TWO MULTI-PERIOD EXCAVATIONS ALONG THE ROMAN ROAD FROM *LONDINIUM* TO SILCHESTER AT BRENTFORD

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SUMMARY

Brentford is reputedly a staging-post along a major Roman road leading westwards from Londinium, earning this reputation from finds recovered by 19th-century antiquarians and evidence gathered during archaeological excavations in the town during the 1960s and 70s. However it was not until recently that the opportunity arose to re-examine the evidence for the western part of Brentford near to the River Brent, when a triangle of land between Brentford High Street and Brentford Lock (Site 1), and land to the rear of the Park Tavern, London Road (Site 2) were excavated. The two sites were located near the confluence of the River Brent and the River Thames, on either side of the ford crossing the Brent. The westernmost site (Park Tavern) has produced evidence of Roman roadside occupation, indicating that ribbon development extended west of the River Brent in the Roman period. The Brentford Lock site revealed the northern roadside ditch of the Roman road from Londinium to Silchester, with evidence for roadside occupation into the 4th century. There was then an apparent hiatus in the occupation of the Brentford Lock site until the late medieval period when pits and boundary ditches were found to the rear of houses and inns lining the High Street. The land adjoining the River Brent was utilised as a tannery from the 18th to the 19th century.

INTRODUCTION

Pre-Construct Archaeology Ltd was commissioned by Duncan Hawkins of CgMs Ltd to excavate two sites to the west of Brentford town centre (Fig 1). Site 1 was excavated between 8 May 2001 and 3 July 2001 on behalf of St George Developments Ltd, following an evaluation in 1996 when five evaluation trenches, excavated for British Waterways (Southern Region), revealed evidence of prehistoric, Roman, and medieval deposits, post-medieval brick buildings, and 19th-century tanning pits (Proctor & Moore 1996). The site comprised the properties formerly known as 159–188 Brentford High Street, and was bounded by the River Brent to the north and west and Brentford High Street to the south. The site central National Grid Reference is TQ 1742 7735 and the site was given the code BLR 96. Two archaeological evaluations were also undertaken at the British Waterways Brentford Depot to the north of the Lock for Charles Church Development Ltd: on the Island Site between the River Brent and the canal (Deeves 2001), and at the West Bank Site, Commerce Road, Brentford (Darton 2001). Neither evaluation revealed archaeological deposits, and it appears the excavation of the Grand Union Canal had removed any pre-existing archaeological remains. The archaeological evaluation and subsequent excavation of Site 2 (LRB 01) were carried out between 10 and 21 of December 2001 at The Park Tavern, 107 London Road, London, TW8, on behalf of Barratts West London Ltd (Bagwell 2002). Site 2 is centred on National Grid Reference TQ 5171 1771 and is bounded by London Road to the north, which forms the western continuation of Brentford High Street, and lies 350m to the west of Site 1.
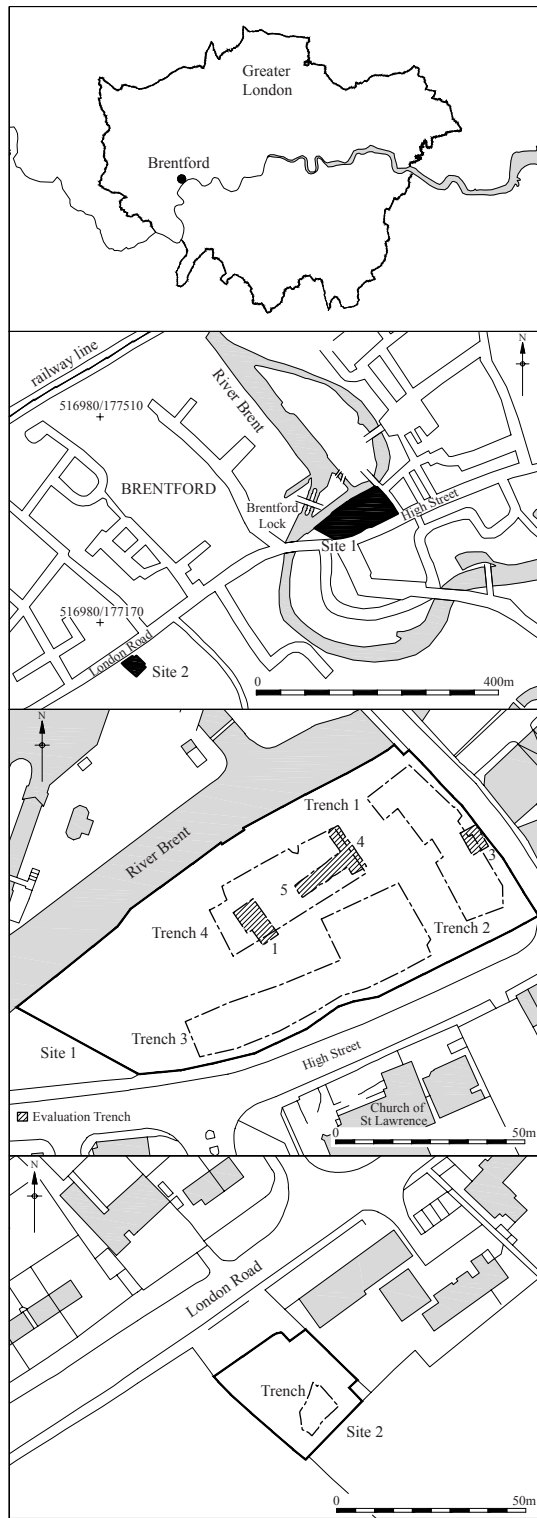
Fig 1. Site and trench locations

NATURAL GEOLOGY AND TOPOGRAPHY

The geology encountered on the sites was River Terrace 1 gravels and sands, which were in turn capped by brickearth. Site 1 lies on the south bank of a meander in the River Brent, near to its confluence with the Thames, and consequently has been prone to flooding and waterlogging in the past. Natural brickearth deposits at Site 1 lay at approximately 5m above Ordnance Datum, at least 1.5m lower than at Site 2, which lies to the west of the River Brent. A gradual slope in the brickearth was noted from the north down towards the High Street in the south at Site 1, and less prevalent was a slope from the middle of the site down towards the River Brent, leaving a ridge of slightly higher ground.

The location of the sites in close proximity to the confluence of a major river and its tributary is of great significance for their later utilisation and occupation. It appears that in the past the River Brent may have approached Brentford High Street more closely than is the case at present and ran beneath a relatively sharp scarp around the north of Lot's Ait before flowing into the Thames (Rackham 1998, 14). Recent studies of the Thames's regime in antiquity have indicated that the mean high water levels in the early Roman period reached above 1.50m OD, falling below 0m OD by the 3rd century, then rising again in the 14th century (Milne 1985). The River Brent was probably prone to flooding during the early Roman and medieval periods.

PREHISTORIC BACKGROUND TO THE SITES

Artefacts recovered from the dredging of the Thames and during the construction of Brentford Docks in the 18th and 19th centuries have highlighted the archaeological potential of the town. A series of excavations directed by Roy Canham between 1966 and 1972, when the High Street was undergoing redevelopment, revealed evidence for prehistoric and later activity. At 2–10 London Road an unstratified Palaeolithic axe was recovered from the modern disturbed ground (Masefield 1997, 17).

Canham excavated three trenches in the south-eastern corner of Site 1 which produced evidence of Neolithic occupation in the form of a possible ditch or gully and a quantity of worked and burnt flints and pottery (Canham

1978, 12). These were dated to the early Neolithic period (*c.*4000 BC). Further evidence for Neolithic activity was revealed 250m to the west of Brentford Lock, at the Park Tavern. Worked flints were recovered from the top of the brickearth, and a residual leaf-shaped arrowhead was found in a Roman ditch. An excavation at 231–232 High Street in 1974–75 produced a considerable quantity of struck flint and pottery of the Mesolithic to Bronze Age. To the east of Brentford town centre, the former Brentford Gasworks was excavated. Activity from the Mesolithic to Iron Age period suggests that the area was cleared of trees and a possible settlement was established (Bishop 2002b).

PHASE 1: PREHISTORIC

Site 1

Prehistoric struck and burnt flints were recovered during the evaluation and excavation of Site 1, particularly in the eastern half of the site. The assemblage is indicative of activity over a long period of time and is mostly unstratified, although an assemblage of early Iron Age flints was recovered from an infilled channel in the south of the site. Earlier materials recovered from the brickearth include blade cores and blades of Mesolithic/early Neolithic date, backed flakes and possible knives of late Neolithic/ Early Bronze Age date. Because the brickearth

contained artefacts it was hand dug in 5cm spits to investigate whether it had been redeposited, and to test the possible presence of buried land surfaces or features. Excavation of the brickearth in evaluation Trench 3 revealed a late Neolithic tranchet arrowhead. The brickearth in excavation Trench 2 (5.09m OD) contained occasional sherds of Bronze Age, Iron Age and Roman pottery, and worked and burnt flints, suggesting it was a sub-soil of prehistoric to Roman date. The brickearth had been disturbed by bioturbation and as a result contained cracks in which the cultural materials were found; there was no evidence to suggest prehistoric features, and deposits were overlain by the disturbed brickearth. An assemblage of residual flints was recovered from a shallow Roman pit. This contained seven flint pieces, of which four were retouched, comprising a blunted-back knife, a truncated flake, a notch and a blade-like flake with a splintered edge. The blade-like flake and the blunted-back knife would suggest a date prior to the end of the Early Bronze Age. The high proportion of retouched pieces is unusual and the collection may possibly form part of an individual tool kit.

The brickearth further west, in Trench 3, noticeably sloped down to the south, more markedly in the centre of the trench, towards a large natural channel at the southern edge of the site (highest level 3.52m OD; lowest level 2.25m OD) (Fig 2). The channel appeared
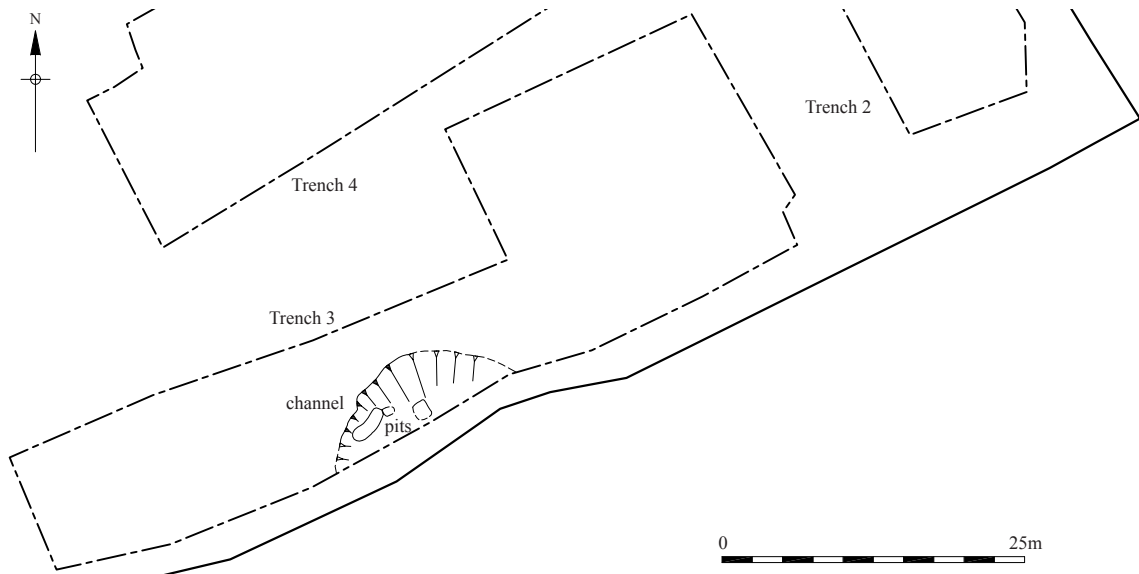

Fig 2. Site 1: Phases 2 and 3

to form the northern meander of a stream or river, curving from south-west to north-east and then north-west to south-east. The edges of the channel were composed of interspersed alluvial layers of silt, sand and gravel up to 1m thick. The earliest deposit in the channel was a silty gravel, which was overlain by a dark grey sand, a yellowish sand, and finally a sandy gravel layer. Canham (1978, 17) may have recorded the same channel south of the road at 141–147 High Street, since he mentions 'layers of silt and loose, earthy gravel, apparently the infilling of a former channel of the Brent. Resting on and cutting into the infill were traces of Romano-British occupation'.

The more recent excavations have provided an opportunity to reassess Canham's conclusions of thirty years ago. Canham's Site 4 consisted of several small trenches at the former properties 184–187 High Street; of these, three narrow north–south trenches were located within excavation Trench 2. A gully was originally identified in the middle trench; it contained a fragment of sandstone with smoothed surfaces within its fill. However, when these trenches were re-evaluated, the sections appeared to show no sign of any linear features, and this 'gully' is likely to have been an ephemeral natural feature. The prehistoric material recovered also does not appear to have been *in situ*.

Site 2

The top 50mm of the brickearth contained moderate silty patches and produced several Neolithic and Roman finds, indicating that it had been subject to reworking. The earliest activity at Site 2 is represented by four pieces of struck flint, consisting of three blades and a leaf-shaped arrowhead, all characteristic of Mesolithic/Early Neolithic industries. Two of the blades were deposited into the top of the brickearth, probably by its reworking. The other pieces were residual finds within Roman features, but probably originated from the brickearth. Although no features were found associated with them, these finds indicate probable Neolithic activity in the vicinity.

PHASE 2: EARLY IRON AGE (700–300 BC)

Site 1

The earliest silt and gravel fills of the natural channel were overlain by a succession of silty layers. These produced 24 struck pieces of flint, mostly comprising crudely produced or miss-hit, thick and squat flakes, flake fragments or unclassifiable core shatter. The primary fill (0.2m thick) of the channel was a grey clayey silt layer with flecks of charcoal. The secondary fill was a redeposited brickearth deposit, probably eroded from the edge of the channel and washed in. Overlying this was a reddish grey clay with worked and burnt flint and pottery inclusions (0.15m thick). A further episode of silting occurred and this deposit (0.3m thick) contained significant quantities of burnt flint, fragments of Iron Age jars, and one iron slag lump. The burnt flint implies either the presence of hearths close by or that refuse from hearths was deposited on the river bank. One core, consisting of a small gravel pebble, was also recovered. The flint assemblages were expediently produced, reflect a decline in flintworking techniques, and are characteristic of flintworking traditions dating to the Middle Bronze Age or later. Thus they may be contemporary with ceramic evidence for early Iron Age activity.

Cutting into this silt deposit were three pits containing Early Iron Age pottery. One was filled with grey silty clay with pottery inclusions. A linear pit was filled with greenish grey silt with pottery and burnt and worked flint. Truncating the eastern edge of the linear pit was a sub-rectangular pit with rounded edges, filled with grey silt and pottery fragments. Of the three Iron Age pits, only two contained struck flint, consisting of four flakes; these were undiagnostic, although comparable to the material from the alluvial deposits, and may be contemporary with the use of the pits. A reddish grey silt (0.6m thick) sealed the fills of these features and formed the upper fill of the natural channel (3.33m OD). This upper silt layer had daub and pottery fragments dating from the Late Iron Age to AD 50.

PHASE 3: LATE IRON AGE (300 BC–AD 50)

Site 1

Sherds of Late Iron Age pottery were found residually in several Roman features and in the top of the brickearth in Trench 2. The base of the roadside ditch yielded sherds of pottery pre-dating AD 50. Several small pits and a patch of *in-situ* burning or a hearth in Trench 2 also contained Late Iron Age pottery.

Following the excavation in 50mm spits of

the brickearth at both sites no *in-situ* artefacts were recovered apart from within the channel and pits cut into its edges at Site 1. Finds from the brickearth were recovered in vertically aligned groups, representing a prehistoric/Roman sub-soil. This well-rooted brickearth has been encountered on a third site in Brentford, at 232–246 High Street to the east, where it also represented part of an early soil profile truncated by later activity.

The redeposition of flints, especially in Roman deposits, is an indicator of the intensive use of the site from the Roman period onwards. The fragments of prehistoric pottery recovered from the brickearth in the eastern half of Site 1 were abraded and residual in nature and were deposited as a result of bioturbation. Nevertheless the density of prehistoric finds in this part of the site indicates a survival of the early sub-soil and activities may have been concentrated on this higher ground throughout the prehistoric period. The density of flintwork at Site 1 is less than it has been at other local sites, perhaps because of the low-lying nature of the area and alluvial processes. The leaf-shaped arrowhead recovered from the brickearth at Site 2 is noteworthy, such types being more commonly recovered from the Upper Thames Valley and dating to the early Neolithic (Bishop 2002b). The small struck flint assemblages indicate Mesolithic/early Neolithic activity on or very near to the sites and reflect the favourable environmental conditions that the area afforded in this period.

The Early Iron Age features found at the edge of a palaeochannel of the Brent at Site 1 were the only *in-situ* prehistoric deposits recorded at either site. The finds and features from the edge of the channel are a conclusive indicator of riverside activities, perhaps representing butchery and food preparation, and of the possible existence of a settlement in Brentford between 700 and 300 BC. The collections of complete prehistoric weapons and other finds from near the mouth of the River Brent, together with residual finds from the land, imply the presence of an important settlement or settlements in the Brentford area. The main occupation site has not yet been identified; it may have been eroded away by the action of both the Rivers Brent and Thames or through later human activity. Although the Brentford Lock site has revealed evidence for an Early Iron Age site in the vicinity, and enabled the mapping of a former course of the River Brent, it is also clear that the Brentford area was a landscape in which people lived and hunted continuously throughout the prehistoric periods.

EARLY ROMAN ACTIVITY

Soon after the Roman invasion a network of roads was constructed connecting London with the rest of the province. The road from London (*Londinium*) to Silchester (*Calleva Atrebatum*) ran along the north bank of the Thames, crossed the River Brent and continued via Staines (*Pontes*). Brentford was located *c.*10 miles from Staines and *Londinium*, at a natural crossing point on the Brent. Roman roads often linked sites which were a day's march apart, *ie* 10 to 15 miles (O'Connor-Thompson 1998, 29), and Brentford may have developed as a *mutatio*, a relay-station, between two larger settlements. Official travellers using the road west from London could have obtained fresh horses or replacement draught animals at Brentford (Laws 1976, 187). If Brentford did begin as a planned *mutatio*, this would have acted as a catalyst for further growth, though the absence of *opus signinum* flooring and worked building stone suggests a lower status (O'Connor-Thompson 1998, 35).

The present town of Brentford is sited on a Roman settlement, a ribbon development on the line of the important Roman road. The road has been identified at three locations in Brentford — at 231–232 and 233–246 High Street and 2–6 London Road. It was of typical Roman construction — cambered, rammed gravels with lateral ditches. The road was rebuilt and repaired throughout the Roman period. At 246 High Street, the earliest road, dating to the 1st century, consisted of a linear metalled surface orientated north-east–south-west, laid down over a cambered foundation of sterile, redeposited brickearth. The earliest road varied in width between 4 and 6m, and was overlain by a second dumped brickearth layer which supported a more substantial gravel spread approximately 12m wide. The earliest phases of road dated to the Neronian period. A large V-shaped ditch parallel to the southern side of the road cut a Neronian gravel surface. The ditch was backfilled in the Flavian period (Cotton & Parnum 1983, 318).

PHASE 4: AD 43–70

Site 1

An east–west aligned ditch running along the southern boundary of the site with Brentford
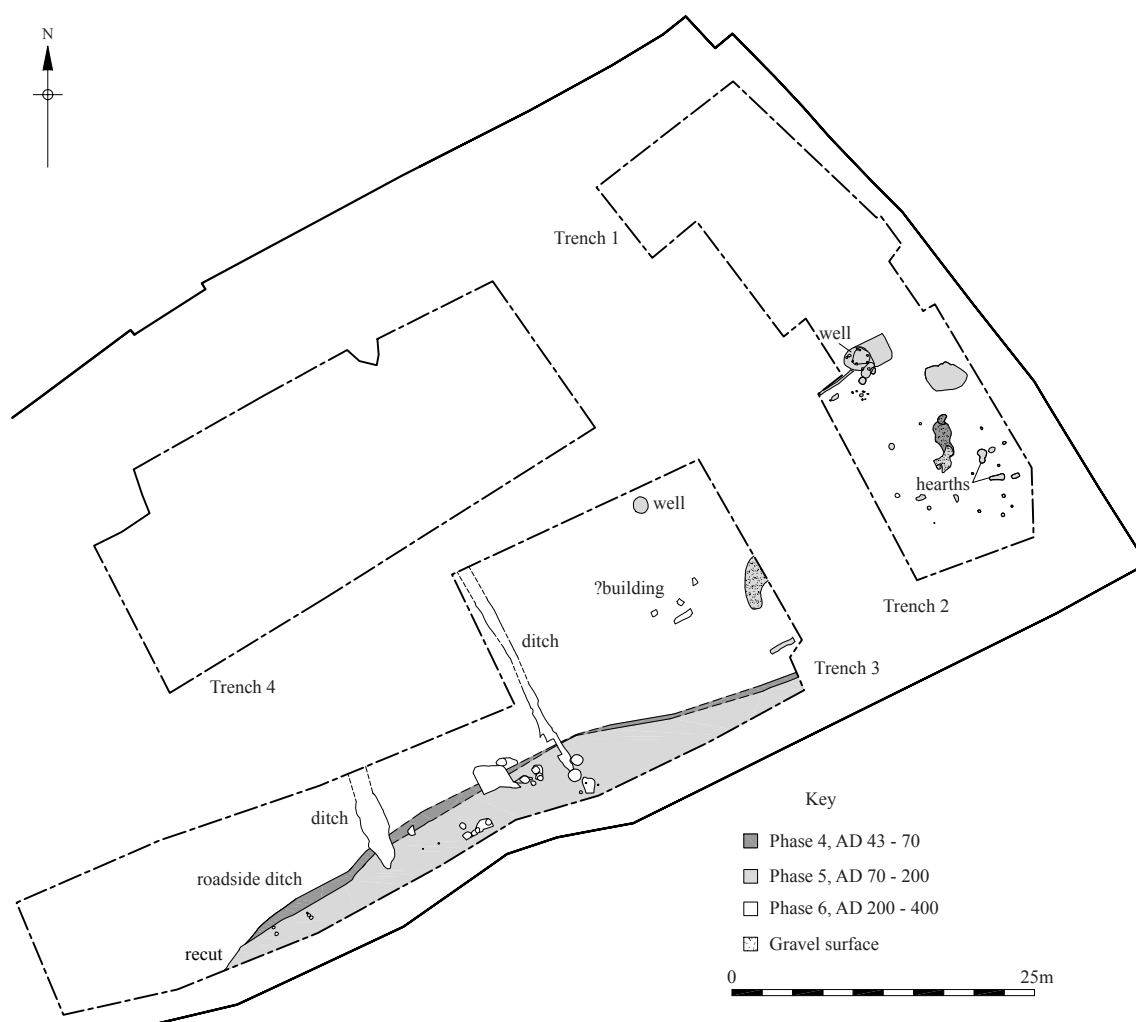
Fig 3. Site 1: Phases 4, 5 and 6

High Street was dug in the mid-1st century (Figs 3 and 4). The ditch is thought to have formed the northernmost roadside ditch of the *Londinium* to Silchester road, which would place this stretch of the Roman road surface directly beneath the modern road. The roadside ditch was up to 2m deep and up to 4m wide; its large size, especially above the former river channel, was probably due to the drainage problems on the site. The roadside ditch stretched 50m east–west along the southern boundary of Site 1, and was excavated in several north–south slots. Changes in the profile of the V-shaped ditch-cut were noticeable in the sondages excavated through it, in terms of the angle of the northern slope. The easternmost extent of the roadside ditch was the narrowest section; it was at least 1.8m in width and 1m deep, with the southern slope rising up towards the modern road. In the central part it was 4m wide and 2m deep with the edge gradually sloping to the south. The westernmost extent examined was *c.*2m wide and 1m deep. Clearly there was a marked change in the line and profile towards the centre of the trench. The enlarged size of the ditch in this area can be explained by the location of the channel which had silted up *c.*400 years before the Romans built their road but would have remained wet. The primary clayey fills of the ditch contained fragments of charcoal and

Fig 4. Roadside ditch at Site 1, facing south-west

yielded pre-Flavian pottery dating to AD 43–70/80, including a significant proportion of Highgate Wood B ware. Imported wares included South Gaulish samian ware, Gallo-Belgic whiteware and Central Gaulish whiteware. The material indicates that the roadside ditch was originally open between AD 45/50 and 70/80. The small amount of slag recovered from this first phase compared with that found in the recuts suggests that the first Roman road was not metalled with slag and that the road builders made use of the gravel that was available. The only other features on the site containing pottery dating to the early Roman period were found at the east of the site in Trench 2: a small rubbish pit of *c.*AD 50–60, which was overlain by a rammed gravel yard surface dating to AD 60–70.

