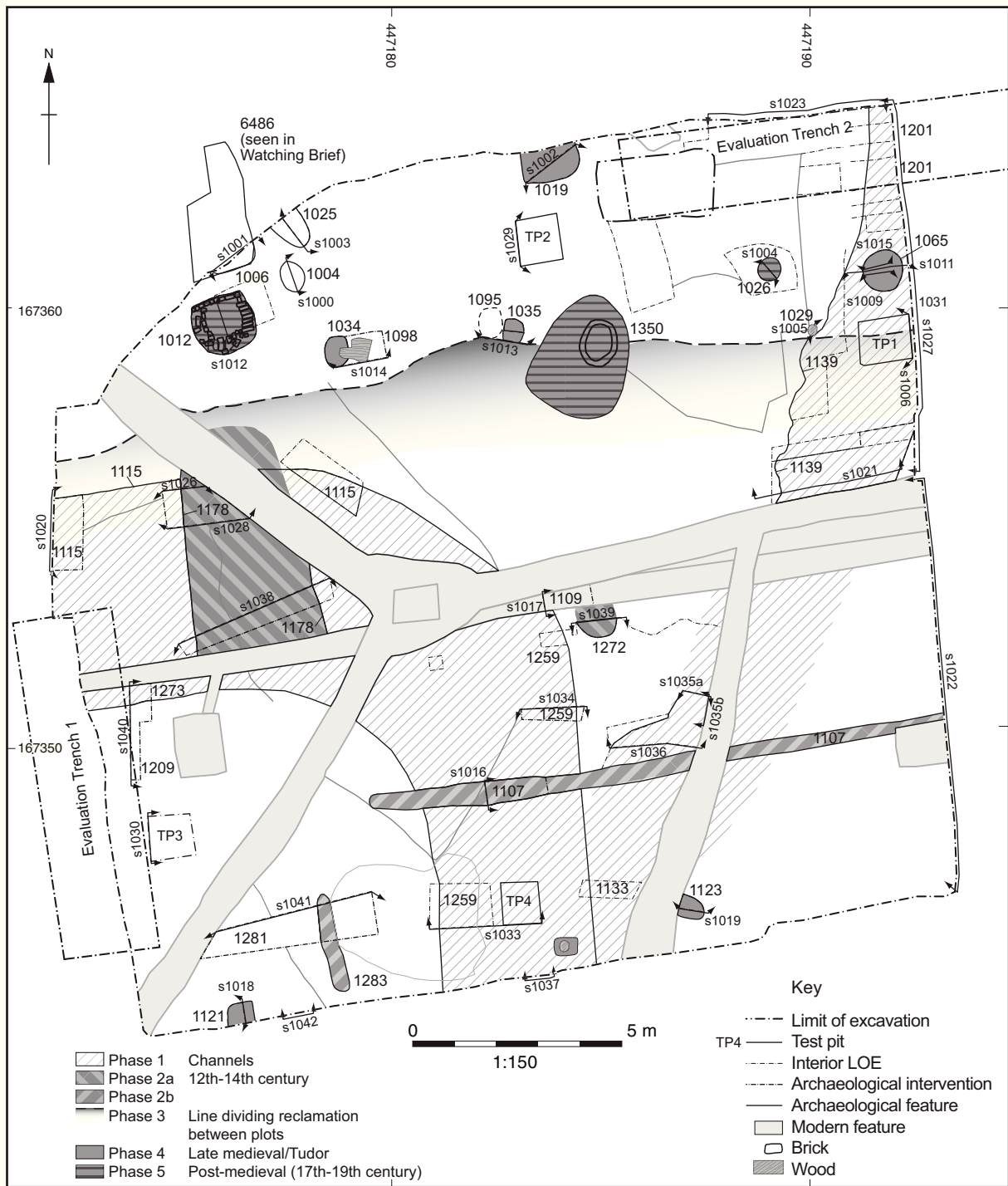
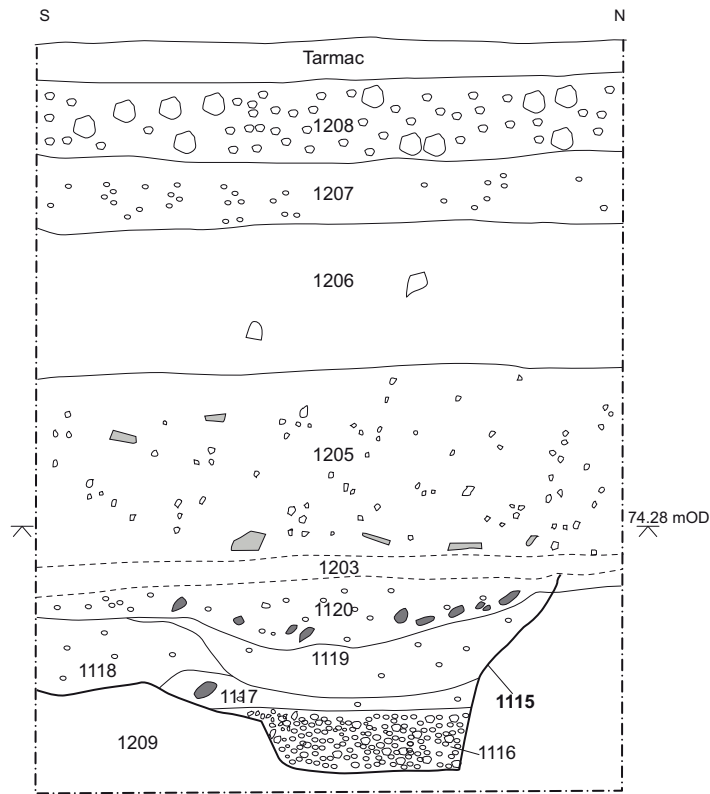


Figure 3: Plan of Area 1000 showing the phasing of the features

Channel 1115
Section 1020



Channel 1115

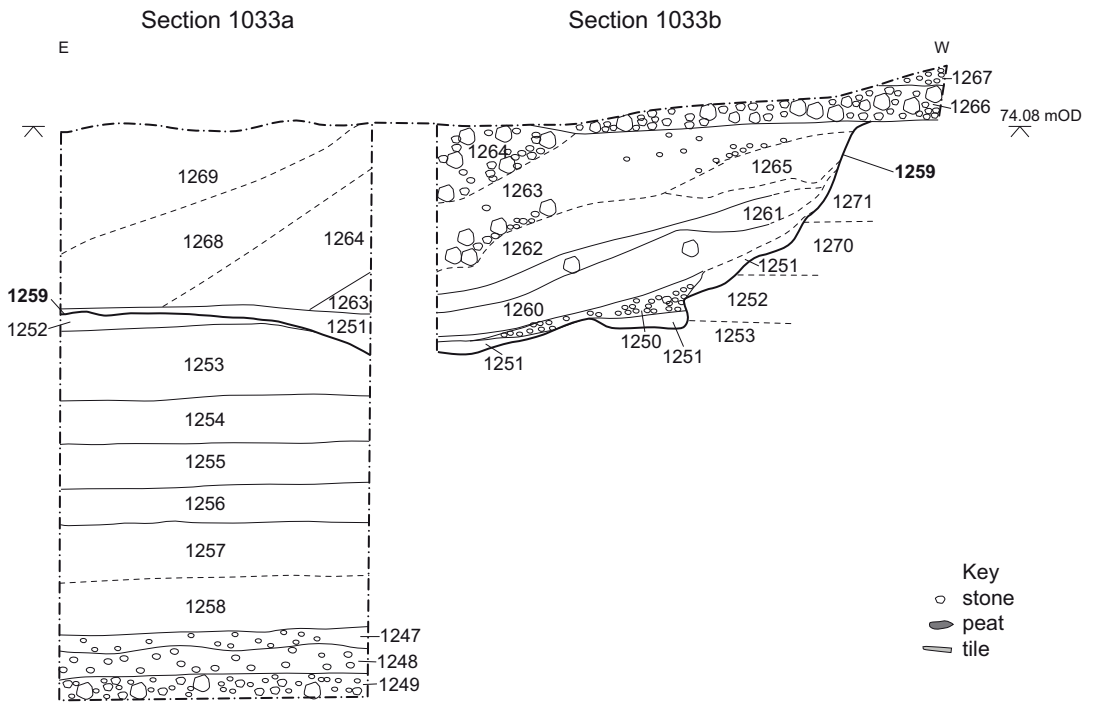


Figure 4: Sections of channel 1115=1259

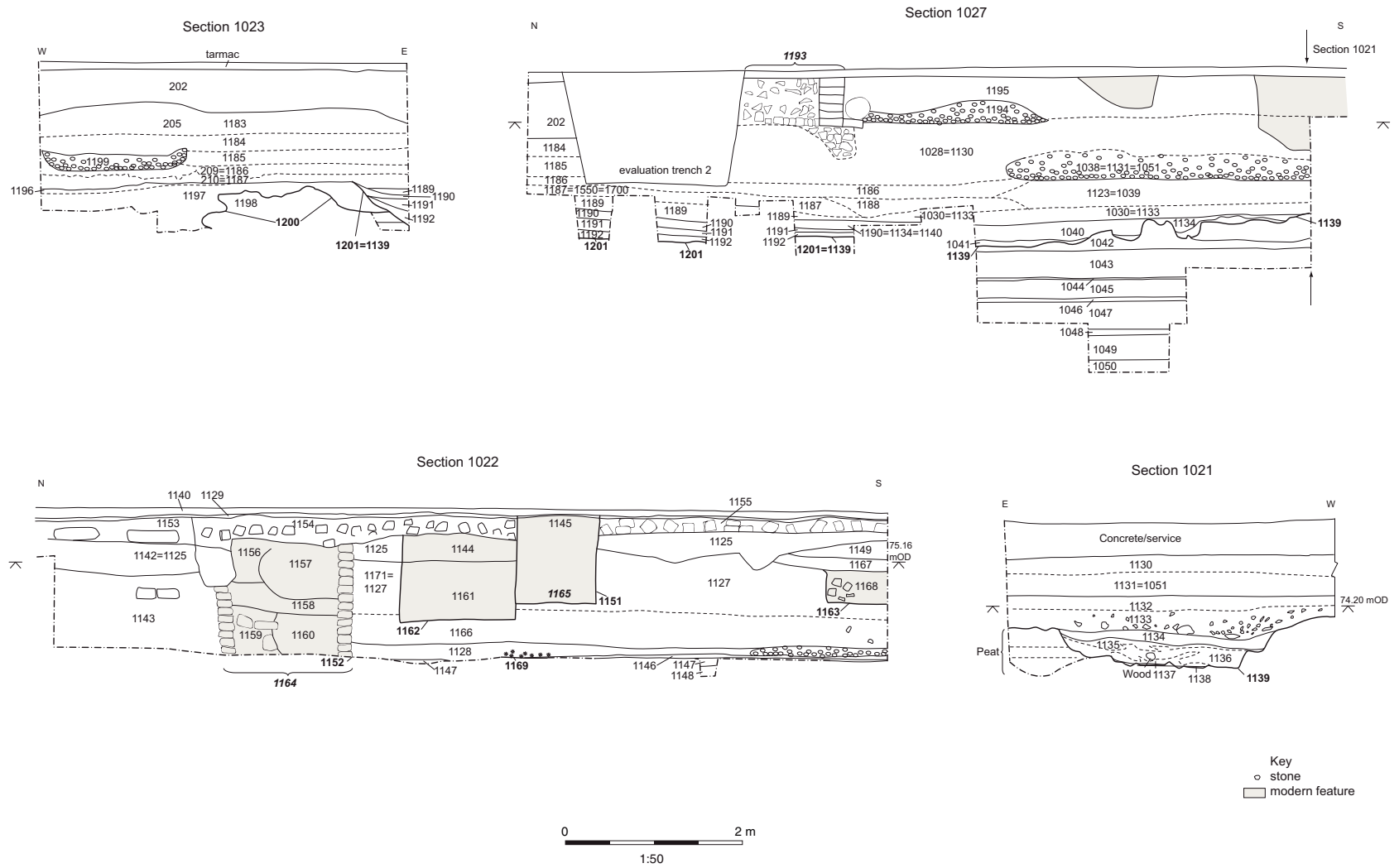
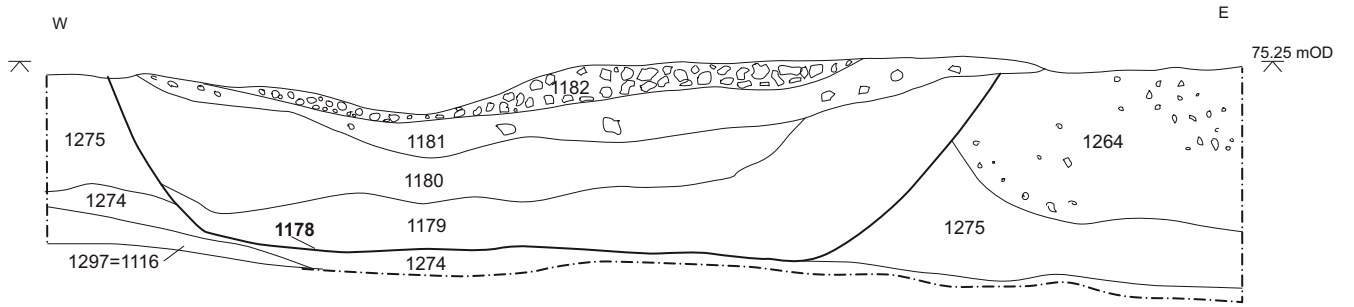


