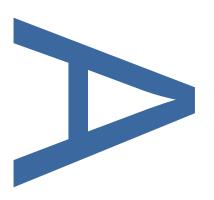
LAND AT THE HIGHWAY, WAPPING LANE, PENNINGTON STREET AND CHIGWELL HILL, (PARCEL 4) LONDON E1



AN ARCHAEOLOGICAL ASSESSMENT



LOCAL PLANNING AUTHORITY: LONDON BOROUGH OF TOWER HAMLETS



PCA REPORT NO: R13591

SITE CODE: TBF10

PRE-CONSTRUCT ARCHAEOLOGY

DOCUMENT VERIFICATION

LAND AT THE HIGHWAY, WAPPING LANE, PENNINGTON STREET AND CHIGWELL HILL (PARCEL 4) LONDON E1 LONDON BOROUGH OF TOWER HAMLETS

EXCAVATION

Quality Control

Pre-Coi	Pre-Construct Archaeology Limited		
	Name & Title	Signature	Date
Text Prepared by:	Alistair Douglas		February 2019
Graphics Prepared by:	Mark Roughley		February 2019
Graphics Checked by:	Josephine Brown		February 2019
Project Manager Sign-off:	Jon Butler		February 2019

Revision No.	Date	Checked	Approved

Pre-Construct Archaeology Ltd Unit 54 Brockley Cross Business Centre 96 Endwell Road London SE4 2PD

Site Code: TBF10

Central National Grid Reference: TQ 3745 8070

Written and Researched by Alistair Douglas

Pre-Construct Archaeology Limited

Project Manager: Peter Moore

Commissioning Client: CgMs Consulting on behalf of Messila House Ltd.

Contractor:

Pre-Construct Archaeology Limited
Unit 54 Brockley Cross Business Centre
96 Endwell Road

Brockley London

SE4 2PD

Tel: 020 7732 3925 Fax: 020 7732 7896

Email: pmoore@pre-construct.com

Website: www.pre-construct.com

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1 ABSTRACT

- 1.1 This report details the results and working of the archaeological excavation carried out on land at The Highway, Wapping Lane, Pennington Street and Chigwell Hill, (Parcel 4), London Borough of Tower Hamlets E1. The work was undertaken by Pre-Construct Archaeology Limited on behalf of Messila House Limited. The project was supervised by the author and the work was monitored by Kim Stabler and Adam Single of English Heritage (Greater London Archaeological Advisory Service) acting as archaeological planning advisor to the London Borough of Tower Hamlets and Duncan Hawkins of CgMs Consulting, consultant archaeologist for the client. The archaeological works were carried out in two phases; Trench 1 was excavated between 4th October 2010 and 14th April 2011 and Trench 2 and 3 were undertaken between 8th October 2014 and 6th February 2015. The archaeological investigation revealed a stratified sequence of archaeological deposits and features dating to the Bronze Age, Roman and post-medieval periods.
- 1.2 The site is located on an escarpment overlooking the Thames flood plain to the south. The natural drift geology across the site was revealed as Taplow Gravel. The highest level was at 7.15m OD in the north of the site (Trench 1) and lowest was at 2.81m OD in the south (Trench 2).
- 1.3 Lithics dating to the Mesolithic and Neolithic eras suggest the site was occasionally visited perhaps on a seasonal basis. These findings were consistent with the earlier excavations at Tobacco Dock (CYD98 and TOC02). The earliest archaeological deposits at TBF10 probably date to the Late Bronze Age consisting of a few pits and postholes and what may be the remnants of a 'burnt mound'. The deposits of abundant burnt and fire cracked flint are significant and suggest that the site was visited repeatedly for specialised activity during the Bronze Age.
- 1.4 After a long hiatus in archaeologically recognisable activity the site was occupied in the Roman period beginning in the 1st or early 2nd century with evidence that the escarpment slope was terraced and the land parcelled into plots demarcated by ditches and fence lines. Quarry pitting identified in the north of the site may have been to extract gravel possibly for a road leading east out of *Londinium* and conjectured to lie 100m to the north of the site.
- 1.5 The archaeological evidence unearthed at TBF10 is consistent with the earlier excavations at Tobacco Dock for an intensification of settlement activity in the middle of the 3rd century. At TBF10 a sequence of clay-and-timber buildings, other structures with earth-fast foundations, boundary ditches, rubbish pits and wells was evidence that the settlement continued until at least the early 5th century. A large assemblage of Roman artefacts including ceramic and stone building material, pottery, animal bone, coins and small finds were also recovered.
- 1.6 The site appears to have been abandoned sometime in the early 5th century and does not appear to have developed into a Saxon settlement. However, a few finds notably a number of

lead rings, a spear and a piece of glass do hint at a Germanic presence or at least cultural influence at the very end of Roman occupation.

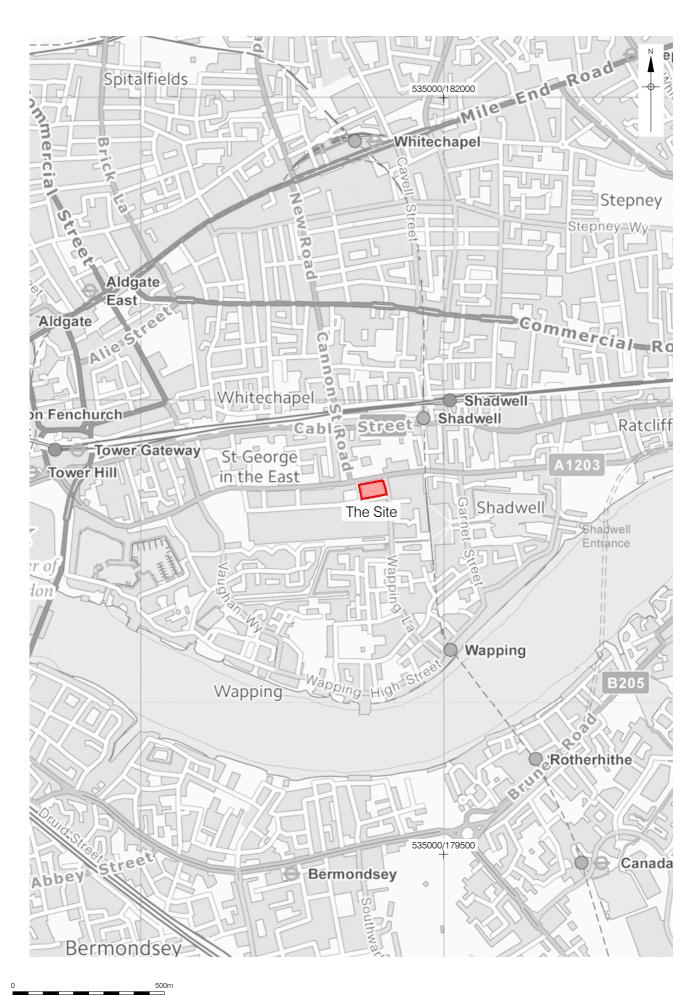
- 1.7 The post-Roman era is characterised by a lack of archaeological material with only few discernible features including a pit and a posthole and a small collection of medieval tile and pottery. The evidence suggests that the land at Tobacco Dock was peripheral to settlement and perhaps used for agriculture in the medieval period.
- 1.8 The site was re-occupied at the end of the 16th or early 17th century evidenced by postholes, rubbish pits and a cess pit. Further excavated wells, cess pits, and rubbish pits attest to occupation of the site throughout the 18th and 19th centuries.
- 1.9 The earliest post-medieval buildings (PMB 1 and PMB 2) unearthed on the site, probably date to the late 17th century. PMB 1 fronted onto The Highway and PMB 2 faced onto Pennington Street. By the middle of the 18th century the cartographic and archaeological evidence suggests that all the surrounding street frontages were built up. The remains of a building (PMB 4) was also revealed that probably fronted onto an alley that connected Pennington Street and The Highway and lay to the east and beyond the area of excavation.
- 1.10 Whilst most of the buildings at Tobacco Dock were probably for domestic use others may have had a commercial or industrial purpose. Ceramics associated with PMB 1 are an indication that it may have been a 17th-century drinking establishment. An 18th-century tanning pit is evidence for an onsite leather manufacturer. The 19th century building (PMB 5) is thought to have at least in part, a commercial or industrial function. The animal bone assemblage also produced evidence of bone working taking place in the 19th century.
- 1.11 The post-medieval buildings at Tobacco Dock remained standing until the middle of the 20th century when the site was badly damaged by enemy bombing.

2 INTRODUCTION

- 2.1 Pre-Construct Archaeology Limited (PCA) was commissioned by CgMs Consulting, on behalf of Messila House Limited to undertake an archaeological open area excavation on land (Parcel 4) at The Highway, London Borough of Tower Hamlets E1. The site (Fig. 1) is bounded to the north by The Highway, Pennington Street to the south, Wapping Lane (formerly Old Gravel Lane) to the east and Chigwell Street to the west. The site is a rectangular area of tarmac formerly a car park and covers an area of 3600m². The central National Grid Reference is TQ 3745 8070.
- 2.2 The current fieldwork followed a written scheme of investigation (Hawkins 2010) which was approved by the Local Authority and a site specific health and safety method statement and risk assessment (Moore 2010; revised 2014).
- 2.3 The excavation was carried out in two phases. The first phase of works was undertaken between 4th October 2010 and 14th April 2011 and comprised a single L-shaped trench (Trench 1) (see Fig. 2) in the north-west of the site, that covered an area of approximately 1612.46m². The northern arm of Trench 1 measured 62m by 17.75m and the eastern arm measured 27.90m by 18.35m. The second phase of archaeological work was carried out between 8th October 2014 and 6th February 2015 and comprised two trenches; Trench 2 was located in the south-central part of the site and Trench 3 was excavated in the southern step of Trench 2 (see Fig. 2). Trench 2 measured 32.95m by 23.75m and Trench 3 measured 2.95m by 2.75m. The total excavated area for Trench 2 and 3 was approximately 790.67m².
- 2.4 Alistair Douglas supervised the archaeological work, the project manager was Peter Moore, and the post-excavation manager was Jon Butler. The archaeological works were inspected and monitored by Duncan Hawkins of CgMs Consulting and by Kim Stabler and Adam Single of English Heritage (Greater London Archaeological Advisory Service).
- 2.5 The excavation was assigned a unique Museum of London site code TBF10.
- 2.6 The site has been the subject of previous archaeological investigations (see Fig. 3). Initially the site was the subject of a Desk Based Assessment by Richard Hughes of Ove Arup (Ove Arup 1994). This was followed by two archaeological field evaluations both undertaken by PCA; CYD96 in 1996 (Bishop 1996) and in 1997 (Douglas 1997). These evaluations clearly demonstrated the survival of significant post-medieval and Roman archaeological deposits, features and structures. As a result of these findings, an open area archaeological excavation also carried out by PCA was undertaken in 2002 (site code TOC02) on the eastern part of the site, approximately 30% of the total site area. The results of this excavation were detailed in a Phase Summary and Assessment Document (Douglas 2002). The Roman and prehistoric phases

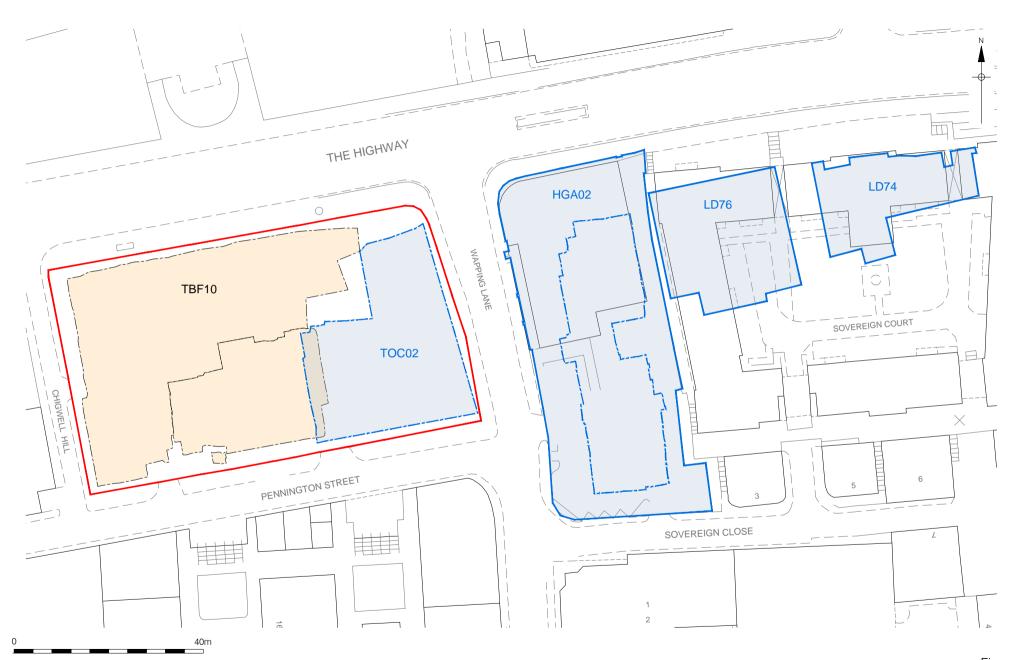
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of these archaeological investigations were published in conjunction with the Roman remains found nearby on land at the corner of the junction of Wapping Lane and the Highway, previously occupied by Babe Ruth restaurant (Douglas *et al.* 2011).





© Crown copyright 2019. All rights reserved. License number PMP36110309 © Pre-Construct Archaeology Ltd 2019 22/02/19 MR Figure 2 Detailed Site Location 1:625 at A4



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Previous Archaeological Interventions in the vicinity of TBF10
1:800 at A4

3 PLANNING BACKGROUND

- 3.1 The site lies within a designated Archaeological Priority Zone 'The Highway' and as such an agreed programme of archaeological works in advance of development forms part of the conditions for the granting of planning permission.
- 3.2 The archaeological excavation reported here was carried out in response to an Archaeological Written Scheme of Investigation (WSI) (Hawkins 2010) relating to planning permission T96/0026 which contains a condition (No 9) relating to archaeology that states:
 - 'No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted and approved by the local Planning Authority'.
- 3.3 The excavation mitigation strategy set out within the WSI (ibid) was the result of discussions and correspondence between Duncan Hawkins (the archaeological consultant for the client) and David Divers and Kim Stabler, English Heritage Archaeological Advisors to the London Borough of Tower Hamlets during August and September 2010.