Site 2

The earliest possible Roman feature was a linear north-east–south-west gully with a concave profile. It produced no finds, but may have drained into a north-west–south-east ditch dated to the early Roman period (Fig 5). This ditch was located in the centre of the site; it had a terminus at its south end and extended northwards beyond the limits of excavation. It would have run perpendicular to the Roman road to the north of the site. These features may represent ditches belonging to field systems situated alongside the road. The pottery assemblage was dominated by Highgate Wood B ware, and also included sherds of South Gaulish samian. It was similar to the pre-Flavian assemblage found at Site 1. The pottery indicates that the ditch was dug *c.*AD 50 and was gradually filled in until *c.*AD 70–90. Therefore this ditch was contemporary with the initial construction of the Roman road.

The land at Site 1 remained open during the early Roman period with a possible development
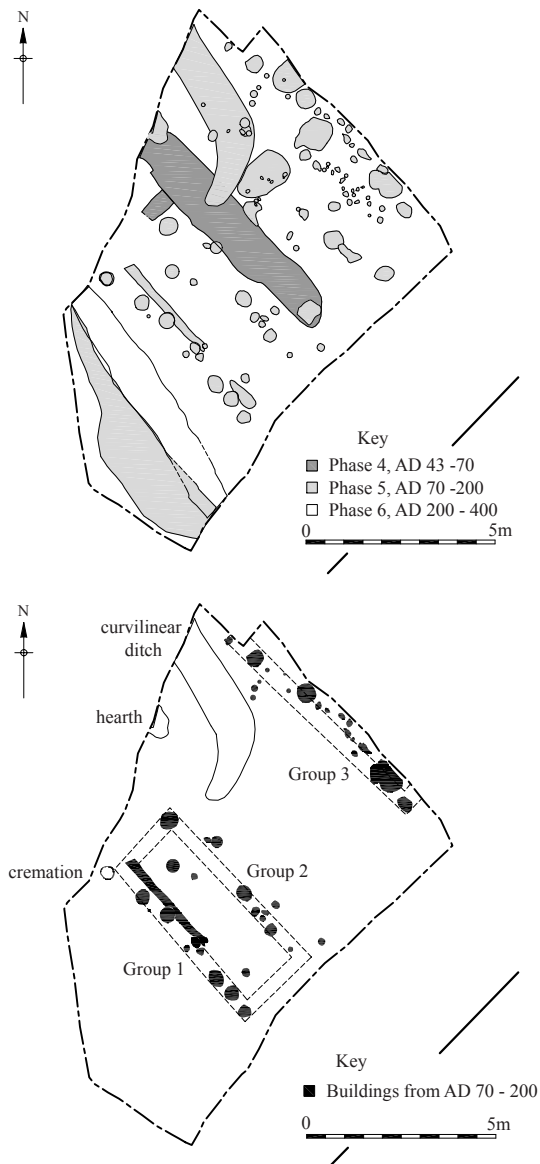
Fig 5. Site 2: Phases 4, 5 and 6

on the east side of the site. Excavations at Northumberland Wharf, on the west bank of the River Brent, 200m east of Site 2, revealed two 1st-century ditches, one of which is similarly aligned north-west–south-east. Unfortunately only a small part of the Northumberland Wharf development was excavated and higher deposits had been disturbed by contractors. Nevertheless these ditches support the existence of an early Roman field system located to the south of the

road and to west of the Brent. The construction of the road between AD 43 and 70 probably caused a re-alignment in the pattern of land division in the area, with the prehistoric layout superseded by a pattern of rectilinear fields and enclosures.

LATE 1st- AND 2nd-CENTURY OCCUPATION

The distribution of the Roman features excavated in Brentford suggests that the settlement extended for up to 800m along both sides of the road. The settlement was established by the late 1st century, and experienced a decline in the late 3rd century, with a possible resurgence in the 4th century. There is little evidence to indicate the nature of the buildings; the only structural evidence recorded is a possible late 1st-century AD foundation trench at 136 High Street, a possible gravel-floored structure of late 1st-century/early 2nd-century date, and beam slots from the mid- to late 2nd century at 233–246 High Street. It would appear that the timber and daub structures have left little trace. Canham (1978, 146) suggests buildings with clay or turf walls or constructed with a sleeper beam set on the existing ground surface, and not in a slot or trench. The Roman road itself has been identified to the east of Site 1, between Half Acre and the County Court on the north side of Brentford High Street, where an early Roman 'metalled' gravel surface, 4–6m wide, was recorded with two lateral roadside ditches. In the late 1st century this section of the road was extensively remodelled, moved slightly to the south and widened to 12m across. Gravel spreads found at 2–10 London Road may be directly connected with the Roman road west of the River Brent and date to the mid-3rd century.

PHASE 5: AD 70–200

Site 1

A remodelling of the road was recognisable at Site 1 (Fig 3), where in the late 1st century the ditch was recut and widened in order to maintain efficient drainage. The northern edge of the recut ditch was located *c*.0.5m to the south of the earlier ditch. The base of the recut was only recorded in the easternmost sondages. Both cuts revealed similarly sloping northern edges with a

steeply cut, narrow base. The primary fills of the recut yielded pottery suggesting the feature was re-excavated *c.*AD 60–70. This pottery includes fragments of wheel-turned jars and beakers from the Highgate Wood kilns, the Colne Valley kilns near Staines, and from elsewhere in the Thames Valley. The pottery assemblage from the secondary fills indicates that the second roadside ditch began to silt up during the period AD 70–100; this is contemporary with the pottery from the fill of the southern roadside ditch observed by Parnum and Cotton between 1974 and 1982. A second recut of the roadside ditch was recorded in one of the central sondages; its fills were deposited during the period AD 100–130. This secondary recut was necessary because this waterlogged area had probably silted up quicker than elsewhere along the ditch. A 2nd-century ditch extended north–south from the roadside ditch and ran perpendicular to the Roman road. This ditch was U-shaped in profile and 0.9m deep; the composition of its fill suggests it was frequently waterlogged.

A large quantity of slag, which had probably eroded from the surface of the road, was re-covered from the roadside ditch fills and the recutting of the ditch may have been under-taken at the same time as the resurfacing of the road. The inclusion of slag within the sur-face of the road has not been mentioned in reports of previous excavations of the Roman road in Brentford, which suggests either that its presence within the road surface was not deemed to be significant or that the slag was more densely distributed closer to the ford over the River Brent.

During the late 1st to 3rd centuries the road-side ditch gradually silted up, and was no longer maintained. The pottery assemblage from this period included imported finewares such as fragments of beakers from South and Central Gaul. Many metal objects were recovered from the ditch fills, presumably having been accid-entally dropped by travellers and washed into the ditch. The Roman coin assemblage falls into two groups: late 1st-century in the lower fills of the ditch, and 3rd-century from the upper fills. The former includes a fine example of a *dupondius* of Domitian, dated to AD 90–96 (Fig 17.9). The lettering is unworn, suggesting it was not in circulation very long prior to its loss. One of the coins recovered from the upper fills dates from the reign of Tetricus I, AD 270–273. Amongst the other objects discovered were a Roman military belt mount, two decorative dress pins, a green glass bead, a finger-nail cleaner, an ornately moulded knife handle, and a small mount cast in the form of a goat (Fig 17.8).

The remains of a possible smithy, dating to the 2nd century, were found in the eastern part of the site; two hearths, a well and a pit full of smithing waste were discovered in excavation Trench 2. Nearby were the fragmentary remains of a rammed brickearth and gravel surface, containing fragments of slag, which could have formed a working surface. The two hearths cut into the brickearth were located to the south of the gravel surface. A similar working surface was recorded in evaluation Trench 3. The northern kidney-shaped hearth contained a charcoal fill as well as a smithing hearth bottom, some undiagnostic slag (probably broken smithing hearth bottoms), vitrified hearth lining, cinder, and some nails. The second hearth had an elongated flue and produced a large amount of fired clay, which may have formed part of its lining; it also contained a smithing hearth bottom and debris similar to the other hearth. In addition, the hearth fill contained some flake hammerscale; this type of micro-slag is produced in nail manufacture. Postholes were recorded surrounding the hearths; these may have formed part of a wind-break or similar structure, though they did not demonstrate any discernible ground plan. Smiths needed to work in an environment with some shadow in order to see the fine differences in colour of the heated iron which told them when the iron had reached the required temperature for the object they were producing or working on. The manufacture of such simple objects as nails may only have required a rough shelter of some kind.

The possible 2nd-century smithy was further evidenced by a large rubbish pit backfilled with slag from 16 smithing hearth bottoms and a considerable quantity of undiagnostic slag, some vitrified hearth lining, cinder, mid-2nd-century pottery, and quantities of charcoal. A small pit very close to both hearths contained 7 smithing hearth bottoms and almost 3kg of undiagnostic slag. The rammed gravel surface dating to the late 1st century was repaired and extended in the 2nd century and contained a smithing hearth bottom and a very small amount of slag. The presence of a well, which was surrounded by several postholes and stakeholes on its edges, would have been necessary for the smith to draw

water. The posts and stakes may have formed a structure over the top of the well with a pulley system for collecting the water. An east–west gully ran into the well from the west and could have formed part of a water collection system. A shallow pit cut into the silted up well contained a pottery assemblage dating to AD 160–200+. Therefore, the well and probably the smithy were redundant by the late 2nd century. A curvilinear gully filled with gravel and late 2nd-pottery was recorded to the south-west of the hearths and could have drained water away from the working area.

In the east of Trench 3, a possible east–west beam slot, a further well, and a rammed gravel surface were located. There were no postholes found associated with the possible beam slot, although it may relate to the well and gravel surface and represent an extension of the activities found in Trench 2.

Site 2

Activity during the period AD 70–200 consisted mainly of groups of postholes and stakeholes

(Figs 5 and 6). These represent at least one building phase that was bounded to the west by a north-west–south-east aligned ditch. This western boundary contained pottery and a copper-alloy brooch dating to AD 70–120. The post and stakeholes were aligned north-west–south-east and, although many of them lacked dating evidence, they formed alignments with datable features and were all sealed by a late 2nd-century Roman gravel deposit. The alignments of post- and stakeholes, together with a beam slot, represent at least one, or possibly several, post-built buildings or phases of building.

Posthole Groups 1 and 2 and a beam slot formed north-west–south-east alignments approximately 3.5m apart, representing a small post-built building. This had dimensions of approximately 5m north-west–south-east by 2.5m north-east–south-west. Five of the post- and stakeholes along the western extent of the building (Group 1) contained freshly broken sherds of pottery, indicating that the building was constructed between AD 100 and 120. A posthole and a stakehole from Group 1 both contained sherds of pottery from the same vessel, confirming that
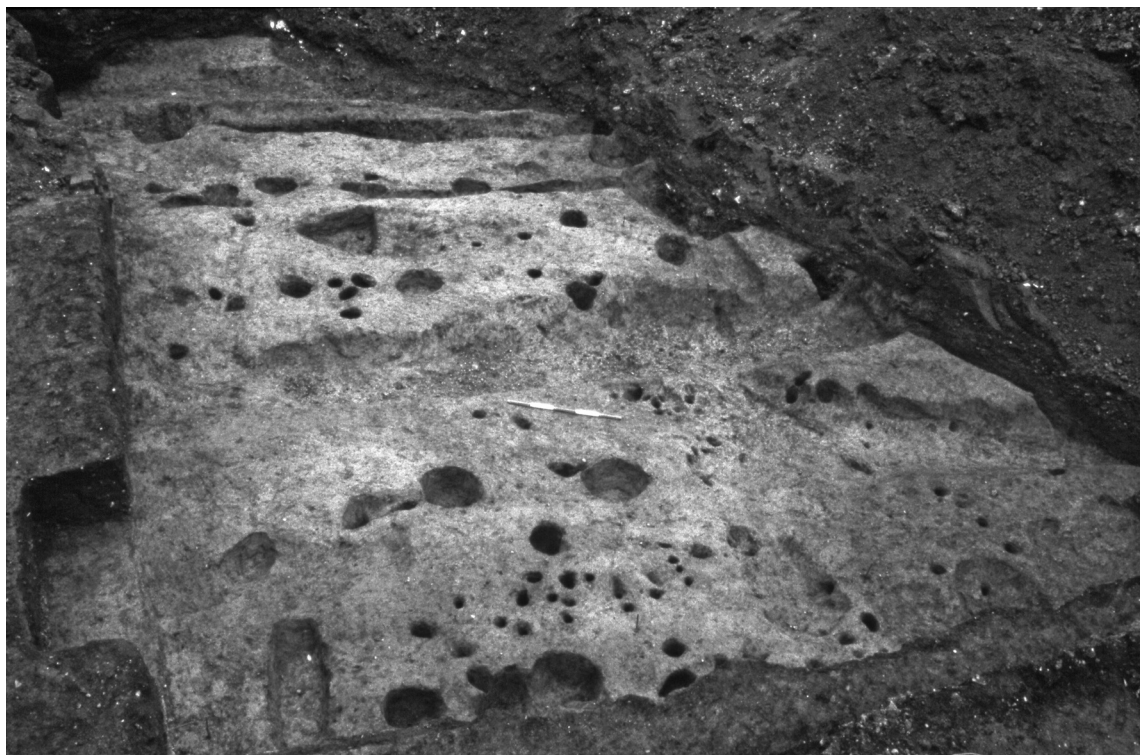
Fig 6. Roman occupation at Site 2, facing south-west

they were contemporary. The base of a late 1st-century vessel, located at the north-west end of the building, contained cremated remains and pyre material. The fill was much disturbed and the upper 60mm contained broken fragments of the vessel. The unidentifiable cremated remains were very small, with the largest fragments only 10–15mm in size, consequently no metric data could be collected from the fragments. Nevertheless the discovery of a likely human cremation urn buried just outside an early 1st-century building is a significant find for Roman Brentford.

A curvilinear ditch was found to terminate at the north-east corner of the building and may have drained water away from its roof. This ditch appears to have been dug between *c.*AD 90 and 110 and remained open until *c.*AD 200, and was therefore contemporary with the construction of the building and indicates the period in which the building went into disuse. The primary fill of this ditch contained a copper-alloy coin from the reign of Trajan, AD 115–117. Several stakeholes with 1st- to 2nd-century sherds were revealed during the excavation of the ditch, but their relationship with the ditch was uncertain. A shallow patch of *in-situ* burning, located to the north of Building 1 and south-east of the curvilinear ditch, was interpreted as a domestic hearth. The hearth appears to be external and may be associated with Building 1 or the possible building to the east.

Posthole Group 3, the easternmost north-west–south-east alignment, may represent a fence line. However, together with other postholes to its west, it may be associated with Groups 1 and 2 to form a larger structure, or it may represent the western side of a structure extending eastwards beyond the limits of the excavation. Four of the 18 post- and stakeholes in Group 3 produced pottery dating to the late 1st and 2nd century. A group of 9 stakeholes to the south of the curvilinear ditch was sealed by a layer of gravel containing mid- to late 1st-century pottery. This gravel layer may have formed part of an early gravel yard surface on the site, similar to the gravel surfaces found at Site 1. A shallow pit was located in the north-east of the trench and contained the sherds of a single 2nd-century amphora. A group of 22 stakeholes formed a north-west–south-east alignment to the west of the Group 3 features, though none produced dating evidence. A further 11 features, including post- and stakeholes and

pits, were discovered on the east side of the trench, although they retained no relation with the discernible structural alignments. All of the late 1st- to 2nd-century features were overlain by a fairly flat, 0.20–0.30m thick, gravel deposit, representing an external surface that covered the entire excavated area. The gravel produced just two abraded pottery sherds dated to *c.*AD 70–200, suggesting the abandonment of the structures after this period. Although of unknown function, it was interpreted as a yard surface since it was compact and possibly tamped, and associated with occupation in the vicinity of the site.

Discussion

Finds recovered from the fills of the roadside ditch at Site 1 have provided evidence for determining the nature of the road at this point and enabled analysis of the local environment and activities (Fig 4). Important Roman roads were often metalled with iron slag brought from elsewhere, and its presence therefore indicates that some repair or resurfacing work took place when the ditches were recut, or that as the edges of the road eroded, quantities of slag fell into the ditch. The density of slag recovered from the ditch may have been higher along this stretch of the road because of the proximity to the Brent river crossing (Fig 7).

Evidence for occupation during the period *c.*AD 70–200 was well represented at Site 2 (Fig 6). The pottery assemblage was fairly large and consisted of many large fresh, unabraded sherds; although ritual activity was represented by the cremation burial, the pottery assemblage is more characteristic of domestic deposition, probably associated with the structures described above. All of the pottery from the features in this phase fell within the period *c.*AD 70–200, suggesting it was well stratified and *in situ*. This conclusion is supported by two copper-alloy brooches, one of which was in exceptional condition, and a coin, also consistent with the pottery dates. The building/s probably represent domestic dwellings located alongside the Roman road, which probably ran to the north of the site. They could represent a farmstead on the fringes of the Roman settlement of Brentford, but it is much more likely that they were a continuation of the ribbon development along the Roman road.
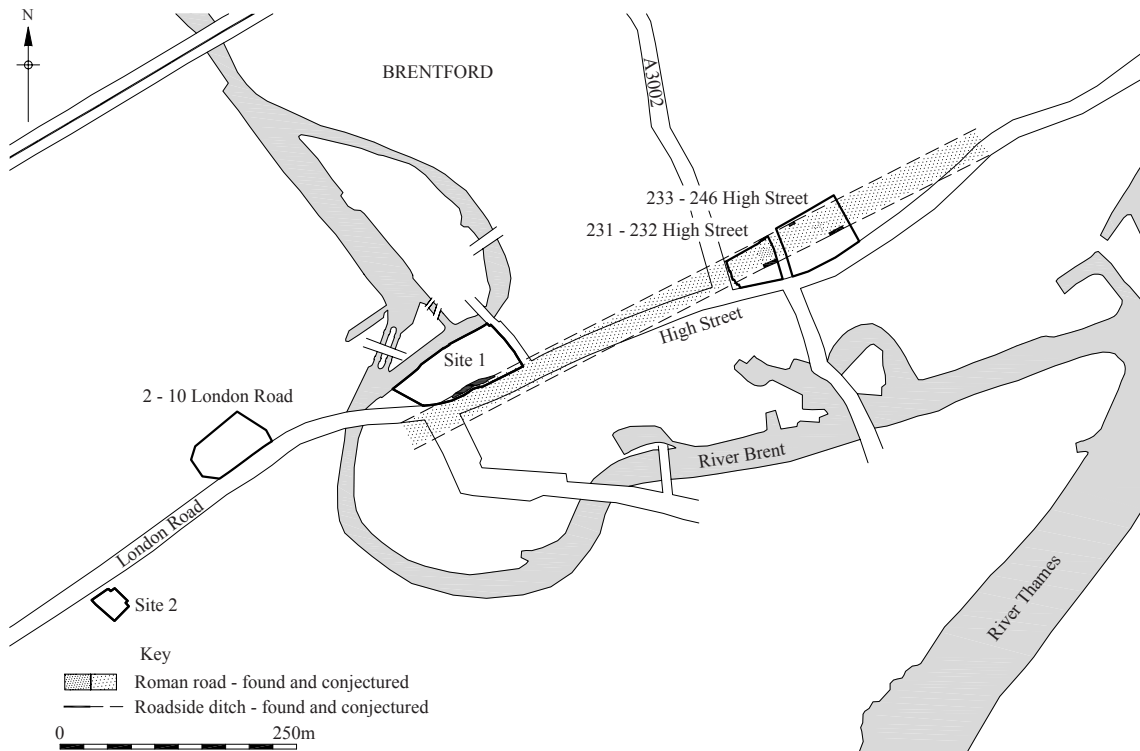
Fig 7. Conjectured line of Roman road through Brentford

LATE ROMAN AND SAXON BRENTFORD

Fragmentary beam slots dating to the 4th century were discovered at 233–246 High Street, and substantial postholes from a 4th-century structure were found at 141–147 High Street. The name Brentford refers to the ford over the River Brent and first appears as Breguntford in AD 705, when King Offa's Council met at the settlement (Weinreb & Hibbert 1983, 86). An early Saxon structure was discovered at 233–246 High Street in the form a sunken-floored building, at least 2.5m in length. Pottery recovered from it dated to *c.*AD 450–550.

PHASE 6: AD 200–650

Site 1

A possible building, formed by an east–west slot and three postholes, provided evidence for mid to late 4th-century occupation on the site (Fig 3). The freshly broken sherds of pottery (AD 330–420) from the beam slot probably

date the building's demolition, while a single posthole dated to the late 3rd century suggests it was occupied during the early 4th century. Two similar square-shaped postholes were also recorded in close proximity; although the pottery within their fills dated to the late 1st century, the sherds could be residual.

The upper fills of the recut roadside ditch indicate that it gradually silted up throughout the 3rd and 4th centuries, suggesting that no major roadworks were undertaken in the later Roman period, and the ditch was allowed to fill up naturally. However several postholes and stakeholes were recorded, aligned east–west along the slope of the roadside ditch and driven into the fills of the recut ditch. This implies that a revetment or fence was constructed along the north edge of the roadside ditch between the 3rd and 4th centuries, perhaps to slow the silting of the ditch.

A north–south aligned ditch was dug during this phase to the west of the possible building, forming a boundary running perpendicular to the road. The ditch contained pottery dating

AD 270–400, and therefore silted up in the 4th century; it could have formed the western property boundary of the 4th-century building. A series of intercutting pits was found immediately to the west of this ditch, truncating the upper fills of the recut roadside ditch and its southern extent. One of these pits, found on the line of the ditch, contained an assemblage of pottery dating AD 270–330. Several shallow pits were sealed by a gravel layer which probably comprised the eroded road surface and sealed the upper fills of the roadside ditch. One of these shallow pits cutting into the top fill of the roadside ditch contained a sherd of pottery of early Saxon date within an assemblage of abraded, possibly residual, early 3rd-century pottery. The gravel could have been dispersed as a result of ploughing up to the edge of the road in the sub-Roman period. Further west a wide north–south ditch contained a pottery assemblage with a wide date range of AD 250–400. The location of this series of pits outside the boundary ditch suggests that the land to the west of the property was not occupied, and was available for rubbish deposition beyond the boundary. A single 4th-century posthole was recorded in the west of Trench 2 and formed the only Late Roman feature discovered in the eastern part of the site.

Site 2

A north-west–south-east aligned, late 3rd to early 4th-century drainage ditch was located on the south-west side of the trench (Fig 4). The ditch contained one homogeneous fill which produced pottery sherds dated to the period *c.*AD 270–330; these were characteristic of locally produced wares. Although there were no other features dating to this phase, the high concentration of finds from the ditch is indicative of occupation nearby, suggesting it may have formed a property boundary. As in the early Roman period, it could have formed part of a field system or property development running perpendicular to the Roman road. The 18th-century ploughsoil that overlay the late Roman features contained a sherd of an early Saxon jar dated AD 450–650.

The lack of evidence for significant late Roman and early Saxon occupation at the sites appears to reinforce Canham's view that the western end of the town was deserted from AD 400 to 1200. The reduction of traffic along the road in the late Roman period probably led to the decline of the settlement.