Figure 5: Long section 1023, 1027 and 1022 with channel 1139 section 1021

Pit 1178
Section 1038



Pit 1272
Section 1039

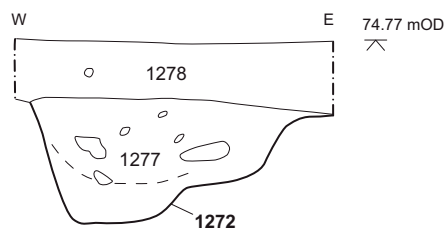


Figure 6: Sections of pit 1178 and 1272

Gully 1283
Section 1041

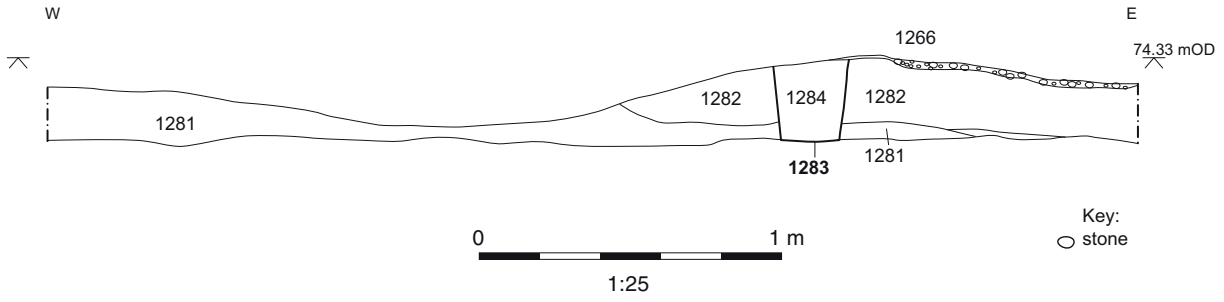


Figure 7: Section of gully 1283

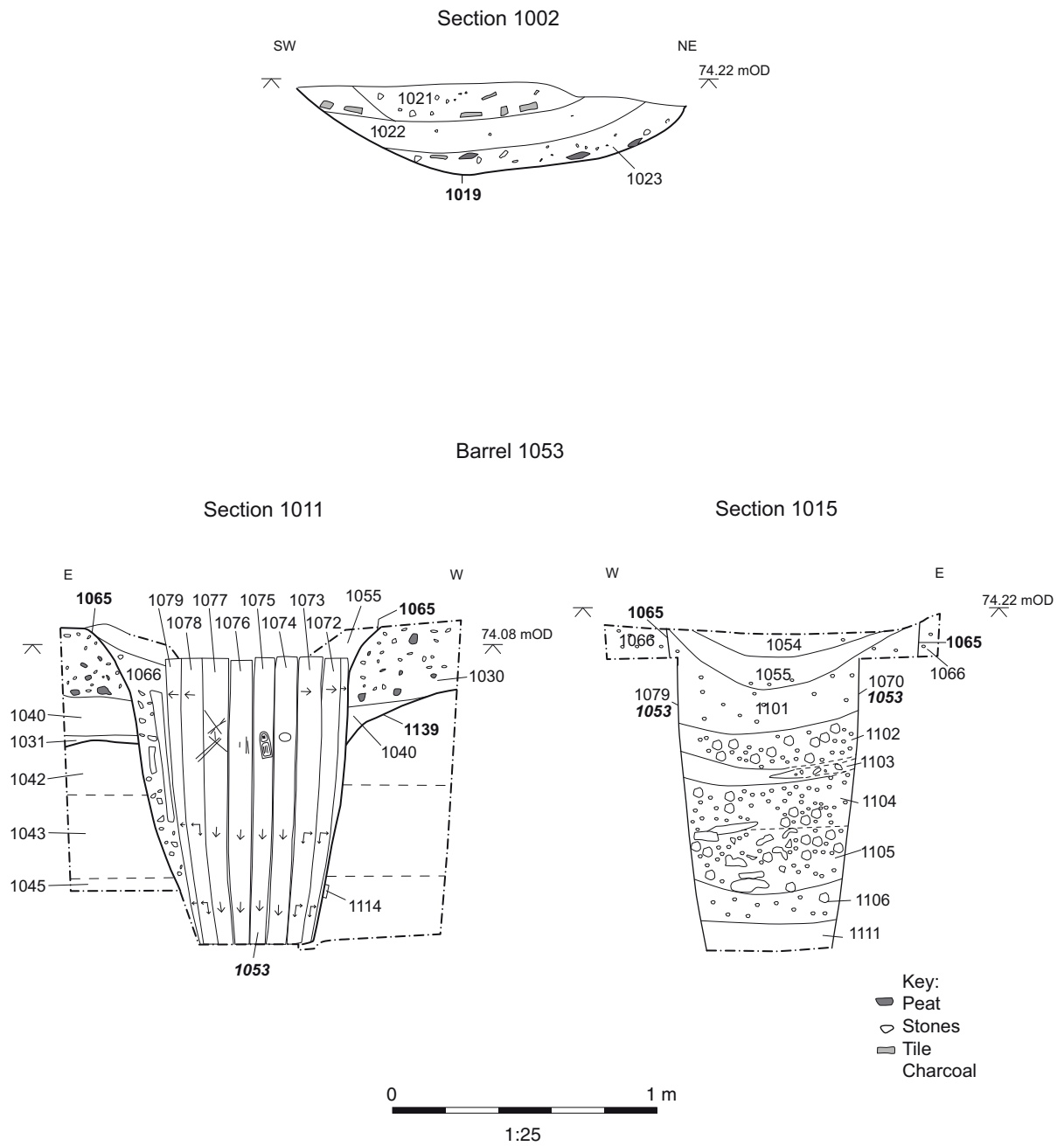


Figure 8: Sections of pit 1019 and barrel 1053

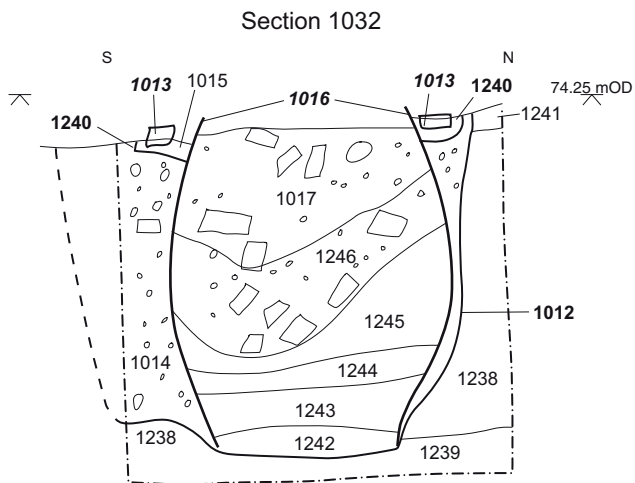
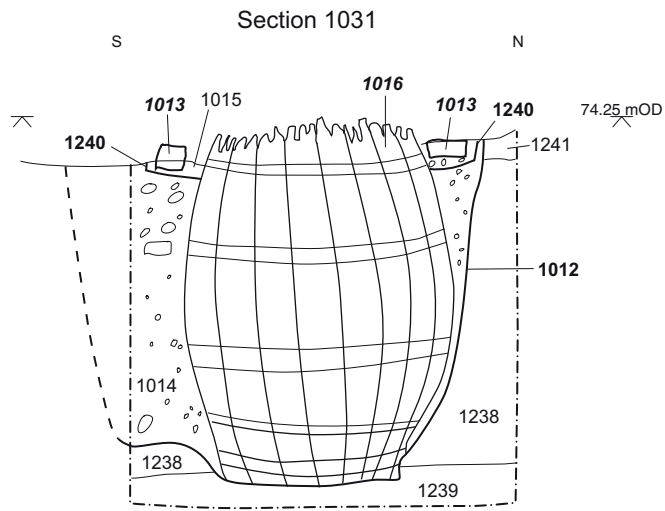