4 GEOLOGY AND TOPOGRAPHY

- 4.1 The site is located c.1.2km east of the City of London on the north side of the river Thames and 4.7km west of the confluence of the Thames and the River Lea. The course of the Thames now lies some 0.65km south of the site but probably ran close to the site in the prehistoric and Roman period. Furthermore, it has been proposed (Barber and Bowsher 2000, fig. 3 and Douglas *et al.* 2011, fig. 5) that in the Roman period, a subsidiary back channel to the Thames running roughly east/west lay approximately 200m to the south of the site. This back-channel of the Thames may have offered a convenient safe-haven for Roman shipping.
- 4.2 The site sits on Taplow/Mucking terrace gravels (Gibbard 1994) and on an escarpment overlooking the alluvial deposits of the Thames floodplain to the south. Undisturbed terrace gravel was encountered in both the earlier evaluations of 1996 and 1997 (CYD96) and in the open area excavation of 2002 (TOC02). The highest level on the terrace gravel was at 6.85m OD in the north of the site falling to a low of 2.95m OD in the south-east. The excavation of 2002 (TOC02) revealed peat deposits in the south-east corner of the site, indicative of marshy ground and a north/south stream was conjectured (Douglas *et al.* 2011, fig. 8) flowing towards the Thames roughly on the alignment of Wapping Lane.
- 4.3 The earlier archaeological investigations suggested a topographic model not only of an incline from north to south, towards the river Thames but also an incline from the centre to the east and west and the possibility of a salient of higher ground in the south central part of the site.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 **Prehistoric**

- 5.1.1 The lithic assemblage from the evaluation (CYD96) and from the excavation (TOC02) has been collated and reported as a single assemblage (Douglas et al. 2011, 9). The evidence suggested prehistoric activity dated from the Mesolithic/early Neolithic era until the Bronze Age. The activity was thought to be sporadic and temporary, perhaps seasonal in nature although sustained over a long period.
- 5.1.2 Burnt flint has been recovered in small quantities from across the site and was thought to represent only residual background 'waste'.

5.2 Roman

- 5.2.1 The site lies 1.2km east of *Londinium* a Roman settlement founded in the first century in the aftermath of the Claudian invasion at the lowest bridgeable point on the Thames. Largely thanks to its geographical position on the River Thames and at the centre of a radiating road network *Londinium* rapidly developed as major trading centre.
- 5.2.2 In common with most Roman cities, Londinium was ringed by cemeteries laid out beyond the settlement boundaries and along the arterial roads. The cemeteries form an important symbolic division between the urban centre and the rural hinterland. Shadwell lies beyond the eastern cemetery, extensively excavated in the 1980s (Barber and Bowsher 2000) suggesting that Shadwell should perhaps be viewed as separate from, although intimately connected to Londinium.
- 5.2.3 The eastern cemetery excavations (Barber and Bowsher 2000) also revealed a road, laid out in c.AD 70-80 that ran east from *Londinium* towards the Thames at Ratcliff and its extrapolated course would pass approximately 100m to the north of the site (Lakin *et al.* 2002).
- 5.2.4 Until the mid-1970s the Roman archaeological evidence for Shadwell included only a scattering of stray finds and a number of high status burials to the east of the site, recorded in antiquarian records. The first significant evidence of Roman occupation of Shadwell was found c.70m to the east of the study site at LD74 and LD76, where the foundations of a 'tower' structure was excavated. The 'tower' was originally interpreted as a military signal station connecting *Londinium* to the 'Saxon Shore' forts of the 3rd and 4th centuries (Johnson 1975; 1979). However, this interpretation was challenged by Lakin *et al.* (2002) and a mausoleum standing in the late 1st or early 2nd century was thought to be more likely. The 'tower' sites were the focus of intense

- activity dating to the mid to late 3rd century including utilitarian buildings, drainage ditches, timber lined tanks and evidence of animal butchery. An impressive assemblage of Roman pottery and coinage was also recovered.
- 5.2.5 The 'tower' sites lie to the east of and adjacent to the site of Babe Ruth's Restaurant (site code HGA02) that lies opposite the study site on the east side of Wapping Lane. At HGA02 a large Roman public bath house was discovered. The bath house was built in the middle of the 3rd century and appeared to have remained in use until the late 4th century. Associated with the bath house was a sequence of clay-and-timber buildings, also dating from the mid-3rd century, rebuilt and maintained until the late 4th/early 5th century. The finds associated with the Roman remains included a rich assemblage of pottery, animal bone, coins, jewellery, and hair pins (Douglas *et al.* 2011).
- 5.2.6 Adjacent and to the east of the excavations of TBF10 at TOC02 further Roman deposits and features were excavated including clay-and-timber buildings, masonry ovens, rubbish pits, wells, drainage ditches, and terracing/landscaping works (Douglas *et al.* 2011).
- 5.2.7 It has been argued (Douglas *et al.* 2011) that the Roman remains at Shadwell represent Roman activity spanning the 1st to the early 5th century. In the early Roman period the settlement at Shadwell appears to have been essentially a small rural riverside community engaged in farming, fishing and possibly boat building (Douglas *et al.* 2011, 13). However, from the mid 3rd century onwards the settlement rapidly expanded along the escarpment and south towards the Thames. The settlement has at least some of the attributes of a 'small town' such as the large public bath house and appears to have acted as a 'gateway' community involved in trade and traffic with the continent

5.3 **Saxon**

5.3.1 The post-Roman abandonment of the Roman settlement at Shadwell is not well understood. The evidence for occupation during the Saxon period is elusive although it seems likely that the surrounding land would have continued to be agriculturally exploited.

5.4 Medieval

5.4.1 During the medieval period the site appears to have remained devoid of habitation. A few sherds of medieval pottery were recovered in the excavation of 2002 (Douglas 2004) from agricultural type soils that blanketed the southern part of the trench and may be an indication of when these soils were formed and worked.

5.5 Post-Medieval

- 5.5.1 The earlier archaeological investigations (TOC02) revealed an array of post-medieval structures and buildings largely domestic in nature. Other archaeological features included wells, cess pits, rubbish pits, drains and ditches.
- 5.5.2 The archaeological evidence was supported by the cartographic sources referred to in the Desk Top Assessment (Ove Arup 1994) that demonstrated in typical fashion that the early occupation was around the edges of the study site with the central area given over to gardens and back yards.
- 5.5.3 Interestingly the post-medieval pottery assemblage (TOC02) suggested that an Inn/Tavern establishment, a Coffee House and an apothecary may have been located on the study site.
- 5.5.4 In the beginning of the 19th century the London Docks were constructed. Immediately to the south of the site, Tobacco Dock was built between 1811 and 1814, to link London Dock (Western Dock) to a second facility to the east (Eastern Dock). A new warehouse (Tobacco Dock) was built which housed tobacco up until the 1860s and thereafter wool, wines and spirits would be stored (Douglas 2004). The docks attracted many thousands of labourers seeking work and the population of the area trebled between the beginning and the middle of the 19th century, reaching a peak of 12,000 in 1851 (Weinreb and Hibbert 2008, 831). The earlier archaeological investigations confirmed an increasingly built up environment predominantly domestic in nature although some of the buildings may have been used as warehouses. The pottery assemblage suggested that the site was of relatively low economic status throughout the 19th century.
- 5.5.5 Post-medieval small finds recovered from the earlier excavations of the study site include items of personnel dress and hygiene, such as hair curlers, buttons, combs, toothbrushes, bone syringes as well as household items such as thimbles, spoons, knife and cutlery handles. An unusual find were two Ottoman tobacco pipes originating from Turkey and dated post 1850.
- 5.5.6 The site maintained its basic 19th-century configuration up to the 2nd World War when it was heavily bombed. All the buildings that survived the bombing were levelled during or shortly after the war.
- 5.5.7 After the war, the site was subject to commercial/industrial development with the construction of five principal buildings (OS Map 1982). By the time of the first evaluation in 1996 all these buildings had been demolished and the site was a car park of the Tobacco Dock Factory Shop development.

6 ARCHAEOLOGICAL METHODOLOGY

- 6.1 In Trenches 1 and 2 the initial breaking-out of the hard standing and the reduction of the modern overburden was achieved by a 360° tracked excavator. The undifferentiated deposits were excavated by machine using a toothless 'ditching' bucket in 100mm spits and under archaeological supervision.
- 6.2 Where depths of c.1.20m were reached, the trench edges were stepped to allow safe basal access. However, in the south-west of Trench 1 there was an anticipated excavation depth of 4m and therefore the south and south-western sides of the trench were shored with "mabey" steel sheets.
- 6.3 Within the step, in the south of Trench 2, a third trench (Trench 3) was excavated by hand to allow further recording of archaeologically sensitive deposits.
- A site grid was established, using an Electronic Distance Measuring device and this was tied into the National Grid at the outset of the project.
- 6.5 Once the top of the archaeological horizon was reached the deposits were excavated by PCA staff using hand tools, i.e. trowels, shovels and mattocks, and recorded using single context recording method on pro forma context and planning sheets. Plans and sections were drawn at a scale of 1:20 or 1:10 as appropriate. Black and white, and digital photographs were taken.
- 6.6 In this report context numbers are set within squared brackets [], small finds are prefixed by SF and environmental samples are bracketed < >.
- 6.7 The entire site archive including the site records and the finds will be deposited with the London Archaeological Archive and Research Centre (LAARC) under Museum of London site code TBF10.

7 THE ARCHAEOLOGICAL SEQUENCE

7.1 Phase 1 (not illustrated)

- 7.1.1 This phase represents the lowest level of the stratigraphic sequence and the natural drift geology encountered.
- 7.1.2 Natural sand and gravel identified as Taplow Gravel, part of the Quaternary terrace sediments, was encountered in the north of Trench 1 at between 7.15m OD and 6.19m OD. In the south of Trench 1 the terrace gravel sloped to the south from 5.0m OD to 3.28m OD. In Trench 2 the terrace gravel also sloped to the south falling from 5.78m OD to 2.81m OD.
- 7.1.3 A series of at least 3 palaeo-channels generally on an east/west alignment dissected the gravel. Similar features had been recorded in the earlier excavations of TOC02.

7.2 Phase 2: Bronze Age (Figure 4)

7.2.1 This phase represents deposits and features that are probably Late Bronze Age or earlier in origin.

Trench 1

Archaic sub-soil

7.2.2 In the north-west of Trench 1 a level spread of 'dirty' silty gravelly sand [813] was recorded at between 7.21-7.07m OD. Further patches of this archaic sub-soil (contexts [467] and [1354]) were recorded further down the slope at 6.91m OD and 6.07m OD.

Colluvial deposits

7.2.3 A sequence of grey/brown silty sands and gravelly silts was recorded across the southern part of Trench 1. These deposits were devoid of any cultural material but their stratigraphic position suggests that they were probably formed in the prehistoric period possibly by a process of colluvial action. The deposits inclined to the south, mirroring the underlying slope of the natural terrace gravels, falling over a distance of approximately 8.50m, from a high of 4.77m OD on layer [1240] to a low of 3.36m OD on context [1349].

Deposits of burnt and cracked flint

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7.2.4 The colluvial soils in the south of Trench 1, were capped by three separated deposits [1327], [1328] and [1318] of greyish silty sand and gravel that contained a notable quantity of burnt and cracked flint (forming up to an estimated 20% of the deposit composition). Occasional fragments of charcoal and animal bone were also identified within the soil matrix. This burnt flint horizon was recorded between 4.44m OD and 4.05m OD. A small amount of Roman pottery collected from layer [1327] is thought to be intrusive and these deposits are phased to the prehistoric era.

Fire pit

7.2.5 A pit [1303] (fill [1302]) elongated on an E/W axis was excavated in the south-west of Trench 1. The cut measured 2.24m E-W by 0.60m N-S and was characterised by sloping sides falling to a concave base. The fill was black clayey silt with very frequent inclusions of cracked and burnt flint. It is possible that this feature may have been a fire pit.

Pitting

- 7.2.6 Three pits ([1315], [1336] and [1332]) regularly spaced apart formed a c.3m arc in the south-east of Trench 1. The pits ranged in size from 1.76m to 0.60m across and a depth of between 0.15m and 0.41m. All of the features were truncated but appeared to be sub-rectangular in shape and characterised by vertical or near vertical sides falling to a flat base. All of the pits contained similar black or dark brown sandy silt with frequent small to medium sized flint pebbles. Pit [1332] was also notable for the recovery of a metal object SF 356.
- 7.2.7 The pits described above have been phased to the prehistoric period based on their stratigraphic position however it is possible that pits [1332] and [1336] may have been cut from a higher level than which they were recognised. Further identification of the metal object found in pit [1332] may clarify the phasing of this group of pits.

Postholes

7.2.8 In the south-west of Trench 1, three possible postholes were recorded that truncated natural deposits. Cut [1294] was the westernmost feature with the other two located c.4.0m to the east. The postholes were of a similar size c.0.45m across and ranged in depth from 0.28m to 0.15m. All three features were circular or sub-circular in shape, characterised by steeply sloping sides falling to a concave base contained and contained similar light grey gravelly silts. Although the features lacked any cultural material they are phased to the prehistoric period based on their stratigraphic position.

Trench 2

Archaic soils

- 7.2.9 In the south-west of Trench 2, a sequence of dark brown sandy silt deposits (contexts [1959], [1939], [1990], [1987], and [2105]) with occasional fragments of burnt or cracked flint were recorded. These archaic soils sloped to the south falling over a distance of c.4.50m from a high of 4.30m OD to a low of 3.71m OD. Pottery dated to the Late Bronze Age was recovered from layer [1990].
- 7.2.10 Similar deposits were recorded in the south-central (contexts [2166], [2123] and [1869]) and in the south-east (context [2181], [1913], [1849], [1897] and [1828]) parts of Trench 2 at between 4.64m OD and 3.96m OD. Patches of similar archaic soil (layer [2045] and [1622]) were also recorded further to the north at between 5.53m OD and 5.46m OD. Early post-Deverel-Rimbury pottery and struck flint was retrieved from layer [1913].

Burnt flint deposits

7.2.11 In the south-east of Trench 2, the archaic soil described above was capped by a spread of sandy silt and burnt and cracked flint (contexts [2179], [1858] and [2153]). These deposits covered an area that measured c.5.0m N-S by 5.50m E-W and was 0.12m thick. Numerous struck flints as well as prehistoric pottery were recovered from the deposit [1858]. This burnt flint horizon was encountered at between 4.79m OD and 4.28m OD, a similar level to the burnt flint layers recorded in Trench 1.

Hearth

7.2.12 In the south-central part of Trench 2, a possible hearth [2145] (fill [2144] was recorded. The circular cut measured 0.80m across and 0.13m deep and was characterised by near vertical sides falling to a flat base. The feature was filled with a dark grey/black silty sand and gravel with occasional fragments of burnt flint.

Large pit / trough?

7.2.13The archaic soils [2166] and [2147] (see above) were truncated by a large sub-rectangular cut feature [2152] measuring 3.25m E-W by 1.42m N-S and 0.38m deep. The cut was characterised by near vertical sides falling to a gradual break of slope and a flat base. The fill was mottled

brown-yellow grey sandy silt. The purpose of the feature is uncertain but it may have been associated with the burnt flint deposits to the east and a trough for holding water is a possibility (see phase discussion).

Pitting in Trench 2

- 7.2.14 In the south-central part of the trench, two pits ([2160] and [2126]) of similar sub-circular shape and size ranging from 0.82m across to 0.31m deep were excavated. Pit [2160] was overlain by sandy silts [2123] and [2166] up to 0.33m thick that may have been formed by colluvial action. However, fragments of animal bone noted in context [2123] may indicate an anthropogenic component to these soils. The layer [2123] was in turn truncated by pit [2126]. The regularity of the pits suggests an anthropogenic origin although the lack of cultural material makes further interpretation difficult.
- 7.2.15 In the south-west of Trench 2, the archaic soils were truncated by a further three pits [1976], [1930] and [1985] all heavily truncated by later intrusions. The cuts measured between 0.66mm and 0.54m across and between 0.46m and 0.15m deep and were characterised by sloping sides falling to a flat base. The pits were filled with similar greyish sandy silts with very occasional flecks and fragments of charcoal, daub and burnt flint.
- 7.2.16 Approximately 3m to the east of the group of pits described above a fourth pit [2001] was recorded truncating natural deposits. The sub-rectangular pit measured 1.44m by 1.04m by 0.38m deep and was characterised by sloping sides falling to a flat base. The basal fill was a light grey brown sandy gravel and the upper fill dark grey brown silty sand. The pit [2001] has been assigned to the prehistoric period on its stratigraphic position and broad similarity to the pitting to the west. However, a lump of Kentish ragstone was recovered from the upper fill [2000] and this might indicate a later Roman date at least for the final infilling.