'NEW BRENTFORD' AND 'BRENTFORD END'

Few medieval structures have been found in Brentford, probably due to truncation by post-medieval cellars located within the same property boundaries as many of the medieval buildings. The church of St Lawrence, which stands opposite the site, was certainly in existence in the late 12th century when Maurice de Berkeley was recorded as one of its benefactors. Although Brentford is not mentioned in the Domesday Book, it is clear from later evidence that the administrative entity of Brentford had already been established in the pre-Conquest period. Old Brentford lay in the parish of Ealing, in the hundred of Ossulstone, and New Brentford lay in the parish of Hanwell, in the hundred of Elthorne. Brentford End lay in the parish and hundred of Isleworth to the west of the River Brent. The emergence of the three settlements as distinct units can be traced in documents; late 13th-century 'West and East Braynford' became known as Old and New Brentford in the 15th century, and references to Brentford End occur by the early 16th century (Canham 1978, 5). The ford over the River Brent was bridged by at least the 13th century and a market and fair were granted by Edward I in 1306, at New Brentford. At 141–147 High Street a 14th-century robbed out wall and postholes were discovered, and further east at 233–246 High Street two features of the same date were recorded. In the early 15th century a second bridge was built of stone, slightly to the north, a second chapel was built in New Brentford, and two houses for poor travellers were added, known as the hospital of St Mary, St Anne and St Louis (Canham 1978, 5). Brentford was known as a stopping-place for travellers by the early 15th cenrtury. There were a number of inns along the High Street, including the Red Lion in New Brentford where Henry VI held a meeting of the Order of the Garter in 1446 (O'Connor-Thompson 1998, 57). The walls of a chalk-built cellar were observed during the excavation of a service trench in the High Street which were interpreted as belonging to the Red Lion Inn.

PHASE 7: LATE 10th–11th CENTURY

Two parallel ditches aligned north-east–south-west at the western end of Trench 3 (Fig 8), probably field boundaries, represent the earliest
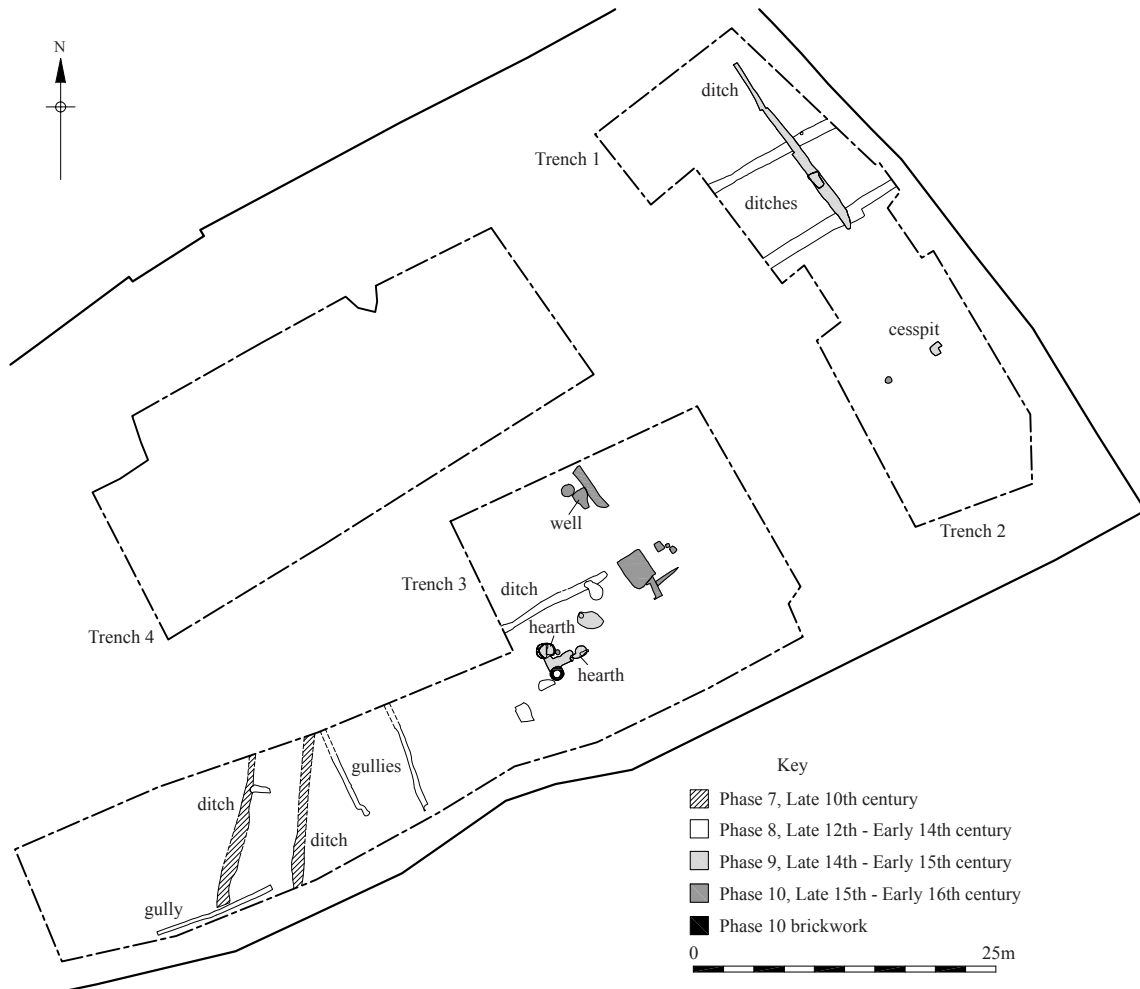
Fig 8. Site 1: Phases 7, 8, 9 and 10

phase of activity on the site post-dating the Roman period. The pottery assemblage from both ditches consisted of early medieval sandy wares, dating from AD 970–1100. The ditches were 0.4m deep and U-shaped in profile.

PHASE 8: LATE 12th– EARLY 14th CENTURY

Towards the centre of Trench 3 an east–west ditch with a rounded eastern terminus contained pottery with a deposition date of 1170–1350. Two rubbish pits found to the south of this ditch dated to 1180–1350; a third pit truncated the eastern end of the ditch. The 13th/14th-century activity on the site is characterised by a change in alignment of the north-east–south-

west ditches to north–south gullies running southwards to the road. The westernmost gully produced the complete profile of a Kingston ware cooking pot with an everted rim, dating from the late 13th/early 14th century. A similar gully, aligned east–west, was found in the west of the trench; this may have been connected with the north–south gullies, draining water off the land towards the River Brent. A linear feature ran into the southern limit of Trench 4, and may have represented the northern terminal of a north–south gully, which silted up in the late 13th/early 14th century. Evaluation Trench 3 contained two medieval rubbish pits, one of which contained material dated to 1100–1300; both were sealed by a layer of redeposited brickearth. Two V-shaped ditches ran east–west

across Trench 1; their fills contained 14th-century pottery and residual Roman pottery. The northernmost of the two had a single posthole cutting into its northern edge.

PHASE 9: LATE 14th–EARLY 15th CENTURY

In Trench 1 a north–south ditch cut through the two east–west ditches; the terminus of the ditch was found at its south end, indicating that it drained into the River Brent to the north. Between the primary and secondary fills was a layer of peg tile, which appeared to have been purposefully laid in order to aid its drainage. The ditch contained medieval pottery sherds (1340–1450) and was probably deliberately backfilled during this period. Truncating the ditch was a sub-circular rubbish pit, backfilled in the late 14th/15th century. Overlying the pit was a spread of gravel also deposited around the same date. The north–south ditch could have formed a property boundary for a riverside development, while the pit and gravel surface indicate that land close to the river's edge had begun to be exploited. In Trench 2 a small pit and a sub-rectangular cesspit were backfilled in the late 14th/15th centuries. These features were most likely associated with a property fronting onto the High Street.

In Trench 3 two phases of pitched-tile hearths were recorded at the rear of a High Street property boundary. Little of the earliest hearth remained, with only a crescent surviving. This was replaced by a new circular, pitched-tile hearth. To the east of this hearth was a second complete, circular, pitched-tile hearth; the fill beneath this hearth contained a pottery assemblage dating the construction of the hearth to the late 14th/15th century. The tiles forming the hearths were pushed into a soft clay layer; the area between the two hearths was scorched. It is likely that these hearths were contemporary and, if they were in use at the same time, a small-scale industrial or catering function could be inferred. The hearths were probably housed in an outbuilding (of which no archaeological traces survived), located to the rear of a property fronting onto the High Street.

No features or deposits dating to the medieval period were found at Site 2. A single sherd of Kingston ware cooking pot *c.*1230–1400 was recovered from the 18th-century plough soil. Between the abandonment of the site in the late

Roman period and the re-occupation in the late 17th century the land probably remained part of an open field system.

DISCUSSION

From the 12th to 15th centuries the Brentford Lock site appears to have remained relatively open ground, possibly with an agricultural or horticultural use, as inferred from the presence of boundary ditches. The rubbish pits found from the 13th century and later imply that the settlement was expanding westwards towards the River Brent. Two 14th-century gullies ran perpendicular to the High Street, indicating a change in alignment from the earlier ditches, and possibly signifying the beginning of property development along the High Street. The western part of medieval Brentford became known as New Brentford, and the properties recorded during the excavation would have stood opposite the church of St Lawrence. One of these properties is notable because of the number of hearths at its rear and the continuity of the activities that were taking place. Three 15th-century pitched-tile hearths, possibly used for baking, were discovered; cutting into these was an unusual brick structure with a tiled floor dating to the 16th century (see below).

POST-MEDIEVAL EXPANSION

Of great importance to the prosperity of Brentford was the expansion of the City of London in the 16th century. The growing importance of the market at Brentford combined with the presence of the Bath/Exeter road was reflected in the number of inns established in New and Old Brentford. The High Street formed part of the main Bath and Exeter road, and Brentford was the first stopping point for the frequent mail and stagecoaches en route to these destinations. At New Brentford the food from the market, and cloth from packhorses, could easily be transported by road or transferred onto the River Thames to be shipped to London.

There were at least ten inns in New Brentford by 1614 and this had risen to about forty by 1770. The number of inns reflects not only a rise in population, but also a need to cater for the increasing number of travellers. The Moses Glover map of 1635 covers the area around both the subject sites, and depicts buildings lining the High Street, with hedges forming property

boundaries, leading back towards the Brent on the north side of the High Street. An inn called the 'George' is shown almost opposite St Lawrence's Church and may have been located at Site 1. There was a coaching inn at Site 2 from the 17th century known as the Angel Inn; the precise foundation date of this building is unknown. It does not appear on Glover's 1635 map of the Syon Estate but it does appear on John Rocque's Survey map of 1746, suggesting a construction date between 1635 and 1746 (Hawkins 2001, 8).

A second battle of Brentford took place in 1642, during the Civil War, when the victorious Royalists went on towards London only to be turned back at Turnham Green (Weinreb & Hibbert 1983, 86). By the mid-17th century the settlement of Old Brentford had a higher population (259 premises) than New Brentford (132 premises), as exemplified by the 1664 Hearth Tax Returns (Canham 1978, 6). Structures were recorded at 136 High Street in the form of masonry foundations from a 16th-century timber building. The building had been at least partly demolished in the 17th century; a paved yard and an alley were laid over the foundations.

PHASE 10: LATE 15th–EARLY 16th CENTURY

A circular brick structure, with a reused, glazed tile floor and of a 'beehive' shape, was located to the south of the pitched-tile hearths, sunk 0.4m deep into the ground within Property 3D (Fig 9). The internal diameter of the structure was 0.65m at the top, and 0.85m at the base. A large disc of iron, possibly a lid, was found lying on the tiles. This structure was backfilled with a deposit composed mostly of charcoal and ash

Fig 9. Site 1: 'Beehive'-shaped brick structure

with some animal and fish bone. The ceramic assemblage dated the structure's disuse to the late 15th century, and consisted mostly of drinking vessels, including a Tudor Green ware lobed cup. It is not clear what the function of this feature was, but it could not have been used as an oven since there was no flue, and because it was buried, it would have been difficult to clean out. The sunken feature could have been used for storage, perhaps as a yeast store. A pit with a posthole cutting into it was found within the same property boundary.

A series of pits and a north–south ditch (Figs 8 and 10) were dug along the north–south boundary of the adjacent property to the east (3C). A large square pit located to the rear of the property was backfilled mostly with drinking vessels, including two German Siegburg stoneware drinking jugs from the late 15th century. The pit truncated a north–south ditch, into which a gully ran from the west; a flint hammerstone was recovered from its fill. Four postholes may have formed part of a post-built building located to the east of the ditch. A 1.2m-deep well was located to the north of these features; this went out of use by the late 16th century. The well appeared to truncate a further section of the north–south ditch.
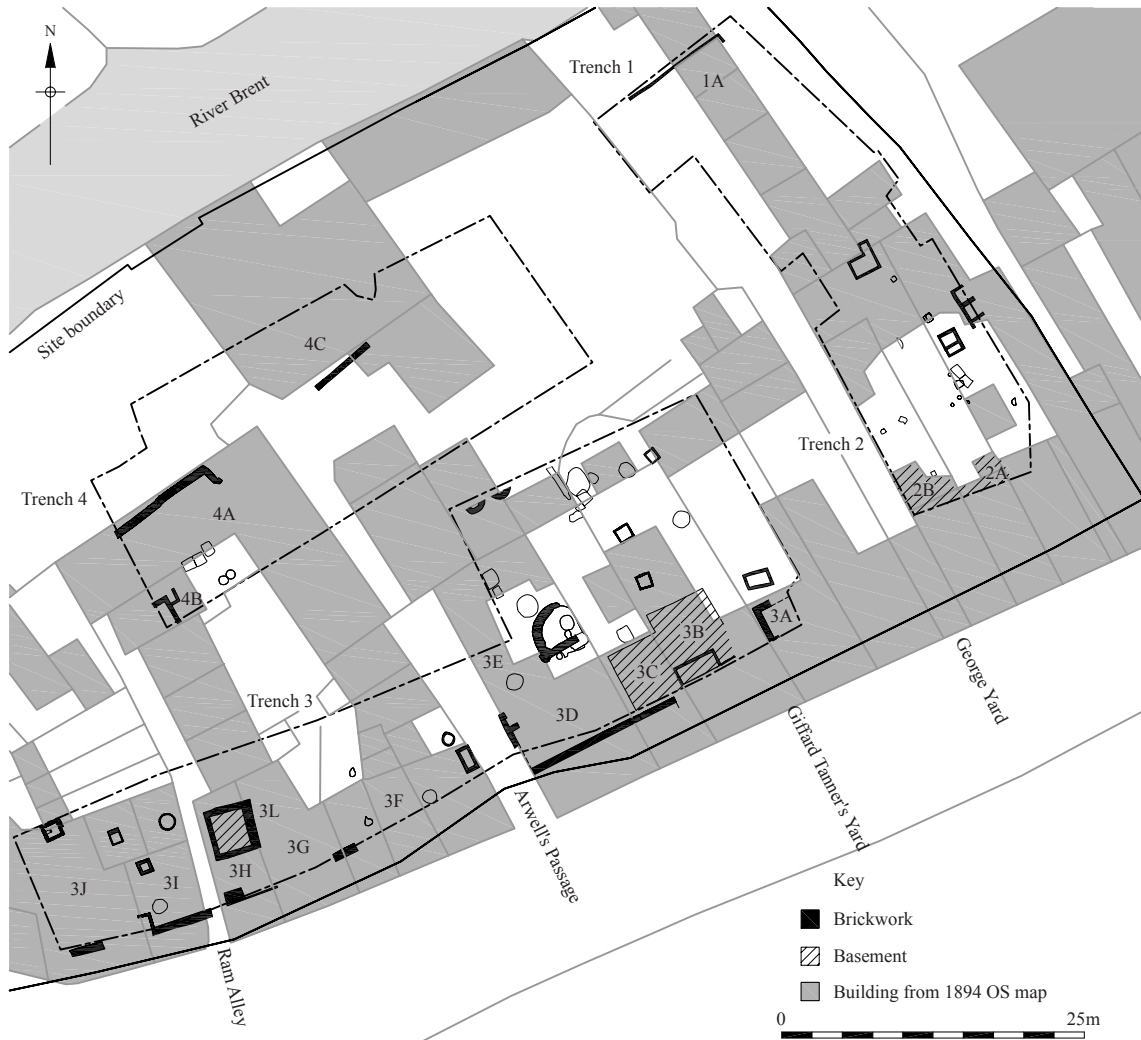

Fig 10. Site 1: Phases 10, 11, 12 and 13 and OS Map 1894

PHASE 11: LATE 16th–EARLY 17th CENTURY

The well in Property 3C was deliberately back-filled with a 0.6m-thick deposit of cattle skulls, followed by 0.6m of roof tiles. The skulls from the base of the well had had their horncores removed, which may link them to the late 16th-century horncore pits found in evaluation Trenches 1 and 5 to the north, signifying the deliberate and organised deposition of waste materials from a probable nearby tannery. A sub-circular pit truncated the top of the backfilled well and the north–south ditch, and was in turn cut by a sub-circular pit and a sub-rectangular rubbish pit, the latter containing further horncores and late 16th-century pottery. Two shallow features found adjacent to the rubbish pit were dated between 1550 and 1700; they were probably formed by rubbish being trodden into the ground when the pit was in use.

Two sub-rectangular, brick-lined cesspits were sited in the back garden of a property (3B) fronting onto the High Street, and a third probable brick-lined cesspit lay in the back garden of Property 3A (Fig 10). The bricks with which these were built dated between the 15th and 17th centuries. The masonry features in the gardens behind Properties 3A and 3B are earlier than the brick structures at the front of these properties. This suggests either that medieval or early post-medieval houses were partially or wholly rebuilt in the late 17th–19th centuries, or that the walls found were later extensions to the original buildings. A brick wall associated with a 16th/17th-century building in Property 3C was recorded along the southern edge of Trench 3, and a sub-circular brick structure of uncertain function, constructed with contemporary bricks, was located to the rear of the adjacent property (3D). Further west another sub-rectangular, brick-lined pit was built in the back garden of the next property (3F). A brick wall forming part of the building in Property 3D was also rebuilt during the 17th century and may represent a double fronted building. This wall truncated the north-western corner of the structure at Property 3C. It is unclear whether the whole of Building 3C was rebuilt at this time or only the north-west corner.

A sub-circular pit or possible well was found in Property 3F and was backfilled in the late 16th century. To the east of this pit, a brick-lined pit was found in the edge of the trench; the bricks dated between the late 15th and 17th centuries. Further west in Property 3I, another sub-circular pit was dated to the late 16th/early 17th century and contained horncores within its fill.

An east–west river wall was built in the north of Trench 1 (Property 1A) in the 16th or 17th century. The main wall and a north–south return were two bricks thick. The north–south element was laid in Flemish bond; it is possible that at least part of this structure represents a riverside building, rather than a river wall. Interestingly, the north–south walls are located along the late medieval north–south ditch, indicating a continuity of boundaries in this part of the site.

Two further east–west brick walls in Trench 4 formed a continuous stretch of river wall at Properties 4A and 4C; both were constructed in the 17th century. The westernmost was 2½ bricks thick decreasing to 2 bricks thick to the east. The wall had a north–south dog-leg before an east–west return which was apparent at the east end of the wall. These walls could also form the walls of a warehouse building. The bricks were relatively well fired and were dark red in colour; the use of relatively strong bricks would have made the brickwork less vulnerable to water erosion.

Three postholes recorded in Trench 2 probably represent one side of a post-built structure. Several stakeholes were found on the western side of this possible structure, four of which could have formed a fence line.

Evaluation Trench 1 revealed further stakeholes and postholes which could be dated to between the first quarter of the 16th and the mid-17th century. Some large pits were also recorded within the evaluation trench (later excavation Trench 4), one of which contained cattle, sheep and goat horncores, and roof tiles. Three sub-rectangular pits found in evaluation Trench 5 were backfilled almost exclusively with cattle horncores, plus some roof and floor tiles with a probable late 16th-century deposition date. Examination of the horncores revealed homogeneity of size and therefore some deliberate selection of particular sized horncores or cattle. The material appeared to have been deliberately placed within these pits, suggesting that the land close to the River Brent was already enclosed, developed, and managed at this date.

PHASE 12: LATE 17th–18th CENTURY

Across the southern half of the site a fairly

homogeneous layer of gravelly silt was deposited, containing a very wide date range of finds. The formation processes of this layer are not clear but most likely represent a gradual reworking of the gardens to the rear of the properties fronting onto the High Street. The series of intercutting pits found in the north of Trench 3 was further truncated by a sub-circular pit, dating to the mid to late 17th century, and a ditch to the west of the Phase 9 north–south ditch. In the west of the trench two postholes were arranged in a north–south alignment and could represent a fence line extending from the rear of a property; the posts were erected in the late 17th or early 18th century.

In the 18th century, the beehive-shaped brick structure, found to the rear of Property 3D, was overlain by a sub-circular brick structure, which formed a large semi-circle, apparently open at its east end. The walls were one brick thick, and the structure measured 4m north–south by 2.3m east–west. The presence of this oven-type structure directly above three earlier hearths and the buried brick structure indicates a continuity of land use to the rear of this property and strongly suggests the building fronting on to the High Street was a public house, kitchen, or a bakery functioning for a commercial market. Two rubbish pits were dug to the north of this structure and backfilled in the late 17th century.