Figure 9: Sections of barrel 1016

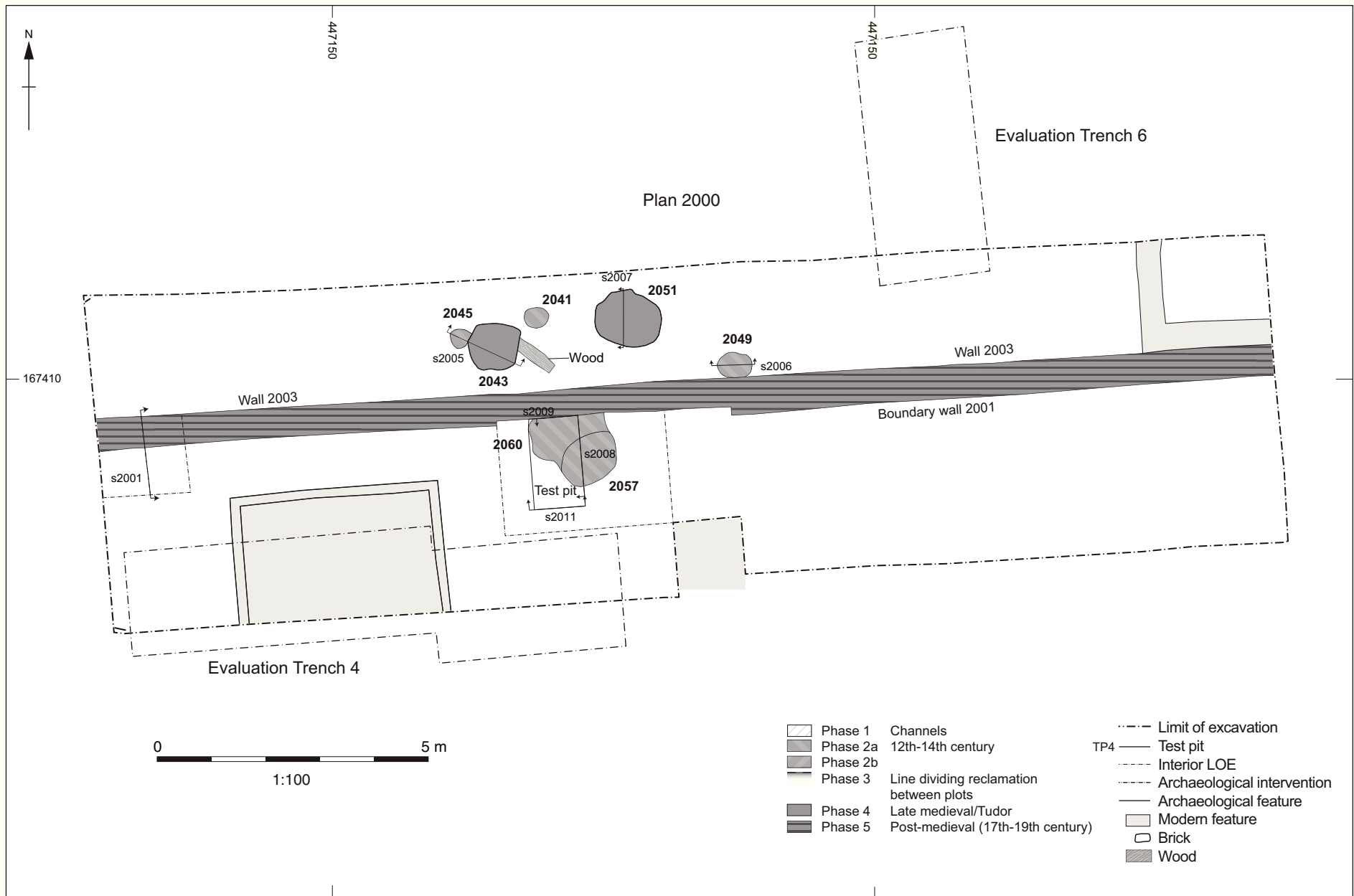


Figure 10: Plan of Area 2000 showing the phasing of the features

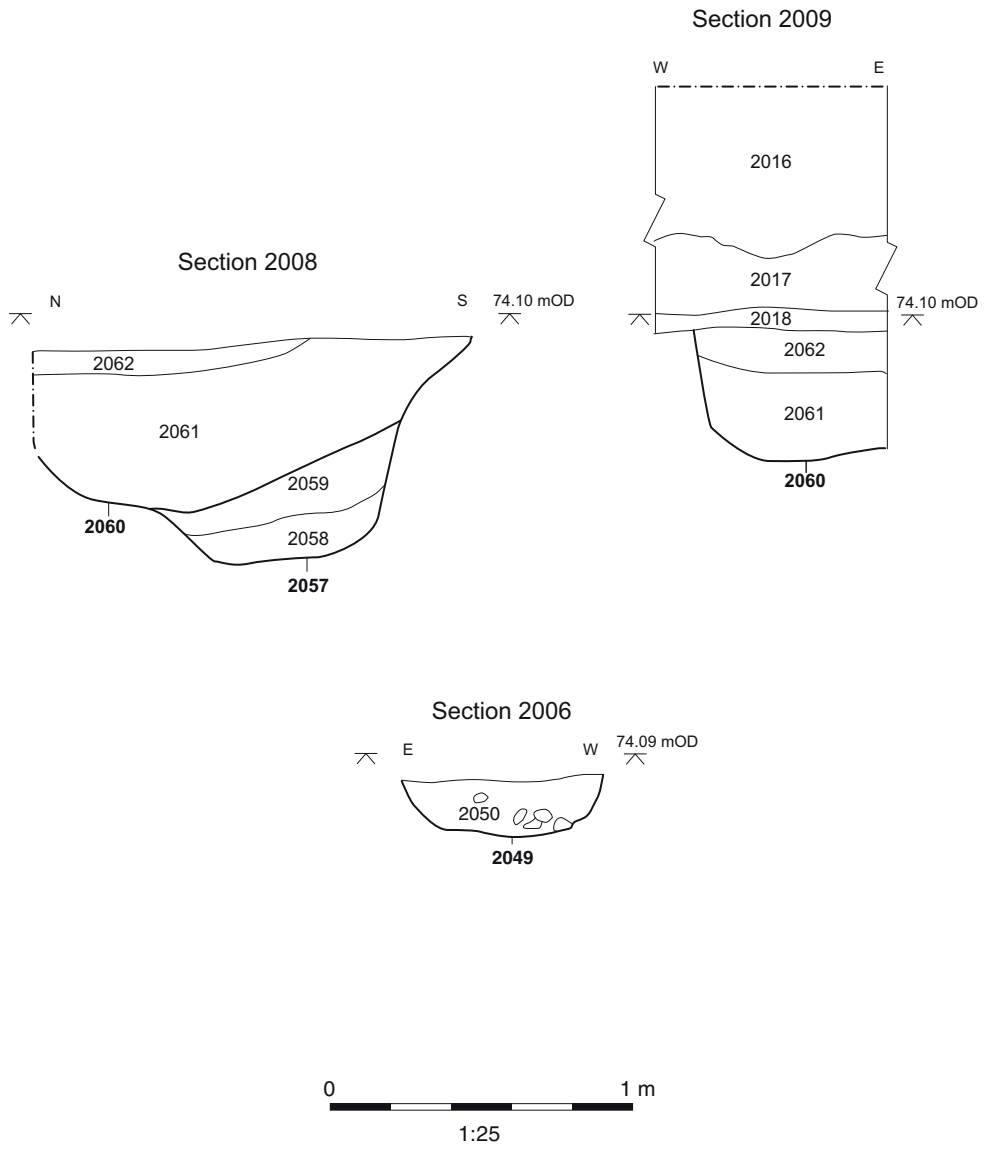


Figure 11: Sections of pits 2057, 2060 and 2049

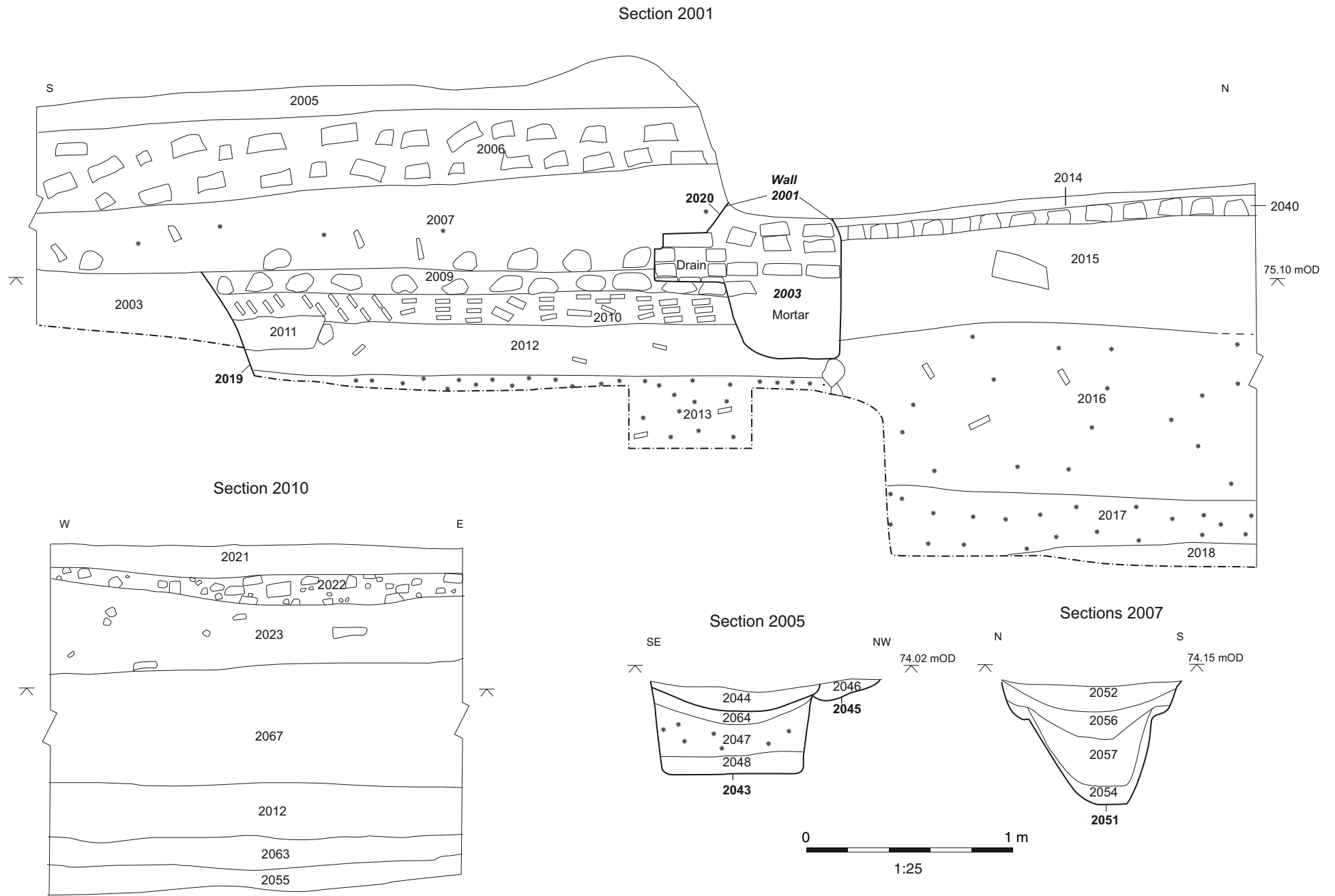


Figure 12: Sections 2001/2010 showing ditch 2019 and wall 2001 and sections of pits 2043, 2045 and 2051

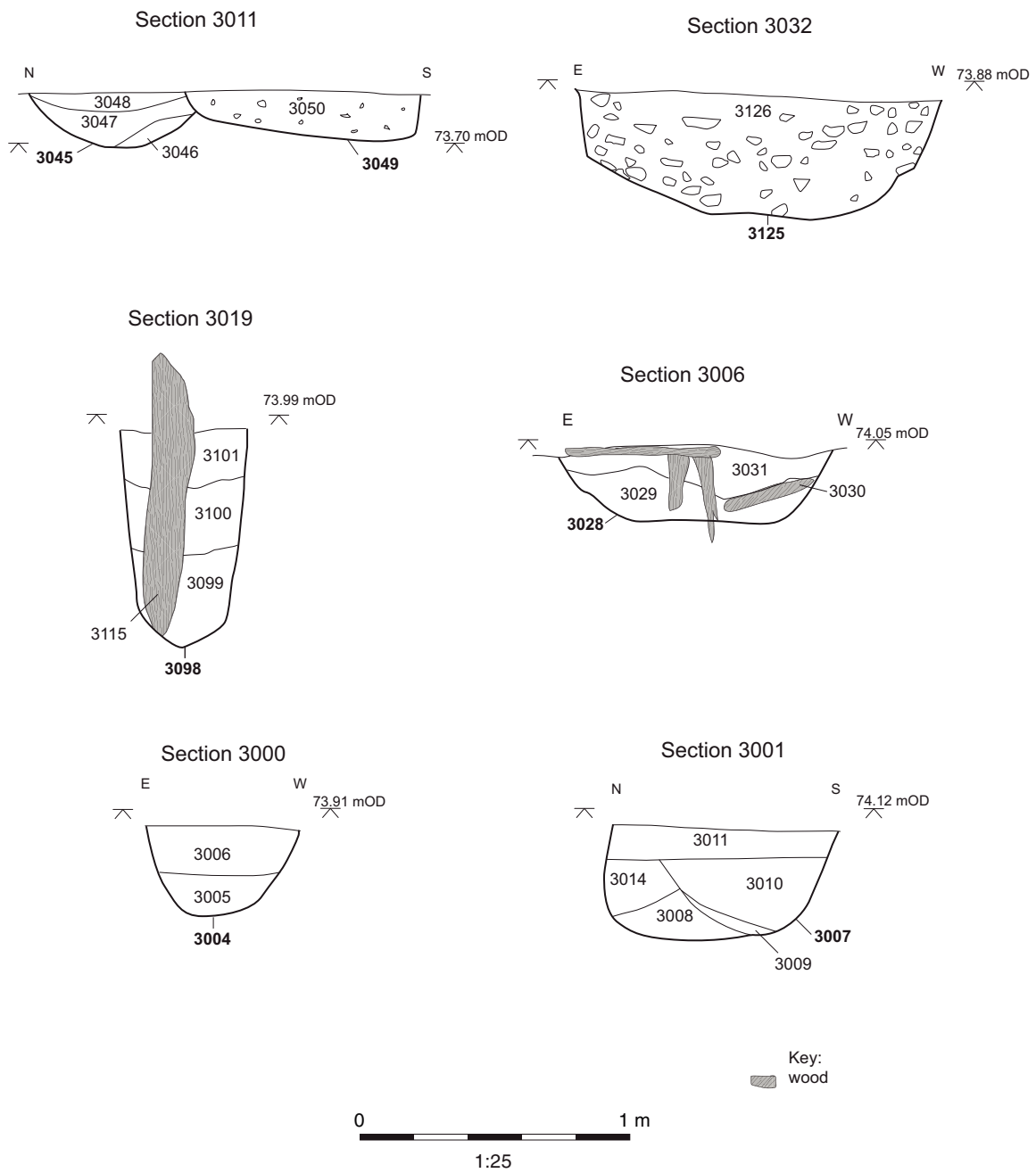


Figure 14: Sections of ditches 3045 and 3125, posthole 3098 and pits 3028, 3004 and 3007

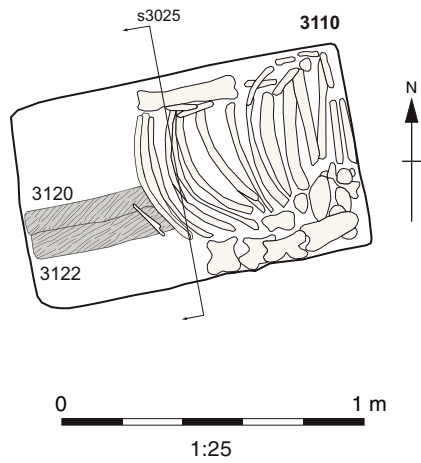
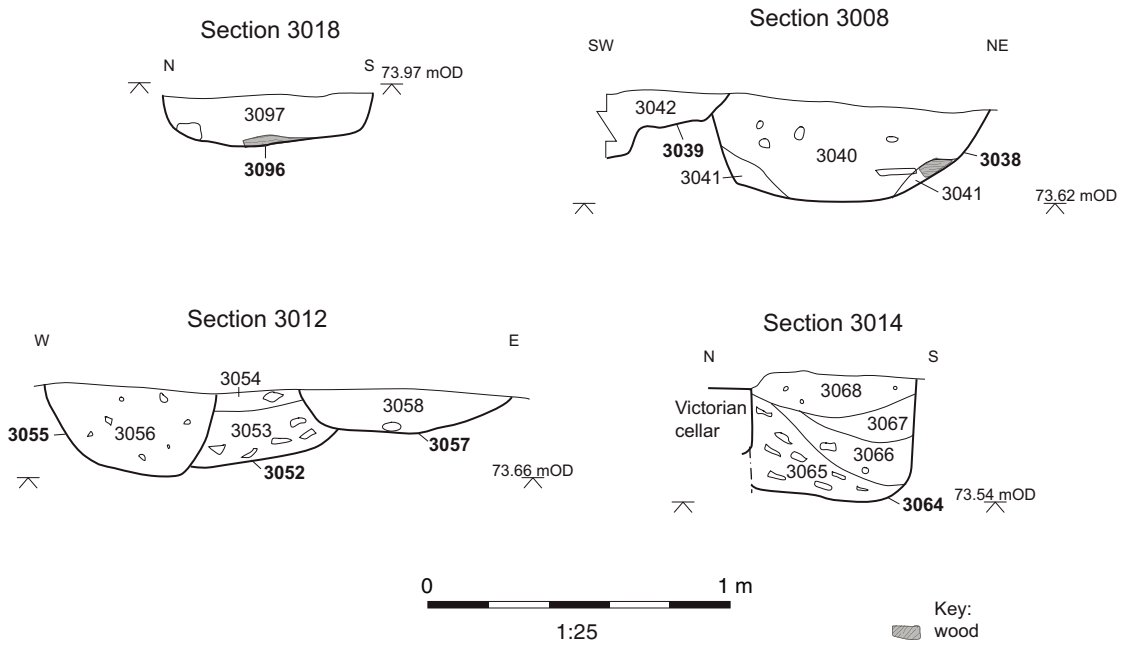


Figure 15: Sections of postholes 3096, 3038/9, 3055/3052/3057 and 3064; plan of pit 3110 showing part horse skeleton and timbers 3120 and 3122