Trench 3

- 7.2.17 In Trench 3 overlying a natural sand deposit was light brown/grey silty clay [2197] 0.10m thick that may represent a fluvial deposit. The level was at 2.89m OD.
- 7.3 Phase 3.1: Early Roman 1st/2nd century (Figure 5)

Trench 1 (north)

Quarry Pits

7.3.1 Some of the earliest Roman features excavated on the site appear to be a series of possible quarry pits, recorded in the north of Trench 1. The pits detailed in table below, are set out on a broad E/W axis, they all truncated natural terrace gravel and were filled with similar silty sandy gravel. The lack of cultural material and the size of the features, up to 3.20m across suggest that they may have been dug to extract gravel. The multiplicity of fills in pit [626] might suggest that at least some of these features had been left open for some time before they were finally filled in. This might also be a further indication that the land was marginal to settlement.

Quarry pits in the northern part of Trench 1

Context	Dimensions	Depth	Shape in plan	Fill
No				
915	3.20m E-W x 1.10m N-S	0.50m	Not discernible	914
913	1.50m N-S x 1.50m E-W	0.30m	Sub-rectangular	912
909	2.80m E-W x 0.60m N-S	0.35m	Sub-circular	908
911	3.10m E-W x 1.50m N-S	0.45m	Sub-rectangular	910
1089	2.0m E-W x 1.0m N-S	0.39m	Sub-rectangular	1088
761	0.70m E-W x 0.70m N-S	0.22m	Sub-rectangular	760
626	3.20m N-S x 2.70m E-W	0.68m	Sub-rectangular	625, 604, 590
799	1.80m E-W x 1.40m N-S	0.30m	Ovoid	798
482	2.55m N-S x 1.66m E-W	0.38m	Sub-rectangular	481
586	2.50m E-W x 1.60m N-S	0.32m	Sub-rectangular	585

7.3.2 Pit [626] was also notable for a single sherd of pottery dated to the LBA/EIA recovered from the uppermost fill [590]. Although the ceramic evidence might suggest a prehistoric date, a single pot sherd is hardly convincing and could easily be residual and the feature has been assigned to the Roman period based on its similarity to other putative quarry pits.

Levelling/surface

- 7.3.3 The putative quarry pits [913], [911] and [909] were covered by a series of compacted silty sandy gravel deposits ([821], [820], [817], [814], [772]) that appear to have been laid down to create a level surface at c.7.04m OD, in the north-west of the site.
- 7.3.4 Further down the escarpment, approximately 10m to the south of the surface layers described above was a level spread of compacted clayey gravel [756] at 6.12m OD. The gravel probably

represents the remnants of deliberately laid and levelled ground and perhaps an indication that the slope was being deliberately terraced.

N/S aligned drainage ditch

7.3.5 The west side of the surface [814]/[820] described above, was truncated by a linear cut [791] (fill [808], [790]) aligned N/S. The feature measured 2.90m long, 1.35m wide and 0.50m deep but it was truncated to the north and south and continued beyond the edge of the excavation to the west. The sides of the feature were steeply sloping falling to a concave base. The base inclined to the south falling from 6.42m OD to 6.34m OD. The basal fill [808] of the feature was sandy gravel that may have been deposited by the erosion of the sides. The upper fill [790] was mottled orangey brown and olive green silty sand perhaps the result of silting up of the ditch.

Shallow pits

7.3.6 In the north of Trench 1, six shallow pits ([778], [789], [906], [785], 486], [861]) ovoid and subcircular in shape measuring between 1.40m and 0.60m across and up to 0.45m deep were recorded. The cuts were characterised by sloping sides falling to a slightly concave base and filled with similar silty sands. The purpose of these pits is uncertain. The pits are detailed in the table below.

Shallow pits

Context No	Dimensions	Depth	Shape in plan	Fill
778	1.40m N-S x 0.60m E-W	0.20m	Sub-circular	777, 776
789	0.90m E-W x 0.70m N-S	0.15m	Ovoid	788
906	1.20m E-W x 0.55m N-S	0.45m	Ovoid	905, 904
785	1.35m N-S x 1.10m E-W	0.40m	Ovoid	784
486	1.06m E-W x 0.50m	0.17m	Ovoid	485
861	0.60m E-W x 0.20m N-S	0.25m	Ovoid	860

A second phase of quarry pitting.

7.3.7 In the north-west of Trench 1, a compacted sandy silt [685] covered pits [789] and [906] (described above) re-establishing a level surface at 7.04m OD. A sequence of intercutting pits (detailed in the table below) truncated the surface layer [685]. All the pits were characterised by steeply sloping sides falling to flat bases and all were filled with similar greyish brown sandy silts. Apart from pit [735] which produced a fragment of daub none of features contained any cultural

material. It is difficult to interpret these features but a second phase of quarrying is a possibility.

A second phase of quarry pitting.

Context No	Dimensions	Depth	Shape in plan	Fill
735	3.70m E-W x 2.88m	0.75m	Irregular	725
717	1.60m E-W x 1.26m N-S	0.64m	Sub-rectangular	716
710	2.36m E-W x 1.06m N-S	0.72m	Sub-rectangular	706, 703
697	1.40m E-W x 1.28m N-S	0.25m	Sub-circular	696
682	1.40m E-W x 1.12m N-S	0.40m	Circular	681

Trench 1 (south)

Fence Line 1

- 7.3.8 In the south of Trench 1, an E/W alignment of five postholes ([1306], [1321], [1308], [1253] and [1251]) was excavated. All the postholes were of a similar size ranging from 0.46m to 0.30m in diameter and were characterised by steeply sloping sides or near vertical sides falling to a concave base. All the postholes were filled with dark or mid brown sandy silts. The postholes may represent a fence line (Fence Line 1) at least c.12m long. Fence Line 1 appears to have continued to the east and into Trench 2 (see para 7.3.14).
- 7.3.9 An isolated posthole [1310] was located 5m to the north of the fence line described above and another [1323] was located 3m to the south. The isolated position of posthole [1310] makes further interpretation difficult but the posthole [1323] may be associated with other postholes (Fence Line 2) to the east excavated in Trench 2 (see para 7.3.16).
- 7.3.10 All the postholes in the south of Trench 1 are detailed in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill
Fence Line 1				
1306	0.40m N-S x 0.36m E-W	0.15m	Ovoid	1305
1321	0.30m x 0.30m	0.17m	Circular	1320
1308	0.46m E-W x 0.40m N-S	0.35m	Circular	1307
1253	0.44m N-S x 0.40m E-W	0.35m	Ovoid	1252
1251	0.34m x 0.34m	0.22m	Circular	1250
Isolated posthol	e to the north of Fence Line 1			
1310	0.42m N-S x 0.38m E-W	0.38m	Sub-circular	1309
Isolated posthole associated with Fence Line 2				
1323	0.60m E-W x 0.52m N-S	0.16m	Circular	1322

Made ground

- 7.3.11 Covering the postholes [1308], [1321] and [1306] was a layer of compacted silty sand [1286] with frequent sub-rounded and sub-angular small to medium pebbles. The layer measured 6.44m x 6.04m and was up to c.0.10m thick. The layer sloped to the south falling from 4.91m OD to 4.47m OD. The layer was probably deliberately laid down to form a level terrace although later subsidence may have caused the layer to slip. The only dating evidence recovered from the deposit was struck flints but these are thought to be residual.
- 7.3.12 Made ground (contexts [1110], [1239], [1233], [1242], [1241], [1319], [1333], [1352] [1100] and [1106]) composed of layers of silty sand and frequent gravel was recorded to the south of the E/W fence line described above (para 7.3.8). These deposits, separated by later truncations, formed a ground horizon approximately 9.0m E-W by 0.80m N-S. The ground sloped to the south falling from 4.24m OD to 3.23m OD. Roman pottery was recovered from layer [1110] dated to AD 50-169 and from deposit [1319] dated AD 120-250.

Trench 2

E/W orientated linear feature

7.3.13 On the eastern side of Trench 2, an E/W orientated linear feature [2092] (fill [2096]) was recorded. The cut measured 1.6m E-W by 0.70m wide and was 0.26m deep but was truncated to the east and west. The cut was characterised by steeply sloping sides falling to a slightly concave but level base. The fill was soft yellow-brown silty sand [2096] that contained ceramic building material (cbm) dated AD 55-160. What was very probably the same feature was recorded further to the east as cut [2158] (fill [2157]). Here the cut measured 4.30m E-W by 1.04m N-S but it was truncated to the west and east. Pottery dated to AD 200-400 and Roman cbm was found in the fill [2157]. Overall the E/W aligned feature stretched for at least c.8.0m. Although, the feature was interpreted as a ditch a structural interpretation such as a beam slot cannot be ruled out. It is likely that this feature was identified and excavated in the excavations of 2002 (TOC02).

Structure 1 (S 1)

7.3.14 Located approximately 5.0m to the north of the linear feature [2092]/[2158] described above (see para 7.3.13) were two possible post pits [2015] and [2013] set c.1.50m apart. A further 4.50m to the north of the two posts pits [1903] and [1892] were two intercutting pits [1903] and [1892]. All the pits were characterised by sloping sides falling to a slightly concave base and were filled with

similar grey-brown sandy silt (dimensions are given in the table below). Daub and fragments of Roman tile were found in pit [2013]. Roman pottery was found in pit [1892]. The post pits may be in association and represent a post-built timber structure (S 1).

Post pits forming Structure 1

Context No	Dimensions	Depth	Shape in plan	Fill
2013	0.80m N-S x 0.44m E-W	0.20m	Sub-rectangular	2012
2015	0.44m E-W x 0.39m N-S	0.22m	Sun-circular	2014
1903	0.77m E-W x 0.57m N-S	0.44m	Indiscernible	1902, 1898
1892	0.76m x 0.76m	0.40m	Circular	1891, 1893

Fence Line 1

7.3.15 In Trench 2, a series of nine postholes and post pits ([1841], [1826], [1816], [1812], [1818], [1820], [1810], [1822], [1807]) were excavated in the south-west of the trench. All the cuts were characterised by near vertical or steeply sloping sides falling to a concave or slightly concave base and all were filled by similar dark grey sandy silts. Dimensions are given in the table below. Lumps of Hassock stone perhaps used for post packing were found in postholes [1826] and [1812] and large fragments of cbm dated AD 50-160 were recovered from postholes [1807] and [1818]. The postholes and post pits may represent a continuation of the E/W aligned fence line (Fence Line 1) unearthed in Trench 1 and if so indicate a fence line that stretched over at least c.21m.

Post pits and postholes forming Fence Line 1

Context No	Dimensions	Depth	Shape	Fill
1841	0.48m E-W x 0.42m N-S	0.26m	Irregular	1840
1826	0.36m E-W x 0.28m N-S	0.54m	Sub-circular	1825
1816	0.36m E-W x 0.10m N-S	0.22m	Sub-circular	1815
1812	0.55m N-S x 0.40m E-W	0.14m	Sub-rectangular	1811
1818	0.19m N-S x 0.18m E-W	0.22m	Circular	1817
1820	0.57m N-S x 0.34m E-W	0.24m	Sub-circular	1819
1810	1.12m E-W x 0.44m N-S	0.23m	Sub-circular	1809
1822	0.56m N-S x 0.53m E-W	0.27m	Sub-circular	1821
1807	1.04m E-W x 0.40m N-S	0.11m	Sub-circular	1805

7.3.16 Approximately 1.5m to the south of Fence Line 1 described above, a possible post pit [1885] was recorded and a posthole [1942] was recorded a further 1.50m to the south-west of that.

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Dimensions are given in the table below. Neither of these two features contained any dating evidence although they were filled with similar soils to those postholes and post pits that formed the putative fence line to the north.

Isolated postholes

Context No	Dimensions	Depth	Shape	Fill
1885	0.77m E-W x 0.46m N-S	0.33m	Sub-circular	1884, 1883, 1874
1942	0.34m N-S x 0.27m E-W	0.14m	Sub-circular	1941

Fence Line 2

7.3.17 A second possible E/W orientated fence line (Fence Line 2) formed of three possible postholes ([2033], [2017], [2150]) was recorded approximately 4.0m to the south of Fence Line 1. These features appear to be in alignment with a posthole [1323] excavated in Trench 1 and this might indicate a fence line that stretched over at least 14m.

Postholes forming Fence Line 2

Context No	Dimensions	Depth	Shape	Fill
2033	0.33m N-S x 0.28m E-W	0.07m	Sub-rectangular	2032
2017	0.56m N-S x 0.56m	0.08m	Circular	2016
2150	0.50m N-S x 0.44m E-W	0.09m	Ovoid	2149

7.4 Phase 3.2: Roman 3rd century (Figure 6)

Trench 1 (north)

Boundary ditch (BD 1)

7.4.1 In the north central part of Trench 1, a large E/W orientated feature was excavated that might represent part of a boundary ditch (BD 1). The western terminus of the feature [1097] (fill [1095] measured 5.80m E-W by 2.60m N-S and was 0.54m deep but it was truncated to the south and east. The cut was characterised by steeply sloping sides falling to a flat base. A silty sandy clay with occasional small fragments of charcoal and daub filled the feature. The feature [1097] was truncated to the east by a modern intrusion but appears to have continued beyond the intrusion where it was recorded as [1109] (fill [1096], [1118], [1119], [1140], [1141], [1142], [1143], [1144], [1145], [1146], [1147]). The cut [1109] measured 8.60m E-W by 2.20m N-S and was 1.05m deep.

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The multiple deposits of sandy clays and clayey silty sands that filled cut [1109] might suggest that the feature was re-cut on several occasions. Cbm dated to AD 120-250 was found in fill [1118] and pottery dating to AD 200-400 was retrieved from fill [1145].

7.4.2 The feature [1097]/[1109] was excavated along the c.6.50m OD contour. It may also be of significance that this putative boundary ditch is in alignment with the possible beam slot [836] further to the west (see para 7.4.4).

Quarry pits

7.4.3 In the north of Trench 1, a possible third phase of quarry pitting was identified. In the north-central part of the trench a sequence of large intercutting pits ([572], [639], [643], [645], [624], [653] and [647]) was excavated. Approximately 11m to the west of this concentration of pitting another large pit [584] was recorded. A further large pit [665] was located approximately 17m to the south. All the pits were characterised by sloping sides falling to a flat base and were filled by a sequence of gravelly sandy silts and sandy clays. Dimensions are detailed in the table below. The ceramic evidence recovered from these putative quarry pits suggested that they may have been originally dug in the 3rd century.