In the south-western corner of Trench 4 at Property 4B, two circular pits were found with imprints of the staves from timber barrels on their edges. Both were *c*.0.7m in diameter; a fragment of poorly preserved timber was found at the base of the westernmost pit. It appears that the barrels were used to line the pits, which may have formed soakaways or small tanks for the tanners. The pits were backfilled in the 18th century with the selective disposal of particular animal bones. The animal bone assemblage was composed mostly of cattle metacarpals treated in a consistent manner. Repairs were undertaken on the east–west river wall in the north-west of the trench.
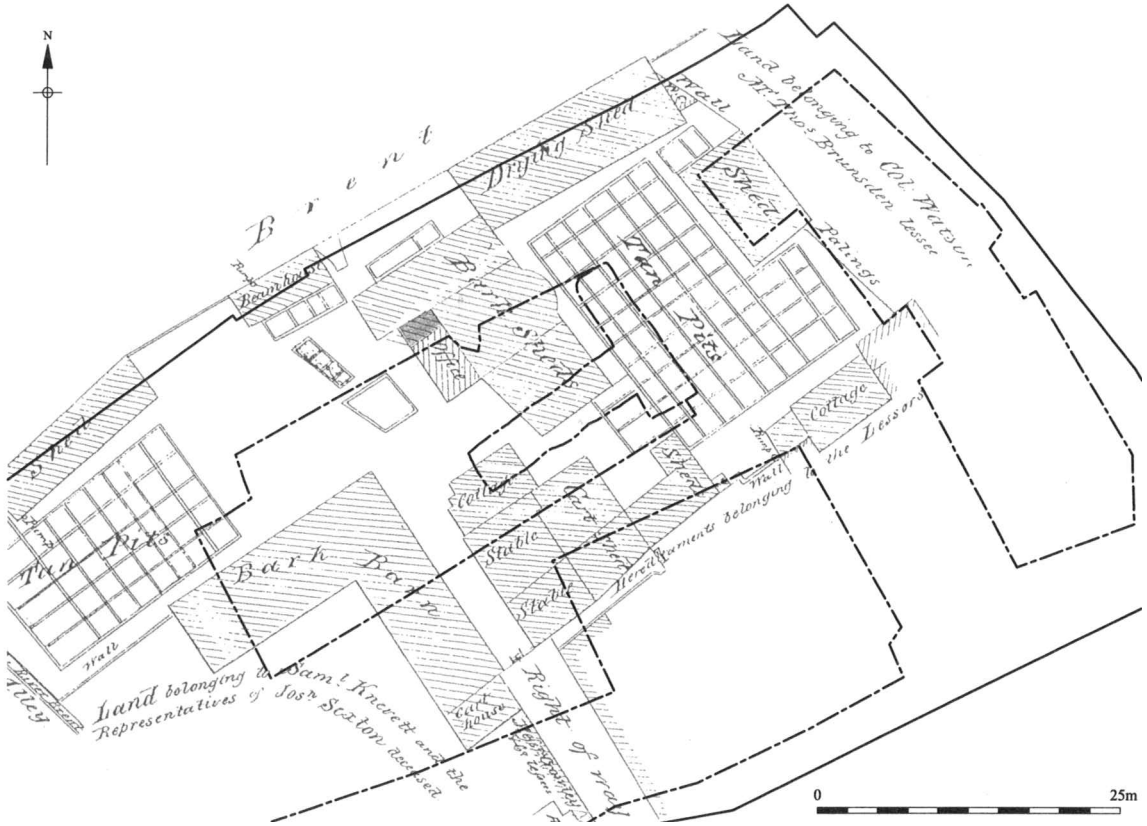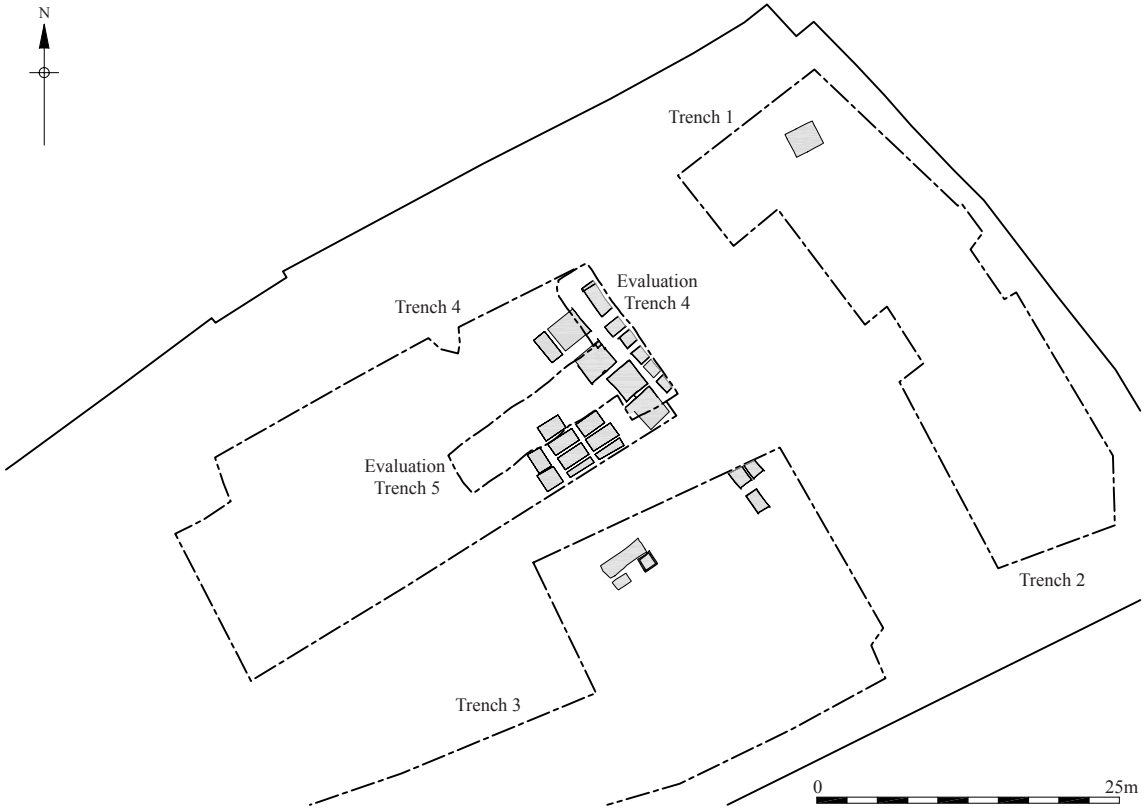
A north–south brick wall was aligned on the same axis as the stakeholes in evaluation Trench 1, and an associated pebble surface was also found. A further pit contained probable tanning waste in the form of cattle, sheep and goat horncores, and the backfill of the wall also contained horncores. The presence of goat horncores is significant as goat leather is used for the production of high quality leather products. In the later 18th century a north–south brick drain was constructed along the length of the trench and a pit was backfilled exclusively with brick, tile and horncores. At the western extreme of the site, evaluation Trench 2 revealed 18th-century ground-raising dumps, and an east–west brick wall, probably representing the rear of a property which fronted onto the High Street. Evaluation Trench 3 contained several 17th-century dump layers and two pits; one was backfilled with residual medieval roof tiles and animal bone, including horncores, the other contained ceramic building materials and cattle horncores. Thus it seems likely that tanning or hornworking was taking place nearby and that a medieval building was demolished or repaired in the area. In evaluation Trench 5 an east–west brick wall was constructed; this is shown as part of the building with an eastern bow façade on the 1873 Indenture Map of the tannery (Fig 11). An apparently watertight, wood-lined pit may have been used for soaking materials prior to or after the tanning process. The pit was backfilled in the 18th century with residual medieval ceramic building material and a concentration of Staffordshire Salt Glazed ware. This pit is also shown on the 1873 Indenture Map, and the pottery assemblage supports the suggestion that the structure to its east was a domestic structure of some status, rather than having an industrial or business function.

By the end of the 18th century, the property boundaries running perpendicular to the High Street were already established and mapped onto a plan of New Brentford Street of *c*.1800 (not illustrated). The brick buildings within these existing property boundaries were mostly rebuilt between the 18th and 19th centuries. Within the two westernmost properties (3I and 3J) of Trench 3 brick buildings were constructed contemporaneously, at some time between the late 17th and 19th centuries. The eastern wall of the building in Property 3I also formed the wall of Ram Alley. A sub-rectangular cesspit was in use in the garden of Property 3I until it was backfilled in the 18th century; its fill contained mid-18th-century clay tobacco pipes and pottery (including a number of teawares), a bone comb, a bone brush handle, and fragments of a bone fan.

Site 2

From the end of the Roman period until the 17th

Trench 1

Trench 4

Evaluation
Trench 4

Evaluation
Trench 5

Trench 2

Trench 3

N

0   25m

N

Brent

Drying Shed

Land belonging to Col.n Watson

Mr Thos Brunsden lessee

Wall

Shed

Bark Shreds

Tan Pits

Palings

Boundhouse

Bark Shreds

Cellar

Stable

Stable

Cart shed

Cottage

Mill to the Lessors

Hereditaments belonging to the Lessors

Tan Pits

Bark Barn

Wall

Alley

Land belonging to Sam.l Knevett and the
Representatives of Jos.r Sexton deceased

Right of way

Cart house

0   25m

century, the site was probably situated in open fields as represented by a ploughsoil deposit covering the whole of the trench. The site was occupied by the Angel Inn which is clearly identifiable on John Rocque's map of 1746, though its precise date of origin is not known. It was a coaching inn and thus had stabling facilities at its rear. In the 18th century two rubbish pits were dug and backfilled; one was backfilled with the partially articulated skeleton of a horse, probably waste from the tanning industry or a by-product of the transport activities linked to the coaching inn. A north-west–south-east-oriented brick wall, dated between the late 17th and mid-19th century, continued south-east beyond the limit of excavation. Two postholes were located in the north of the trench on an east–west alignment, possibly representing stabling structures.

DISCUSSION

The post-medieval evidence from Site 1 has shown a consolidation of the late medieval properties fronting the High Street, which is borne out in the documented population increase and the expansion in Brentford. The first tannery is evident on the site from the late 16th century. The importance of post-medieval Brentford as a staging-post along the road to London is implied by the recovery of drinking jugs from the site, which could suggest the presence of inns nearby. The results of archaeobotanical and zooarchaeological analyses at Site 1 (see below) provide information regarding the nature of wood exploitation and the local vegetation in the post-medieval period, and identify the waste products of the tannery.

18th- AND 19th-CENTURY INDUSTRIAL DEVELOPMENT

By the late 18th century industry had become an established feature of Old and New Brentford, prior to the completion of the Grand Junction (later Grand Union) Canal in 1800. The building of the canal and the railway acted as a further catalyst to Brentford's industrial development. The construction of the railway

significantly reduced the number of stagecoach journeys along the High Street from the early 1840s (O'Connor-Thompson 1998, 61). At 233–246 High Street the remains of an 18th-century pipe kiln, which was in use until *c*.1760, were discovered. A trade directory of 1793 records a flour mill, a malt distillery, brick and tile making, and an extensive pottery. Large industrial units were developed: Booth's Royal Brewery and the Brentford Gas Company to the west of Kew Bridge, and beneath a huge granary stood a bullock hose for the feeding and fattening of bullocks for the London butchers (Canham 1978, 6). By the later post-medieval period the western part of Brentford had become crammed with low class housing, alleys, industries, and wharfs. In the 18th and 19th centuries butchery and tanning industries were present on the River Brent; such processes reputedly made Brentford 'the filthiest place in England'.

PHASE 13: LATE 18th–19th CENTURY

Site 1

In Trenches 1 and 2 three sub-rectangular, brick-lined pits and a single tanning pit were built. The tanning pit probably lay within the property accessed by George Yard. The brick-lined pits lay to the rear of the easternmost property (2A). The cellars of buildings fronting onto the High Street within Properties 2A and 2B were found at the south of Trench 2.

By 1800 the property boundaries were crystallised around Ram Alley, Arwell's Passage, Giffard Tanner's Yard, and George Yard (Fig 10). The measured property boundaries of the *c*.1800 survey are also in evidence on the *c*.1800 large-scale survey of the Clitherow estate. A number of buildings along the southern edge of Trench 3 are represented by walls of brick fabric 3032, and in some cases 3046. These are walls or extensions associated with Houses 3A, 3B, 3E (extension of 3D), 3G, 3H, 3I and 3J. The structures complete the sequence of properties fronting the High Street that fall within excavation Trench 3.

The property located at the east end of Trench 3 (3A) lay to the east of Giffard Tanner's Yard. A

Fig 11 (opposite). Tanning pits (above) surveyed in and (below) Indenture map 1873

north–south brick wall returned east–west and was strengthened with extra bricks to its south, representing the chimney stack of the late 18th- to 19th-century extension of the building in Property 3A. The 1838 tithe map shows the property fronting the High Street as one unit, but the yard behind has been subdivided. By 1865 the property was divided into two buildings with rear extensions adjacent to each other; it retains the same boundaries in 1894. A passage between Buildings 3A and 3B is labelled as 'Mr. Giffard the Tanner's yard' on the *c.*1800 survey. Directly in line with this passage, in Trench 4, an arrangement of tanning pits was found. An east–west brick wall formed part of an 18th–mid-19th-century building at Property 3B. The vaulting on its eastern portion may represent a storage area, probably located below a raised ground floor. The western portion may form the north–south party wall between Buildings 3B and 3C. These brick walls have identical mortar and are therefore likely to have been built at the same time. Two circular 19th-century brick soakaways were constructed in Trench 3; both were over 5m deep from the top of the brickearth and both had corbelled roofs with iron lids. The easternmost was located within Giffard Tanner's Yard, and was fed by several brick-lined drains which also connected to a late 19th-century north–south-aligned ceramic drain. The second 19th-century, corbelled roofed soakaway was located to the rear of Building 3E and stood alone. Also to the rear of Building 3E (though most likely within the tannery), an 18th/19th-century, brick-lined circular structure was found continuing beyond the northern limit of Trench 3. This structure may have replaced the nearby circular brick structure that was built in the 16th/17th century, as both had similar dimensions, with walls up to 0.5m thick, and could have formed receptacles for tanning materials or processes.

Building 3E represents the rear extension of 3D. An 18th- to early 19th-century brick wall extends further to the north than the rear walls of the adjacent buildings, along the line of Arwell's Passage. This can be seen clearly on both the 1865 and 1894 OS maps. Buildings 3F, 3G and 3H correspond to the three property boundaries which formed the frontage between Arwell's Passage and Ram Alley to the west. No brick walls were found representing a building at Property 3F, although the location of a 15th–17th-century brick-lined pit, extending beyond the southern trench edge, indicates the

rear wall of the property was set much closer to the High Street. This building was, by the 19th century, formed of 'Three houses' mentioned in the *c.*1800 survey. A possible brick basement at Property 3L, to the rear of 3H, probably dates to the mid-18th to early 19th century; the bricks are thicker and more regular than those of 3H, suggesting a later date. It represents either a rear extension associated with 3H or the first of a range of small buildings or cottages behind the High Street frontage, fronting onto Ram Alley. A building at the end of this range may be 4B, of similar date, represented by a brick corner structure in Trench 4. Its south-western element was built using bricks of fabric 3046; the north-eastern walls incorporated bricks of fabric 3032. The walls form an extension, sandwiched between the cottages and a large building (4A). The fact that the foundations were only one brick thick suggests either a single storey brick building, a timber-framed weatherboarded building (timber framing being commonly used in commercial premises and farm buildings in the 18th and 19th centuries), or a very low status brick dwelling. The building is situated within the large area of light industrial activity containing a tanning yard on the 1865 OS map. Three sub-rectangular pits, backfilled by the early 19th century and possibly associated with the tannery, were sited between the two buildings.

To the west of Ram Alley, up to the western edge of excavation in Trench 3, were two further buildings, 3I and 3J. They may represent a terrace or two semi-detached houses built between the late 17th and early 19th centuries. An opening in the rear wall of 3J was blocked in the late 18th–19th century, showing that it still stood then. Masonry features behind 3I include a circular, brick-lined well or soakaway, which had been backfilled with a mid-19th-century pottery assemblage, and a sub-rectangular brick-lined pit to its south. Two sub-rectangular, brick-lined pits lay within the garden to the rear of 3J. Dating the backfilling of the easternmost pit is difficult because only a residual sherd of Cheam ware was recovered. The westernmost of the two was backfilled with 19th-century pottery and some dress accessories, including a glass button and a brooch. Ironically, given its location within a few metres of the Roman roadside ditch, this soakaway also contained a 19th-century ceramic figurine of a Roman soldier carrying a sword, <102>. In Trench 4 lay the east–west brick wall

of an 18th- to early 19th-century building, of bricks of fabric 3032. This wall appears to form the nucleus of a large warehouse, 4C, accessed via Arwell's Passage and Tanner's Yard.

19th- AND 20th-CENTURY REDEVELOPMENT

The extensive 19th-century tannery at Site 1 is represented by the wood-lined tanning pits found in the western end of Trench 3 (Fig 10). In evaluation Trench 1, further drainage work respected the north–south alignment, while the construction of a new building was imposed on the east–west alignment. These divisions are likely to have been property boundaries which originated in the 16th century. Evaluation Trench 4 was occupied by ten tanning pits from the 19th-century tannery, which were laid out in uniform rows visible on the 1873 Indenture Map (Fig 11). An east–west brick wall bounded the tanning pit area to the north, and a brick surface abutted the wall and sloped down to the north and east. The tanning pits varied in size; they were constructed with timber planks and clay lined for waterproofing. The timbers at the base of the pits had a series of holes cut into them to facilitate drainage, through corner sumps. These planks may have been re-used from the 19th-century revetment structures on the banks of the River Brent to the north (Proctor & Moore 1996, 48). By the 19th century, the building with the bow façade from evaluation Trench 5 had been incorporated into the tannery and converted into an industrial or functional building.

PHASE 14: LATE 19th–EARLY 20th CENTURY

Site 1

The cellars found in the south of Trench 2 were rendered with Portland cement, indicating that these buildings still stood in the late 19th/20th century, until they were backfilled in the early 20th century. North–south aligned, 19th-century ceramic pipes were observed running downwards into the southern edge of Trench 3 and probably drained waste water into a main sewer beneath the High Street. The basements of the buildings fronting onto the High Street were backfilled with late 19th/20th-century domestic rubbish, including mattress springs and glass

soda bottles. During the late 19th or very early 20th century a warehouse was built in the north of Trench 4. Its internal column bases were supported on brick foundations bonded with a lime-based mortar. The bricks in the column bases were of fabrics 3032 and 3035. An internal partition within the warehouse was built in the late 19th/20th century, using bricks of fabric 3034 bonded with a Portland cement based mortar. This was built on the same alignment as the east–west wall from Building 4C. Running approximately north–south was an 18th- to early 19th-century property boundary wall that also incorporated a drain in fabric 3032. This may equate to the north–south boundary of the large L-shaped property shown on the 1865 OS map in the south-western corner of the tanning yard. Thus, by the 19th century Site 1 was densely occupied with houses fronting the High Street, and a substantial tannery was located on the River Brent. Many wood-lined tanning pits were found along the river, containing noxious substances which served to tan the leather. Brick-lined soakaways and cesspits in the back gardens of the houses were backfilled as the High Street properties extended further north, and properties were further subdivided until no gardens remained.

Site 2

Following a significant reduction in its size and status during the late 19th century, and the demolition of its east wing in 1915, the Angel Inn was completely demolished during the inter-War period and replaced with another public house building eventually renamed the Park Tavern in 1968. It was demolished in 2001 prior to the site's present development.

THE FINDS

THE ROMAN POTTERY

Malcolm Lyne

The Brentford Lock site produced 4,041 sherds (51,705gm) of prehistoric and Roman pottery from 167 contexts: a further 608 sherds (17,989gm) of Roman pottery came from the Park Tavern site. One sherd from the post-medieval ploughsoil at the latter site could be early Saxon in date but this is questionable. All of the assemblages were quantified by numbers

of sherds and their weights per fabric. These fabrics were identified using a x8 magnification lens with built-in metric scale for determining the natures, forms, sizes and frequencies of added inclusions: finer fabrics were further examined with a x30 magnification pocket-microscope where necessary. None of the assemblages was large enough for quantification by Estimated Vessel Equivalents (EVEs) based on rim sherds (Orton 1975). Museum of London Archaeological Services codes (Anon 2000) were used for Roman fabrics; a further numbered series with the prefix P was created for the prehistoric material:

P.1A   Handmade soft black fabric with sparse to moderate up-to 2.00mm calcined-flint filler.
P.1B   Similar but with profuse calcined-flint filler.
P.2   Handmade black fabric with profuse up-to 0.50mm quartz and sparse up-to 2.00mm calcined-flint filler.
P.3   Handmade fabric with profuse ill-sorted up-to 5.00mm calcined flint and sparse up-to 0.50mm colourless quartz filler.
P.4   Handmade soft black fabric with sparse up-to 3.00mm chaff vesicles.
P.5   Handmade soft black fabric with occasional up-to 1.00mm rounded vesicles from ?leached out chalk.
P.6   Similar but with additional sparse calcined flint.
P.7   Handmade grog-tempered black fabric with occasional up-to 3.00mm calcined-flint filler.
P.8   Handmade black fabric with silt-sized to 0.20mm quartz and up-to 2.00mm white and orange grog filler.

Roman pottery codes used in the tables are as follows:

AHSU: Alice Holt/Surrey; AMPH: Miscellaneous amphorae; BAET: Baetican Dressel 20 amphora fabric; BB2: Wheel-turned Black-Burnished from North Kent; BHWS: Brockley Hill White-slipped; DORBB1: Dorset Black-Burnished; ERSA: Early Roman Sandy Fabric A; FIN: Miscellaneous fine; FMIC: Fine micaceous; GROG: Belgic grog-tempered; HOO: Oxidised White-slipped Hoo flagon fabric; HWB: Highgate Wood B fabric; HWBRS: Red-slipped Highgate Wood B fabric; HWC: Highgate Wood C fabric; LOMI: London micaceous; LOXI: Local oxidised; LYON: Lyon; NKSH: North Kent Shell-tempered; OXID: Miscellaneous oxidised; RDBK: Ring and Dot Beaker fabric; SAMLG: La Graufesenque samian; SAMLZ: Lezoux samian; SAMMV: Martres-

de-Veyre samian; SAND: Miscellaneous sandy greywares; VCWS: Verulamium Coarse White-slipped; VRG: Verulamium Region Greyware; VRW: Verulamium Region Whiteware.

The Assemblages from Site 1

Phase 2: Early Iron Age (700–300 BC)

Assemblage 1: From the fills of natural channel [1214].

Only two of five silt deposits produced any pottery; [1191] yielded 13 sherds (51gm) of pottery in under-fired Fabric P.1A: no rim or other diagnostic sherds are present. The uppermost silting of the channel [1211] yielded a further 35 sherds (294gm) of pottery, comprising 18 fragments (126gm) in P.1A and 17 (168gm) in P.4. At least four vessels are represented in this material, including a carinated shoulder fragment from a situlate vessel in P.4 fired irregular buff-grey (Longley 1980, fig 21, 48–50), dated *c.*900–700 BC (see Fig 12.1 and 12.2)

Assemblage 2: From the fill [1155] of pit [1156], cutting into fills [1019] and [1211] of the natural channel.

The 19 sherds (66gm) of pottery comprise 12 sherds in P.1A, 1 in P.2, and 6 in P.5. The fragments include a finger-impressed jar rim fragment in black P.1A. Date: Early Iron Age.

Phase 4: Pre-Flavian c.AD 43–70/ 80 (Fig 12.3–12.8)

Assemblage 3: From the fills [911], [979], [939], [971], [1176], [1201], [1206], [1207] and [1181] of cuts through the fills of the original north ditch of the road.

These fills yielded 218 sherds (2,506gm) of pottery, including significant numbers of sherds (113) in the grog-tempered Highgate Wood B fabric. The six sherds of South Gaulish samian include fragments from a Ritterling 12 bowl (*c.*AD 43–70), a Dr.30 bowl (*c.*AD 43–110), and Dr.18 and Dr.15/17 platters (*c.*AD 43–90 and 43–85). Other sherds include a corniced beaker rim in Central Gaulish Whiteware (*c.*AD 50–130), seven Verulamium Region Whiteware flagon fragments, a sherd from a biconical in North Kent Fine ware (*c.*AD 43–130), a flagon sherd in oxidised Hoo ware, and three butt-beaker fragments in Gallo-Belgic Whiteware (*c.*AD 43–

70). This material indicates that the ditch was probably open between *c.*AD 45/50 and 70/80.

*Phase 5: c.*AD *70–200* (Figs 12.9–12.10; 13.11–13.12)

Assemblage 4: From the primary fills [722], [723], [732] and [685] of cuts across the recut roadside ditch at the eastern end of Trench 3.

The 91 sherds (1,848gm) of pottery from these contexts include a significant element of residual pottery derived from the fills of the first roadside ditch, including further fragments from the same bead-rim jars as were present in that feature and the beaker in FMIC fabric. The assemblage is too small for quantification by EVEs but was broken down into numbers of sherds and their weights per fabric after the extraction of two intrusive post-Roman sherds.

Table 1

Fabric	No. of sherds	%	Weight in gm	%
AHSU	6	6.7	85	4.6
BAET	2	2.2	65	3.5
ERSA	1	1.1	22	1.2
FMIC	7	7.9	64	3.5
GROG	10	11.2	186	10.0
HWB	26	29.2	755	41.1
HWC	1	2.2	10	0.5
RDBK	6	6.7	59	3.2
SAMLG	4	4.4	30	1.6
SAND	17	19.1	284	15.5
VRW	9	10.1	276	15.0
Total	**89**		**1836gm**	

The most significant single fabric remains Highgate Wood B grog-tempered ware, followed by somewhat lower percentages of unattributed wheel-turned sand-tempered, 'Belgic' grog-tempered, and Verulamium Region Whitewares. The small amount of South Gaulish samian includes fragments from a Dr.27 cup (*c.*AD 43–110) and a Dr.36 platter (*c.*AD 70–110). A further 93 sherds (874gm) of pottery came from the primary silting of the same ditch in cut [1102] further to the west ([929] and [978]). This assemblage also has a large percentage of sherds (43%) in Highgate Wood B fabric. Fragments from a Class 2E jar in Highgate Wood C fabric (*c.*AD 70–160) and an indented beaker in mica-dusted MICA 376 fabric (*c.*AD 60–140) are also present. The pottery from these primary ditch silts suggests that the feature was recut *c.*AD 60–70.

Assemblage 5: From the secondary silting within the recut roadside ditch: contexts [601], [602], [603], [677], [731], [884], [928] (Fig 13.13) and [969].

The 68 sherds (903gm) of pottery from these contexts form too small an assemblage for any meaningful quantification. The assemblage still includes significant numbers of sherds in Highgate Wood B fabric, as well as fragments from South Gaulish samian forms Dr.18 (*c.*AD 43–90) and Dr.37 (*c.*AD 70–110), eight pieces from a dot-barbotine decorated beaker of uncertain type in Highgate Wood C fabric (*c.*AD 70–160), and a Class 4A bowl similar to Frere type 339 in Verulamium Region Whiteware (*c.*AD 75–105). This assemblage indicates that the recut ditch silted up during the period *c.*AD 70–100 and is in keeping with the dating of the pottery from the contemporary ditch on the other side of the Roman road, excavated on the International Supermarket site in 1974–82 (Cotton & Parnum 1983).