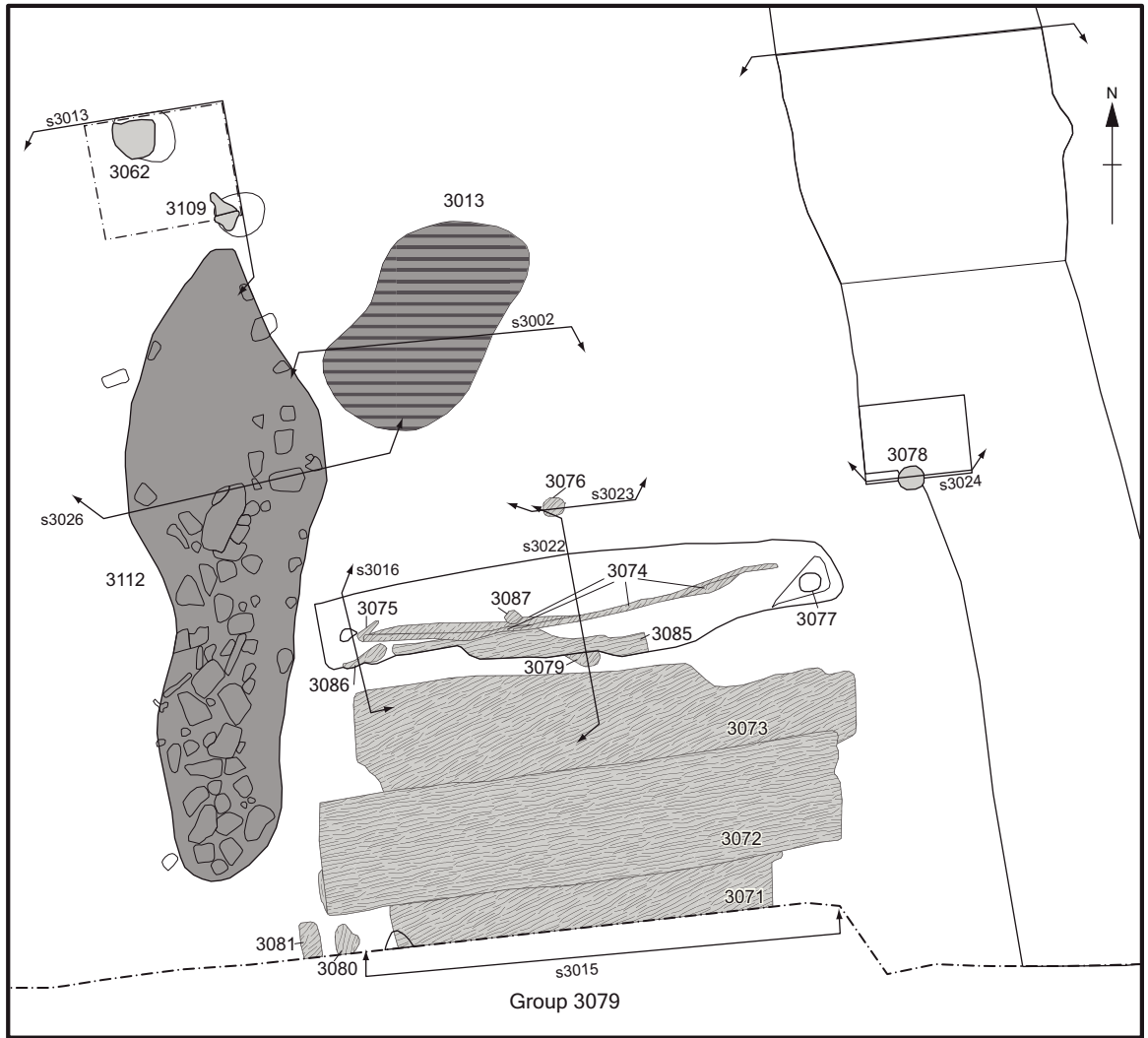


Figure 16: Plan of Building 3079

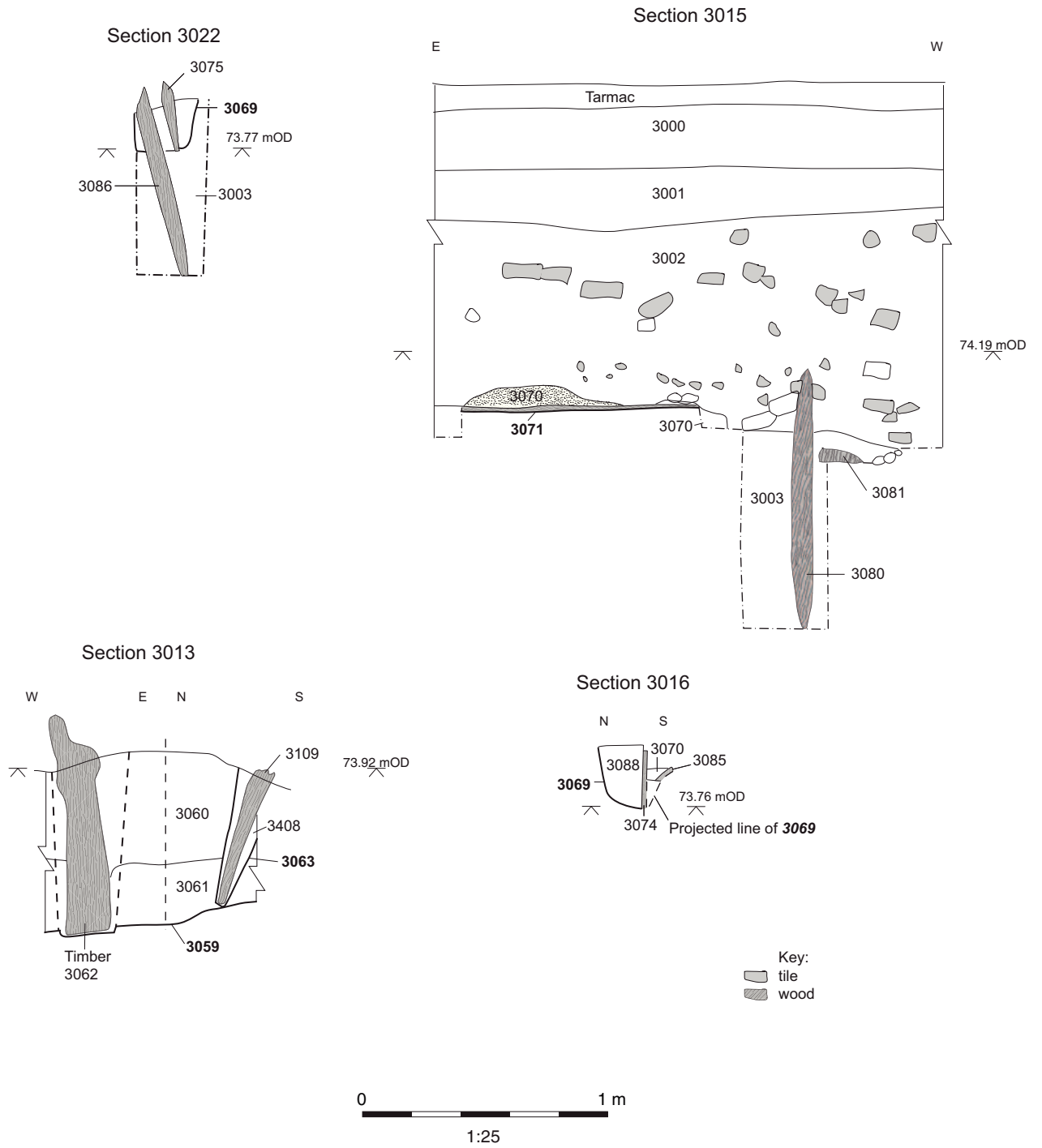


Figure 17: Sections associated with Building 3079: 3022, 3015, 3013 and 3016

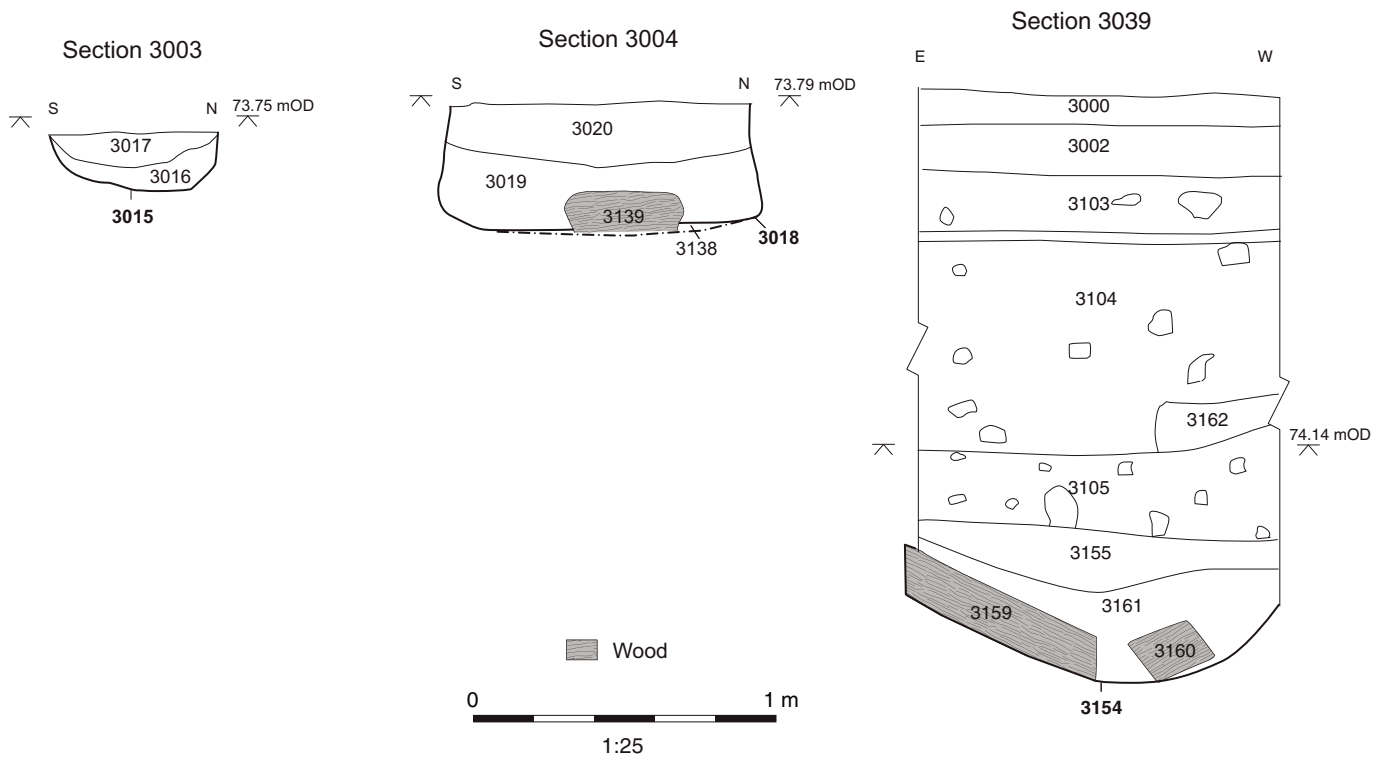
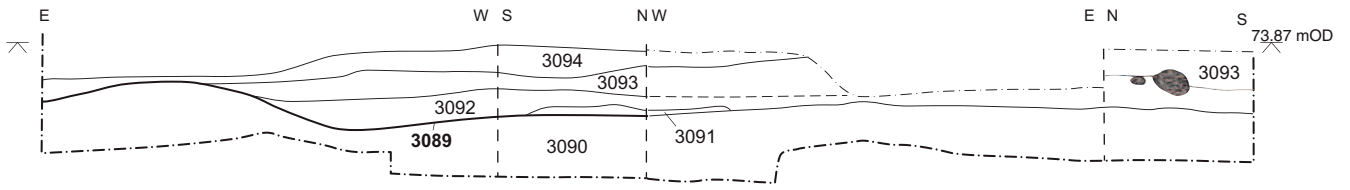
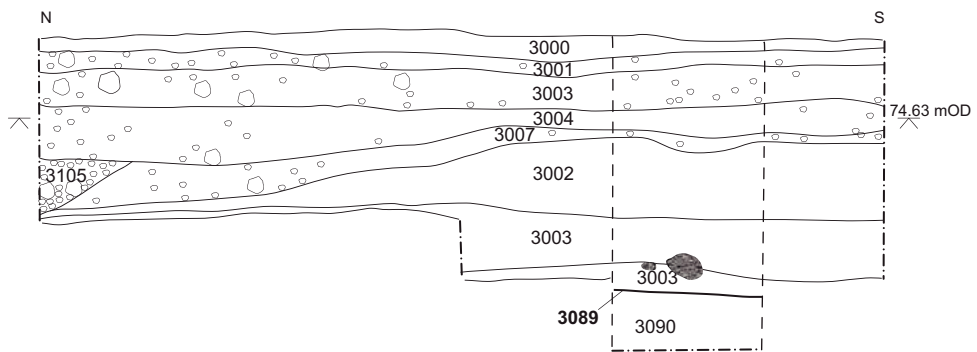


Figure 18: Sections of pit 3154, 3015 and 3018

Section 3017



Section 3021



Section 3007

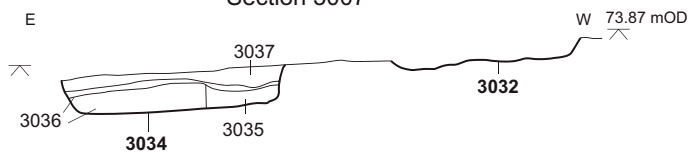


Figure 19: Long section 3021, sections of features 3089, 3032 and 3034

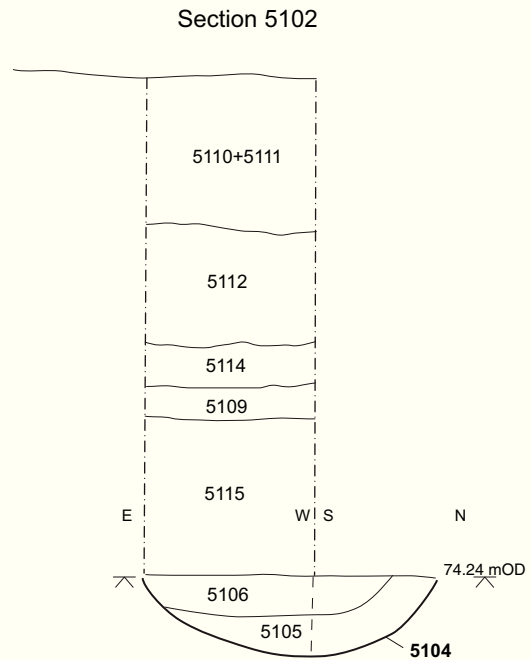
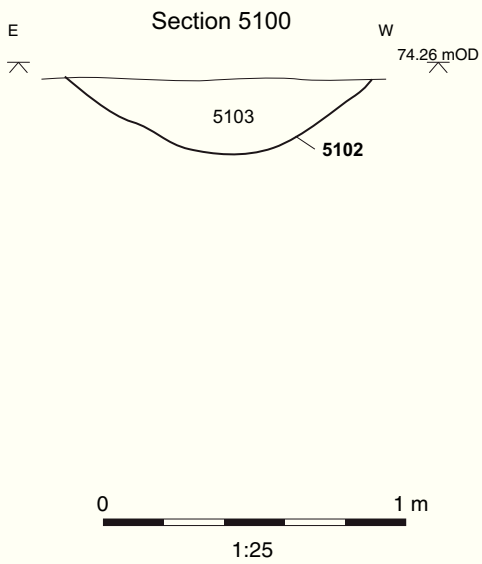
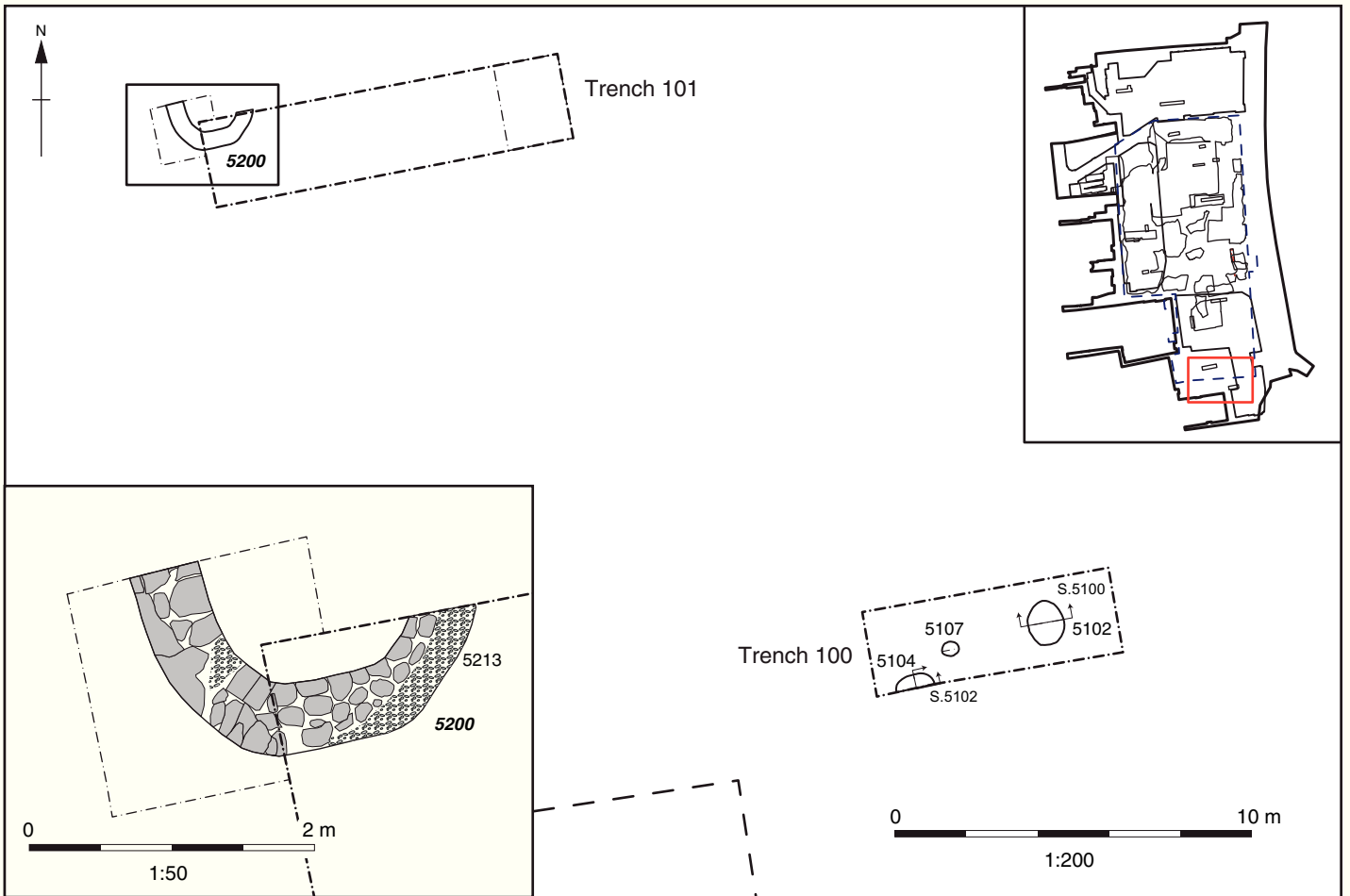