Quarry pits in the north of Trench 1

Context	Dimensions	Depth	Shape in plan	Fill
No				
572	2.80m E-W x 1.90m N-S	0.70m	Sub-circular	580, 579, 563, 562
639	5.20m E-W x 3.0m N-S	0.35m	Sub-circular	642, 652
643	3.20m x 0.70m	c.0.35m	Indiscernible	644
645	3.0m E-W x 2.04m N-S	c.0.35m	Sub-circular	646
624	2.60m E-W x 1.60m N-S	1.04m	Sub-rectangular	601
653	2.80m E-W x 1.90m N-S	0.46m	Sub-circular	654
647	3.04m E-W x 1.90m N-S	c.0.35m	Sub-circular	648
584	2.34m EW x 2.12m N-S	0.62m	Circular	544, 545, 546, 566, 569,
				571, 549
665	2.34m E-W x 2.12m N-S	0.62m	Sub-circular	664, 698

Possible beam slots.

7.4.4 In the north-west of Trench 1, an E/W orientated linear feature [408] (fill [407]) was excavated.

The cut measured 3.58m E-W by 0.50m N-S by 0.28m deep but was truncated to the east and west and was characterised by vertical sides falling to a flat base. Pottery dating to AD 200-400 and cbm dated AD 140-300 was recovered from the sandy silt fill. The feature was interpreted as a possible beam slot.

- 7.4.5 Four metres to the south-east of beam slot [408], another E/W aligned linear feature [732] (fill [731]) was detected. The feature [732] was 1.90m long but truncated to the east and west, 0.50m wide and 0.10m deep. The cut was characterised by sloping sides falling to a slightly concave but level base. A 3rd/4th-century coin (SF 156) was found in the sandy silt fill.
- 7.4.6 Ten metres to the south of the linear feature [408] a third E/W aligned feature [836] (fill [835]) was recorded. The cut measured 5.20m E-W by 0.70m N-S by 0.15m deep but was truncated to the north, east and west. The cut was characterised by sloping sides falling to a flat base that inclined to the east, the base falling form 6.40m OD to 6.29m OD. Silty sandy gravel filled the cut. Finds recovered from this feature included pottery dating to AD 150-300 and cbm dated AD 50-160.
- 7.4.7 A N/S orientated linear cut [555] (fill [554]) was recorded c.2.50m to the west of the feature [836] and perpendicular to it. The cut [555] measured 1.10m long by at least 0.34m wide and 0.15m deep and was truncated to the north and south. The cut was characterised by steeply sloping sides falling to a flat base that inclined to the south with the base dropping from 6.92m OD to 6.87m OD. Pottery retrieved from the fill is dated to AD 250-400.
- 7.4.8 It is possible that the four linear features described above represent the remnants of beam slots and are an indication of buildings with earth-fast foundations. However, this interpretation is far from certain; the fragmented nature of the features makes it difficult to propose a convincing building(s) footprint, the alignment of [408] on a NW/SE orientation is slightly askew to that of [732], and none of the features has a return. Unfortunately, the relationship between the N/S aligned [555] and the E/W orientated [836] has been destroyed by later truncation. Furthermore, the sloping base of cut [836] and [555] suggests an alternative interpretation that these features represent drainage ditches or gullies.

Postholes and post pits

7.4.9 A series of probable postholes and post pits were excavated in proximity to the linear features described above. The post pits measured up to 1.20m across and 0.59m deep and the postholes were typically c.0.30m in diameter and between 0.10m and 0.50m deep. All the features were characterised by steeply sloping sides falling to a flat or concave base and filled with similar silty sand. In posthole [689] was found Roman pot sherds dated AD 240-400 and pottery of the same date was found in posthole [1000]. Details are given in the table below

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Context No	Dimensions	Depth	Shape in plan	Fill
810	0.20m x 0.20m	0.10m	Circular	809
812	0.50m x 0.40m	0.25m	Sub-circular	811
734	0.30m x 0.22m	0.24m	Sub-circular	733
689	0.36m E-W x 0.30m N-S	0.40m	Circular	688
687	0.30m N/S x 0.20m E-W	0.51m	Ovoid	686
667	0.84m x 0.80m	0.59m	Circular	666
730	0.06m x 0.06m	0.22m	Circular	729
522	1.20m E-W x 0.80m N-S	0.44m	Sub-circular	521
608	0.35m E-W x 0.30m N-S	0.26m	Ovoid	609
998	0.50m N-S x 0.37m E-W	0.23m	Ovoid	997
1000	0.36m x 0.36m	0.26m	Circular	999

- 7.4.10 It is notable that post pit [522] truncated the linear feature [836] (see para 7.4.6). Furthermore, two smaller postholes [1000] and [998] were located 3m and 4m further to the east of pit [522] and just to the south of cut [836]. It is conceivable that the post pit and postholes represents either timber uprights associated with a ground beam or are possibly part of a fence line that replaced a ditch on the same alignment.
- 7.4.11 A second cluster of 4 postholes and a larger post pit [667] were recorded approximately 5m to the north of cut [836]. Two further postholes [810] and [812] lay c.7m to the north of the post pit [667]. Finally, posthole [734] was located c.1m to the north of the E/W aligned slot [732].
- 7.4.12 Whilst the putative postholes and post pits described above suggest a structural interpretation perhaps in association with the linear features described in para 7.4.4-6, it is still difficult to suggest a convincing footprint for the structure(s).

Trench 1 (south)

Dumped deposits

- 7.4.13 In the south central part of Trench 1, a sequence of dumped deposits formed of clayey silt ([1346], [1341], [1334]) and sands capped by silty sandy gravel [1330] measured 5.70m N-S by 2.0m E-W and sloped to the south from 4.36m OD to c.3.75m OD. Pottery recovered from layer [1341] is dated AD 200-300 and ceramics were also found in layer [1334] dated to AD 200-400. Cbm was also recovered from [1334] dated AD 50-160 and cbm found in the uppermost deposit [1330] dated to AD 120-250. Layer [1330] was also notable for a high concentration of burnt flint.
- 7.4.14 In the south-east of Trench 1, a layer of sandy clayey silt [1364] was recorded measuring 4.30m

N-S by 2.70m E-W and c.0.10m thick. This deposit was at c.3.48m OD. A coin (SF 361) found in layer [1364] is dated to AD 270-290.

Boundary ditch (BD 2)

- 7.4.15 In the south of Trench 1, truncating layer [1330] (see above, para 7.4.13) an E/W orientated ditch was recorded [1278] (fill [1277], [1300]). The feature measured at least 11.20m long by 1.90m wide and 0.70m deep but it was truncated to the east and west. The cut was characterised by sloping sides falling to a flat base that inclined gently to the east falling from 4.03m OD to 3.94m OD. The ditch was filled with sand and gravels. Five coins (SF 346, SF 347, SF 348, SF 349 and SF 351) all dating to the 3rd/4th century were recovered from fill [1277], as well as pottery dated AD 150-400 and cbm dated AD 140-250. Fragments of a shale bracelet (SF 343 and SF 344) were also found in context [1277]. Pottery dating to AD 150-400 and cbm dated AD 120-250 was also recovered from the fill [1300].
- 7.4.16 The ditch, [1278], probably continued beyond modern intrusions further to the east where it was recorded as context [1299] (fill [1298]). The cut [1299] measured 3.16m long 1.88m wide and 0.43m deep and was characterised by sloping sides falling to a flat base that sloped gently to the east falling from 3.96m OD to 3.90m OD. Roman pottery was found in the fill [1298] as well as cbm dated AD 120-250.
- 7.4.17 Truncating the side of the ditch [1278] was a possible posthole [1375] (fill [1374]), circular in shape, that measured 0.38m in diameter and was 0.37m deep. This posthole is maybe an indication that the ditch was once revetted with timber.
- 7.4.18 In Trench 1, feature [1278]/[1299], probably a boundary ditch (BD 2), was recorded over a distance of 15.30m. The ditch probably continued into Trench 2 (see para 7.4.26).

Rubbish pitting?

- 7.4.19 To the south of the boundary ditch (BD 2), layer [1364] was truncated by a large oval pit [1362] (fills [1376], [1361], [1347] and [1348]) that measured 2.20m N-S by 1.90m E-W and 1.0m deep. The cut was characterised by steeply sloping sides falling to concave base. The feature was filled by a sandy clayey silt overlain by a sequence of coarse sand and gravel with clayey lenses. Cbm dated to AD 55-160 was found in the basal deposit [1376] and pottery dating to AD 250-400 and cbm dated AD 120-250, was recovered from the upper fill [1347]. It is uncertain as to the function of the pit but it may have been utilised for refuse disposal.
- 7.4.20 Pit [1362] was covered by a sequence of dumped deposits of sandy clayey silts (1351], [1359]

- and [1304]) up to 0.20m thick. Pottery found in context [1304] dated to AD 250-400 while the cbm dated to AD 55-160.
- 7.4.21 Layer [1359] was in turn truncated by another large pit [1360] (fill [1365], [1356], [1353]), sub-rectangular in shape, that measured at least 1.85m by 1.18m and 0.80m deep. The cut was characterised by sloping sides falling to a flat base and was filled with a sequence of clayey silts and sandy clay. Animal bone as well as pottery dating to AD 200-400 and cbm dated to AD 50-160 were found in the pit. The pit may have been used for the disposal of domestic refuse.
- 7.4.22 Approximately 1m to the north of the boundary ditch (BD 2) another possible rubbish pit [1274] (fill [1273], [1272) was excavated. The cut was ovoid in shape and measured 1.36m E-W by 0.88m N-S and 0.79m deep. The sides were steeply sloping falling to a concave base. Silty sands filled the pit and from the basal fill [1273] ceramics dated AD 130-300 and cbm dating to AD 55-160 were found. The upper fill [1272] produced a coin (SF 345) dated 3rd/4th century.

Trench 2

Dumped deposits

- 7.4.23 In the south-west and south-centre of Trench 2, dumped patches of sandy silts and silty sands ([1790], [2142], [1908] [2102] and [2048]) were recorded. The deposits sloped south from a high of 4.48m OD to a low of 3.96m OD. It may be that some of this material was deposited by downhill erosion however there does appear to be a significant anthropogenic component and they may represent deliberately dumped deposits to level the ground. Pottery with a date range of AD 240-400 was found in contexts [1790], [2142], [2102] and [2048]. Cbm dated to AD 55-160 was retrieved from context [1790] and cbm dated AD 55-250 found in layer [2102]. A 3rd- or 4th-century coin (SF 645) was found in layer [2101] and a coin (SF 630) dating to AD 330-335 was found in context [2102].
- 7.4.24 A sequence of dumped deposits ([1846], [1813] [1798], [1785] and [1804]) were also recorded in the south-east of Trench 2. The deposits sloped south from a high of 4.44m OD to a low of 3.96m OD. Ceramics recovered from contexts [1846], [1813], [1798] and [1785] were dated to AD 250-400. Coins were also retrieved from some of these deposits including SF 513 dated AD 307-318, and SF 510 dated 3rd or 4th century found in layer [1785] and SF 520 dated AD 364-378 and SF 519 dated AD 343-348. Unfortunately, the coins suggest a deposition date for these deposits in the 4th century which seems at odds with their stratigraphic position and it may be that the coins are intrusive.
- 7.4.25 Just to the north of the deposits described above was another sandy silty layer [2080] recorded at between 5.01m OD and 4.70m OD. To the east of layer [2080] the dump layers [2148] overlain by

[2146] were recorded. The ground horizon here in the south-east of the trench was between 4.88m OD and 4.65m OD. A coin (SF 655) and a strap end (SF 656) recovered from layer [2146] has been identified as 3rd or 4th century and pottery found in the layer dated AD 200-400.

Boundary ditch (BD 2)

- 7.4.26 The E/W orientated ditch (BD 2) probably continued into Trench 2 where it was recorded as cut [1901] (fill [1900], [1899]). The feature [1901] measured 1.50m N-S by 0.78m E-W and 0.42m deep but was truncated to the west. The cut was characterised by near vertical sides falling at a flat base at 3.99m OD. A sequence of sandy silts filled the feature. Cbm identified as Roman, pottery dating to AD 200-400 and a coin (SF 595) dated 3rd or 4th century were recovered from the basal fill [1900]. Also retrieved from context [1900] was SF 594, a small copper-alloy bell. The upper fill [1899] produced cbm dated AD 50-160.
- 7.4.27 If cut [1901] did represent a continuation of the ditch (BD 2) then it stretched for at least 19.50m terminating in Trench 2. However, an alternative interpretation for the feature [1901] is that it represents a rubbish pit coincidentally on the same alignment as the ditch and this might explain the difference in cut profile to the ditch and the higher level of the base.
- 7.4.28 Set parallel with the alignment of the putative boundary ditch (BD 2) and possibly in association with it, were two postholes [1907] (fill [1906]) and [1918] (fill 1917]). The postholes measured up to 0.35m in diameter and 0.20m deep were set c.0.30m apart and truncated dumped deposit [1908] (see para 7.4.23).

Timber framed structure (S 2)

- 7.4.29 In the south-west of Trench 2, a sequence of intercutting features was excavated that may represent the remnants of a timber structure (Structure 2). Cut [2021] (fill [2020]) represented an E/W aligned slot truncated to the east and west by possible postholes. The slot measured 0.50m E-W by 0.30m N-S and 0.11m deep and was characterised by vertical sides falling to a flat base. The fill was a dark grey brown silty clay.
- 7.4.30 Slot [2021] was truncated by two postholes [2006] and [2026] to the east and west. The posthole [2026] was also truncated by another posthole [2008]. Set c.0.40m to the south of posthole [2008] was a fourth posthole [2023], while a fifth posthole [2035] lay just to the north of posthole [2008]. The postholes, up to 0.40m in diameter and c.0.10m deep, were characterised by vertical or near vertical sides falling to a flat base. A similar sandy silt filled the postholes. Details of the postholes are given in the table below.

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Context No	Dimensions	Depth	Shape in plan	Fill
2026	0.29m x 0.29m	0.11m	Circular	2025
2006	0.40m N-S x 0.39m E-W	0.13m	Ovoid	2005
2008	0.28m E-W x 0.23m N-S	0.13m	Sub-circular	2007
2023	0.22m E-W x 0.20m N-S	0.14m	Sub-circular	2022
2035	0.27m x 0.23m	0.16m	Circular	2034

7.4.31 The postholes [2035], [2008], [2026] [2023] were set on a N/S axis over 1.0m and were perpendicular to the slot [2021] and the posthole [2006]. It may be that these features represent traces of a timber structure. It may also be significant that the E/W alignment of the slot [2021] is also on the same orientation as the E/W aligned post pits to the east (see para 7.4.34). At the very least it does suggest that these features were laid out at the same time.

Surface? Layers

- 7.4.32 In the north-east of Trench 2, the remnants of possible surface layers were recorded. Context [1882] represented a silty clay overlain by a compacted gravel [1876]. The gravel surface measured 1.69m E-W by 1.45m N-S and was at 6.18m OD. Pottery dating to AD 150-400 was recovered from layer [1882] and a coin (SF 523) identified as 3rd or 4th century.
- 7.4.33 Two metres to the east of the gravel spread [1876] a layer of compacted silty clay [1620] that measured 2.78 N-S by 1.93m E-W was recorded at 6.29m OD. Pottery dated AD 200-400 and cbm dating to AD 50-250 were found in this deposit. The silty clay layer could represent the remnants of an internal beaten earth floor, although this is far from certain.