Assemblage 6: From the fills of the second recut of the roadside ditch: contexts [927], [935], [936] and [968]. (Fig 13.14–13.22)

The 460 sherds (5,309gm) of pottery from these contexts do not include enough rim fragments for reliable quantification by EVEs but were nevertheless broken down into numbers of sherds and their weights per fabric (Table 2). Highgate Wood C fabric is the most significant in the entire assemblage, making up nearly one third of the material; unsourced sandy grey wares and Highgate Wood B sherds come a poor second and third, at 19% and 15% respectively. The Highgate Wood B sherds are probably mostly residual in an assemblage with a significant element of that nature. The samian includes Dr.18 and 18/31 platters (*c.*AD 70–90 and 90–110 respectively), and a Dr.37 bowl and a Dr.27 cup (*c.*AD 43–110) from La Graufesenque. Martres de Veyre samian includes a Dr.18/31 platter (*c.*AD 90–120). The amphora sherds include a Dressel 20 rim fragment from a vessel of Martin-Kilcher form 22 (1983; *c.*AD 70–150) and there is a fragment from a BB2 cooking pot. Fragments from beakers of Class 3B (*c.*AD 70–100) and 3E (*c.*AD 70–160) are also present in this fabric. The assemblage appears to have been deposited during the period *c.*AD 100–130.

Table 2

Fabric	No. of sherds	%	Weight in gm	%
AHSU	45	9.8	528	9.9
BAET	4	0.9	324	6.1
BB2	1	0.2	10	0.2
BHWS	1	0.2	36	0.7
ERSA	3	0.7	22	0.4
GROG	3	0.7	128	2.4
HOO	3	0.7	27	0.5
HWB	68	14.8	1066	20.1
HWBRS	4	0.9	30	0.6
HWC	144	31.3	1130	21.3
LOMI	2	0.4	35	0.7
LOXI	3	0.7	44	0.8
LYON	1	0.2	7	0.1
NKSH	3	0.7	62	1.2
OXID	8	1.7	102	1.9
SAMLG	19	4.1	257	4.8
SAMMV	6	1.3	16	0.3
SAND	88	19.1	752	14.2
VCWS	1	0.2	5	0.1
VRG	4	0.9	93	1.8
VRW	43	9.3	625	11.8
MISC	6	1.3	9	0.2
Total	**460**		**5309gm**	

Table 3

Fabric	No. of sherds	%	Weight in gm	%
AHSU	7	7.0	168	8.7
AMPH	1	1.0	64	3.3
BAET	6	6.0	530	27.3
DORBBI	4	4.0	34	1.8
GROG	5	5.0	100	5.2
HWB	1	1.0	10	0.5
HWC	25	25.0	286	14.7
OXID	1	1.0	10	0.5
SAMLG	1	1.0	26	1.3
SAMLZ	5	5.0	38	2.0
SAMMV	2	2.0	22	1.1
SAND	38	38.0	402	20.7
VCWS	3	3.0	22	1.1
VRW	1	1.0	228	11.8
Total	**100**		**1940**	

Assemblage 7: From pit fill [780]. (Fig 13.23)

The 116 sherds (1,007gm) of pottery from this pit include significant amounts of residual material and are therefore unsuitable for any form of quantification; they do, however, include two fragments of Central Gaulish samian (*c.*AD 120–200).

Assemblage 8: From pit fills [802], [808] and [1226]. (Fig 14.24–14.30)

The 100 sherds (1,940gm) of pottery from this feature were quantified by numbers of sherds and their weights per fabric (Table 3). The small size of this assemblage makes it impossible to draw any firm conclusions about patterns of pottery supply. Highgate Wood C is still the most significant fabric by sherd count, although there is a considerably larger number of sherds in unattributed, possibly local, grey-ware fabrics. The Central Gaulish samian in-cludes fragments from a Dr.37 bowl (*c.*AD 120–200) and a Dr.18/31 platter (*c.*AD 120–150). The assemblage is dated to *c.*AD 150–175.

Assemblage 9: From pit fills [800] and [799]. (Fig 14.31–14.32)

The 114 sherds (3,789gm) of pottery from this feature include 26 large, fresh Dressel 20 amphora fragments (2,934gm), as well as pieces from a Central Gaulish samian Dr.31 platter (*c.*AD 150–200), the lower part of a Hoo flagon, fragments from two Class 2F everted-rim jars (*c.*AD 120–160) in Highgate Wood C fabric, and a Verulamium Region Whiteware jar rim fragment of late 2nd-century form. The assemblage is dated to *c.*AD 160–200+.

*Phase 6: c.*AD *200–400*

Assemblage 10: From the gravelly upper fill [931] of the roadside ditch recut.

The 60 sherds (580gm) of pottery from the gravel are very broken up but the fine wares include fragments from a Lower Nene Valley Colour-coat beaker (*c.*AD 180–400), a North Gaulish pentice beaker in NGWH fabric (*c.*AD 150–250), and a Colchester Colour-coat beaker (*c.*AD 130–250). The coarse pottery includes fragments from two Verulamium Region Whiteware jars of *c.*AD 150–250 dated types, a handle fragment from an amphora in Verulamium Coarse White-slipped ware, sherds from two Class 3F poppyhead beakers (*c.*AD 130–170), a Class 2F everted-rim jar in Highgate Wood C fabric, and fragments from a BB1 flanged bowl (*c.*AD 160–200+) and straight-sided dish (*c.*AD 120–180). An early 3rd-

century date is indicated for this assemblage, although the state of the material suggests that it could all be residual.

Assemblage 11: From pit fill [961]. (Fig 14.33–14.34)

The 17 sherds (271gm) of pottery from this pit include fragments from an Oxfordshire Red Colour-coat platter of Young Type C55 (1977; *c.*AD 240–400) and a Central Gaulish samian Dr.31 platter (*c.*AD 150–200).

Assemblage 12: From the uppermost fill of the roadside ditch [992]. (Fig 14.35)

The 145 sherds (1,786gm) of pottery from this feature have a wide date range and are, therefore, unsuitable for any kind of quantification. The latest material is of *c.*AD 250–400 date and includes fragments from a type 5B-4 developed beaded and flanged bowl in Alice Holt/Farnham ware (*c.*AD 270–330), three sherds from a horizontally-rilled jar in Portchester D fabric (*c.*AD 330–420), an Oxfordshire Whiteware mortarium of uncertain type (*c.*AD 240–400), and an Oxfordshire Red Colour-coat mortarium of Young type C97 (1977; *c.*AD 240–400).

Assemblage 13: From beamslot fill [785]. (Fig 14.36–37)

The 26 sherds (345gm) from this feature were almost certainly deposited within it at the time of the destruction of the building. Much of the pottery is clearly residual but six large fresh sherds from the illustrated vessel (possibly a local product) are also present and suggest that the building was demolished at the end of the 4th or during the early years of the 5th century.

The Assemblages from Site 2

*Phase 3: c.*AD *43–70+*

Assemblage 14: From field-ditch fills [127] and [128].

Most of the 108 sherds (1,968gm) came from the lower fill [128]. The 97 sherd assemblage from this context is not really large enough for any meaningful form of quantification but, like the broadly contemporary Assemblage 3 at Site 1, has a predominance of fragments in Highgate Wood B grog-tempered ware. The five sherds of South Gaulish samian include fragments from

a Dr.15/17 platter (*c.*AD 43–85) and a Dr.27 cup (*c.*AD 55–75). Most of the other sherds are very fresh and include illustrated sherds Figs 14.38, 15.39–15.41. The eleven sherds from the upper ditch fill [127] include fragments from another bead-rim jar in Highgate Wood B fabric and South Gaulish samian forms Dr.18 (*c.*AD 70–90) and Dr.27 (*c.*AD 70–90). The indications are that this ditch was dug *c.*AD 50 and continued to receive rubbish until *c.*AD 70–90.

*Phase 4: c.*AD *70/80–200*

Assemblage 15: From ditch fill [244]. (Fig 15.42–15.48, 16.49)

The 106 sherds (5,348gm) of pottery from this feature were quantified by numbers of sherds and their weights per fabric (Table 4).

Table 4

Fabric	No. of sherds	%	Weight in gm	%
AHSU	28	26.4	596	11.1
BAET	1	0.9	858	16.0
FINE	3	2.8	50	0.9
HWB	53	50	3350	62.6
RDBK	P	P	P	P
SAMLG	7	6.6	92	1.7
SAND	8	7.5	246	4.6
VCWS	1	0.9	32	0.6
VRW	5	4.7	124	2.3
Total	**106**		**5348**	

The assemblage has grog-tempered Highgate Wood B sherds from jars, storage vessels and bowls, making up half of all the pottery in this *c.*AD 70–100 dated assemblage, with Alice Holt/Surrey greywares accounting for just over another quarter. Nominal amounts of Verulamium Region Whiteware and White-slipped ware sherds from flagons are present, as are fragments from a beaker in Ring-and-Dot Beaker fabric (*c.*AD 50–100). The seven South Gaulish samian sherds include fragments from a Dr.18 platter (*c.*AD 43–90) and a Dr.37 bowl (*c.*AD 70–110).

Assemblage 16: From curvilinear ditch fills [190], [217], [189] and [188]. (Fig 16.50–16.57)

The lowest fill [190] yielded 94 sherds (864gm), including a fragment from a Martres-de-Veyre

samian Dr.37 bowl (*c.*AD 90–120). The assemblage is too small for quantification but is characterised by a decline in the significance of Highgate Wood B sherds and the appearance of large numbers of jar and beaker fragments in Highgate Wood C fabric (41 sherds) (Fig 16.50). Fragments from the following fabrics were also present: Verulamium Region Whiteware, black, sand- and grog-tempered ware and patchy black/orange BB1 fabric (Fig 16.51–16.54). The next fill [217] yielded a further 47 sherds (760gm) of pottery, largely (42 fragments) of sand- and grog-tempered wares from the Lower Colne Valley kilns at Fulmer and Hedgerley. There are no rim sherds, however, in an assemblage of 2nd-century character. The uppermost ditch fills [188] and [189] produced 64 sherds (3,285gm) of pottery. This small assemblage has large numbers of Lower Colne Valley ware sherds, including illustrated sherds Fig 16.55–16.56. The greater part of a vessel is also present (Fig 16.57).

This ditch appears to have been dug during the period *c.*AD 90–110 and remained open until *c.*AD 200; its successive assemblages appear to reveal changes in the pattern of pottery supply to the site. The primary fill (dated *c.*AD 100–150) is dominated by Highgate Wood C products, with somewhat smaller quantities of Highgate Wood B, Alice Holt/Surrey, Lower Colne Valley, and Verulamium Region Whitewares. The late 2nd century sees the disappearance of Highgate Wood C and Alice Holt/Surrey wares, and the total domination of what are admittedly small pottery assemblages from the upper fills of the ditch by Lower Colne Valley products. It is known that the Alice Holt/ Farnham pottery industry went into sharp decline after AD 120 and that the London Highgate kilns ceased production in *c.*AD 160/180: it would appear from this evidence that the Colne Valley potters took over the pottery market shares of these two industries at the Isleworth settlement during the mid to late 2nd century.

Assemblage 17: from posthole fills [162], [170], [240] and [242].

Most of the postholes for this rectangular structure lacked pottery, but the fills [240] and [242] yielded three large fresh sherds between them from a 'Pie-dish' (Fig 16.58), confirming that they were contemporary. This vessel and large fresh sherds of jars in grog-tempered Highgate Wood B fabric from [162] and [170] suggest

that the building was constructed between AD 100 and 120.

*Phase 6: c.*AD *250–400*

Assemblage 18: From ditch fill [201].

The 72 sherds (2,386gm) of pottery from this feature are predominantly from Alice Holt/ Farnham grey ware vessels (68%) and include fragments from a Class 10 beehive, an indented beaker, two Class 3B cooking pots, and three Type 5B.4 beaded-and-flanged bowls (*c.*AD 270–330). The four Oxfordshire Red Colour-coat ware sherds include fragments from a Class C23 beaker (Young 1977; *c.*AD 270–400+) and a type C97 wall-sided mortarium (*c.*AD 240–400+). Other wares in this assemblage (dated *c.*AD 270–330) include illustrated sherds (Fig 16.59–16.61). It has been noted during work on pottery from earlier excavations at Brentford (Canham 1978) that some of the late 3rd to early 4th-century colour-coat beakers and coarse wares appeared to be of local manufacture. The final two illustrated pots belong to this small group of vessels and are both characterised by patchy surface blackening.

The illustrated sherds

(Nos 1–37 BLR 96 (Site 1) sherds; nos 38–61 LRB 01 (Site 2) sherds.)

Fig 12.1. Jar rim sherd in soft, black Fabric P.1A with finger-jabbed decoration on its upper surface. Paralleled at Runnymede Bridge (Longley 1980, fig. 29.228). *c.*900–700 BC. [1214]

Fig 12.2. Rim sherd from one of two undecorated jars in similar fabric. Plain vessels of this type are common on Post-Deverel-Rimbury Late Bronze Age and Early Iron Age sites in the Middle and Lower Thames valleys and are known from Brooklands Weybridge (Hanworth & Tomalin 1977), Runnymede Bridge (Longley 1980), and elsewhere. *c.*1000–300 BC. [1214]

Fig 12.3. Bead-rim beaker in pink-brown sand-free, wheel-turned fabric with sparse up-to 3.00mm red ironstone inclusions. Ext. rim diameter 100mm. *c.*AD 43–60. [971]

Figs 12.4, 12.5 and 12.6. Three bead-rim jars in black Highgate Wood B fabric. Ext. rim diameters 220mm, 220mm, and 160mm respectively. *c.*AD 40–100. [971]
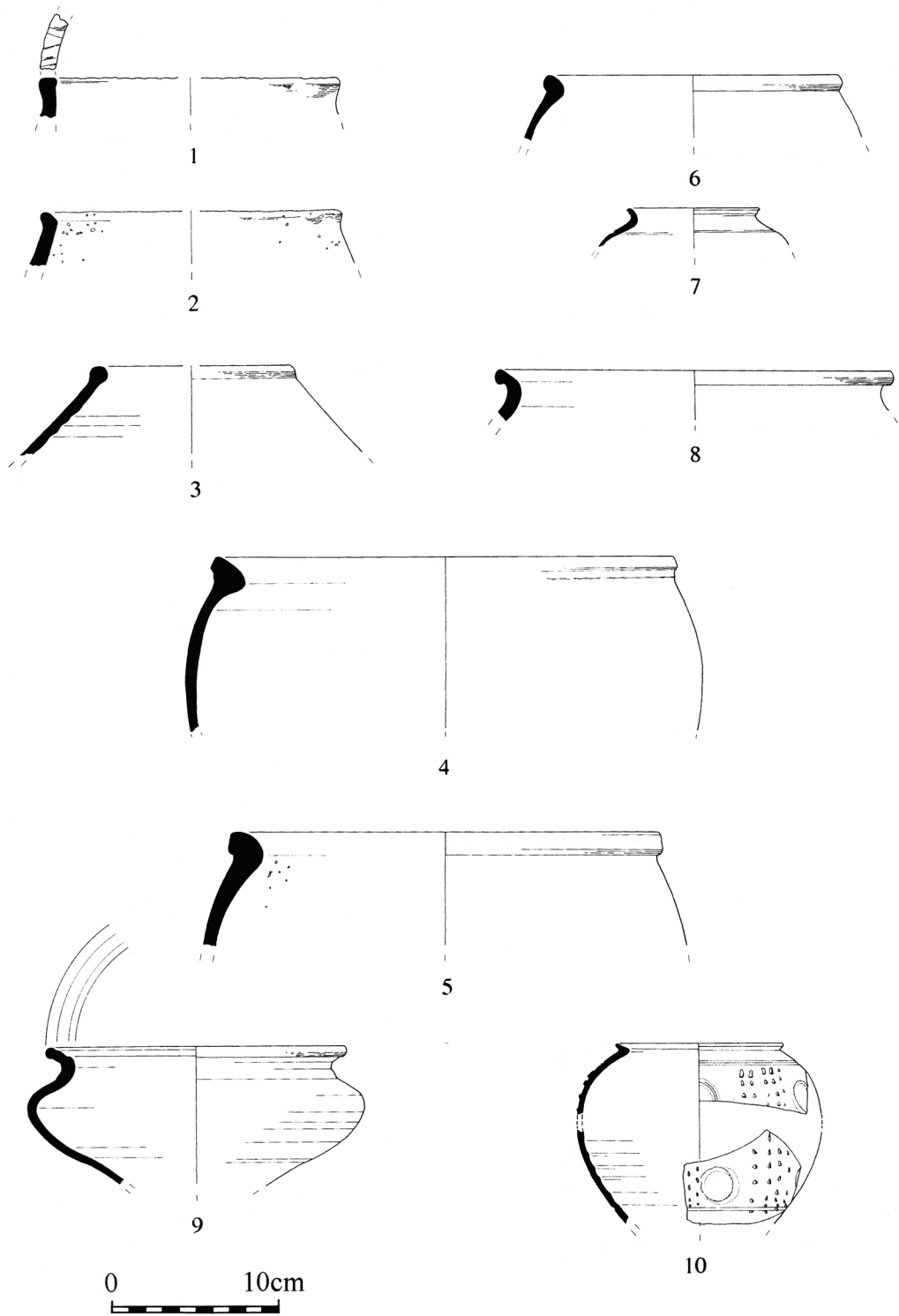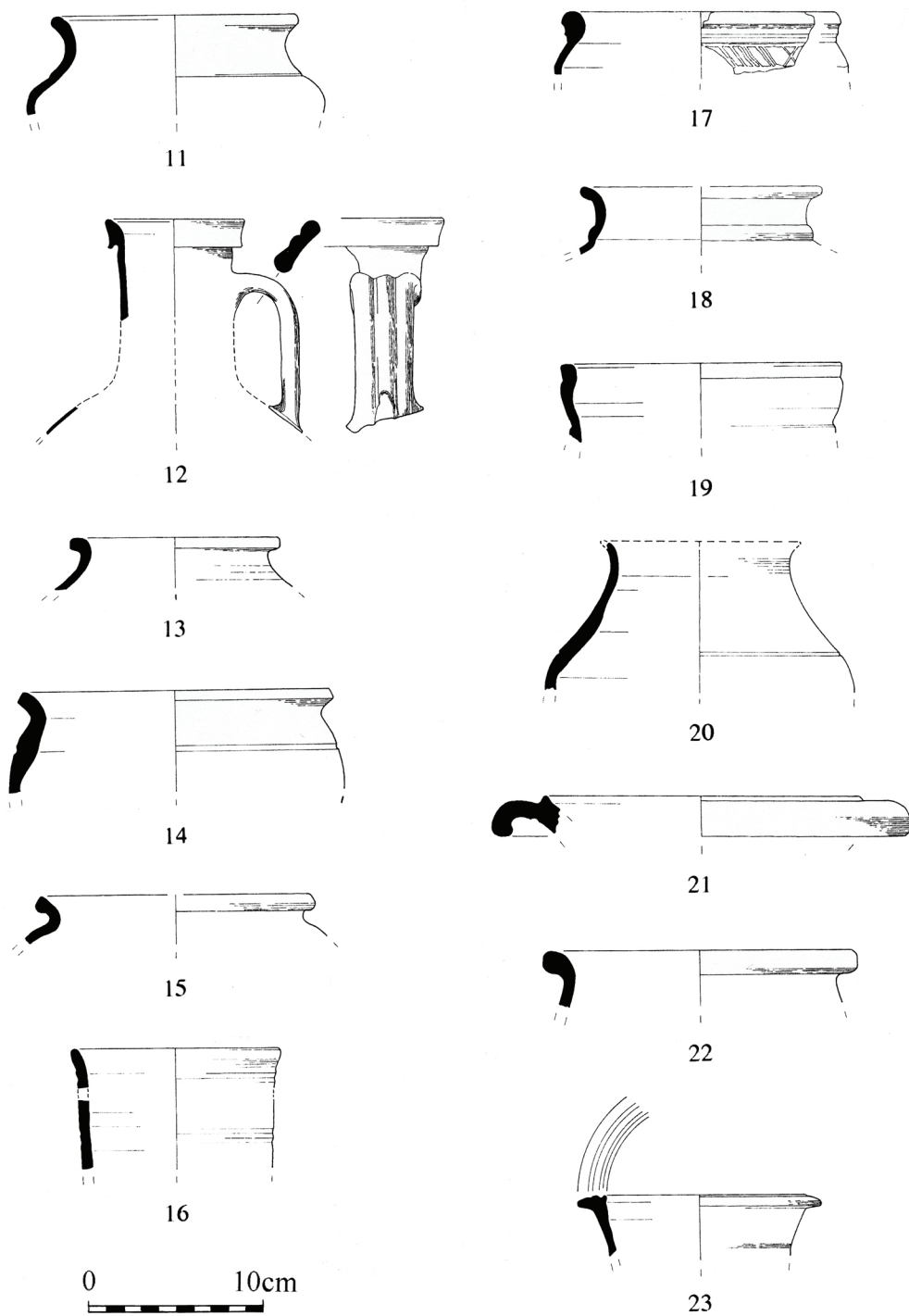
Fig 12. Prehistoric (nos 1–2) and Roman (nos 3–10) pottery

Fig 13. Roman pottery, nos 11–23

Fig 12.7. Beaker in polished micaceous black FMIC fabric. Ext. rim diameter 80mm. Similar to Davies form 852 (1994). *c.*AD 50–120 [971].