Figure 20: Plan of trenches 100 and 101, and selected sections

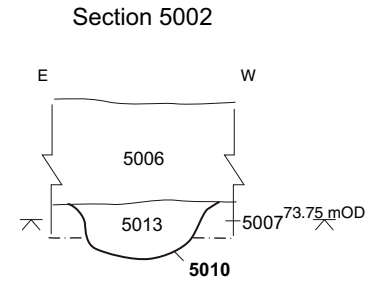
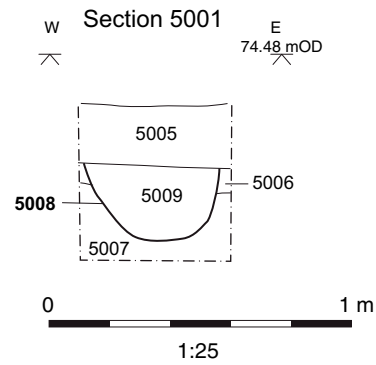
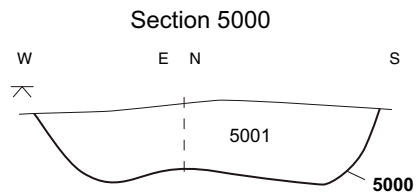
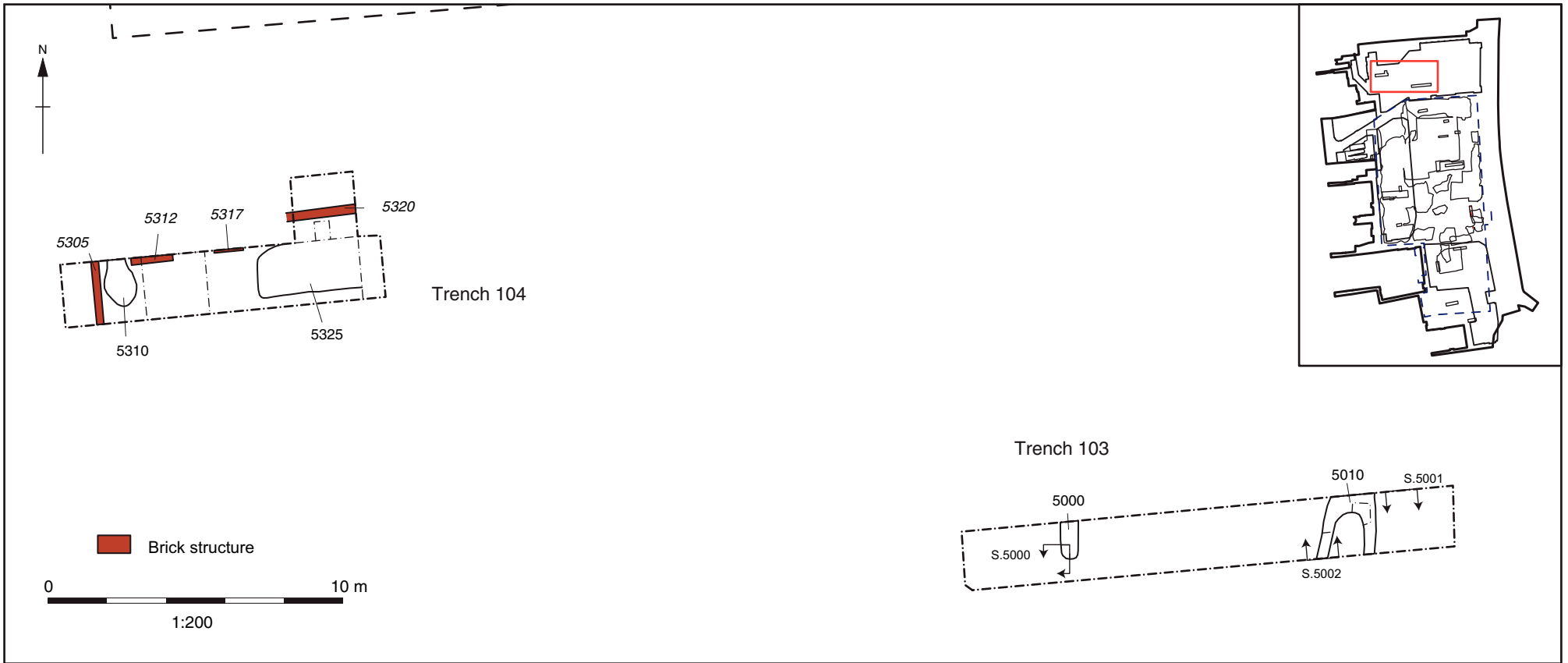


Figure 21: Plans and sections from Trenches 103 and 104

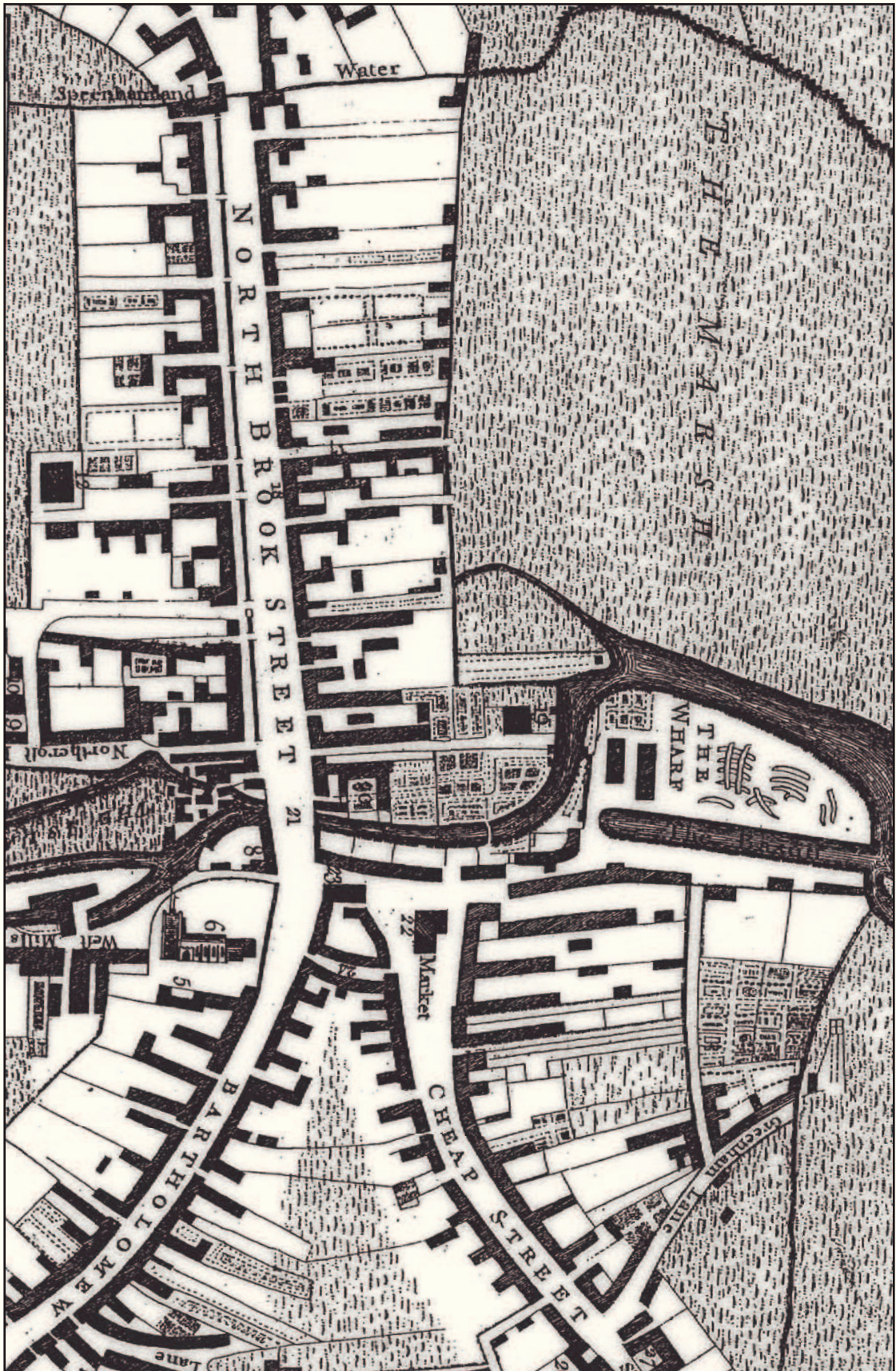


Figure 22: Extract from Willis' Map of Newbury



Figure 23: Extract from the 1839 Tithe Map of Newbury



Figure 24: Extract from the 1:500 Ordnance Survey map of Newbury, 1880-81

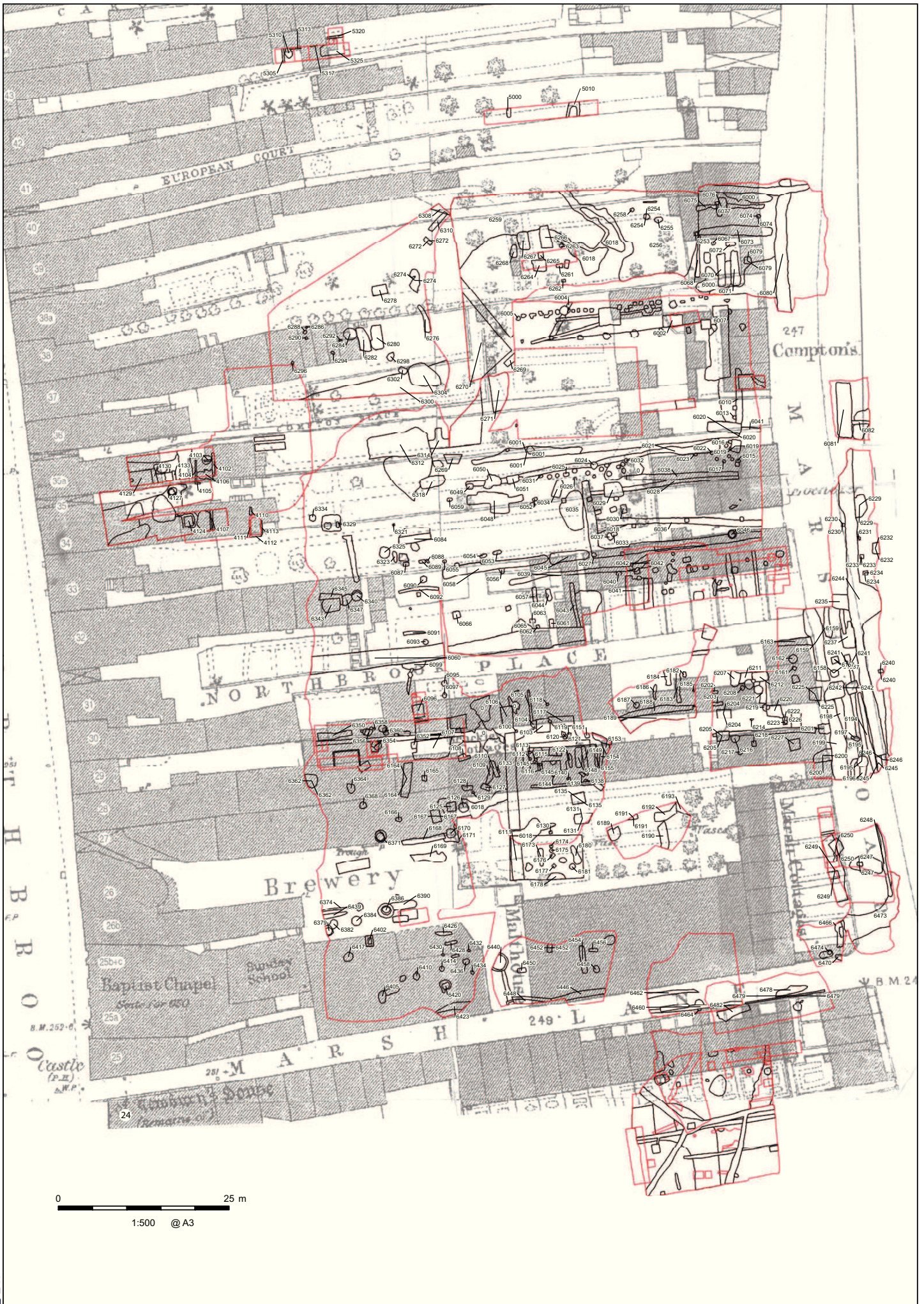


Figure 25: Archaeological features overlaid upon the 1:500 Ordnance Survey map



Figure 26: Plan showing the phasing of archaeological features

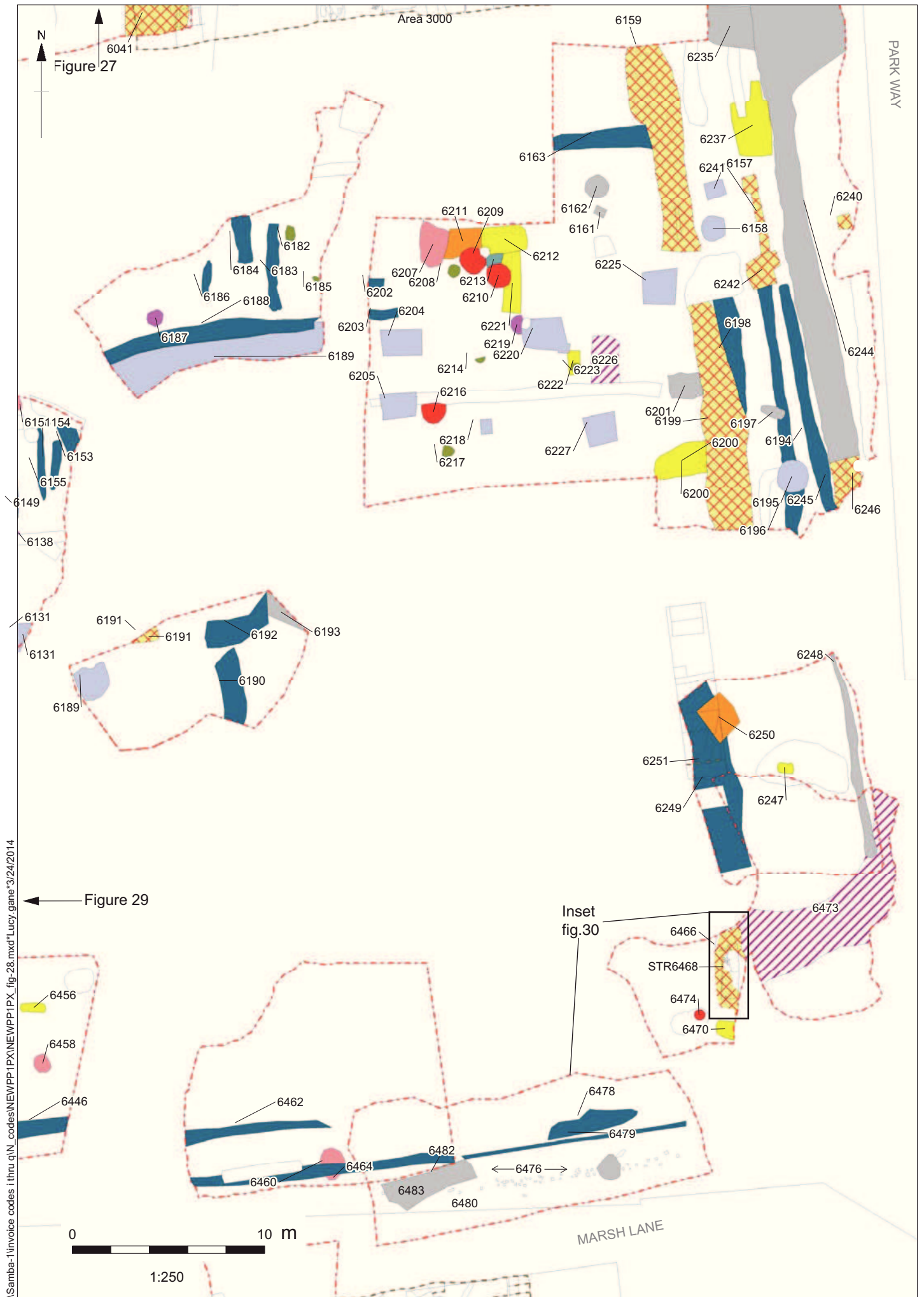


Figure 28: Watching Brief plan (1:500) for the east central part of the site, showing characterisation of features