Post pits and a posthole on the east side of Trench 2

- 7.4.34 In the south-east of Trench 2, a possible post pit [2056] was excavated and 5m to the east a group of three possible post pits [2139], [2137] and [2131] was located. Post pit [2131] truncated the pit [2137] and it may be that this represented a later replacement post. The post pits were up to 0.80m in diameter and 0.42m deep and were characterised by steeply sloping sides falling to a concave or slightly concave base. All the pits were filled with similar grey/brown sandy silt. Pottery dating to AD 240-400 was found in pit [2137] and cbm dated to AD 50-160 was found in pit [2056]. These post pits may represent an E/W orientated fence/wall line at least 6.0m in length.
- 7.4.35 Approximately 12.50m to the north of the putative fence/wall line (and almost perpendicular to pit [2056] was located pit [1860]. The pit [1860] truncated the gravel layer [1876]. The cut measured 0.92m x 0.62m x 0.42m deep and was characterised by near vertical sides falling to a break of

slope and then sloping sides falling to a flat base. The basal fill of silty clayey sand was 0.23m thick and was overlain by sandy silt. The lack of charcoal, pottery and animal bone suggests that this was not a rubbish pit and that a structural function perhaps as a post pit is a possibility.

7.4.36 Sited c.8.0m north of post pit [2139] (and the possible E/W line of post pits) another possible posthole [2019] was excavated. The circular cut 0.29m in diameter and 0.14m deep was characterised by near vertical sides falling to a flat base. A brown/grey sandy silt filled the hole. The posthole [2019] was truncated by a second [2010] smaller posthole, 0.15m in diameter. Details of the postholes and post pits in the east of Trench 2 are given in the table below.

Context	Dimensions	Depth	Shape in plan	Fill
No				
2056	0.54m E-W x 0.26m N-S	0.06m*	Ovoid	2057
2139	0.60m E-W x 0.46m N-S	0.27m	Sub-circular	2138
2137	0.67m E-W x 0.65m N-S	0.16m	Sub-circular	2136
2131	0.80m x 0.80m	0.28m	Sub-circular	2130
1860	0.92m E-W x 0.62m N-S	0.42m	Sub-circular	1870, 1859
2019	0.29m x 0.29m	0.14m	Circular	2018
2010	0.15m x 0.15m	0.13m	Circular	2009

^{*}Truncated dimension

Ditch or gully

7.4.37 Located c.4.0m to the north of the putative E/W fence/wall line described in para 7.4.34 and truncating the layer [2117] an E/W orientated linear feature [2121] (fill [2122], [2120] was excavated. The cut measured 1.54m E-W by 1.30m N-S and 0.34m deep but it continued beyond the area of excavation to the east. The cut was characterised by steeply sloping sides falling to a concave base. In the basal fill of dark grey sandy silt [2122] was found pieces of cbm dated AD 190-400 and found in the upper fill of light brown sandy silt was pottery dating to AD 250-400 and cbm dated AD 55-160. It is thought that the feature [2121] may represent a ditch possibly for drainage.

Shallow pits

7.4.38 Recorded in the east of Trench 2, were a series of shallow pits. To the west of ditch [2121] and truncating layer [2117] was the ovoid shaped pit [2119] (fill [2118]). The pit measured 0.96m E-W by 0.76m N-S and 0.15m deep but it was truncated to the west. The cut was characterised by

- sloping sides falling to a flat base. The fill was mottled grey and yellow/brown sandy silt. Pottery found in the pit is dated to AD 200-400 and the cbm dated to AD 50-180.
- 7.4.39 Approximately 1.50m to the south of the E/W alignment of post pits (see para 7.4.34) a circular pit [1802] (fill [1799]) was recorded; measuring 0.90m x 0.80m and 0.09m deep. Dark grey sandy silt with frequent fragments of burnt flint and occasional flecks of charcoal filled the pit. Unfortunately, no dating evidence was recovered from this shallow feature and it is assigned to Phase 3.2 because of its stratigraphic position.
- 7.4.40 Located c.1.50m to the north of the post pit [2056] was another shallow sub-circular pit [2072] (fill [2071]) characterised by steeply sloping sides falling to a flat base. The cut measured 0.98m N-S by 0.74m E-W and 0.12m deep. Yellow/brown silty sand with frequent very small sub-angular and sub-round pebbles filled the pit.
- 7.4.41 The function of the three pits described above is uncertain. Their shallow depth appears to preclude a structural interpretation and the general lack of domestic detritus does not suggest rubbish pitting.

Rubbish pits

- 7.4.42 Three metres to the east of the possible structure (S 2) described in para 7.4.29-31 truncating layer [2142] was pit [2141] (fill [2143], [2140]). The sub-circular pit measured 0.96m E-W by 0.42m N-S and 0.18m deep but was truncated to the south. The cut was characterised by sloping sides falling to a flat base, and was filled with sandy clay overlain by sandy silt. The upper fill [2140] produced pottery dating to AD 200-400 and cbm dated AD 120-250. A small quantity of animal bone was found in the pit.
- 7.4.43 Twenty-one metres to the east of pit [2141] and on the same contour c.4.40m OD another heavily truncated pit was excavated [1778] (fill [1779]). The pit measured 1.52m E-W by 0.15m N-S and 0.24m deep but was truncated to the south. The cut was characterised by near vertical sides falling to a flat base and was filled with mottled dark and mid grey sandy silt. The function pit [2141] and [1778] is uncertain but rubbish pitting is a possibility.

Disuse

7.4.44 Structure 2 in the south-west of Trench 2, was overlain by a mixed grey/brown with patches of mid brown and dark orange soft silty clay [1951] with frequent fragments of burnt daub, occasional fragments of charcoal, and burnt flint. Pottery recovered from this deposit dated to AD 250-300.

An Archaeological Assessment of Land at the Highway, Wapping Lane, Pennington Street and Chigwell Hill, London E1, London Borough of Tower Hamlets (Parcel 4)

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- 7.4.45 In the east of Trench 2, overlying post pit [2131] (see para 7.4.34) was dark grey/brown sandy silt [2117] with occasional flecks of charcoal and cbm. The layer measured 3.44m N-S x 2.70m E-W and was up to 0.20m thick. This level ground was at c.5.0m OD. Pottery recovered from the layer dated to AD 240-400, cbm dated AD 190-400 and a coin (SF 627) identified as 3rd or 4th century was also retrieved.
- 7.4.46 It may be that the deposits described above represent trample or levelling after the structures were demolished.

Trench 3

7.4.47 In Trench 3 a sequence of silty clays and clayey silts ([2193], [2194], [2195] and [2196] c.1.0m thick was recorded overlying earlier Phase 2 deposits. Roman pottery was recovered from these deposits dated AD 240-400. The highest level was at 3.84m OD.

7.5 Phase 3.3: Roman 3rd/4th century (Figure 7)

Trench 1 (north)

Boundary ditch (BD 3)

- 7.5.1 In the north-central part of Trench 1, an E/W orientated ditch (represented by contexts [504] (fill [499]), [524] (fill [501] and [523] (fill [500]) was excavated. The feature which terminated in the west but was truncated to the east, was at least 6.0m long, up to c.1.50m wide and c.0.47m deep. The feature was filled with silty gravel. Pottery dated to AD 1550-1700 was found in fill [499] however because of the features stratigraphic and spatial position the pot is regarded as intrusive. The ditch (BD 3) may have formed a boundary or property division.
- 7.5.2 Set approximately 1.50m to the north of the ditch [504] was a parallel row c.2.50m long of three stakeholes set regularly apart. The stakeholes ([227], [229] and [197]) ranged in diameter from 0.04m to 0.10m and depth from 0.09m to 0.13m. All the cuts were characterised by steeply sloping sides falling to a pointed base. It may be the stakeholes represent a fence line and maybe associated with the boundary ditch described above.

Boundary ditch (BD 4)

7.5.3 Circa 17m to the south of ditch [504], a series of intercutting features was recorded. The pits were all filled with similar sandy silts. However rather than actually being separate pits, it may be

that these features represent a single feature perhaps a ditch later disturbed by vegetation colonising the loose fill. If so, then this ditch with a terminus to the west and extending to the east, would be at least c.3.30m long, 1.30m wide and c.0.50m deep but was truncated to the east and south.

- 7.5.4 Approximately 3.30m to the west of the putative ditch described above another E/W orientated ditch [807] (fill [806], [805]) was excavated. Ditch [807] was at least 3.60 long, 1.14m wide and 0.71m deep but it was truncated to the south and west. The feature was filled with silty clays and in the lower fill [806] Roman cbm was found. The ditch [807] terminated in the east but appears to have continued beyond a modern intrusion to the west where an E/W orientated linear cut [932] (fill [931]) was recorded on the same alignment. The cut [932] measured 5.68m E-W by 2.56m N-S and 0.77m deep but it was truncated to the east and west. Clayey sandy silt filled the cut. Overall the ditch [807]/[932] extended for at least 10m.
- 7.5.5 The gap between the butt end of ditch [807] and sequence of pitting to the east was 3.20m wide and this may represent an entrance way through an E/W orientated boundary (BD 4).

Dumped deposit

7.5.6 Located in the north-west of Trench 1, a layer of dark brown sandy silt [662] was recorded at 7.11m OD. The deposit measured 5.45m N-S by 2.40m E-W and c.0.05m thick and overlay the postholes assigned to Phase 3.2. Pot sherds recovered from this layer dated to AD 250-400.

Well

- 7.5.7 The new ground horizon [662] was truncated to the north-west by a large square timber lined well [565] (fill [589], [564] [655], [659], [650], [651], [581], [570]). The construction cut measured 2.80m N-S by 2.45m E-W and was 2.37m deep. The well itself was lined with timber planking but unfortunately the wood was very poorly preserved and did not survive lifting. The timber lining created a well approximately 1m square in plan. The construction cut was backfilled with compacted gravelly sand [564] overlain by compacted silty sandy gravels [655] and [659]. Pottery found in the backfill [564] dated to AD 200-400 and cbm also found dated AD 50-160.
- 7.5.8 The primary fill of the well was a sandy gravel [650] c.0.10m deep and this was overlain by silty sandy gravel [651] 0.44m thick. Found in the secondary fill was cbm dated to AD 270-400. The upper fills were deposits of sandy silts and found in context [581] was pottery dated AD 200-300 and cbm dated AD 55-160. The uppermost fill [570] produced pottery dating to AD 250-400 and cbm dated AD 120-250. A bone hair pin (SF 128) was also found in deposit [570]. It is presumed

that the upper fills of the well must represent deliberate filling in of the well.

Post pits

7.5.9 Located in the north-west of Trench 1, was an intriguing cluster of intercutting post pits. With the exception of cut [702], all the features were of a similar shape, size and depth (details are given in the table below). All the cuts were characterised by steeply sloping sides falling to a flat base and all were filled with similar sandy silt.

Context No	Dimensions	Depth	Shape in plan	Fill
728	0.60m x 0.50m	0.50m	Circular	727
719	0.50m x 0.50m	0.39m	Circular	718
709	0.70m x 0.55m	0.50m	Circular	708
705	0.55m x 0.55m	0.50m	Circular	704
700	070m x 0.70m	0.49m	Circular	699
713	0.60m x 0.60m	0.55m	Circular	712
702	0.15m x 0.15m	0.26m	Circular	701
684	0.90m x 0.80m	0.50m	Circular	683

7.5.10 Interpreted as post pits these features formed a circular pattern 1.70m across with the post pits set regularly 0.50m (centre to centre apart). If these are structural features then the structure that they represent is uncertain.

Pitting in the north of Trench 1

- 7.5.11 Layer [662] (see para 7.5.6) was also truncated by pit [658] (fill [657]). The sub-circular cut measured 1.70m E-W by 1.0m N-S and 0.20m deep but was truncated to the south and was characterised by sloping sides falling to a base that inclined to the south. The pit was filled with light brown sandy silt with occasional fragments of animal bone. The presence of animal bone might suggest that the pit was used for refuse disposal.
- 7.5.12 Approximately 4.50m to the north-east of pit [658] another pit [724] (fill [723], [720], [711]) was excavated. The pit was sub-rectangular in shape and measured 1.21m N-S by 0.91m E-W and 0.62m deep. The cut was characterised by sloping sides falling to a flat base. A sequence of sandy silts filled the pit and from the upper fill [711] came pottery dating to AD 130-300. The function of this pit is uncertain.
- 7.5.13 The pit [724] was truncated by a second pit [676] (fill [675]) sub-circular in shape that measured 0.70m N-S by 0.50m E-W by 0.30m deep. The cut was characterised by sloping sides falling to a

concave base. The pit was filled by grey/brown sandy silt that contained pottery dated AD 200-400. The function of this pit is also uncertain.

Trench 1 (south)

Dumped/levelling deposits

- 7.5.14 In the south of Trench 1, covering the E/W boundary ditch (BD 2) and pit [1274] of Phase 3.2 was a layer [1249] of firmly compacted sandy silt with frequent gravel. The layer measuring 6.62m N-S by 9.08m E-W was generally level at between 4.97m OD and 4.88m OD. To the south and east of layer [1249] separated by a later intrusion another deposit of sandy silt with very frequent gravel [1245] was recorded. The layer [1245] measured 4.25m N-S by 3.88m E-W and 0.17m thick. The deposit sloped form 4.50m in the north to a low of 4.08m OD in the south. Isolated deposits of sandy silt [1218] at 4.48m OD and sandy clayey silt [1326] at 3.88m OD and may represent the same ground horizon as [1249]/[1245]. Pottery dating to AD 200-400 was found in layer [1326].
- 7.5.15 In the south-east of Trench 1, approximately 1.50m to the south of the layer [1245] sandy clayey silt [1295] overlain by sandy silt [1281] created a new ground surface at between 3.97m OD and 3.78m OD. The ground horizon here measured 3.40m E-W by 1.70m N-S. Pottery dating to AD 200-400 and cbm dated AD 120-250 was found in layer [1295] and in layer [1281] pot dated AD 150-300 and cbm dating to AD 50-120 was found.
- 7.5.16 All the deposits described above may have been deliberately put down to level and consolidate the ground.

Pitting

7.5.17 Truncating the layer [1249] were two pits shallow pits up to 1.24m across and 0.24m deep. Both features were characterised by sloping sides falling to a flat base and filled with similar compacted sandy gravel. The lack of cultural material might suggest these pits were not refuse pits but they could represent repair to the external surface [1249].

Building (B 1)

Post pits defining an E/W orientated wall line (south)

7.5.18 In the south-east of Trench 1, an E/W orientated line of seven post pits was excavated (details are given in the table below). The pits were all characterised by steeply sloping or near vertical sides falling to a flat base and all were filled with similar dark brown sandy silt. The latest dated

pottery retrieved from these post pits dated to AD 200-400 and the cbm dated to AD 140-250. A late Roman hair pin (SF 243) was found in pit [1117]. The post pits may represent an E/W orientated wall at least 3m long that may have formed the south wall of Building 1.