Fig 12.8. Rim sherd from Class 1 jar in grey Alice Holt/Surrey ware. *c.*AD 50–120. [1181]

Fig 12.9. Large, fresh sherd from necked bowl with reeded rim in wheel-turned, grey-black fabric with very-fine-sand and black grog filler. Ext. rim diameter 180mm. Parallels for this vessel have proved very elusive and it may be indicative of limited local production. [685]

Fig 12.10. Rim sherd from ring-and-dot beaker in cream RDBK fabric. Ext. rim diameter 90mm. *c.*AD 50–100. Six fresh sherds from this vessel are present. [685]

Fig 13.11. Everted-rim cup of Thompson Class E3-2 (1982) in polished black 'Belgic' grog-tempered ware. Ext. rim diameter 120mm. This Hertfordshire 'Belgic' form was made from *c.* 15 BC to *c.*AD 50 and may be residual. [723] and [732]

Fig 13.12. Collared flagon of Frere type 112 (1972) in white Verulamium Region Whiteware. Ext. rim diameter 80mm. *c.*AD 60–75. [723]

Fig 13.13. Honey-jar rim in cream-pink Verulamium Region Whiteware. Ext. rim diameter 120mm. *c.*AD 60–120. [928]

Fig 13.14. Necked jar in grey lumpy Highgate Wood B fabric. Ext. rim diameter 140mm. *c.*AD 40–100. [927]

Fig 13.15. Another example in similar fabric. Ext. rim diameter 140mm. *c.*AD 40–100. [927]

Fig 13.16. Fragment from rim of Dr.30 bowl copy in Highgate Wood Red-slipped ware. Ext. rim diameter 120mm. *c.*AD 70–100. [927]

Fig 13.17. Bead-rim jar with burnished chevrons on its shoulder in grey Highgate Wood C fabric with black slip over rim. Ext. rim diameter 140mm. *c.*AD 70–120. [936]

Fig 13.18. Class 2E necked jar in similar fabric. Ext. rim diameter 160mm. Similar to Davies *et al* 1994, Type 1032. *c.*AD 100–120. [936]

Fig 13.19. Fragment from Dr.30 bowl copy in similar fabric. Ext. rim diameter 180mm. *c.*AD 75–150. [935]

Fig 13.20. Unusual flask in grey Alice Holt/Surrey ware. [936]

Fig 13.21. Mortarium of Frere type 761 (1972) in cream Verulamium Region Whiteware. *c.*AD 100–140. [927]

Fig 13.22. Necked jar of Frere type 295 (1972) in similar fabric fired pale-orange with cream surfaces and rim edge blackening. Ext. rim diameter 180mm. *c.*AD 70–100. [927]

Fig 13.23. Class 4A bowl of Frere type 929 (1972) in pink Verulamium Region Whiteware fabric. Ext. rim diameter 130mm. *c.*AD 140–180. [780]

Fig 14.24. Small wheel-turned storage jar with rolled-over rim in hard grog-tempered grey fabric. Ext. rim diameter 240mm. Possibly a Fulmer product (Corder 1939, 157, Type 90). *c.*AD 100–150. [808]

Fig 14.25. Straight-sided dish of Gillam type 75 (1976) in black BB1 fabric with external burnished acute lattice decoration. *c.*AD 110–160. [808]

Fig 14.26. 'Pie dish' in grey Highgate Wood C fabric with scored diagonal lines on its exterior. Ext. rim diameter 260mm. *c.*AD 120–160. [808]

Fig 14.27. Class 3E beaker in similar fabric with applied white slip. Ext. rim diameter 90mm. *c.*AD 70–160. [808]

Fig 14.28. Class 3F beaker rim in similar fabric. Paralleled by Davies *et al* 1994, Type 11 18. *c.*AD 140–160. [808]

Fig 14.29. Hook-rimmed jar in similar fabric with white slip over the rim. Ext. rim diameter 240mm. Paralleled in *c.*AD 150–200 dated context Z9A at 233–246 High Street, Brentford (Canham 1978, fig 55-15). [808]

Fig 14.30. Reeded bowl rim in very fine Verulamium Region Whiteware variant fired grey-black with smooth cream-grey to pale-orange surfaces. Ext. rim diameter 160mm. *c.*AD 130–200. [808]

Fig 14.31. 'Pie dish' in white-slipped grey Highgate Wood C fabric. Ext. rim diameter 160mm. One of two. [799]

Fig 14.32. Large sherd from re-fired BBI flanged bowl of Gillam type 38 (1976). Ext. rim diameter 240mm. *c.*AD 160–200+. [800]

Fig 14.33. Bead-rim beaker sherd from a vessel of ?Monaghan Class 2C6 (1987) in North Kent Fine ware. Ext. rim diameter 80mm. *c.*AD 190–230. [961]

Fig 14.34. Developed beaded-and-flanged bowl of Lyne and Jefferies type 5B-4 (1979) in grey Alice Holt/Farnham ware with internal black slip extending over the flange. *c.*AD 270–330, one of two. [961]

Fig 14.35. Pie dish in Colne Valley grey-black ware. [992]

Fig 14.36. Rim sherd from narrow-mouthed jar similar to Lower Nene Valley Colour-coat type 273 (Perrin 1999) but in sandy buff-grey fabric with internal brown colour-coat. Ext. rim diameter 160mm. *c.*AD 300–400. [785]
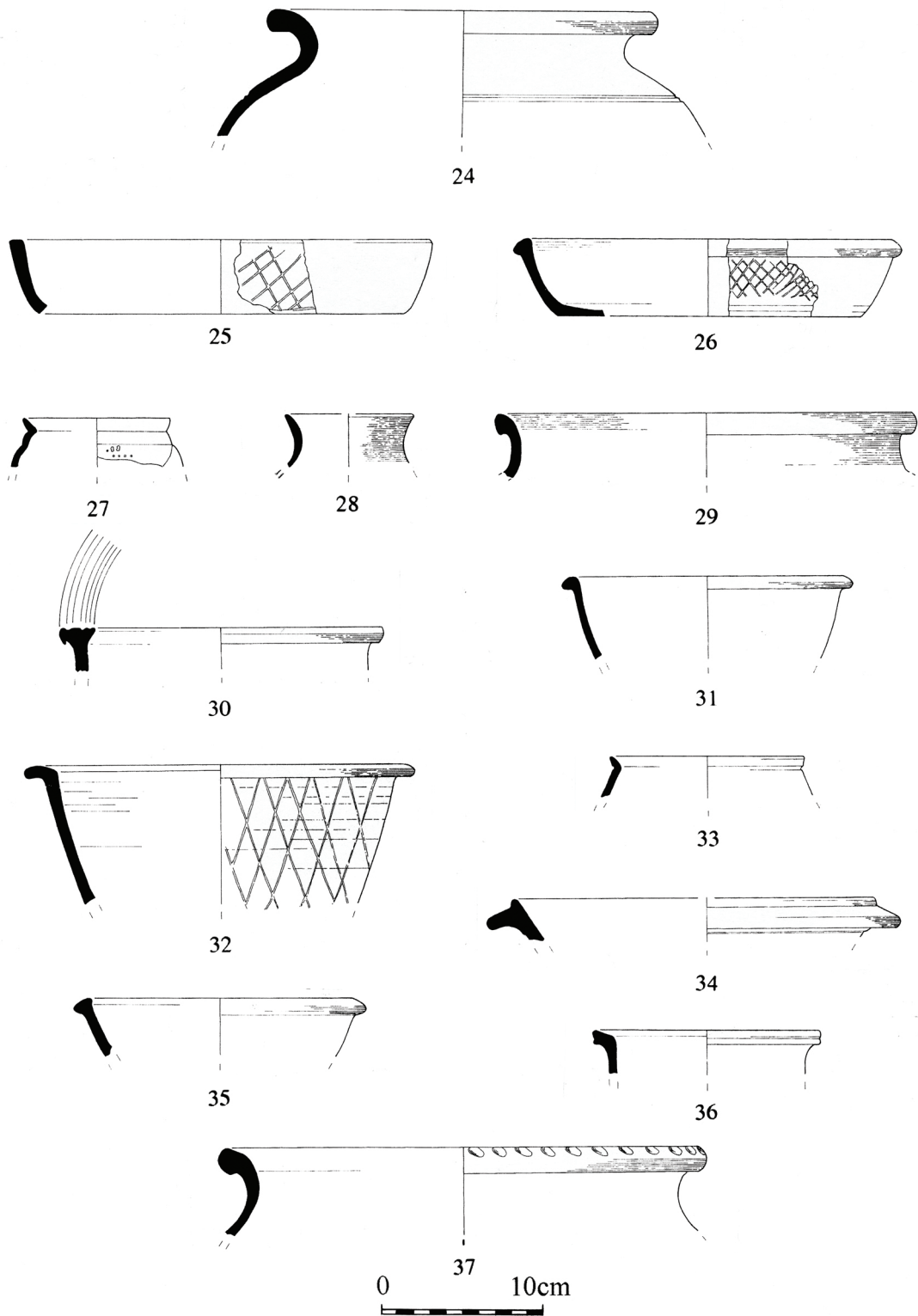
Fig 14. Roman pottery, nos 24–37

Fig 14.37. Large necked-jar with horizontal body rilling in cream Overwey/Portchester D fabric with stabbed rim decoration. Ext. rim diameter 260mm. Paralleled at the Overwey kilns (Clark 1949, fig 6-10). *c.*AD 330–420. [785]

Fig 15.38. Bead-rim jar in black Highgate Wood B fabric. Ext. rim diameter 120mm. *c.*AD 40–100. One of two. [127]

Fig 15.39. Everted rim jar in similar fabric. Ext. rim diameter 140mm. *c.*AD 40–100. Fragments from a simple lid in Highgate Wood B fabric are also present. [128]

Fig 15.40. Biconical of Monaghan type 2G1.7 (1987) in patchy buff/grey North Kent Fineware. Ext. rim diameter 100mm. *c.*AD 70–100. [128]

Fig 15.41. Large jar of Lyne and Jefferies Class 1 (1979) in grey-black polished Alice Holt/Surrey ware with lid-seated rim and burnished latticing on its shoulder. Ext. rim diameter 340mm. *c.*AD 50–120. [128]

Fig 15.42. Bead-rim jar in patchy brown/black Highgate Wood B fabric. Ext. rim diameter 200mm. *c.*AD 40–100. [244]

Fig 15.43. Another example with undercut bead in similar fabric fired brown. Ext. rim diameter 150mm. *c.*AD 40–100. Fragments from three other bead-rim jars in similar fabric are also present. [244]

Fig 15.44. Round-bodied and lid-seated Class 4F bowl in brown-black Highgate Wood B fabric. Ext. rim diameter 240mm. *c.*AD 60–100. One of two. A tripod foot may come from one of these vessels. [244]

Fig 15.45. Everted rim storage-jar in similar fabric fired patchy black/grey/orange-brown with burnished chevrons on its body. Ext. rim diameter 380mm. [244]

Fig 15.46. Jar of Lyne and Jefferies Class 1 (1979) in grey AHSU fabric with a carinated shoulder and lid-seated rim. Ext. rim diameter 120mm. *c.*AD 50–120. [244]

Fig 15.47. Class 5 Atrebatic bowl in similar fabric fired polished black. Ext. rim diameter 200mm. *c.*AD 50–120. [244]

Fig 16.48. Class 6 Gallo-Belgic platter copy in similar fabric. Ext. rim diameter 180mm. *c.*AD 50–120. [244]

Fig 16.49. Lid-seated dish in polished black very-fine-sanded fabric. Ext. rim diameter 160mm. [244]

Fig 16.50. Class 2E jar in grey Highgate Wood C fabric. Ext. rim diameter 100mm. *c.*AD 70–160. [190]

Fig 16.51. Flagon of Frere type 406 (1972) in cream Verulamium Region Whiteware. Ext. rim diameter 70mm. *c.*AD 100–130. Paralleled in Context Z6A at the 233–246 High Street site in Brentford (Canham 1978, fig 52.31). [190]

Fig 16.52. Wheel-turned necked jar in pimply black, sand- and grog-tempered ware. Ext. rim diameter 160mm. Paralleled at the Fulmer kiln (Tarrant & Sandford 1973, fig 6-8). *c.*AD 80–130. [190]

Fig 16.53. Flanged bowl in similar fabric. Similar to an example from Context Z6A at 233–246 High Street, Brentford (Canham 1978, fig 52.27). *c.*AD 70–140. [190]

Fig 16.54. Flanged bowl of Gillam form 35 (1976) in patchy black/orange BB1 fabric. Ext. rim diameter 200mm. *c.*AD 120–180. [190]

Fig 16.55. Jar in reddish-brown fabric with fine grog filler fired grey-black, with burnished acute latticing on its body. The flanged rim has been deliberately ground down after firing. Ext. rim diameter 80mm. There are seven fresh sherds from this vessel. [188]

Fig 16.56. Jar with rolled over rim fired rough, flecky reddish-brown/grey. Ext. rim diameter 160mm. Paralleled in Context Z8 at 233–246 High Street, Brentford (Canham 1978, fig 54.11). *c.*AD 150–200. [188]

Fig 16.57. Everted-rim jar with shoulder cordon in black HWB fabric. Ext. rim diameter 160mm. *c.*AD 70–100. [189]

Fig 16.58. 'Pie-dish' of Monaghan Class 5D1 (1987) in black BB2 fabric with chamfered base and burnished external acute-lattice decoration. Ext. rim diameter 150mm. *c.*AD 110/120–180/200. [240/242]

Fig 16.59. Handmade shell-tempered ware jar fired patchy black/brown. Ext. rim diameter 180mm. *c.*AD 250–300. Four fresh sherds from this vessel are present. One or two handmade vessels in this fabric occur in most 3rd-century assemblages from sites in West Surrey and the London area and are thought to originate in the Abingdon area of Oxfordshire (Lyne 1994, 488–99). [201]

Fig 16.60. Pentice beaker with body rouletting in very-fine-sanded orange fabric fired pale orange with patchy white slip. [201]

Fig 16.61. Everted rim jar in very-fine-sanded bricky orange fabric with pimply cream slip. Ext. rim diameter 160mm. [201]

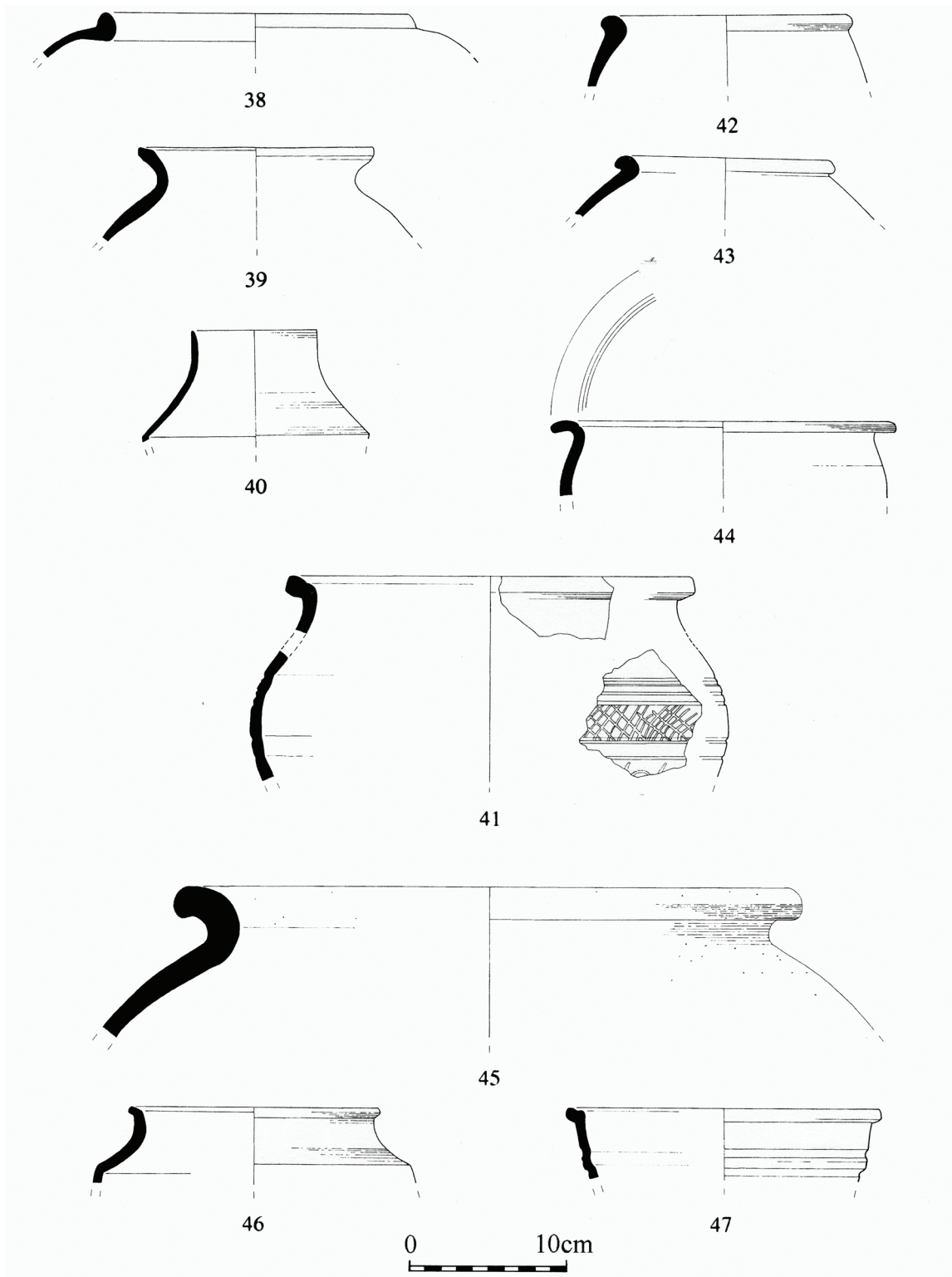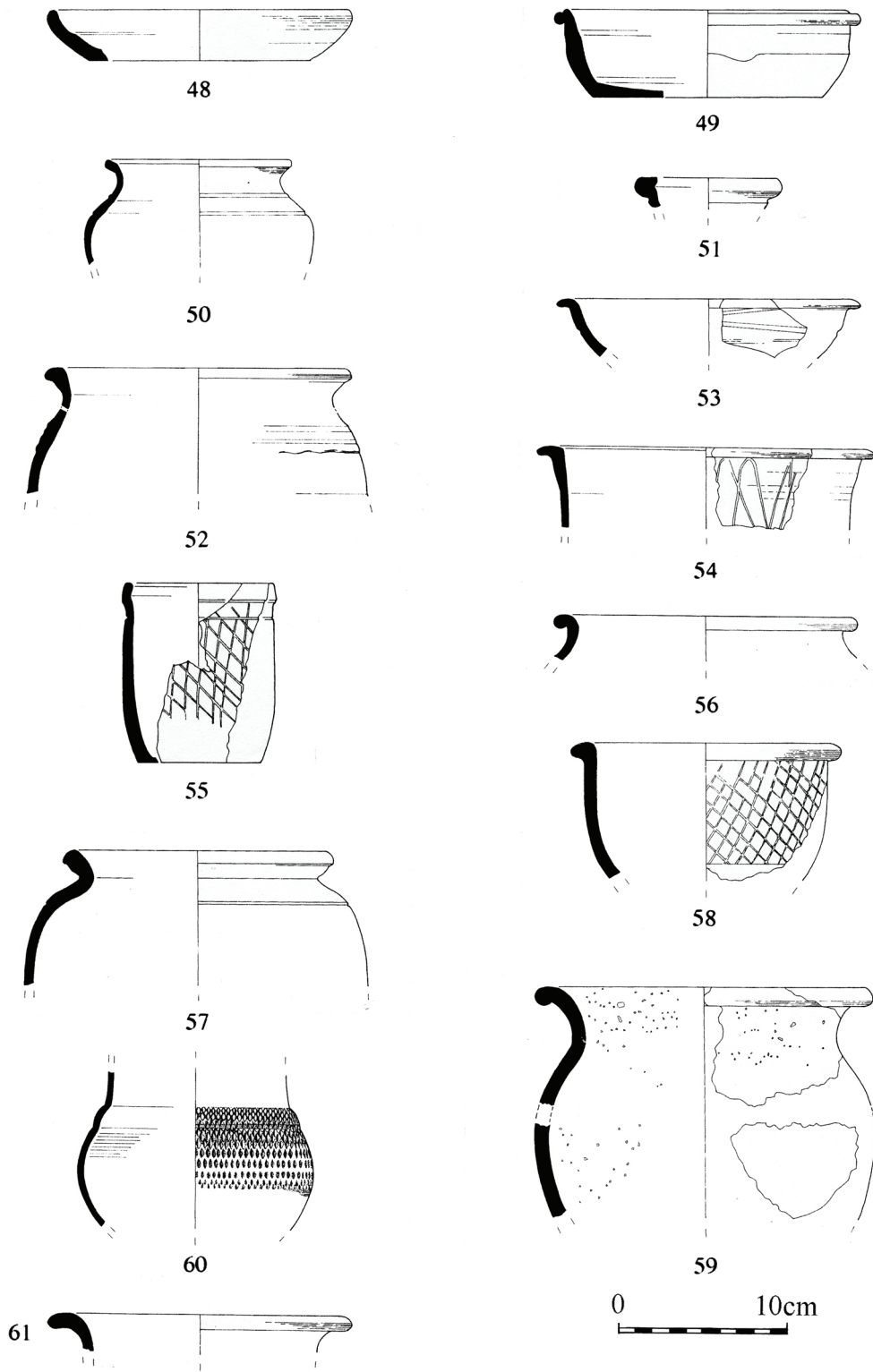*Fig 15. Roman pottery, nos 38–47*

Fig 16. Roman pottery, nos 48–61

The changing pattern of Roman pottery supply to the two sites

The pre-Flavian pottery assemblages include large quantities of handmade, grog-tempered Highgate Wood B ware, mainly in the form of bead-rim jar fragments, which account for between one third and a half of all of the pottery present at both sites during this period. Smaller numbers of coarse grey and wheel-turned Alice Holt/Surrey ware bead-rim and necked-and-cordoned jars came from the Hampshire/Surrey border regions around Farnham. Verulamium Region Whitewares were also supplied to both sites in small quantities, possibly in the form of loaded flagons and mortaria.

The fine wares supplied to both sites are largely made up of South Gaulish samian bowls, cups and platters. Biconicals in North Kent Fine ware and flagons in its oxidised Hoo equivalent from the Medway estuary marshes of North Kent are also present. Gallo-Belgic Whiteware fragments from butt-beakers and flagons indicate trade links with North-Eastern Gaul and there are fragments of Central Gaulish White ware and Lyon ware beakers from Brentford Lock. It is probable that the Continental imports were acquired via the London market rather than by direct trade. The Flavian period (*c.*AD 70–100) saw little change in the pattern of pottery supply to the two sites, except that the still dominant Highgate Wood B wares were joined by wheel-turned Highgate Wood C ware jars, bowls and beakers. North Kent and Gallo-Belgic fine wares ceased being supplied during this period.

The early 2nd century witnessed the termination of production of Highgate Wood B wares and their total replacement by wheel-turned Highgate Wood C sand-tempered greywares. Small quantities of Alice Holt/Surrey greywares continued to be traded to both sites and were joined by handmade, soot-soaked BB1 cooking pots, bowls and dishes from production sites around Poole Harbour in Dorset after *c.*AD 110/120: these latter vessels probably arrived with salt from the same area as an adjunct to trade in that commodity. Verulamium Region Whiteware flagons and mortaria continued being supplied: flagon fragments from waterlogged deposits in Southwark have surviving traces of resin lining and it may be that the Brentford examples of these vessels also arrived as packaging for wine or some other liquid commodity. Dressel 20 amphora fragments may indicate the acquisition of olive oil from southern Spain, but empty vessels of this type were also frequently reused for storage or cut down into vats.

South Gaulish samian was replaced first by Martres-de-Veyre products and then by Central Gaulish samian imports after AD 120. Occasional vessels from London pottery producers include lids in LOXI and mica-dusted wares in LOMI fabric. Small numbers of vessels from the Lower Colne Valley kilns at Hedgerley and Fulmer to the west of Staines made their appearance at Site 2 during this period but do not appear to be present at Site 1 on the east side of the River Brent. That site was supplied with significant quantities of greyware vessels of unknown (but non-Colne Valley) origin during this period; these may possibly be of local manufacture.

This small divergence in the pattern of pottery supply to the two sites became more marked during the late 2nd and early 3rd centuries. Assemblages from both sites datable to *c.*AD 150–250 are unfortunately rather small, but it is quite clear that the Lower Colne Valley potters took advantage of a decline in the fortunes of the Alice Holt industry and the cessation of production by the Highgate Wood potters between AD 160 and 180 to become by far the biggest supplier to the Isleworth settlement during the late 2nd century. There is no evidence for this happening at the settlement on the other side of the Brent: it seems likely that the river formed an eastern boundary to the marketing of Lower Colne Valley products along the Staines to London road.

The Late Roman assemblages from both sites are small but previous work by this author on large assemblages of this period from Northumberland Wharf (Laws 1976) and 233–246 High Street (Canham 1978, Z1, 2 and 3; Lyne 1994, 677–8) indicates that the Alice Holt/Farnham kilns had become by far the most significant coarse ware supplier during the mid-3rd century, after the collapse of the Lower Colne Valley industry, and remained so until the end of the 4th century. Significant quantities of late 3rd-century BB1 products (10%) are also present, as well as very small quantities of coarse pottery from unknown but probably local sources. The insignificant quantities of fine pottery are largely made up of Oxfordshire and Lower Nene Valley Colour-coat products, with small numbers of beakers and other forms in the local fabric referred to above. The small assemblages of this date from the Brentford Lock and Park Tavern sites

do not add much to this information but they do indicate that pottery supply to the sites on either side of the River Brent was once more very similar in character.

THE POST-ROMAN POTTERY

Chris Jarrett

Site 1 produced 734 sherds of post-Roman pottery: 2 sherds of residual Saxon pottery, 82 sherds of medieval pottery, and 650 sherds of post-medieval pottery, the majority of it dating to between the 15th and 19th centuries. The ceramic sequence is fairly typical with Surrey whitewares, Kingston ware, Cheam ware, and particularly Coarse Border wares dominant in the 15th century; local London redwares were common in the small number of 16th-century dated deposits. The 17th-century deposits typically contained all the types of pottery from the industries located in and around London, but with more emphasis towards the Surrey-Hampshire wares. During the 18th century non-local wares, largely associated with a Staffordshire source, become important on the site (as found elsewhere), so that during the 19th century the pottery on the site is dominated by non-local industrial finewares.

Phase 7

A gravel layer [772] was the only deposit to produce pottery in this phase, as two sherds of Coarse Border ware, one sherd being from a jug that could not be closely dated. Coarse Border ware appears in London between 1270 and 1500, but is rare before *c.*1350, after which it became the main pottery type there (Blackmore 1999, 46).