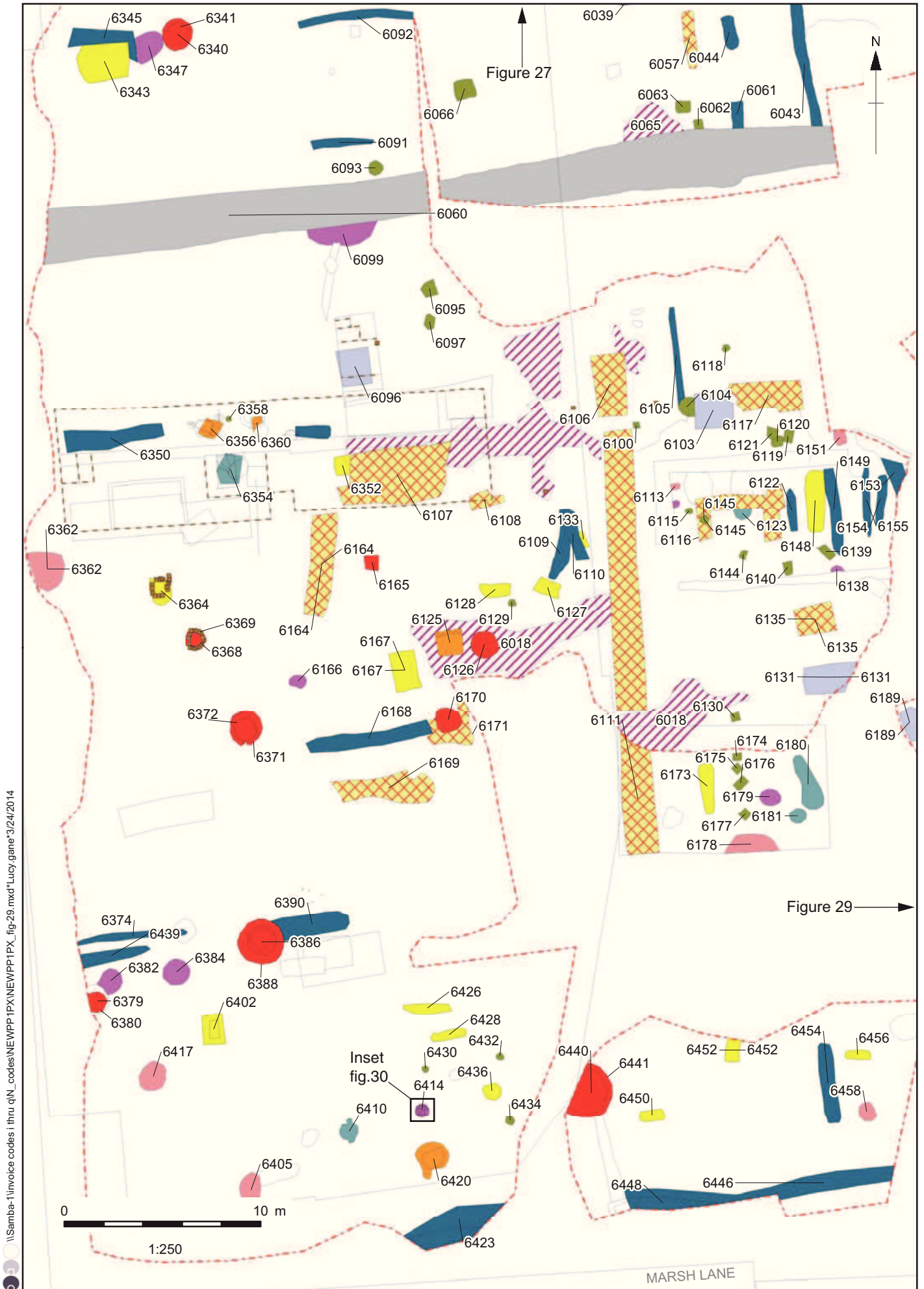


Figure 29: Watching brief plan for the west central part of site (1:500), showing characterisation of features

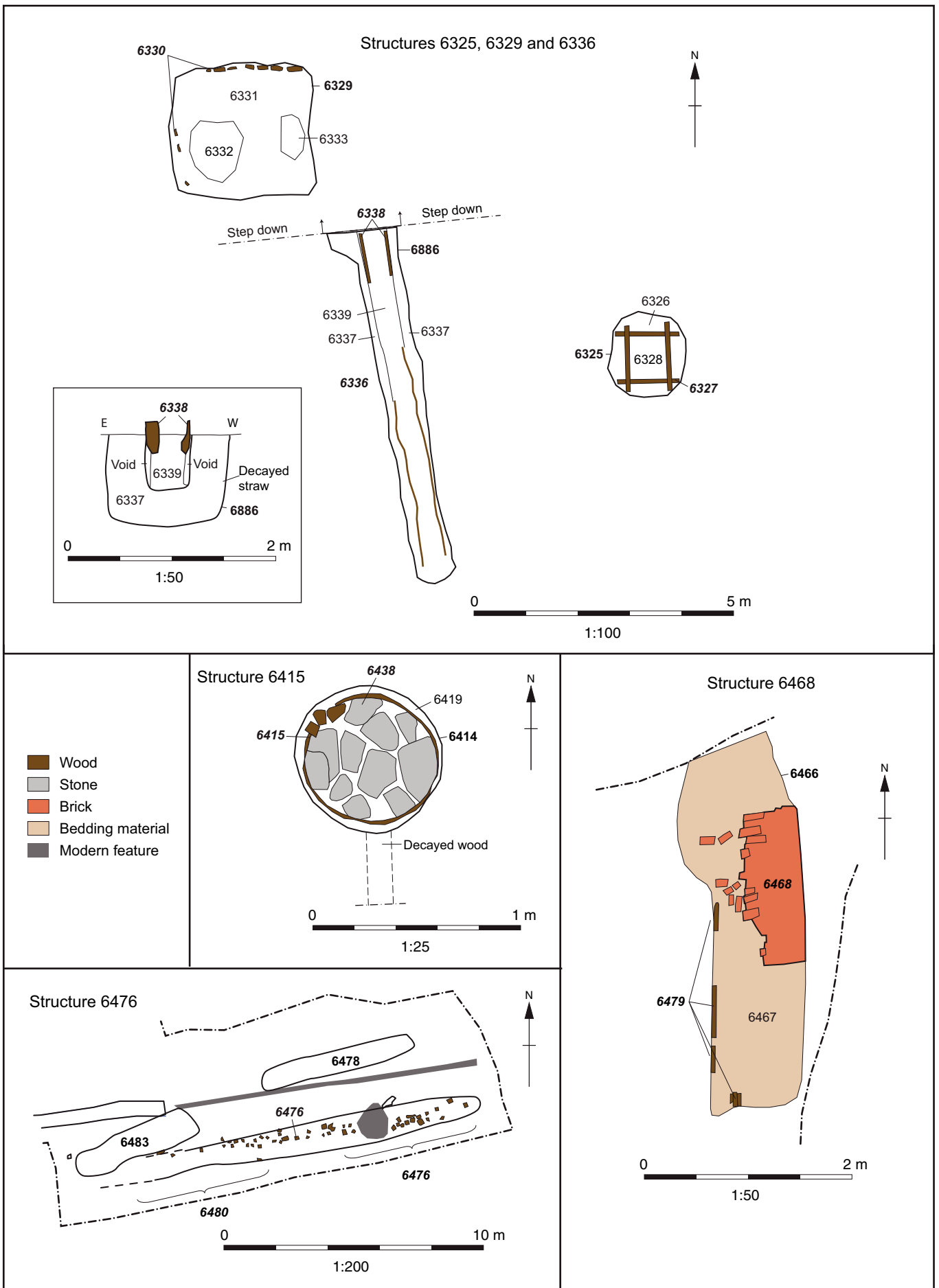


Figure 30: Detailed plans of structures 6327, 6330 and 6336, and structures 6468 and 6476

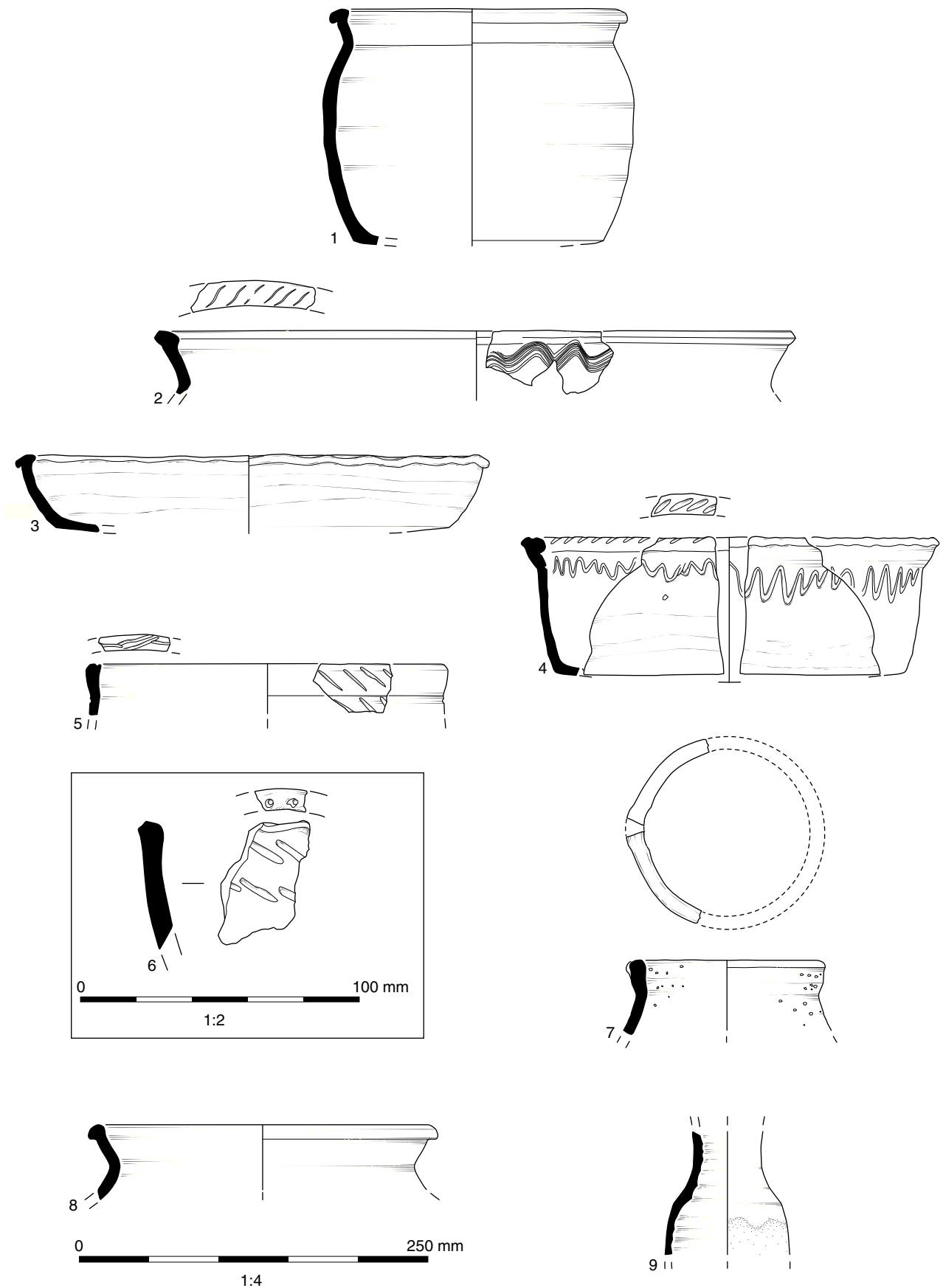
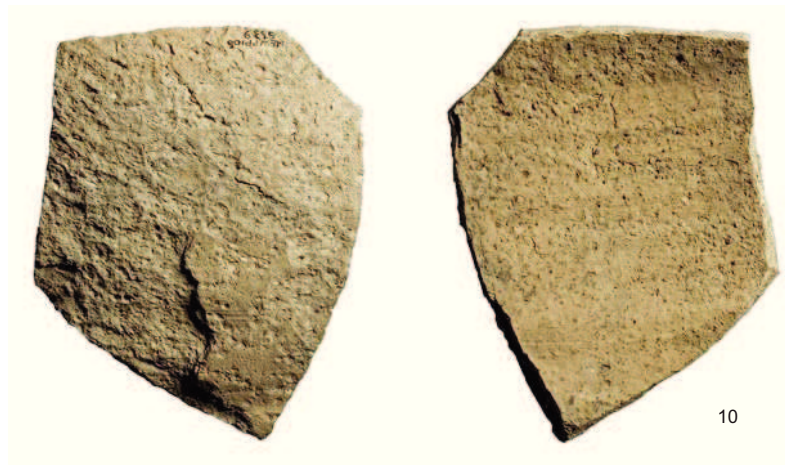