Context	Dimensions	Depth	Shape in plan	Fill	Pot Date	СВМ
No						Date
1094	0.60m E-W x 0.55m N-S	0.45m	Circular	1093		
1086	0.50m N-S x 0.45m E-W	0.45m	Sub-circular	1085	120-250	50-160
1078	0.45m E-W x 0.40m N-S	0.45m	Circular	1077	200-400	140-250
1117	0.35m N-S x 0.30m E-W	0.30m	Circular	1116	120-250	55-160
1291	0.45m x 0.45m	0.45m	Circular	1290	150-300	120-250
1261	0.75m x 0.75m	0.20m	Sub-circular	1260	150-400	50-160
1259	0.40m x 0.40m	0.45m	Circular	1258	120-250	
1248	0.60m N-S x 0.50m E-W	0.70m	Sub-circular	1247	150-300	55-160
1215	0.45m x 0.35m E-W	0.25m	Sub-rectangular	1214	150-400	120-250

7.5.19 Post pit [1291] was truncated by a shallow pit [1261] (see table above). The cut [1261] was characterised by sloping concave sides falling to a concave base. Pottery from this feature dated to AD 150-400 and the cbm AD 50-160. The depth of [1261] and the profile of the cut suggest that this feature was not a post pit but perhaps represents the removal of the post once held by pit [1291]. Pit [1261] was in turn truncated by two post pits [1259] and [1248] (see table above) that could be replacements for [1291].

N/S aligned corridor

- 7.5.20 Approximately 1.0m to the west of the post pits described above a N/S linear feature [1202] (fill [1201]) was excavated. The cut measured 1.40m long by 0.88m wide and 0.20m deep and was butt-ended to the south and truncated to the north. The cut was characterised by sloping sides falling to a slightly concave base that inclined to the south. A mottled dark grey/mid brown silty clay, with frequent cbm and charcoal fragments, as well as numerous large pieces of broken tile filled the cut. Pottery from the fill dated to AD 50-300 and the cbm dated to AD 120-250.
- 7.5.21 Approximately 4.0m to the north and west another N/S aligned [1217] (fill [1216]) feature was identified. The cut measured 1.36m long by 0.74m wide and 0.35m deep but was truncated to the north and south. The cut was characterised by vertical sides falling to a flat base. A sandy gravelly silt filled the feature. Pottery dated AD 350-400 was found in the fill, as well as cbm dated AD 140-300 and a coin (SF 337) identified as either 3rd or 4th century. The late date for the ceramics is surprising and are likely to be intrusive.

- 7.5.22 It may be that both linear features described above represent structural elements possibly beam slots that define wall alignments and a narrow corridor 1.50-2.00m wide. However, this is far from certain.
- 7.5.23 Between the two linear features described above a patch of firmly compacted gravelly sandy silt [1218] 1.02m by 0.86m by 0.20m thick was recorded at 4.48m OD. This deposit could represent a beaten earth floor or floor make up within the putative corridor. Pot dated AD 200-300 was retrieved from layer [1218]. Layer [1218] overlay the E/W aligned ditch [1278] of Phase 3.2.

Post pits defining an E/W wall line (north)

- 7.5.24 Approximately 5.50m to the north of the post pits described in para 7.5.18 another E/W alignment of three possible post pits [1019], [1017] and [1235] was recorded. All the cuts were characterised by near vertical or steeply sloping sides falling to a flat base and all were filled with similar sandy silt. Details are given in the table below. It may be that these post pits define the alignment of a wall at least 4.0m long.
- 7.5.25 Approximately 2m to the west of post pit [1019] a fourth post pit [1244] (see table below) was recognised. However, post pit [1244] was off-set and slightly to the north of the east/west orientation of post pits [1019], [1017] and [1235] and it is uncertain if the feature was in association with them.

Post pits defining an E/W wall line (north)

Context No	Dimensions	Depth	Shape in plan	Fill
1019	0.49m N-S x 0.42m E-W	0.43m	Circular	1018
1017	0.68m E-W x 0.52m N-S	0.64m	Ovoid	1016
1235	0.51m N-S x 0.42m E-W	0.23m	Ovoid	1234
1244	0.57m E-W x 0.55m N-S	0.50m	Sub-circular	1243

7.5.26 Another possible post pit [903]) 0.45m in diameter and 0.33m deep was set 3.30m to the north and perpendicular to pit [1235] and the north wall. It may be that post pit [903] was part of some other structure to the north of Building 1.

Floor or floor makeup

7.5.27 Post pit [1235] was overlain by a sandy gravel layer [1232] however it is possible that the post pit

could have truncated the layer. The deposit measured 1.50m E-W by 1.07m N-S and 0.10m thick. The level was at between 4.57m OD and 4.46m OD. Pottery found in the layer dated to AD 150-400. The deposit may represent a beaten earth floor or floor makeup.

- 7.5.28 Layer [1232] was truncated by an E/W aligned feature [1221] (fill [1186]). The cut measured 1.74m long by 1.07m wide and 0.27m deep but was truncated to the east and west and was characterised by near vertical and steeply sloping sides falling to a slightly concave base. The fill was silty clay with frequent large pieces of broken brick, tile and Kentish ragstone. A late Roman hair pin (SF 338) was also found in context [1186]. It is uncertain as to what context [1221] represents. However, feature [1221] was partly covered by a layer of gravelly sandy silt [1197] with occasional fragments of burnt clay and charcoal that measured 3.88m E-W by 2.32m N-S and 0.07m thick. Context [1197] may represent the remains of a beaten earth floor. The level was at 4.43m OD.
- 7.5.29 Context [1171] (fill [1170]) may represent a repair to the floor layer [1197]. The rectangular shallow cut [1171] measured 1.04m E-W by 0.72m N-S and 0.12m deep and was filled with sandy silt with occasional large lumps of stone and pieces of tile. Pottery dating to AD 200-400 was found in the fill [1170].

Oven

- 7.5.30 The possible floor repair [1170] was truncated by the construction cut [1161] for an oven or furnace. The cut was rectangular and measured 1.80m E-W by 0.87m N-S by 0.29m deep but was truncated to the south. The cut was characterised by sloping sides falling to a flat base. The basal fill [1169] was a yellow/orange sandy clayey silt only 0.03m thick. Pottery recovered from this layer dated to AD 150-300.
- 7.5.31 Deposit [1169] was overlain by a layer of brick and tile and occasional lumps of Hassock stone [1031], laid flat and bonded with clay that had been scorched red. The level on the cbm was at 4.47m OD. The cbm was dated to AD 120-250 and pottery associated with the brick and tile was dated to AD 200-275. The context [1031] probably represents the base of the oven/furnace.
- 7.5.32 On the north side of [1031] the base of the oven/furnace was overlain with what may have been the remains of an enclosing wall [1124]. The context was formed of sandy silty clay with frequent charcoal and occasional fragments of cbm capped by the remains of a course of Kentish ragstone, Hassock stone and pieces of brick and tile. The wall measured 1.64m E-W by 0.52m E-W and was 0.15m high. The cbm dated to AD 200-400.
- 7.5.33 Abutting [1124] and perpendicular to it a N/S aligned sill beam [1123] was recorded. Formed of sandy clayey silt with occasional gravel the feature measured 0.36m N-S by 0.34m E-W and was

- 0.16m high but it was truncated to the north. Two large stones lay flat on [1123] and are perhaps the remains of a stone course. The sill beam could have supported part of superstructure associated with the oven/furnace.
- 7.5.34 It is thought that the post pits possible beam slots and floor layers described above represent the remnants of a clay-and-timber building (Building 1) with earth-fast foundations. The rectangular shaped building appears to have been laid out on an E/W orientation and measured c.5.0m N-S by at least 6.70m E-W and does appear to continue east into Trench 2.

Beam slots?

- 7.5.35 There were two possibly structural features that although they were near Building 1 are not easily interpreted as part of it. They are assigned to Phase 3.3 on stratigraphic grounds and are discussed below.
- 7.5.36 A linear feature [1289] (fill [1287], [1288]) was located less than 1m to the north of the putative north wall of Building 1. The feature measured 4.70m E-W by 0.80m N-S and 0.72m deep but was truncated to the east and from above. The cut was characterised by near vertical sides falling to a flat base. The primary fill of cut was dark grey sandy silt [1288] 0.36m thick and this was covered by greenish grey sandy silty clay [1288]. Pottery recovered from the fills dated to between AD 200-400. It may be that this feature represents a beam slot and possibly a later rebuild of the north wall of Building 1 but this is uncertain.
- 7.5.37 Slightly truncating posthole [1019] (see above para 7.5.25) was a N/S orientated slot [983] (fill [982]). The cut measure 1.03m N-S by 0.48m E-W and 0.30m deep and was characterised by vertical sides falling to a flat base. The feature was truncated to both the north and south and the relationship with the E/W aligned cut [1289] has been lost. Pottery dating to AD 120-400 and cbm dated AD 120-250 was found in the slot. It is again uncertain how this possible beam slot is associated with Building 1.
- 7.5.38 Truncating slot [983] and post pits [1017], and [1019] was a pit [1007] (fill [1006], [1001]). The sub-rectangular cut measured 2.70m E-W, 1.18m N-S and 0.56m deep (maximum) but was truncated to the south. The cut was characterised by sloping sides. The primary fill was a silty clay [1006] overlain by silty sandy clay [1001]. Pottery found in the lower fill dated AD 100-250 and ceramics in the upper fill dated to AD 150-300. Cbm also recovered from the pit dated to AD 120-250. It may be that this pit is evidence that the posts [1017] and [1019] were removed perhaps as part of a readjustment of the north wall of Building 1.

Water supply/Conduit

- 7.5.39 In the south-west of Trench 1, a curvi-linear feature [1012] (fill [1011], [1152], [1237]) was excavated. The cut was 3.80m long, 1.04m wide and 0.99m deep but it was truncated to the west and south. The cut was characterised by sloping sides and a flat base that inclined to the south falling from 3.65m OD to 3.60m OD. The basal fill was sandy silt and this was overlain by sandy silty gravel. Pottery dating to AD 200-400 and cbm dated AD 55-160 was found in the basal fill.
- 7.5.40 Further to the south of cut [1012] a north/south orientated feature [1276] (fill [1275] was unearthed that is probably a continuation of [1012]. The cut [1276] was 2.04m long, 0.85m wide and 0.39m deep and was truncated to the south and north. Pottery dating to AD 50-300 was found in the fill. Overall the length of feature [1012]/[1276] was at least c.7.0m.
- 7.5.41 Other linear features were excavated further to the east. Context [1210] (fill [1209]) represented a north/south aligned trench that measured 2.50m long by 1.05m wide and 0.45m deep. The cut was characterised by near vertical sides falling to a flat base that inclined sharply to the south and was filled with gravelly sandy silt. Pottery found in the fill dated AD 240-400. However, seven coins were also recovered from the fill and these have been identified as follows; SF 330, SF 332, SF 334 dated AD 364-378, SF 333 dated AD 335-341 and SF 329, SF 331 and SF 335 could only be dated to the 3rd or 4th century. The late date for the coins might be explained if the feature represents a drain or water conduit and the coins were deposited when the feature finally silted up and was no longer maintained.
- 7.5.42 Feature [1210] probably continued further to the south where it was excavated as context [1312] (fill [1311]). Cut [1312] measured 1.90m N-S by 0.74m E-W by 0.90m deep but it was truncated to the north and south. The cut was characterised by steeply sloping sides falling to a flat base that inclined to the south that sloped from 3.49m OD and 3.42m OD. Pottery found in the fill dated to AD 200-400 along with two coins (SF 354 and SF 355) identified as 3rd or 4th century. Overall the feature [1210]/[1312] measured at least 5.0m long.
- 7.5.43 To the south of features [1312] and [1276] was an E/W orientated cut [1125] (fills [1120], [1176], [1175]). The cut [1125] measured 6.90m long, 2.40m wide (maximum) and 0.60m deep but it was truncated to the east and west. The cut was characterised by steeply sloping sides falling to a flat base that inclined to the east falling from 2.95m OD to 2.68m OD. The side of the cut [1125] was truncated by a driven timber post [1230]. The post measured 150mm x 100mm x 200mm in length but was too poorly preserved to survive lifting intact. It may be that this timber was part of the revetting of the ditch or part of a timber structure, perhaps a drain or conduit within the ditch. The cut [1125] was filled with a base layer of clay [1120] covered by sandy silt. Pottery found in the clay dated AD 200-400 and pottery found in the sandy silt fill [1176] dated to AD 200-300.
- 7.5.44 To the east of [1125] and in line with it another E/W orientated feature was excavated [1220] (fill

[1229], [1228], [1219]). The cut measured 5.60m long, 1.70m wide (maximum) and 0.60m deep. The cut was characterised by steeply sloping sides falling to a flat base at c.3.10m OD. A sequence of sandy silty gravel overlain by sandy silty clay and sandy silt filled the cut. Pot found in the basal fill [1229] dated to AD 250-400, while in the middle fill pottery dated to AD 170-300 and in the upper fill pot dating AD 300-400 was recovered.

- 7.5.45 To the west of [1125] and in alignment with it was the cut feature [1285] (fill [1284], [1283]) was unearthed. The cut [1285] measured 0.59m E-W by 1.16m N-S and 0.66m deep but it was truncated to the east and west. The cut was characterised steeply sloping sides falling to a flat base. The basal layer was clay overlain by silty gravel.
- 7.5.46 It seems probable that the cuts [1285], [1125] and [1220] represent a single E/W orientated feature at least 16m long. Furthermore, although cut [1125] was recorded as stratigraphically truncating the N/S orientated features [1212] and [1276] it may be that all of these features are actually contemporary. It may be that the features [1285], [1125], [1220], [1012], [1210], [1312] and [1276] represent the remains of a network of underground water conduits that would have supplied water to building(s) in the south-east of Trench 1.

Trench 2

Made ground

- 7.5.47 In the west of Trench 2, a sequence of dumped deposits [1937], [1921], [1919] and [1905] comprised of sandy silts and clayey silt overlay the E/W orientated ditch [1901] (see Phase 3.2, para 7.4.26). The deposits, probably laid down to consolidate soft ground formed a new ground horizon measuring 2.0m E-W by 1.46m N-S at c.4.44m OD. The latest dated pottery found in these deposits dated to AD 250-400 and the cbm to AD 190-400.
- 7.5.48 To the east of context [1919], a layer of clayey sandy silt [1950] was recorded that probably represents the same ground horizon. The level here was at 4.37m OD. Pottery recovered from this deposit dated to AD 240-400 and the cbm dated to AD 190-400.
- 7.5.49 Layer [1950] (see above), was truncated by a sub-rectangular pit [1936] (fill [1935] that measured 1.10m across and 0.26m deep. Pit [1936] was in turn truncated by a second pit [1928] measuring 0.87m N-S x 0.60m E-W x 0.15m deep. Both pits were characterised by sloping sides falling to a flat base and were filled by similar sandy gravel. The profile of the cuts does not suggest a structural use for the holes and the lack of cultural material within the fill suggests that they were not refuse pits. It may be that the pits represent repair to the ground surface.
- 7.5.50 Dumped deposits were also recorded in the south-central part of Trench 2 where silty sandy

gravel [2044] overlain by sandy silt [2031] formed a new ground horizon at c.4.50m OD. Pottery dating to AD 240-400 was found in [2044] and from [2031] pot dating to AD 250-400 was recovered.

- 7.5.51 Patches of sandy gravel [1830] and [1829] were excavated in the very south and west of Trench2. Here the ground level was recorded at 3.97m OD. Pottery found in [1830] dated to AD 250-400.
- 7.5.52 In the eastern part of Trench 2, a sandy silt [2112] layer measuring 2.90m E-W by 2.20m N-S was recorded at c.5.43m OD. Cbm dated AD 200-400 was retrieved from the layer. Further to the north context [1875] represented a small patch of silty clay at 6.07m OD. Pottery dated AD 240-400 was found in this deposit.