Phase 8

The north–south orientated gully [827] produced the complete profile of a Kingston ware (KING) cooking pot with an everted rim. Kingston ware was first produced in that town in the late 12th century, but was traded to London between 1230 and 1400. The Kingston ware jar or cooking pot had no or few noticeable typological changes during its period of production, unlike the other Surrey whiteware industries (Pearce & Vince 1988, 45, 61–2, 75–6). Other features in this phase contained sherds of Coarse Border ware

and Cheam ware (CHEA, dated 1350–1500). An ashy fill [862] associated with the hearth [730] produced a small amount of pottery, mostly as Coarse Border ware that included the base of an internally green-glazed vessel, sherds of a large rounded jug (CBW LGR), and a red-slip-decorated, green-glazed jug (CBW RED), both forms dated 1340–1500. A horncore pit [740] produced in its fill [739], in addition to sherds of Coarse Border ware, fragments of Tudor Green ware (TUDG), dated 1380–1500, and Early Post-medieval redware (PMRE), dated 1480–1500. The pottery present would seem to indicate that the tanning pit had gone out of use at the end of the 15th century.

Phase 9

Truncating the hearth structure was the beehive-shaped masonry structure [701] which had been backfilled with a number of fills containing fragments of a Coarse Border ware saucer-shaped lid (CBW LID) and the bificated rim of a jar or cooking pot (CBW BIF); both forms being dated 1380–1500. Drinking vessels were present as a Tudor Green ware lobed cup and Early Border ware drinking jug sherds (EBORD), dated 1480–1550. All these wares would again imply a deposition date at the end of the 15th century. A similar deposition date could be given to the fills of pit [1071], which produced mostly drinking vessels: Coarse Border ware jugs and the rims of two German Siegburg stoneware drinking jugs; this form was also present in Tudor Green ware, as well as the base of a lobed cup. Red earthenwares occurred as a Cheam redware (CHEAR), dated 1480–1550, in the form of a barrel-shaped jug, and the rim of a handled, carinated dish in yellow-glazed Post-medieval slip-coated redware (PMSRY).

Phase 10

Features in this phase produced 16th-century pottery as Early post-medieval redware, Cistercian ware (CSTN), dated 1480–1600, and Raeren stoneware (RAER), dated 1480–1550, while some late 16th-century deposits contained yellow and green-glazed Surrey-Hampshire Border ware (BORDG and BORDY), dated 1550–1700. Other features produced more characteristic pottery associated with the 17th century, such as Post-medieval redware (PMR), dated 1580–1900, Border ware and Red

Border ware (RBOR), including a dish with slip decoration (RBORSL), both dated 1580–1800. Essex wares were present as Post-medieval black-glazed wares and Metropolitan slipware (METS), dated 1630–1700. Tin-glazed wares were very uncommon and consisted of plain white wares (TGW C), dated 1630–1800, or with geometrical designs (TGW D), dated 1630–1680. Non-local wares occurred as Midlands purple ware butter pots, while imported pottery consisted of German Frechen stoneware (FREC), dated 1550–1700, and Dutch slipware (DUTSL), dated 1500–1650. Pottery recovered from features in this phase was usually fragmentary and present in small sherd numbers, but where forms could be distinguished they were usually domestic: bowls, colanders, dishes, jars, jugs, an ointment pot, and tripod pipkins.

Phase 11

Larger groups of pottery with more complete vessels were recovered from features in Phase 11, the wares consisting of mostly typical 18th-century types. At the start of the 18th century the Border ware white earthenwares had mostly ceased to be produced, but Red Border ware was well represented in this phase along with Post-medieval redware. Tin-glazed earthenware was also more prominent as plain blue (TGW BLUE), dated 1630–1800, and style H with dark blue designs on a light blue background (TGW H), dated 1690–1800. Staffordshire white salt-glazed stoneware (SWSG), dated 1720–1780, was a notable component of larger pottery groups as found in the rubbish pit [509], where there were three flanged lids from tea or coffee pots and sherds from a number of bowls. This pit also produced six largely complete plain blue tin-glazed earthenware ointment pots dating to the early 18th century. The rim of a Creamware moulded plate with a basket design and tortoiseshell glaze (CREA TORT), dated 1740–1770, was also present. A soak-away or cesspit [633] produced a number of tewares as fragments of a Staffordshire white salt-glazed stoneware saucer and tea bowl and these forms were also present in Chinese porcelain, either decorated in blue and white (CHPO BW) or with *famille rose* enamelling (CHPO ROSE), dated 1720–1780. This pit also produced, like other deposits in this phase, sherds of Staffordshire-type slipware dishes, but of note in this feature was a medium-sized, straight-sided dish in a marbled fabric that had been roughly white-slipped and clear-glazed.

Of some interest in the back-fill [21] of construction cut [44] was the rim sherd (with a simple geometrical slip-trailed design) of a 'flanged-dish' in Donyatt ware from Somerset. Donyatt ware is increasingly being recognised in the south-west London suburbs, such as Stanwell and Uxbridge, but seems rarely to get into the capital (Pearce 2000; Jarrett 2002). English stonewares, including London stoneware (LONS), were also present in this phase, mostly as sherds of tankards; occasional sherds of Nottingham stoneware (NOTS), dated 1700–1800, were recorded. The rim of a stoneware saggar and a biscuit ware bowl were recovered from a fill of the brick-lined soak-away [642] and these items may have been derived from the Isleworth pottery, which was operating between 1757 and 1831 (Britton 1987, 77). The Isleworth pottery made a wide range of pottery types that included delftware, stoneware, porcelain, and combed-slipwares similar to Staffordshire wares.

Phase 12

Pottery in this phase largely consisted of domestic forms in 19th-century industrial finewares: Creamware (CREA), dated 1740–1880, Pearl ware (PEAR), dated 1770–1850, Refined white-ware (REFW) and Yellow ware (YELL), both dated 1800–1900. The Pearl wares and Refined white earthenwares frequently had 19th-century transfer-printed designs, while other decoration on these wares falls under the description of Factory-made slipware and tends to indicate low socio-economic status. Also present were English hard-paste porcelain (ENPO HP) and 19th-century English stonewares, the latter often present as sherds of blacking bottles. A wide range of features had these pottery types dumped into them, including rubbish pits and the rectangular tanning pits [252] and [491], the former going out of use after 1830 as indicated by the presence of a flow-blue Transfer-printed bowl and plate and a sherd of English stoneware with Bristol-glaze.

Phase 13

The small number of features producing pottery in this phase also produced 19th- or 20th-century industrial finewares as described in Phase 12.

Conclusions

Canham's Site 4 trenches produced only a small number of medieval pottery sherds and a few large sherds of vessels of Tudor or 16th-century date (Canham 1978, 19). It is difficult to ascribe site functions for the late medieval period from the pottery, as the forms found on this site are readily found on other sites of the same date. Although fragments of jugs were largely associated with the hearths in Phase 8, this form had many functions in the medieval period and without tell-tale use signs, such as sooting and other deposits, it was not possible to associate any other activity with the hearth except for kitchen and drink serving. Similarly the Phase 9 beehive-shaped structure produced mostly jugs and other drinking vessels, such as lobed cups and drinking jugs, that would be at home in any other domestic situation of the late 15th and early 16th century. Later phases also showed domestic wares with no specialised vessels associated with specific industries or activities.

THE CLAY TOBACCO PIPES

Chris Jarrett

The clay tobacco pipe bowls were classified according to Atkinson and Oswald (1969) and are coded AO, but the 18th-century pipes have been referenced to Oswald (1975) and are coded OS, while the single Broseley type bowl is coded BR. Site 1 produced a total of 225 clay tobacco pipe fragments, of which 50 were bowls. The pipes were present in Phases 10–12 and those with maker's marks can mostly be related to the local industry.

Phase 10

The earliest tobacco pipes on the site are AO type 9 bowls, dated 1640–1660; these were present as two examples in fill [609] of pit [610] and a bowl and a heel from fill [629] of circular pit [630]. A single AO type 15 bowl, dated 1660–1680, was recovered from fill [794] of pit [795].

18th-century bowls were present in this phase in fill [711] of pit [712] which produced 12 bowls, 11 of which were of OS type 10 bowls, dated 1700–1740. Two of these bowls had a crown in relief on each side of the heel, while two other bowls were initialled A S, for which there are three possible known makers during this period, but none are local (see Oswald 1975, 145–6). Three other examples of this bowl type had the forename I, but the family name was illegible. Of interest in this pit was a late 17th/early 18th-century type bowl, with a slightly angled bowl and a wide, forward sloping heel. On the underside of the heel was an incuse heart-shaped stamp with the initials TW. The source of this bowl is probably Broseley, Shropshire, and it has similarities with Atkinson's type 3 Broseley bowl series. Thomas Ward, born in 1628 and alive until *c.*1690, is a known maker for this area with these initials (Oswald 1975, fig 7.3, 50, 192).

Phase 11

Fill [502] of rubbish pit [509] produced three OS type 12 bowls, dated 1730–1780, which were initialled W S. The same initials occurred on an OS type 22 spurred armorial bowl with the Prince of Wales feathers, also dated 1730–1780. There are no local makers of this date with these initials, but they occur elsewhere in Brentford and London, and William Smith, 1781, Holborn was favoured as the maker by Oswald (Oswald 1975, 35, fig 24.25; Le Cheminant 1981, 105). A demolition layer produced two OS type 10 bowls, one of which was initialled I W; this may refer to a number of possible makers during this period, none known locally (see Oswald 1975, 159). There were also four bowls recovered from a layer of demolition rubble [506], all with a crown on each side of the heel.

Phase 12

The tanning pit [198] produced in its fill [162] a single AO type 28 bowl, dated 1820–1840; it was decorated with a large leaf on the back of the bowl and a border of leaves on the front of the bowl and was initialled J H. There are no local makers with these initials at this time.

The brick-lined pit [642] produced in its fill [607] a single OS type 10 bowl (<106>) and a decorated AO type 27 bowl (<107>), dated 1780–1820. The latter was initialled R S, which may possibly refer to Richard Simmonds, 1805, a London listed maker, or possibly R Smith who is recorded at Uxbridge in 1839. The decoration on this bowl has a band of 'drapes and tassels' around the rim above vertical ribs running around the bowl. Another brick-lined soak-away [615] contained in its fill [613] the heel of an AO type 27 bowl also initialled R S.

Fill [649] produced an OS type 12 bowl, dated 1730–1780, initialled H W, probably for Henry Wickham, a Brentford pipe maker known between 1781 and 1784. It is also possible that the initials were reversed and stand for William Heath, who was working in Brentford from *c.*1723 and died in 1764; one of his kilns has been excavated and published (Laws & Oswald 1981). The second bowl in this deposit was a poorly moulded AO type 28 bowl with Masonic symbols, decorated in relief, with leaves on the front of the bowl and a diamond-shaped symbol containing a shooting sun on the back. The left side of the bowl has a pair of dividers and castle turrets, while the right side has a set-square, the moon and stars. The heel of the bowl is initialled R I, which may refer to several London makers, none of whom are local.

The wooden tanning pit structure [491] produced in its tanning fill [489] an AO type 30 bowl, dated 1850–1910; this was decorated with vertical ribs around the lower two thirds of the bowl and drapes and tassels around the rim. A later fill [487] produced two more AO type 30 bowls, one of which had a fluted body. Sealing the tanning pits, dump [490] produced two spurs of AO type 28, with evidence for leaves on the front and back of the bowl and initialled J H. All the AO type 28 bowls with J H initials on the site come from the same mould and represent either an undocumented local pipe maker, or possibly a London supplier.

Conclusions

Clay tobacco pipes first appear on the site in the mid-17th century; this is in keeping with many other low socio-economic status post-medieval sites as tobacco became more affordable by the general populace. The presence on the site of a probable Broseley type bowl dating to the end of the 17th century can be explained by Brentford's location on a main arterial route from London to the West. This may also be a reason for some of the initialled pipes not being sourced to local makers, such as William Heath. The latter had a kiln operating on Brentford High Street to the east of the site, but his pipes are absent on the site except for one possible bowl if the initials were reversed.

Clay tobacco pipes recovered from the rectangular wood-lined tanning pits would seem to indicate that they had gone out of use in the late 19th century.

THE SMALL FINDS

Lynne Keys

The Roman small finds were analysed with reference to their perceived function and this is reflected in the catalogue arrangement and summary. The function categories are based on Crummy 1983 (with small adaptations where necessary). The medieval and post-medieval small finds are also arranged with reference to function but the categories have been simplified in order to deal with the small number of objects.

Roman

Personal adornment or dress

A total of six brooches or brooch fragments was recovered from BLR96 (Site 1) and two from LRB01 (Site 2), all of copper alloy. The two hairpin fragments are also copper alloy; however, since soil conditions may have affected the survival of bone, and the method of excavation favoured the observation of metal finds (particularly copper alloy), no specific importance should be attached to the absence of bone pins in the assemblage.

Bow brooches
Site 1
<116> Colchester type with forward facing hook on head; edges of bow serrated with punched marks; beaded foot; solid catch plate. L 41mm; W 23mm. [735] (Fig 17.1)
<146> Dolphin type; pronounced crest ridge; perforated catch plate. Second half 1st century AD. L 62mm; W 30mm. [927] (Fig 17.2)
<139> Colchester type; two fragments with upper part of bow missing; solid catch plate. Dated to AD 50–70; a coin from this context has been dated AD 45–65. L 55mm+; W 29mm. [936] (not illus)
<129> Pin only; non-pointed end still curved over where once attached. L 48mm. [935] (not illus)
<155> Pin only; non-pointed end still curled where once attached. L 41mm. [929] (not illus)

Site 2
Both copper-alloy, two piece Colchester types with springs present but pins missing. Dated to AD 50–70.
<2> L 36mm; W 20mm. [192] (Fig 17.3)
<6> Thin tapering bow; solid catch plate. L 45mm; W 21mm. [244] (Fig 17.4)
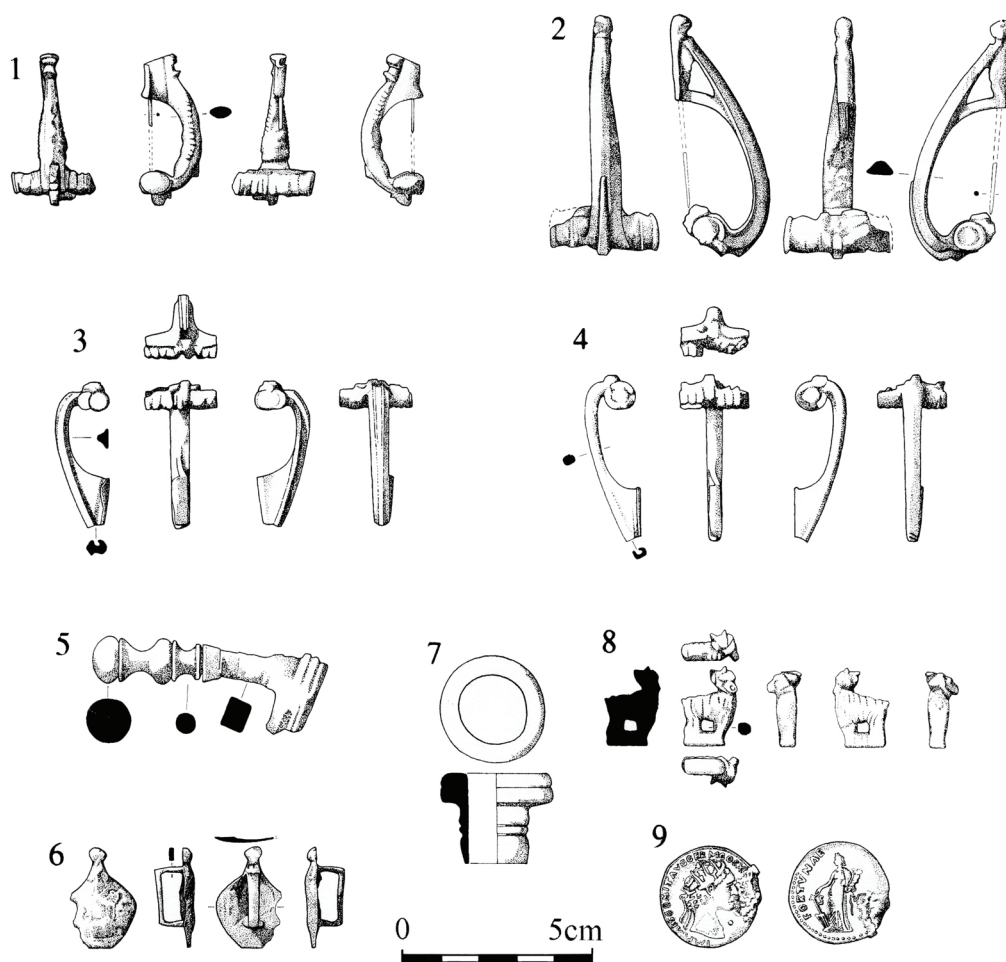
Fig 17. 1. Site 1: <116> Colchester type brooch; 2. Site 1: <144> Dolphin type brooch; 3. Site 2: <2> Colchester type brooch; 4. Site 2: <6> Colchester type brooch; 5. Site 1: <166> Handle; 6. Site 1: <165> Belt mount; 7. Site 1: <127> Trumpet mouthpiece; 8. Site 1: <l38> Copper-alloy figurine/ mount in the form of a goat; 9. Site 1: <136> Dupondius of Domitian AD *90—96*

Plate Brooches

Site 1

<125> Disc brooch (incomplete); damaged back plate with pin and catch plate. D22mm +. [840] (not illus)

Hairpins

Site 1

<142> Cast pin with reel/bead/reel surmounted by flattened sphere; point missing. Crummy Type 2 but extremely dainty for a hairpin. Type 2 metal pins were introduced early in the 2nd century AD and had perhaps gone out of production by the 3rd century (Crummy 1983, 28). L 62mm. [933] (not illus)

<161> Cast; head missing. L 113mm. [1060] (not illus)

Beads

Site 1

Two were recovered, both glass cylinder beads. This type covered the whole Roman period but became most popular in Britain after the 3rd century AD; small cut segments were common in Late Roman necklaces (Guido 1978, 95). Both examples below were found in Phase 6 (4th-century) contexts.

<118> Dark opaque green with longitudinal striations on surface; polygonal section. L 11mm; D 4.5mm. [757]

<144> Cut segment of opaque blue-green bead; circular section. L 6mm; D 5mm. [991]

Toilet, surgical or pharmaceutical instruments

Site 1

All are of copper alloy, except for <166> which has some iron still attached.

<135> Nail-cleaner of beaten metal; straight flat shaft with two decorative longitudinal lines; suspension loop at right angles to the blade; from Phase 6: 4th-century pit fill. L 40mm; W 7mm. [961]

<166> Handle; cast moulded and very slightly curved; trace of iron insert still present at socketed end. The quality of the object and the deliberate curve imply it was possibly from a specialised knife or medical implement. L 61mm; W 25mm. [603] (Fig 17.5)

<141> Cast object which may have been a toilet spoon or medical implement. The pointed end is missing, while the thicker end appears to have had a flattened piece pinched off; this may be the result of recycling of the object for its metal (with reference to <153> below, although neither object joins). L 16mm. [992]

Domestic utensils or furniture

Site 1

<153> Broken cast object which, to judge by its curved end, was probably a plain drop handle. When the fragments are joined, however, the object is asymmetrical and thicker towards its broken end, so it may have been a metalworker's failed product. Interestingly this piece was found in the same context as the toilet spoon or medical instrument <141> above; both may have been intended for recycling. A coin from the same context has been dated to AD 270–273. L 65mm+. [992]

Buildings and services

Nails
Site 1
<110> [602]; <178> [715]; <190> [1060].

Tools

Iron knife-blade fragments
Site 1
<117>. 28mm x 17mm. [742]
<158> 23mm x 15mm. [929]

Site 2
<11> iron fragment, probably from a blade; tapering towards one end. L 39mm; W 23mm+. [250]

Fasteners and fittings

Site 1
<121> Broken fragments of copper-alloy strip; x-radiography shows what appears to be a pattern of circles running lengthwise. L 62mm; W 17mm. [753]
<114> Iron with two perforations; burnt. L 145mm. [682]
<180> Iron mount; fragment; slightly curved. 45mm x 23mm. [757]

Military equipment

Site 1
<165> Belt mount; cast; damaged around part of edge; reverse has rectangular attachment loop. L 26mm; W 17mm+. [1060] (Fig 17.6)
<127> Trumpet mouthpiece. Cast and very well preserved; this object was recovered from a 4th-century pit. L 26mm+; D 27mm. [907] (Fig 17.7)

Objects associated with religious beliefs and practices

Site 1
<138> Copper-alloy figurine/mount in the form of a goat. Although heavily stylised, its small backward swept horns and body hair are realistically shown. Under the base of the figure is a tiny rectangular attachment loop. The goat is one of the cult emblems of the god Mercury, frequently accompanying him in representations, but may additionally have had an independent fertility symbolism (Green 1978, 26). L 15mm; H 19mm. [936] (Fig 17.8)

Waste associated with metal working

Site 1

Virtually all the metal working waste was recovered from fills in the road ditch, probably brought in with the quantities of iron slag which would appear to have been used as metalling. However refer also to <141> medical implement and <153> handle (above), both from pit fill [992].

<160> Copper alloy casting sprue. L 16mm. [929]

<143> Copper alloy casting waste. L 35mm. [952]

<159> and <160> Copper alloy waste distorted by heat. L 15mm & 28mm. [929]

<130> Distorted lead strip waste. L 42mm. [937]

Coins

Site 1

<172> Copper-alloy *as/dupondius*, 1st to early 2nd century, extremely corroded. [800]

<131> Copper-alloy *as*, Nerva AD 97, as *RIC* II 83. [883]

<136> Copper-alloy *dupondius*, Domitian AD 90–96, *RIC* 392. [924] (Fig 17.9)

<133> Copper-alloy Claudian copy, AD 45–65, Grade II. [936]

<140> Copper-alloy, mid-3rd century, extremely worn and corroded. [984]

<152> Copper-alloy *antoninianus*, Tetricus I, AD 270–273, minted in Cologne/Trier. [992]

<150> Copper-alloy, mid-3rd century, very worn. [1004]

<123> Copper-alloy unidentifiable, extremely corroded. [824]

<154> Copper-alloy unidentifiable, extremely worn and corroded, fragmentary. [992]

Site 2

<3> Copper-alloy *sestertius*, AD 115–117. Reverse celebrates Trajan's victory over Armenia and Mesopotamia. Trajan, *RIC* 642. (190)

Post-Roman

Dress and objects associated with dress and grooming

Buttons and fasteners

<193> Two copper-alloy buttons of different sizes; solid attachment loop on reverse; larger flat, smaller slightly convex; probably coat buttons. Both relatively modern in appearance (19th–20th century). D 26mm; 17mm. [5]

<174> Copper-alloy globular button; hollow; broken loop attachment. D 12mm. [842]

<197> Copper-alloy round button; now broken in half and in fragments; originally composite? D 23mm. [513]

<100> Glass button; dark blue; round with cut facetting around edge. D 23mm. [639]

<198> Copper-alloy wire loop fastener. Used in the medieval and early post-medieval periods as either a dress fastener or chain link. From Phase 7 (12th–early 14th century). D 11mm. [838]

Brooch

<103> Copper-alloy oval brooch; decoration of a bird (dove?) in flight. Found in a 19th-century cesspit cut. 37mm x 30mm. [639]

Fan

<101> Bone fragments of fan ribs; probably 18th century. L 131mm (largest). [632]

Brush

<186> Bone handle; perforated for suspension. L 89mm. [632]

Comb

<185> Bone; fragment of double-sided type; one side 12 teeth per 10mm; other 22 per 10mm. L 46mm. [632]

Domestic activity

Knives, cutlery and kitchen utensils

<175> Ivory knife handle, with only part of iron blade remaining; whittle tang. L 90mm; W 17mm. [609]

<124> Wooden cutlery handle; turned. L 74mm. [824]

<176> Possible copper-alloy vessel fragment. L 32mm; W 17mm. [unstratified]

Stone hones

(The petrological identifications are by John Brown)

<196> Fragment of Norwegian ragstone. L 123mm. [517]

<195> Coarse grain, sedimentary sandstone. L 32mm. [119]

<194> Hammer stone, flint; broken at one end. L 104mm. [110]

Ceramic figurine/doll

<102> In Roman dress and carrying a sword; head is missing and it once had separate limbs, which would have swivelled; Parian ware, 19th century. L 39mm. [639]

Horse furniture and equipment

<170> Copper-alloy stud or mount; damaged; slightly convex with central perforation; incomplete; this may be a bridle boss and could be residual Roman; context date: late 15th–early 16th century. D 27+mm. [1106]

<115> Iron buckle; crude D-shaped frame; flat in section. Probably a harness buckle. 55mm x 78mm. [682]

<112> Iron rowel spur; incomplete; traces of the end of the rowel box are only visible on the x-radiograph. L 88mm+; W 75mm. [669]

<134> Badly damaged iron spur; corroded, with pieces lost owing to lamination, and badly twisted; spur end missing; possible single ring terminal visible on x-radiograph. L 80mm+. [877]

<201> Iron horseshoe; half; square holes; probably post-medieval. L 132mm. [487]

<206> Iron horseshoe; half, in fragments; post-medieval. L 121mm. [76]

<188> Iron horseshoe; fragmentary. L 84mm. [828]

Metalworking waste

<176> Copper-alloy sheet waste fragment; L 30mm. [unstratified]

<199> Lead strip. L 85mm. [59]

<204> Lead strip. L 69mm. [34]

Coin

<122> Copper-alloy jetton; damaged and corroded. This type of jetton was manufactured in some quantity in France and the Low Countries in the late medieval/early post-medieval period to supply an English market. This example is probably 15th century. [unstratified]

Miscellaneous

<104> Glass syringe; plunger still present; 19th century. L 101mm. [639]

<113> Iron ferrule; D-shaped; one end damaged. L 63mm; W 16mm. [682]

<109> Iron wall hook; incomplete; one end pointed. L 134mm; W 26mm. [606]

<203> Iron ring. D 60mm. [527]

<111> Flat lead disc which appears to have been deliberately cut in half; possibly to be used as a balance weight. Recovered from late 16th/17th-century context. Wt 28g; D 39mm (original); thickness 3mm. [669]

THE IRON SLAG

Lynne Keys

Methodology and discussion of terms

Just over 39kg of material identified as iron slag was recovered from the excavations. All the slag presented was examined by eye and categorised on the basis of morphology alone. Each category of slag in each context was individually weighed, but the smithing hearth bottoms were weighed individually and measured to obtain their dimensions.