Figure 31: Pottery illustrations 1-9



0 100 mm

1:2



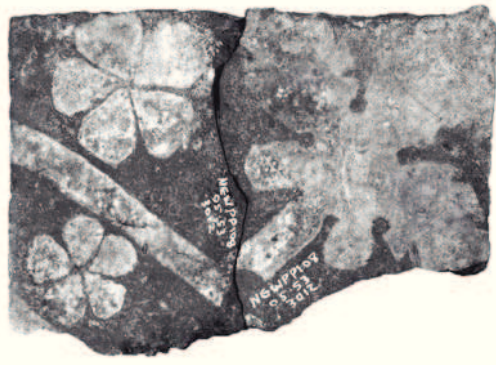
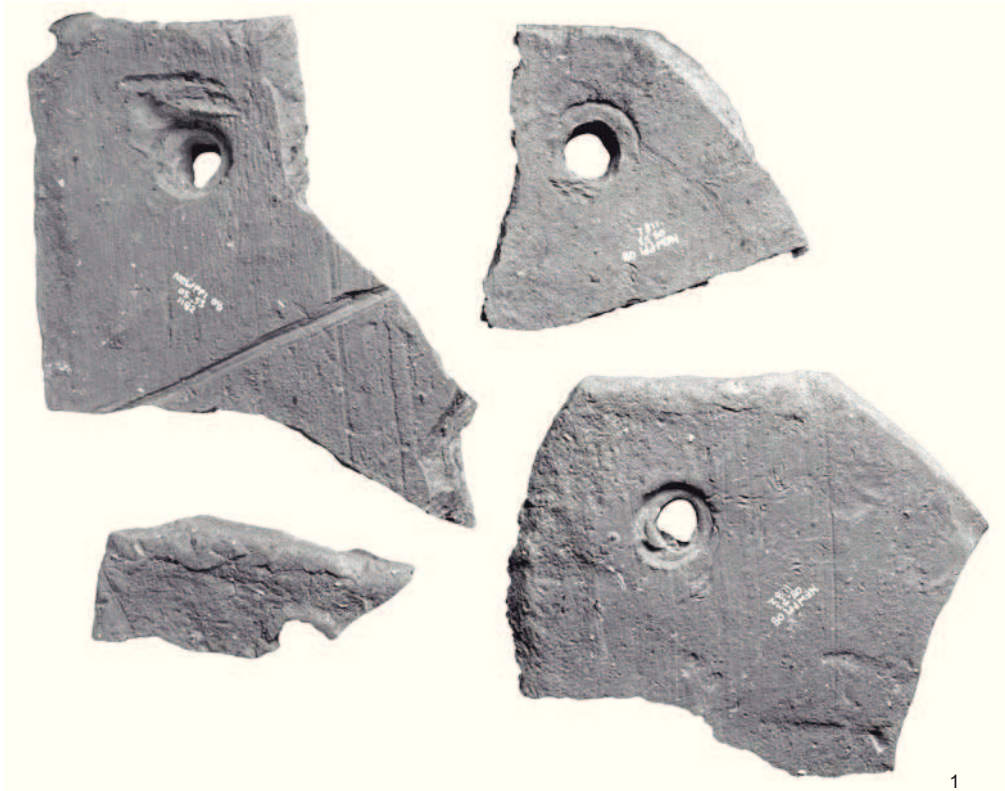
0 100 mm

1:3



11

Figure 32: Pottery photographs, nos 10-11



0 100 mm
1:2

Figure 33: Ceramic building materials 1 and 2

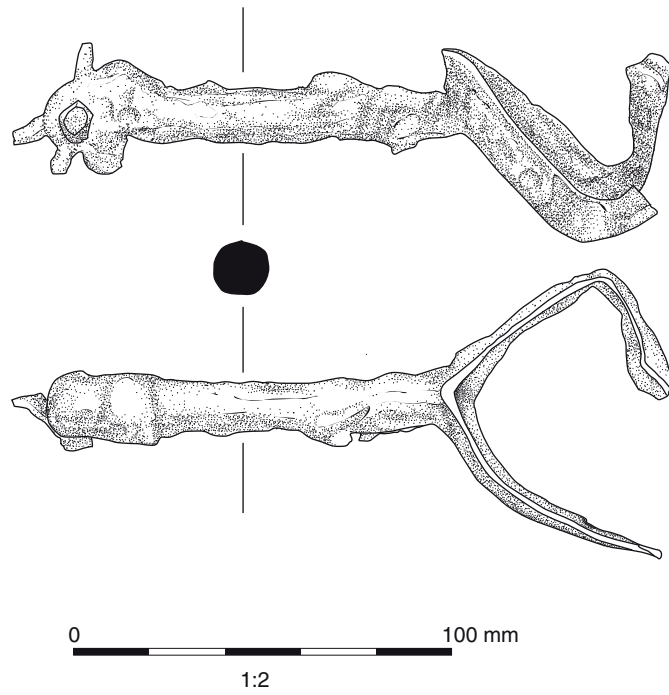
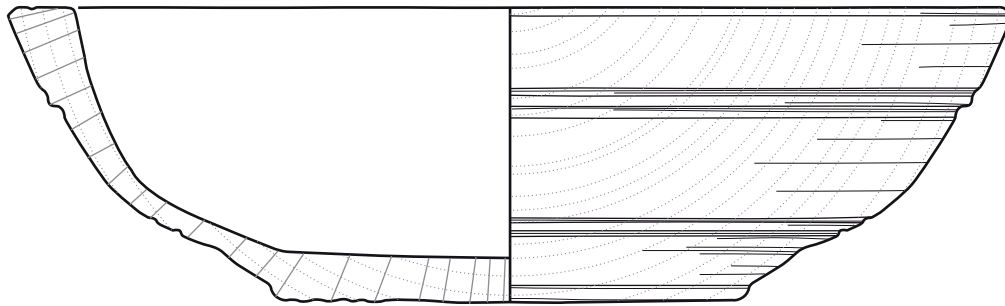


Figure 34: Rowel spur Sf 101; Leaded copper alloy pan weight with initials cast into the face

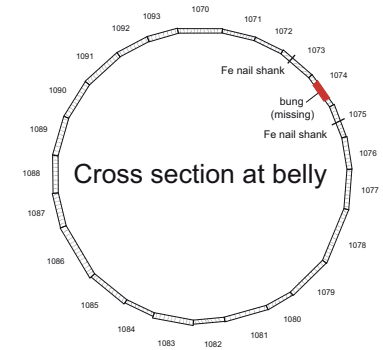
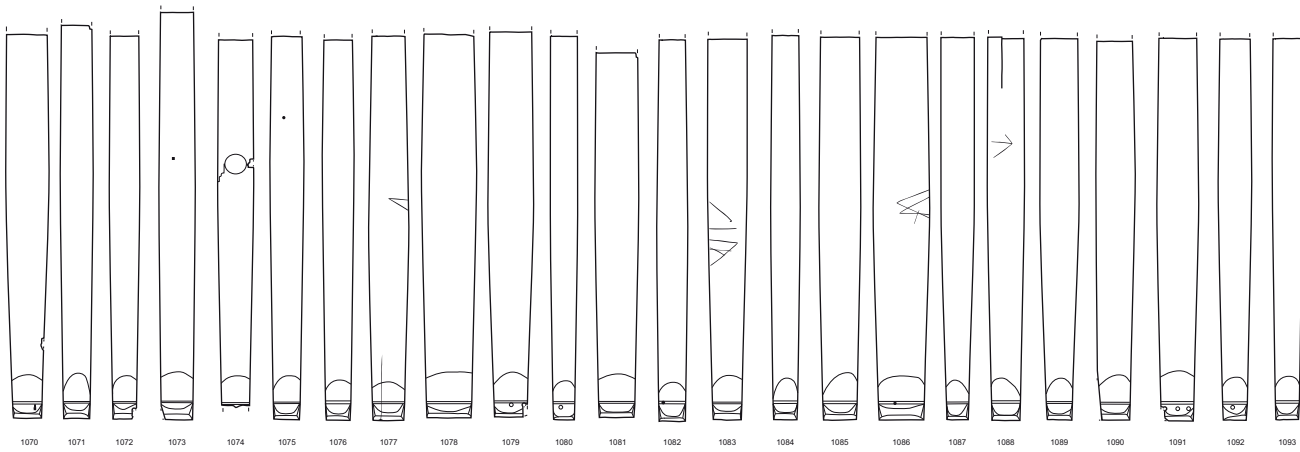


0 100 mm
1:2

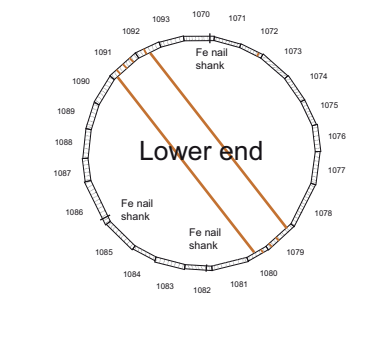
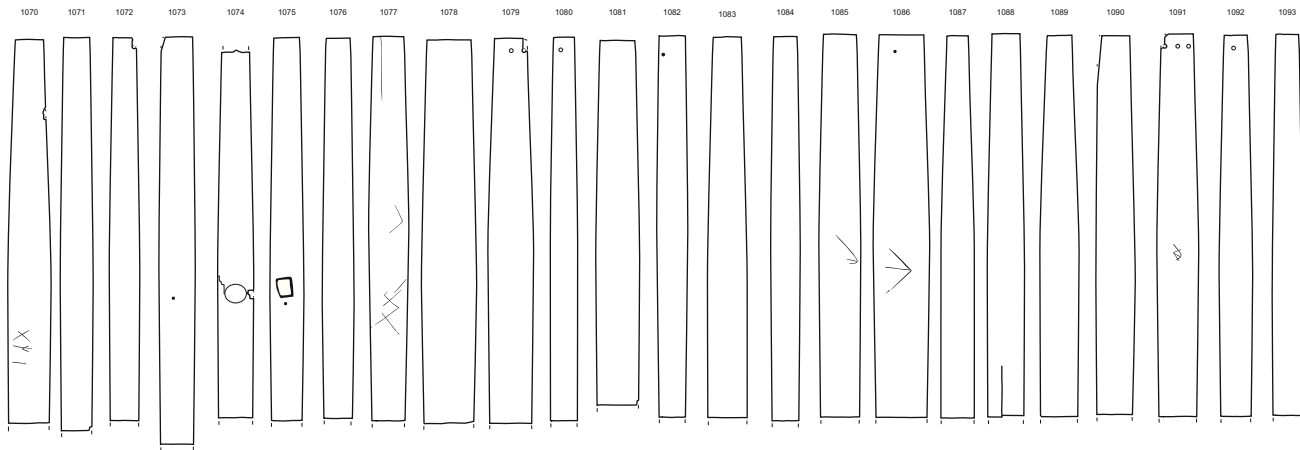
Figure 35: Wooden bowl

NEWPP108 Cask- internal face

Upper end as found



Lower end as found



NEWPP 108 Cask- External face

Upper end as found

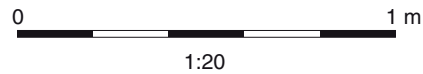


Figure 36: Wooden staves of cask 1053

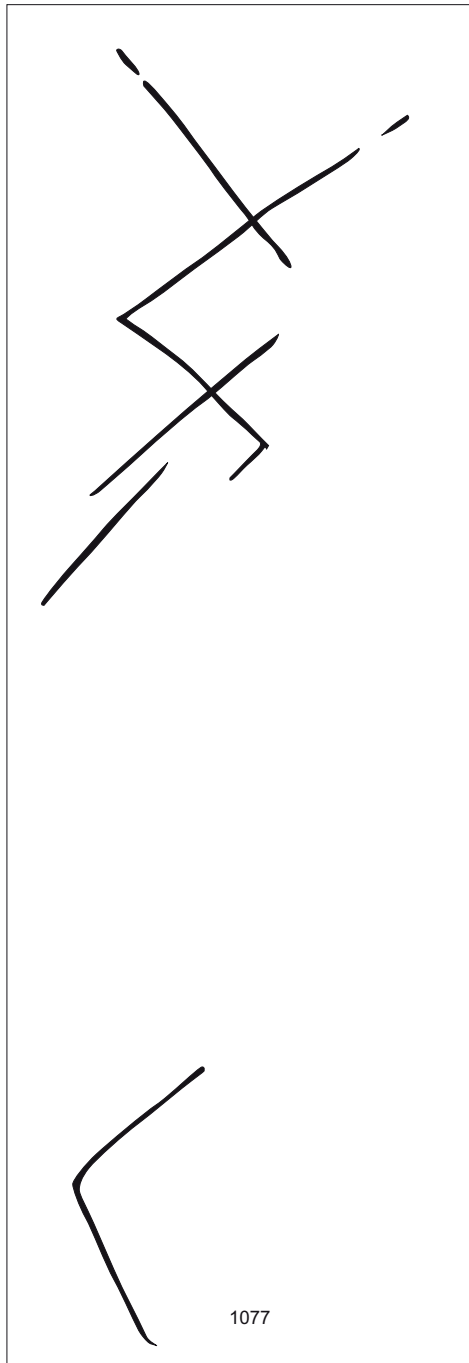
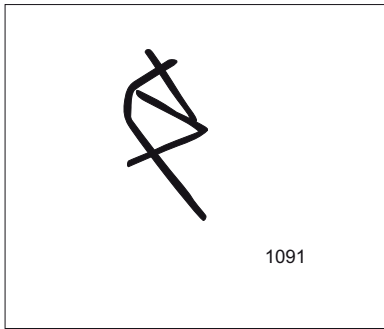
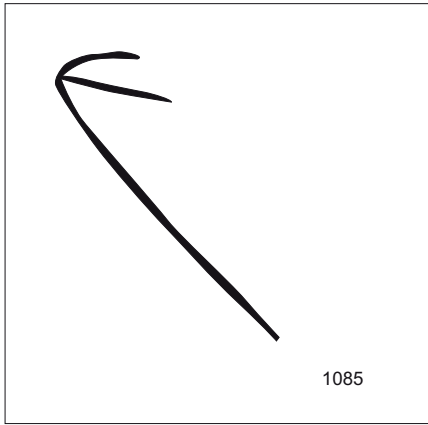
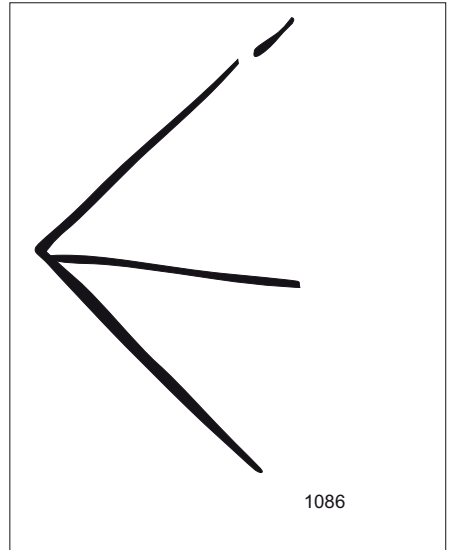
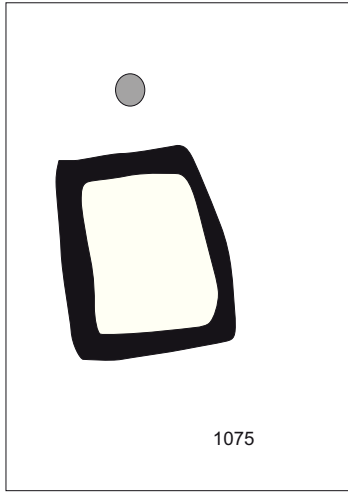
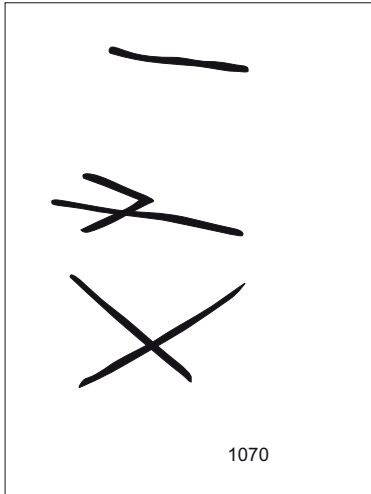