Building 1

7.5.53 Typically, all the post pits of Building 1 were characterised by near vertical or steeply sloping sides falling to a concave or pointed base. All the putative postholes and post pits were filled by dark brown sandy silts or clayey silts. Roman pottery and cbm was recovered from some of the postholes and post pits detailed below.

E/W wall line (north)

7.5.54 Excavated in the south-west of Trench 2, was an E/W orientated line of 11 post pits and postholes (details are given in the table below). The post pits and postholes extended over a distance c.5.0m and appear to be a continuation of a line of post pits ([1019], [1017] and [1235]) unearthed in Trench 1 (see para 7.5.24). It is probable that these features in Trench 1 and 2 represent a continuous wall line and define the north wall of Building 1. The overall distance of the E/W alignment of Building 1 was c.13m.

Post pits and postholes defining an E/W wall line (north)

Context	Dimensions	Depth	Shape in plan	Fill	Pot	Cbm
No					date	Date
1890	0.54m N-S x 0.44m	0.33m	Sub-circular	1889, 1888		
	E-W					
1881	0.30m E-W x 0.22m	0.15m	Sub-circular	1880	150-300	
	N-S					
1845	0.50m N-S x 0.36m	0.26m	Sub-circular	1862, 1844	240-400	
	E-W					

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1839	0.58m E-W x 0.31m	0.24m	Ovoid	1838	250-400	190-
	N-S					400
1755	0.86m N-S x 0.44m	0.33m	Ovoid	1754		
	E-W					
1837	0.51m E-W x 0.40m	0.28m	Ovoid	1836		
	N-S					
1761	0.70m N-S x 0.62m	0.57m	Circular	1760		
	E-W					
1766	0.42m N-S x 0.38m	0.75m	Sub-circular	1765	250-400	
	E-W					
1768	0.70m N-S x 0.54m	0.66m	Sub-rectangular	1767	200-400	50-160
	E-W					
1879	0.70m N-S x 0.48m	0.38m	Sub-rectangular	1878		
	E-W					
1916	0.10m x 0.10m	0.07m	Circular	1915		

N/S wall line (east)

7.5.55 At the east end of the line of postholes described above another group of postholes may represent a return to the south and the east wall of Building 1

Postholes defining the east wall line of Building 1

Context	Dimensions	Depth	Shape in	Fill	Pot date	Cbm
No			plan			Date
1887	0.40m N-S x	0.23m	Circular	1895,		
	0.35m E-W			1896		
1923	0.53m N-S x	0.22m	Sub-circular	1922		
	0.40m E-W					
1993	0.42m N-S x	0.10m	Rectangular	1992		
	0.35m E-W					
1966	0.60m E-W x	0.20m	Sub-circular	1965		
	0.45m N-S					
1971	0.40m x 0.40m	0.35m	Circular	1970	240-400	
1999	0.42m N-S x	0.16m	Sub-circular	1998		
	0.26m E-W					
1995	0.63m N-S x	0.20m	Sub-circular	1994		

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	0.23m E-W					
1824	0.96m E-W x	0.26m	Sub-	1823	250-400	55-160
	0.86m N-S		rectangular			
1867	0.89m E-W x	0.35m	Indeterminate	1865	250-400	55-160
	0.30m N-S					
2042	0.46m x 0.46m	0.29m	Sub-circular	2041		

E/W wall line (south)

7.5.56 At the southern end of the N/S line of postholes described above, two pits [1867] and [1824] are uncertainly interpreted as structural features. Both pits contained a more mixed fill and was notably larger than the other putative postholes in this alignment, However, pit [1824] also aligns with the E/W orientation of the group of postholes in Trench 1 that may represent the south wall of Building 1.

Water supply/conduit

- 7.5.57 In the south-west of Trench 2, what were probably the remains of a timber drain [2098] (fill [2089], [2088], [2097], [2087], [2095]). The construction cut measured 0.76m E-W by 0.44m N-S and 0.20m deep but was truncated to the east, west and south. The cut was characterised by vertical sides falling to a flat base. The cut was filled with degraded wood that appeared to be the remains of a box shaped drain [2088] 0.78m long, 0.16m wide and 0.14m deep. The fill of the drain was dark grey sandy silt [2088] that contained pottery dated AD 250-400 as well as fragments of lead. Sandy silts also backfilled the construction cut. The latest dated pottery from these deposits was AD 250-400 found in context [2087]. The date is consistent with the drain being laid in the 3rd century. However, coin SF 650 retrieved from the backfill [2097] dated to AD 330-335 and coin SF 647 found in backfill [2095] is identified to AD 343-348. The coins may be intrusive or the drain may have been constructed or rebuilt in the 4th century.
- 7.5.58 It may be that the drain unearthed in Trench 2 is a continuation of the putative drainage features found in Trench 1 in which case the E/W orientated element of the system extend for at least c.20m.
- 7.5.59 The drain described above was in part overlain by a layer of sandy silt with frequent gravel [2067]. The layer possibly the remains of a surface measured 0.97m N-S by 0.72m E-W by 0.16m thick and was at 4.09m OD. Pottery recovered from context [2067] dated AD 250-400. What may be the same ground horizon as [2067] was recorded to the south as context [2085] at 3.79m OD. The layer [2085] measured 0.80m N-S by 0.66m E-W.

Pitting in Trench 2

- 7.5.60 In the south-central part of Trench 2, a pit [2053] (fill 2047]) measuring 1.48m across and 0.25m deep was excavated. The cut was characterised by near vertical sides falling to a flat base. A sandy clay with occasional fragments of timber and charcoal filled the pit. Pottery found in the pit dated AD 200-400. The purpose of the pit is uncertain but a refuse pit is a possibility.
- 7.5.61 On the eastern side of Trench 2 there were excavated a series of shallow intercutting pits that truncated the surface layer [2112]. All the pits were characterised by near vertical sides falling to a flat base, all excavated to a similar depth c.0.25m and all filled with similar sandy silt. The lack of cultural material found in these features suggests that perhaps they do not represent rubbish pits and their purpose remains uncertain. Details are given in table below

Context No	Dimensions	Depth	Shape in plan	Fill
2053	1.48m E-W x 0.60m N-S	0.25m	Rectangular	2047
2084	0.74m N-S x 0.30m E-W	0.20m	Sub-circular	2083
2109	1.10m E-W x 0.94m N-S	0.25m	Sub-circular	2108
2107	0.76m N-S x 0.70m E-W	0.25m	Sub-circular	2106
2100	1.48m E-W x 1.04m N-S	0.29m	Sub-circular	2099
2082	0.70m N-S x 0.40m E-W	0.23m	Sub-circular	2081

Trench 3

7.5.62 In Trench 3 a deposit of sandy silt [2188]] raised ground level to at least 4.09m OD.

7.6 Phase 3.4: Roman 4th century (Figure 8)

Trench 1 (north)

Boundary ditch (BD 5)

7.6.1 Excavated in the north-west of Trench 1, was a linear feature [707] (fill [684]) that measured 5.03m E-W by 0.98m N-S and 0.26m deep but it was truncated to the east and west. The cut was characterised by sloping to a flat base. A sandy silt with occasional fragments of cbm and animal bone filled the cut. Pottery dated AD 250-400 was recovered from the fill as well as two coins SF 140 dated AD 353-364 and SF 141 dated AD 330-335. It is uncertain as to the function of feature [707] as both drainage or structural purposes seem unlikely. A boundary ditch (BD 5) is a

possibility.

Rubbish pits

- 7.6.2 In the north-east of Trench 1, a group of three intercutting pits ([548], [525] and [457]) was excavated that measured up to 0.90m across and 0.30m deep. The rectangular shaped pits [548] and [525] were characterised by near vertical sides falling to a flat base and both pits were truncated by an oval shaped pit [457] characterised by sloping sides falling to a concave base.
- 7.6.3 Located approximately 2.0m to the south of the group described above was pit [446]. The cut was characterised by sloping sides falling to a flat base. A metre to the west of [446] another large ovoid pit [419] was excavated. Positioned to the south of pit [419] was the heavily truncated pit [448]. Approximately 2m to the west of pit [419] a large sub-rectangular pit [496] was excavated.
- 7.6.4 All the pits described above were filled with similar dark brown sandy silt and fragments of animal bone were noted in pits [548] and [547]. Pottery dated AD 200-400 was found in pit [547] and pottery dated to AD 300-400 was found in pit [419]. It may be that these features represent refuse disposal. Dimension details are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill
548	0.50m N-S x 0.50m E-W	0.30m	Sub-rectangular	547
525	0.90m N-S x 0.80m E-W	0.30m	Rectangular	502
457	0.48m N-S x 0.36m E-W	0.22m	Ovoid	458
446	0.79m N-S x 0.64m E-W	0.36m	Indeterminate	447
419	1.60m E-W x 1.30m N-S	0.34m	Ovoid	410
448	0.53m N-S x 0.42m E-W	0.17m	Indeterminate	449
496	1.50m N-S x 1.10m E-W	0.50m	Sub-rectangular	495

Pits of uncertain function

- 7.6.5 Another sequence of pits ([512], [488] and [506]) were excavated 14m to the west of those described above. They ranged in size from 1.70m to 0.69m across and up to 0.50m deep. The cuts were characterised by sloping sides falling to a flat base. Silty sands filled these pits and in pit [512] a coin (SF 90) was found dated AD 353-364. The function of these pits is uncertain.
- 7.6.6 Further to the south approximately 15m from the ditch [707] another two pits ([955] and [937]) were recorded. The cuts were characterised by vertical sides falling to a flat base and were filled by clayey sandy silt. The lack of cultural material within the pits suggests that these features were not rubbish pits but a structural interpretation is a possibility. All the pits of uncertain function are

detailed in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill
512	1.70m N-S x 1.50m E-W	0.57m	Sub-rectangular	507
				494
488	1.15m N-S x 0.96m E-W	0.57m	Ovoid	487
506	0.69m N-S x 9.29m E-W	0.39m	Sub-circular	505
955	1.30m N-S x 1.22m E-W	0.66m	Sub-rectangular	954
937	1.12m E-W x 0.44m N-S	0.30m	Sub-rectangular	936

Postholes

- 7.6.7 It may not be a coincidence that a cluster of postholes ([939], [948] and [935]) was also recorded in the same location as the pits [955] and [937] described above (see para 7.6.6). The only dating evidence recovered from these features was cbm found in context [934] dated AD 50-160.
- 7.6.8 There was another cluster of postholes ([603], [613], [615], [617], and [619]) located to the south of the boundary ditch (BD 5) described in para 7.6.1.
- 7.6.9 A possible posthole [335] was also recorded in the north-east of Trench 1 truncating the pit [419]. The isolation of the feature makes further interpretation difficult. All the postholes in Trench 1 (north) are detailed in table below.

Context No	Dimensions	Depth	Shape in plan	Fill
939	0.46m N-S x 0.30m E-W	0.27m	Circular	938
948	0.44m x 0.22m	0.14m	Ovoid	947
935	0.34m x 0.24m	0.21m	Ovoid	934
603	0.35m N-S x 0.30m E-W	0.50m	Sub-circular	602
613	0.35m E-W x 0.30m N-S	0.30m	Sub-circular	612
615	0.25m x 0.25m	0.50m	Sub-circular	614
617	0.20m x 0.20m	0.40m	Sub-circular	616
619	0.40m E-W x 0.35m N-S	0.40m	Sub-circular	618
335	0.48m E-W x 0.21m N-S	0.19m	Sub-rectangular	334

Trench 1 (south)

Made ground

7.6.10 In the southern part of Trench 1, a gravel surface represented by contexts [1236] and [887],

appears to have been laid out. The surviving surface measured 9.0m E-W by 6.50m N-S and sloped to the south from 5.17m OD to 4.59m OD. The gravel surface probably extended further to the east at least as far as context [907]. Layer [907] measured 0.88m N-S x 0.60m E-W x 0.42m thick and was at 5.11m OD. If this is the same gravel surface as [1236]/[887] then it extended E-W for at least 12.50m. Pottery recovered from layer [887] dated AD 150-300 but three coins were also found SF 183 and SF 184 dated to the 3rd or 4th century and SF 186 dated to AD 318-324.

- 7.6.11 Probably a contemporary ground horizon was recorded to the south-east of context [1236] with a sequence of dumped deposits (contests [993], [985], [963] and [971]). The deposits were of burnt clay and daub overlain by sandy silts covering an area 3.0m E-W by 1.50m N-S at between 4.93m OD and 4.85m OD. The latest dated pot was from context [963] and dated to AD 250-400.
- 7.6.12 Further to the south, gravelly sandy silts [1174] and [1182] appeared to form a ground horizon that measured 6.40m E-W by 3.50m N-S and sloped down to the south from a high of 4.58m OD to 4.17m OD. What may be a crudely made hone (SF 325) was found in layer [1182]. The latest dated pottery found in the upper layer [1174] dated to AD 200-400.
- 7.6.13 To the south of [1174]/[1182] the ground appears to have been formed by a deposit of compacted sandy silt [1187] measuring c.3.60m E-W by 2.20m N-S and sloping from a high of 4.0m OD south to 3.61m OD. Two coins (SF 327 and SF 328) were retrieved from the layer [1187] and are thought to date to the 3rd or 4th century.

Fence Line 3

7.6.14 A group of eight postholes and post-pits was recorded truncating the gravel surface [1236]. All the cuts were characterised by steeply sloping sides falling to a concave base and were filled with similar silty sandy clay or silty gravel. Posthole [1082] was notable for lumps of limestone possibly post packing found within the fill towards the base of cut. A similar arrangement of stones was found within post-pit [1039]. Dimension details are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill
1065	0.60m N-S x 0.44m E-W	0.14m	Sub-rectangular	1064
961	0.64m E-W x 0.46m N-S	0.53m	Sub-circular	960
1082	0.76m N-S x 0.66m E-W	0.37m	Ovoid	1081
1045	0.30m dia	0.37m	Circular	1044
1080	0.55m E-W x 0.49m N-S	0.38m	Circular	1079
1039	0.42m N-S x 0.36m	0.32m	Circular	1038
1099	0.54m E-W x 0.34m N-S	0.14m	Ovoid	1098
1051	0.57m x 0.57m	0.20m	Circular	1050

- 7.6.15 Although one of the post pits [1051] did also truncate the E/W aligned ditch [1055] described below in para 7.6.17, because of its resemblance to the other possible postholes and post pits it has been grouped with them.
- 7.6.16 The postholes and post pits were laid out in a broadly E/W alignment over a distance of 7.50m. It is thought that the postholes and post-pits may represent a fence line (Fence Line 3) possibly a property boundary or to demarcate different zones of activity.

E/W aligned drainage? ditch

7.6.17 Post pit [1065] and gravel surface [1236] was truncated by a linear E/W orientated feature [1055] (fill [1054]). The feature was butt-ended to the east and truncated to the west, it measured 4.15m long, 0.48m wide and 0.29m deep. The cut was characterised by sloping sides falling to a concave base that inclined to the west falling from 4.80m OD to 4.73m OD. The fill was a silty sand in which pottery dated AD 240-400 was found. The ditch may have been for drainage.