Activities involving iron can take two forms:

(1) The manufacture of iron from ore and fuel in a *smelting* furnace. The resulting products are slag (waste) and a spongy mass called an unconsolidated bloom which consists of iron with a considerable amount of slag still trapped inside.

(2a) *Primary smithing* (hot working by a smith using a hammer) of the bloom on a stringhearth, usually near the smelting furnace, to remove excess slag. The slag from this process will include micro-slags, particularly tiny smithing spheres.

(2b) *Secondary smithing* (hot working) of an iron shape by a smith to turn it into a utilitarian object. This will also generate micro-slags: hammerscale flakes from ordinary hot working of a piece of iron, or tiny spheres from high temperature welding to join two pieces of iron.

The slag assemblage represents secondary iron smithing. Some slags could have been generated by either smelting or smithing, but only one tiny fragment of diagnostic smelting slag was recovered and that from a Late Roman pit. Some of the slag may once have formed parts of smithing hearth bottoms but since it is broken up and we cannot be sure, it had to be assigned to the 'undiagnostic' category. Other non-ironworking debris present (*eg* fired clay, vitrified hearth lining, cinder, and fuel ash slags) could have been the result of various kinds of high temperature activities (including domestic fires) and cannot be taken on its own to indicate ironworking was taking place. However, when found with iron slag or in an area where activities involving production or working of iron were taking place, it is reasonable to suggest that this too may have been produced by the process.

Slags diagnostic of iron smithing take two main forms: bulk slags and micro-slags. Of the bulk slags, the smithing hearth bottom is the one least likely to be confused with slags produced by smelting. Its characteristic plano-convex shape was formed as a result of high temperature reactions between the iron, iron-scale and either silica from a clay furnace lining or the silica flux used by the smith. The predominantly iron silicate material produced by this reaction dripped down into the hearth base during smithing forming smithing slag, which,

if not cleared out, developed into the smithing hearth bottom. When removed from the hearth these were usually taken outside and deposited in the nearest pit or ditch. The proximity of cut features or dumps with quantities of smithing hearth bottoms to a building is often a good indication that the structure may have been a smithy.

The slag

Phase 1; Trench 2
A smithing hearth bottom was recovered from a 5cm spit of brickearth [1198]. No great significance should be attached to this unless the brickearth is thought to be pre-Iron Age.

Early Iron Age

Phase 3; Trench 3
The majority of the slag (1,017g) from this period was recovered from the fills [934], [1019], [1211] of the waterlogged channel. A small amount of undiagnostic slag came from pit fill [1155].

Roman

This is the most significant period with regard to iron slag. Unlike the earlier and later periods, a number of activities were taking place on the site involving slag, each revealing a different aspect of site development, particularly in Phase 5.

Phase 4; Trench 3
The slag from this phase was found solely in the fill of the original cut of the road ditch. The amount of slag is, however, extremely small (45g) and stands in marked contrast to the slag deposited in the next phase from the recutting of the road ditch. The implication is that either any smith nearby did not dump slag into the ditch at this time or that the road (which one might expect to erode into the ditch) did not contain slag in its make-up (or at least not a significant amount). Such unusual depositional behaviour on the part of the local smith or smiths can be ruled out, smiths being notorious opportunists who deposit their slags in any open features or convenient space nearest the place where they are working. The likely explanation is that the absence of slag reflects the fact that the first Roman road was *not* metalled with slag. This explanation is supported by the areas of deposition and amounts of slag in the next phase.

Phase 5; Trench 2
The presence of iron slag in this trench represents smithing activity being carried out using two hearths [908] and [909] excavated in this area. [908] contained a charcoal fill as well as a smithing hearth bottom, some undiagnostic slag (probably broken smithing hearth bottoms), vitrified hearth lining, cinder, and some nails. [909] produced a large amount of fired clay which may have formed part of its lining, but it also contained a smithing hearth bottom and debris similar to that from [908], including a nail. In addition, the hearth fill contained some flake hammerscale. This is a micro-slag produced by the ordinary hot working of a piece of iron by a smith. The manufacture of nails would produce this micro-slag.

No outline of a building could be discerned from the postholes and stakeholes in the area around the hearths, but it should be noted when discussing the absence of evidence for a structure that one of Canham's trenches ran immediately across the area beside the two hearths and will have truncated any evidence which may have remained there. It is very probable the activity *did* take place in some structure, as discussed above.

Pit [779], *c.*8m away from the hearths, contained 16 smithing hearth bottoms and a considerable quantity of undiagnostic slag, some vitrified hearth lining, and cinder. Pit [1074], very close to both hearths, contained 7 smithing hearth bottoms and almost 3kg of undiagnostic slag. The gravel levelling a little further away was found to contain a smithing hearth bottom and a very small amount of slag.

Several features in the north-west of Trench 2, over 12m away from the hearths, also produced slag, but not in large amounts. It may be that smithing activity was taking place there too but the evidence is not substantial and the slag may indeed represent debris generated by the smithing carried out in [908] and [909].

Phase 5; Trench 3
A total of over 15kg of slag was recovered from Trench 3 in this phase, most of it from the fills of the recut roadside ditch. The slag does not appear to have been deposited as a result of nearby smithing activity; rather its presence has implications for the Roman road at this point and possibly for the organisation of the road builders in collecting large amounts of slag for re-use. 34 smithing hearth bottoms were present

in a total amount of 10.5kg of slag. The slag was not generated by the smithing activity evident in Trench 2, as smiths do not carry their slag that far to discard it, unless there was a requirement that they do so for some purpose. Further, it is unlikely, having brought it so far, that they would actually dispose of it into the ditch. It seems more likely that slag was brought from the immediate neighbourhood or from much further afield to be deposited on the Roman road. The presence of the slag implies that the recut was probably undertaken at the same time as the road was resurfaced or improved. Large quantities of iron slag (only a small proportion of which would have found its way into the ditch, and an even smaller sample of which was recovered from the slots dug through the ditch) were used to resurface the road. The slag was probably mixed with other materials to produce a hard, weather resistant surface. Over time, however, the edges of the road would erode and some of the surface constituents would fall into the ditch, hence the presence of the slag. The fills of the secondary recut produced some 3.6kg of slag containing nine smithing hearth bottoms. The amount is not as large as the previous recut which may imply the road repairers were not resurfacing the road but only using the slag to fill in potholes where necessary.

Late Roman

Phase 6; Trenches 2 and 3
Only 491g of slag and possibly related debris were recovered from this phase. Only two fragments came from Trench 2, one a piece of tap slag. Tap slag is a dense, low porosity slag with a ropey flowed structure produced during the smelting process. It is formed as the liquid slag is allowed to flow out continuously or intermittently through a hole in the side of the furnace along a specially made channel into a hollow in the ground. The slag in Trench 3 was found in various cuts with no large depositions in any feature. The road ditch fill has none.

THE ENVIRONMENTAL EVIDENCE

Nick Branch

The lithostragraphic analysis of column samples taken through the sedimentary sequence in the Roman roadside ditch indicates predominantly fine-grained sediment deposition. These sedi-

ments most probably represent natural erosion from the edges of the archaeological feature and deposition in its base. Although it is possible that the charcoal represents *in-situ* burning, it most likely indicates dumping of waste materials.

The lithostratigraphic descriptions of the column samples are as follows.

Column sample 4 (2.33–2.83m OD)

2.33–2.47	Grey (2.5Y 5/1); Clay (As4); diffuse boundary
2.47–2.83	Dark yellowish brown (10YR 3/6); Clay with gravel (As4 Gg+)

Column sample 3 (2.70–3.20m OD)

2.70–3.20	Dark yellowish brown (10YR 3/6); Clay with charcoal (As4)

Column sample 2 (3.17–3.67m OD)

3.17–3.38	Grey (10YR 5/1) and yellowish brown (10YR 5/8); Clay (As4); sharp boundary
3.38–3.61	Yellowish brown (10YR 5/6) and dark grey (10YR 4/1); Clay with gravel (As4 Gg+) and charcoal; sharp boundary
3.61–3.67	Dark yellowish brown (10YR 3/6); Clay with charcoal (As4)

Column sample 1 (3.59–4.09m OD)

3.59–4.09	Grey (10YR 5/1) and yellowish brown (10YR 5/8); Clay with sand (As4 Ga+)

Environmental bulk samples taken from the Roman roadside ditch were poor in charred plant material. The recut Roman roadside ditch contained emmer (*Triticum dicoccum*) grains, with one spelt (*T.spelta*) and two barley (*Hordeum sativum*) grains. Five internodes of emmer wheat were also present. The primary fill of the roadside ditch was similar, containing a couple of barley grains, and twelve other grains of which only four could be identified as wheat indet (*Triticum sp.*). The assemblage also contained a few internodes belonging to emmer and spelt wheats. The wild seeds indicate arable fields and grassland (Poaceae spp. and small legumes, Fabaceae spp.), the latter particularly from the primary fill. A total of seven taxa were identified from charcoal found in the three

Table 5. Taxon identifications: 1st–2nd-century (AD 70–200) Roman deposits

Context/Sample No.	Corylus/Alnus	Fraxinus excelsior	Maloideae	Prunus sp.	Quercus sp.	Ulmus sp.	Indeterminate	Total
936 (23) Fill of roadside ditch	-	-	1	3	32	-	1	37
1061 (31) Fill of roadside ditch	3	3	1	-	17	2	4	30
1177 (34) Charred remains within hearth	1	-	-	-	87	3	9	100
Total	4	3	2	3	136	5	14	167

Roman contexts (Table 5). The figures listed in the table enumerate the number of fragments identified for each taxon.

The charcoal rich fill of the Phase 9 beehive-shaped structure provided a rich and relatively well preserved charred plant macrofossil assemblage with a large number of wheat grains. The majority could only be identified as emmer/bread wheat (*Triticum dicoccum/ aestivum*), as not enough of the distinguishing features remained, but a number of possible bread wheat grains were identified (*Triticum* cf. *aestivum*). There were also a few barley grains in the assemblage, but no chaff. The ratio between cereals and wild seeds is about 2:1, the latter predominantly composed of grasses. There were also a number of species that inhabit wasteland and cultivated land, such as *Chenopodium album* and *Rumex crispus*. Damp ground is also represented through species such as *Polygonum hydropiper* and *Galium* cf. *odoratum*. The most unusual aspect of the sample was the presence of charred flower heads, buds and other plant parts. Unfortunately it was not possible to identify these. The post-medieval sample suggests bread wheat was a significant component of the diet, with hulled barley and possibly oat also contributing. The small weed seeds indicate either cultivated fields or grassland in the vicinity. It is possible that the post-medieval crops were grown locally with the structure surrounded by arable fields. The lack of chaff alone is not enough to say the crops were 'clean' (prime grain), as it does not preserve well, particularly if subject to repeated burning. The charcoal from the beehive-shaped structure predominantly consisted of fragments of coppiced oak, *Quercus*, which was most likely used to fuel the ovens/hearths at the same property. It is likely that some form of silviculture was practised in the post-medieval period, perhaps as part of a woodland management regime, and that aspects of this are seemingly reflected in the wood anatomy of some of the fragments examined. Charcoal from the post-medieval structure was generally better preserved than that recovered from the Roman ditch and many fragments were notable for their relatively large dimensions. The comparatively low degree of fragmentation and the condition of the fragments generally reflects the short time since deposition/burial. This implies that the structure was backfilled with the rake-out of the ovens on the property.

THE ANIMAL BONE

Lisa Yeomans

A total of 347 animal bones, mainly from the roadside ditch and its subsequent recut, was recovered from features dating to the Roman period. Fragmentation had affected the quantity of bone that could be identified to species level (120 fragments). The bone from these phases is typical of domestic refuse, with cattle, pig, and caprines all represented (Table 6). Additionally, horse bones were well represented; this may be related to the Roman practice of burying these animals outside settlements (Grant 1975; Chapman 1984).

Table 6. Number of identified bones from Roman phases

Species	Phase 4	Phase 5	Phase 6
Cattle (*Bos taurus*)	1	34 (39.1%)	14
Horse (*Equus caballus*)		15 (17.2%)	5
Pig (*Sus scrofa*)		3 (3.4%)	2
Sheep/Goat (*Ovis aries/Capra hircus*)	2	33 (37.9%)	7
Sheep (*Ovis aries*)	1	2 (2.3%)	1

A substantial quantity of animal bone, obviously leftover material from local industrial activities, had been generated during Phase 10. Distinguishing between bone waste created by butchery, tanning and horn working can be problematic (Armitage 1984; Serjeantson 1989). However, numerous tanning pits and historical evidence indicating that tanners were present in Brentford during the following centuries enables the faunal assemblage to be interpreted as the result of leather production. The character of the animal bone is consistent with this conclusion. The quantity of animal bone, despite numbering in excess of 1,000 fragments, would have been only a fraction of the debris generated by the industry over the period of production. (In many parts of the country there was local legislation stating that tanneries were required to regularly clear premises of such refuse.) It is worth noting that almost 90% of the bone identifiable to species originated from cattle, suggesting that the main focus of the tanning industry was associated with the preparation of cattle hides. These would have been transported from butchers with the lower limbs and skulls still attached; this was a traditional practice up until the mid-18th century (Thomas 1981). The lower limbs are of little value to the butchers but may have provided useful appendages for the manipulation and stretching of hides (Heard 2000). Lower limb bones and skull fragments formed nearly the entire assemblage from Brentford Lock. The absence of the ulnar, radial and intermediate carpals, as well as the astragalus, calcaneus and navicular-cuboid, compared to high occurrence of the carpals and tarsals distal to these bones, implies that the butchery process was uniform. The lower limbs and hide had been separated from the major meat-providing portion of the carcass between the group of carpals in the forelimb and tarsals in the hind limb. Relatively

few phalanges were present and it may be suggested that these were sold on attached to the hooves to a neatsfoot oil producer (Thomas 1983). This interpretation should be viewed with caution, since many of the pits contained specific anatomical elements, as if the bones were sorted prior to discard. Therefore, it is possible that pits containing phalanges may have been located outside the excavated areas. Since the process of leather manufacture is time consuming, the most economical use of labour requires that quantities of hides are at different stages in the tanning sequence, ensuring a constant supply of the finished product. As such, larger scale operations following a set pattern of treatment would have been more effective at reducing costs. The separation of the bones and their deposition in separate pits may have been specifically designed to enable the various parts of the skeleton to be traded on after a significant quantity had been accumulated. This type of waste is known to have been used in the construction of drains and floors. These transactions may not have been fulfilled during the last cycle of leather manufacture just before the tannery ceased production. One horncore displayed cuts marks around the base, otherwise there were no signs of removal of the actual horn from the inner core, indicating that the cattle horns were passed on to horn workers intact, leaving the recipient to prepare the raw material.

Providing an accurate age-profile of the animals slaughtered is difficult, since the mandibles were removed prior to transport from the butchers to the tannery. Data from the fusion of long bones only provides a mortality profile up to the age when cattle become skeletally mature. The few phalanges present and the fusion of the distal metapodials indicate that all of the animals represented were over one and a half years of age; a few (16%) were slaughtered before the age of two years, whilst 53% lived past the age of three years (based on the fusion ages provided by Silver 1969). Absence of bone from very young animals would imply that calfskins were not processed at the tannery; this is consistent with historical evidence suggesting that tanning the hides of juvenile animals was a relatively uncommon practice (Clarkson 1960). Although wear stages of maxillary teeth are not generally used in age estimation, the degree of wear exhibited by these teeth also implies that many of the animals were killed as adults that were in

their prime. Similarly the horncores of the cattle were consistently classified as originating from either young adult or adult animals (Armitage 1982). This would have been relatively standard for the tanning industry, since the hides would have come directly from the butchers. It would have been necessary for the tanneries to utilise the by-products of the meat trade because demand for the finished product was so high.

The animal bone from the fill of one of the barrel-lined pits was of particular interest in that it mainly consisted of cattle metacarpals treated in a consistent manner. These bones had been broken in half perpendicular to their long axis by chops directed at the anterior and/or posterior surfaces of the shaft. The resulting breakage was uniform with the proximal and distal portions being approximately equal in size. A single hole had also been drilled down through the medial side of the proximal articulation; this pattern was repeated on 16 different bones and the size of these perforations was relatively standardised, measuring between 12.8 and 15.2 mm in diameter. The purpose of this modification is unclear. Although marrow is a substance that could be used in tanning, it is only the metacarpals that display the breakage pattern. The metatarsals, which also contain marrow, were found complete. Furthermore the breakage pattern would not have readily facilitated access to the fat stored in the diaphysis. It seems unlikely that the holes were drilled for the hanging of the carcass during bleeding as the animals are usually hung from their hind limbs (Sharphouse 1983); a hole through the proximal articulation of forelimb bones would not be suitably placed for this task. An alternative possibility is that the holes formed a socket in which tools could be held. However, as the distal portion of the metacarpal was discarded at the same time as the proximal half, it suggests that the upper regions of the bone were not kept as a tool handle. Perhaps the holes were related to stretching of the hides in some manner; occasionally perforated cattle bones (both metatarsals and metacarpals) have been found at sites associated with the tanning industry in Southwark: 156–170 Bermondsey Street, BRB 02; Tower Bridge Road, TWG 00; and Tabard Square, LLS 02. One metacarpal from 156–170 Bermondsey Street had been modified into a pinners bone; a possible interpretation could be that the hole in the proximal articulation formed a means of clamping these to a workbench during use. At present the most probable conclusion for these drilled holes is that they relate to the tanning process in some, as yet undetermined, manner. The fact that examples of this practice are known from a Bermondsey Street site in Southwark, an area also known for the importance of its tanning industry, suggests that the practice was once widely distributed.

Aside from the bones of cattle, caprine (mainly sheep, although goat was also present) was identified in the assemblage; these formed less than 10% of the material. From the recovery of these bones in the same contexts as the other tannery waste, along with the body-part representation, it can be concluded that the hides of sheep were also processed at the site. There is minimal ageing data, but the older animals appear to be well represented; perhaps the tannery obtained hides from a wool herd or animals butchered for mutton. In the immediate vicinity of a concentration of tanning pits, a pit containing horse bones may be evidence of the production of leather from horse skins; the remains of at least two animals were represented in this sample. Traditionally there was a difference between the tanner and whittawyer; historical records document that the tanneries were not to process the skins of sheep, goat, horse, deer or dogs. The archaeological evidence from this site, and others, clearly demonstrates that this rule was frequently ignored (Shaw 1987).

In conclusion, cattle hides were the main focus of the industry at the Brentford Lock tannery. This is in contrast to the archaeological evidence for the tanneries in Bermondsey during the post-medieval period, where a number of zooarchaeological studies have shown that the classes of animal associated with the whittawyer's trade were more common (Armitage 2000; Elsden 2002; Heard 2000). Specialisation in the skins of different animals in regions of London associated with leather production partly supports Clarkson (1960, 250), who argued that the tanners were 'located outside the City', although the difference was by no means as clear-cut as the historical evidence would suggest. Access to resources, availability of land, location of related trades and traditional practices may all have influenced the placement of the various aspects of the leather producing economy of post-medieval London. The production of leather at Brentford Lock appears to have been a large-scale process geared towards providing quantities of

leather mainly derived from cattle hides; the site was probably also involved in trading bone waste from this process to other industries.

CONCLUSIONS

These excavations have provided a window into the nature and development of Brentford throughout the prehistoric, Roman, medieval, and post-medieval periods within its context as a staging-post on a major river and road route to London. Evidence of Iron Age occupation has been located to the east and west of Brentford: at the former Brentford Gas Works site (Bishop 2002a) and at Brentford Lock, although the nucleus of the Iron Age settlement at Brentford remains undiscovered.

The status of the Roman settlement at Brentford is difficult to interpret, and the subject has been frequently debated with regard to other similar sites. Hanley suggests similar small-sized settlements fulfilled a vital role within the Roman countryside, the population of Roman Britain being about 4 to 6 million (2000, 5). The roadside settlement at Aldfoldean, W Sussex, was constructed along the *Londinium* to *Noviomagus Regnensium* (Chichester) road known as Stane Street, where the road bridges the River Arun, in the late 1st century. The settlement extended for 600m south of the River Arun and included a *mansio* complex which was later enclosed by a bank and ditch in the late 2nd century. The settlement at Aldfoldean is a useful parallel to Brentford because it has escaped medieval ploughing and post-medieval development, thus the morphology of the settlement has been established. Outside the enclosed area up to ten buildings were identified within 10m of Stane Street. One of these measured 8.8m wide by 10m long and was sited parallel to the road; narrower buildings were sited perpendicular to the road. There is no consistent plot width, though the reduction in Roman material within the ploughsoil suggests properties may be 40m wide (Millet & Graham 1986, 153). Attempts have been made to categorise small Roman towns, although the terminology of such settlements is often fraught with difficulties. Burnham (1993, 103) has suggested an alternative threefold scheme to Rivet's categorisation (1975): Upper, Middle and Lower Order Settlements. Roman Brentford could be categorised as a Lower Order Settlement since no defences, specialised functions or public buildings have yet been found; however the absence of such features perhaps reflects the poor preservation of the settlement. The new discovery of occupation to the west of the River Brent indicates Roman Brentford was larger than previously thought. It is even possible that some of the higher status buildings associated with *mansio* complexes may be situated here. Similar sites remain poorly understood, though they are crucial to our wider comprehension of the Roman infrastructure. The newly discovered extent of Brentford beyond the River Brent implies that it fulfilled several functions, including agriculture, craft and industry, and a marketplace, although the absence of evidence for public buildings implies it was not used for administration. This large roadside settlement would have provided a range of specialist services to road users while utilising its position near to the road and waterways to facilitate the distribution of industrial and agricultural products.

The continued use of the line of the Roman road as an important route, and the proximity of the Thames and the Brent, ensured the expansion and success of Brentford through the medieval and post-medieval periods, and demonstrates the importance of this location on the Roman, medieval and post-medieval transport network. This continued into the 18th and 19th centuries, when after the construction of the Grand Union Canal, Brentford became almost a victim of its own success and ever more industrialised and overpopulated.

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