Figure 37: Cask markings on the inner face of the staves of 1053

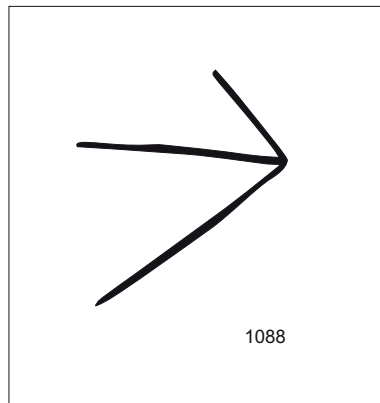
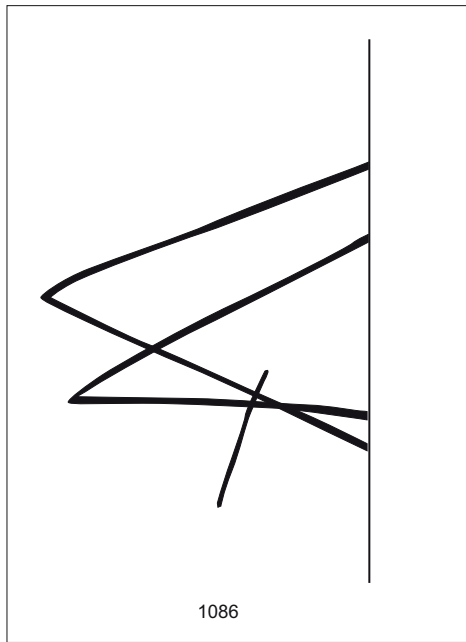
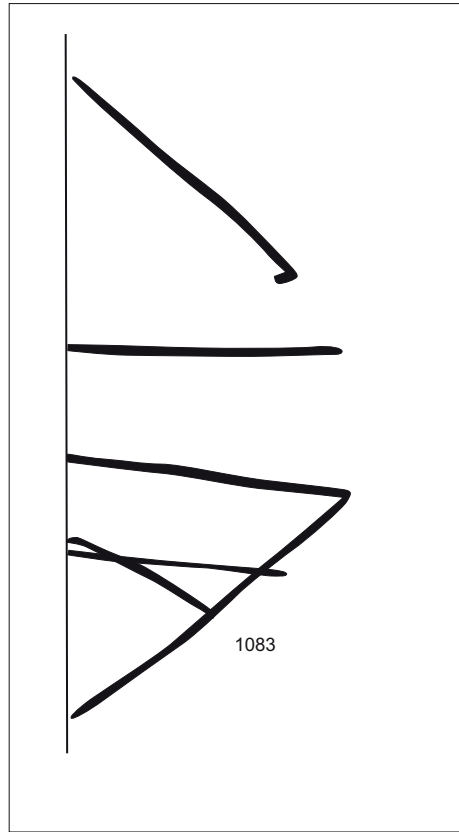
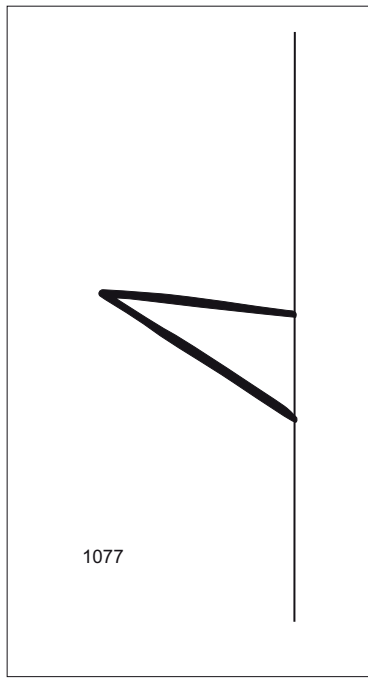


Figure 38: Cask markings on the outer face of the staves of 1053

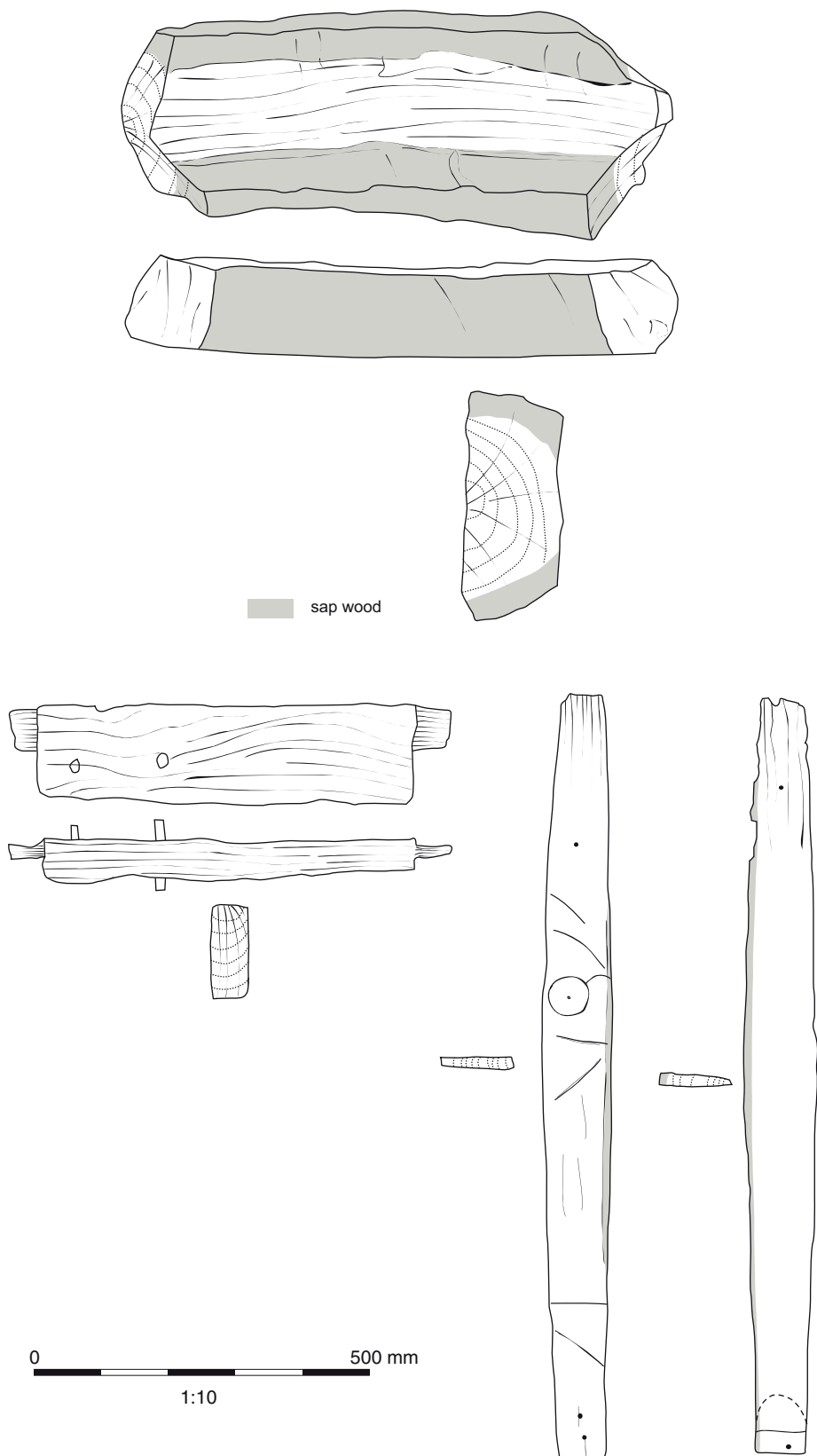
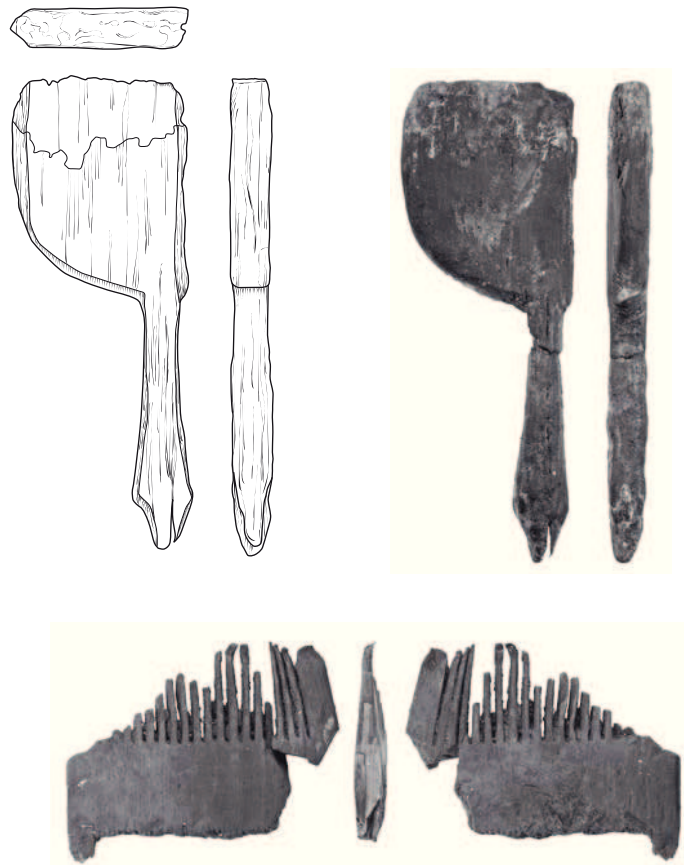


Figure 39: Wooden post-pad 3139, tenoned timber 3120 and selected staves from cask 1016 including cask markings



0 100 mm
1:2

Figure 40: Wooden brush handle and comb



0 100 mm
1:2

Figure 41: Leather shoe and dagger scabbard fragment

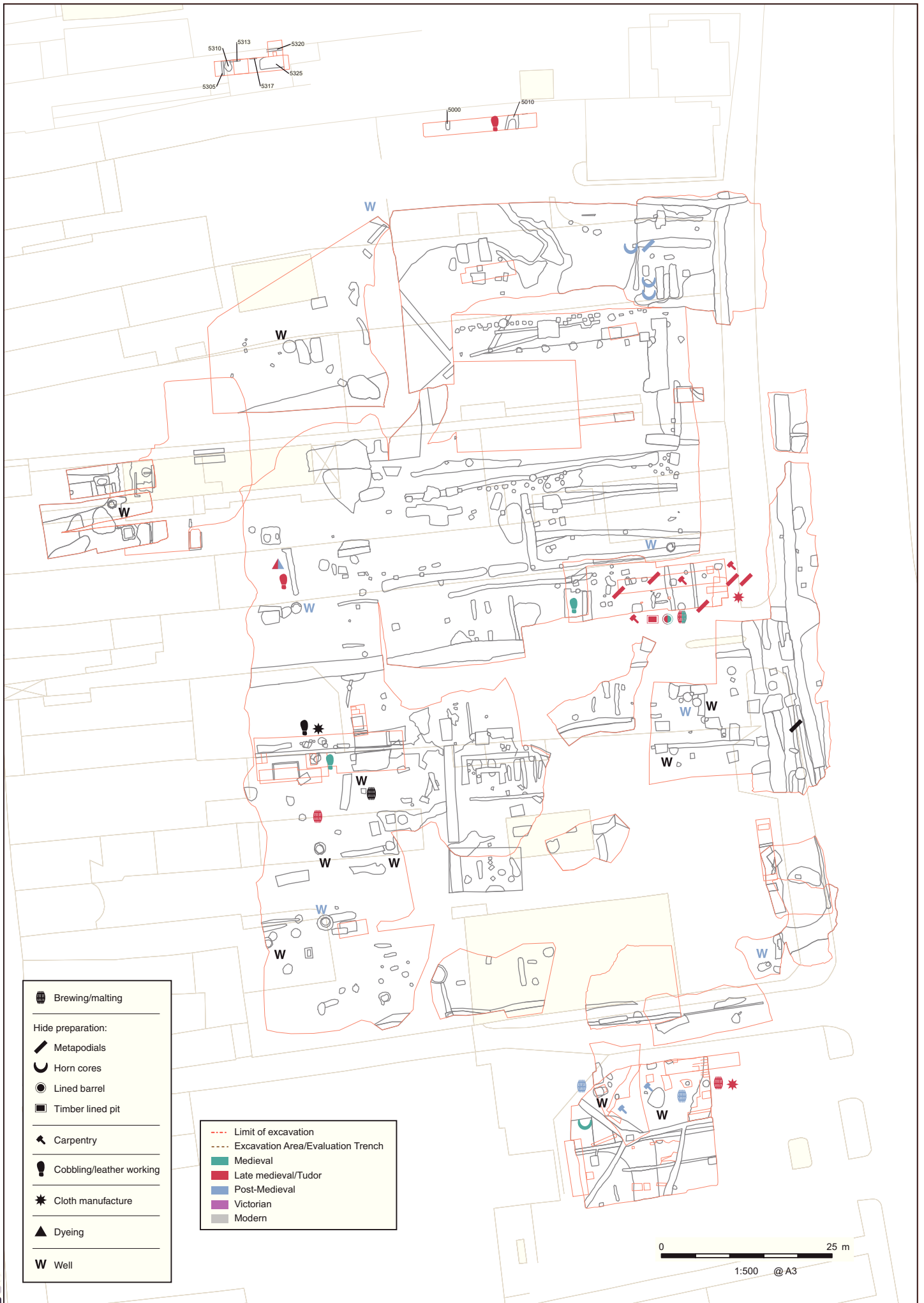


Figure 42: Plan showing evidence for craft/industrial activities by phase across the site