Disuse of Building 1

- 7.6.18 Immediately to the south of the oven detailed in Phase 3.3, (see para 7.5.30) a deposit of black clayey silt with frequent fragments of burnt clay [1162] may represent fire rake-out from the oven. Two coins were found in the deposit SF 312 dated AD 353-364 and SF 313 dated 3rd or 4th century. The fire rake-out deposit [1162] was covered by a thin trample layer of sandy silt [976] 0.03m thick. It is probable that the fire rake-out deposit represents the disuse of the oven in the middle of 4th century.
- 7.6.19 Overlying the Phase 3.3 post pit [1235] (see para 7.5.24) a series of compacted sandy silts were recorded (contexts [1190], [1151], [1135], [1177], [1115] and [1090]). The highest level was recorded on layer [1135] at 4.61m OD. Layer [1190] and [1151] was notable for fragments of burnt daub, charcoal and bone within the soil matrix. Pottery dating to AD 200-400 and a coin (SF 340) dated AD 364-378 were found in the layer [1190]. Pottery dated AD 350-400 and a coin (SF 297) dated AD 343-348 were recovered from layer [1151]. While from layer [1090] came pottery dated AD 240-400 and cbm dated AD 270-350.
- 7.6.20 Further to the south, overlying post pits that may have represented the south wall of Building 1 (see Phases 3.3) was a layer [1198] of firmly compacted sandy silt with frequent gravel. The deposit measured 1.30m N-S by 1.10 E-W and was c.0.15m thick. Pottery found in the layer dated to AD 200-400 and the cbm dated to AD 55-160.

7.6.21 The layers described above appear to post-date Building 1 and represent the demolition of the building.

Building 2 (B2)

- 7.6.22 Truncating layer [1090] was a circular pit [1067] (fill [1066]) that measured 1.02m E-W by 0.96m N-S and 0.32m deep. The cut was characterised by near vertical and steeply sloping sides falling to a flat base. The fill was sandy clayey silt with frequent gravel. Large stones within the fill may have been post packing and suggest that the pit may have had a structural purpose. Pottery found in the pit dated AD 240-400.
- 7.6.23 Circa 4m to the south of post pit [1067] another probable post pit [1189] (fill [1188]) truncated the layer [1198]. The circular pit [1189] measured 0.85m by 0.80m and 0.85m deep. The cut was characterised by steeply sloping sides tapering to a flat base. The fill was a silty sandy gravel and large lumps of ragstone towards the bottom of the pit may represent post packing. The pottery found in the pit dated to AD 50-250 and may be residual. Further dating evidence was a coin (SF 326) identified as either 3rd or 4th century.
- 7.6.24 Partially truncating post pit [1189] was another sub-circular pit [1179] (fill [1183], [1178]). The cut measured 1.40m x 1.40m x 0.60m deep. The cut was characterised by steeply sloping sides tapering to a narrow base. The irregular shape to the cut (it bulges out on the east side) may be the result of the post being wrenched out. The pit was filled with silty sandy gravel overlain by silty clay. The latest dated pottery recovered from the pit was dated AD 50-250 and is likely to be residual.
- 7.6.25 Just to the north of the post pit [1067] and also truncating the layer [1135] a circular posthole [1134] (fill [1131]) was excavated. The feature measured 0.32m in diameter and 0.14m deep and the cut was characterised by vertical sides falling to a flat base. A sandy silt filled the posthole and pottery recovered from it dated to AD 200-400.
- 7.6.26 Approximately 1m to the east of [1134] what may be a post pad [989] was recognised composed of compacted sandy silt; the pad measured c.0.40m across and 0.16m high. The level on the pad was at 4.72m OD. Pottery found in context [989] was dated AD 240-400.
- 7.6.27 It may be that the structural features (post pits and postholes) described above represent a structure probably a building (Building 2) that superseded Building 1. The structure may have extended further to the east and into Trench 2.

Rubbish Pitting

- 7.6.28 To the north-west of Building 2, truncating gravel surface [1236] were three pits ([1027], [1057] and [1063]), measuring up to 1.60m across and 0.35m deep. The cuts were characterised by near vertical sides falling to a flat base and were filled with similar sandy silt. Fragments of daub within the fills were noted for pits [1027] and [1057]. Pottery, animal bone, scraps of metal and fragments of cbm were found in pit [1063] and the ceramics dated to AD 200-400. It is uncertain as to the function of the pits but refuse disposal is a possibility at least for pit [1063].
- 7.6.29 Another possible rubbish pit [1133] of similar size was excavated approximately 4.0m further to the south. Clayey silt with occasional fragments of pottery, animal bone, cbm and burnt flint filled the pit. The ceramics dated to AD 200-400.
- 7.6.30 Finally, in the south-central part of Trench 1 yet another possible rubbish pit [1127] was excavated. The sandy silt fill contained pottery, metal fragments, pieces of cbm and fragments of lava quern stone. The pot dated to AD 200-300.
- 7.6.31 All the putative rubbish pits described above are detailed in the table below.

Rubbish pits

Context No	Dimensions	Depth	Shape in plan	Fill
1027	1.46m N-S x 1.44m E-W	0.35m	Sub-rectangular	1026
1057	1.60m E-W x 0.80m N-S	0.20m	Sub-circular	1056
1063	1.12m E-W x 0.90m N-S	0.19m	Rectangular	1062
1133	1.17m E-W x 0.94m N-S	0.28m	Sub-rectangular	1132
1127	1.84m E-W x 1.26m N-S	0.31m	Sub-rectangular	1126

Trench 2

Made Ground

- 7.6.32 In the south-west of Trench 2, a sequence of sandy silt deposits ([1780], [1773] and [1772]) was excavated. These deposits raised ground level in this part of the trench to c.4.36m OD. The latest dated pottery was AD 300-400.
- 7.6.33 A similar sandy silt [1788] deposit was recorded in the south-east of Trench 2. The layer measured 5.20m E-W by 2.46m N-S and c.0.21m thick and was at between 4.35m OD and 4.17m OD. The pottery here also dated to AD 300-400 and the cbm AD 200-400.
- 7.6.34 To the north of layer [1788] a sequence of sandy silt deposits ([2090], [2075], [2039], [2050] and [2024]) formed a ground horizon measuring 6.0m N-S by 3.0m E-W that sloped to the south from a high of 5.83m OD to 5.15m OD. Pottery recovered from context [2075] dated to AD 250-400.

7.6.35 All the deposits described above may represent a process of colluvial deposition and or anthropogenic dumping. The finds suggest a 4th-century date for the formation of these soils.

Disuse of Building 1

7.6.36 Phase 3.3 postholes [1923], [1966], [1971] and [1995] (para 7.5.55) were overlain by a sequence of layers, suggesting that Building 1 had been demolished. These dumped deposits covered an area measuring 3.50m N-S by 1.80m E-W at c.4.49m OD. The basal layer was a clayey silt [1920] with occasional fragments of daub, cbm, animal bone, metal, burnt wood, and burnt stones 0.08m thick. The pottery found in layer [1920] dated to AD 240-300. The layer [1920] was in turn overlain by a layer of clayey silt [1896] with occasional fragments of burnt daub, flecks of charcoal, cbm and mortar. Pottery from [1896] dated to AD 250-400. Layer [1896] was covered by a dark brown-grey clayey sandy silt [1868] that contained fragments of pottery dated AD 200-300, animal bone, metal, burnt flint and cbm.

Building 2 (B 2)

- 7.6.37 A possible post-pit [1873] (fill [1894], [1877]) truncated the layer [1896]. The sub-circular cut measured 0.70m N-S by 0.38m E-W and 0.40m deep. The cut was characterised by steeply sloping sides falling to a flat base. The fill was gravelly sand 0.20m thick overlain by a clayey silty sand. Roman cbm was identified in the upper fill [1873].
- 7.6.38 The post pit [1873] could be associated with the structural features (post pits and postholes) recorded in the south-east of Trench1. If so, then a building measuring at least 8.0m E-W by 4.0m N-S could be envisaged.

Boundary ditch (BD 6)

- 7.6.39 On the east side of Trench 2, truncating the layer [2024] an E/W aligned ditch [1983] (fill [1982], [1981], [1980]) was excavated. The ditch was 2.49m long, 1.92m wide and 0.48m deep but it was truncated to the east and west. The cut was characterised by slightly concave sides sloping to a flat base. A sequence of sandy silts filled the ditch. Pottery found in the basal fill dated to AD 100-400 while in the upper fills pot dated AD 200-300 was found.
- 7.6.40 What was probably the same ditch as [1983] was found further to the west and recorded as [2002] (fill [1991], [1996], [1968], [1997]). The cut here measured 2.08m N-S by 1.40m E-W and 0.44m deep and was characterised by sloping sides falling to a flat base. A sequence of silty sands filled the ditch. Pottery dating to AD 150-250 was found in context [1991] and pot dated AD

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120-300 was recovered from [1996].

- 7.6.41 There was an indication that the ditch [2002] had been re-cut [1989] (fill [1988]). The cut measured 0.98m E-W by 0.44m N-S and 0.34m deep, Unfortunately, no dating evidence was recovered from the re-cut.
- 7.6.42 If the contexts [2002] and [1983] represented the same feature then a ditch at least 5.50m long can be conjectured. The ditch (BD 6) may have demarcated a property boundary.

Pitting

7.6.43 Located approximately a metre to the south of the boundary ditch (BD 6) described above were two pits [2028] and [2030]. Both pits were of a similar size, up to 1.04m across and 0.27m deep, and were characterised by steeply sloping sides falling to a flat base. The pits were filled with similar grey brown sandy silt. The only artefact recovered from these pits was a residual struck flint (SF 606) found in pit [2030]. The purpose of the pits [2030] and [2028] is uncertain but a structural function is a possibility.

Postholes

7.6.44 Two other probably structural features were recorded in the south-east of Trench 2. Here postholes [1782] and [1784] c.0.25m-0.20m in diameter and 0.34m deep were set c.0.80m apart). The postholes were characterised by near vertical sides falling to a pointed base and were filled with similar sandy clay. Pot found in fill [1781] dated to AD 150-250 and pottery retrieved from the posthole [1784] dated AD 100-400. The purpose of these postholes is uncertain.

Trench 3

7.6.45 In Trench 3 a dumped deposit of sandy silt [2189] raised ground level to at least 4.22m OD. Pottery dated AD 250-400 was recovered from the layer [2189].

7.7 Phase 3.5: Roman Late 4th century (Figure 9)

Trench 1 (north)

Made Ground

7.7.1 In the north of Trench 1, covering the Phase 3.4 linear feature [707] (see para 7.6.1) a layer of

dark brown sandy silt [656] with frequent flint gravel, and occasional fragments of animal bone, metal, pottery cbm and sandstone was recorded. The layer measured 5.10m E-W by 3.20m N-S and was at between 7.16m OD and 6.87m OD. Pottery found in the layer dated to AD 240-400. Four coins were also recovered from the deposit; two (SF 139 and SF 136) are thought to be 3rd and 4th century, whilst SF 137 dated AD 350-353 and SF 138 was identified as dating to AD 364-378.

- 7.7.2 The same ground horizon as [656] was probably represented further to the east as context [474]. The sandy silt deposit [474] measured 1.34m x 1.28m and was at 7.17m OD. Pot found in the layer dated to AD 150-300.
- 7.7.3 Layer [532] may represent the same ground horizon to the west of context [656]. The silty sand measured 2.38m N-S by 1.80m N-S and [532] was recorded at 7.17m OD. A coin (SF 97) found in the layer is thought to be 3rd or 4th century.
- 7.7.4 Approximately 11m to the south of the ground horizon described above and overlying cut features assigned to Phase 3.4, a deposit of clayey sandy silt [933] was recorded at c.6.17m OD. The layer measured 3.30m E-W by 2.20m N-S by 0.07m thick. The deposit probably represents the ground horizon in this part of the trench.

Postholes and post pits

7.7.5 A group of five postholes and post pits was recorded in the north-west of Trench 1. These features range in size from 0.45m in diameter up to 1.44m across and up to c.0.50m deep. Layer [656] was truncated by posthole [641] and layer [532] by posthole [515]. Posthole [515] was notable for stones and broken pieces of cbm being used as post packing. Layer [656] was also truncated by pit [535], which was in turn truncated by pit [453] Two metres to the west of the posthole [515] was located pit [352]. Late Roman pottery was recovered from these features and the medieval pottery found in pit [453] is thought to be intrusive. A coin (SF 134) dated AD 364-375 was also found in posthole [641]. The pits and postholes described above appear to be laid out in an arc. However, their association is far from certain. Details are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill	Pot date
535	1.20m N-S x 0.90m E-W	0.25m	Indeterminate	534	200-400
453	0.80m N-S x 0.72m E-W	0.11m	Sub-circular	452	1270-1500
641	0.69m x 0.63m	0.30m	Circular	640	130-300
515	0.46m x 0.44m	0.57m	Circular	514	
				513	240-400
352	1.44m E-W x 1.14m N-S	0.16m	Ovoid	368	180-300

		351	250-400

- 7.7.6 Also in the north-west of Trench 1, two large intercutting rectangular pits up to 2.36m across and 0.42m deep were recorded. The earliest cut in the sequence [567] was characterised by near vertical sides falling to a flat base. The fill was a firmly compacted silty sand with occasional fragments of cbm dated AD 120-250. Pottery recovered from the pit is identified as 4th century.
- 7.7.7 Pit [567] was truncated by cut [455]. The basal fill was silty sand with clayey lumps with occasional pieces of Roman brick and sandstone up to 300mm. The upper fill was yellow-brown silty sand with frequent lumps of sandstone and broken pieces of Roman brick. The profile and depth of the pits together with concentration of building material within cut [455] suggest that the features may have had a structural purpose. Furthermore, almost central to pit [455] and truncating the upper fill [550] was a possible posthole [538]. It is uncertain if these features relate to other possibly structural features that recorded nearby. Details are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill	Pot date
567	2.20m N-S x 2.36m E-W	0.42m	Sub-rectangular	568	325-400
455	1.99m E-W x 1.58m N-S	1.38m	Rectangular	550	240-400
				456	240-400
538	0.62m x 0.60m	0.31m	Circular	539	180-400

7.7.8 Circa 3m to the south of the post [515], contexts [611] and [552] represent two other possible post pits set 1.90m apart. The cuts were characterised by near vertical or steeply sloping sides falling to a pointed or concave base. The fills were generally silty sands or gravelly silts. Details are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill
611	0.94m E-W x 0.66m N-S	0.20m	Circular	610
552	1.54m N-S x 0.75m E-W	0.41m	Sub-circular	551

Structure 3 (S 3)

7.7.9 Possible post pits were also excavated in the north-east of Trench 1. Here 3 large pits were excavated ([466], [473] and [490])). Pit [466] and [473] were characterised by near vertical and steeply sloping sides falling to flat base. While cut [490], was characterised by sloping sides falling to a concave base. All three pits were filled with similar silty sands. No dating evidence was found in any of the pits. Close to pit [490] a heavily truncated feature, possibly a posthole [429] was recorded and from the fill pottery dated AD300-400 was recovered. Details of post pits and

the posthole associated with Structure 3 are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill
466	1.68m E-W x 1.49m N-S	0.32m	Ovoid	471
				465
473	1.60m E-W x 1.20m N-S	0.32m	Sub-circular	472
490	1.80m E-W x 1.0m N-S	0.40m	Sub-circular	489
429	0.40m x 0.40m	0.30m	Indeterminate	428

7.7.10 The posthole and the post pits described above appear to define the north-west corner of a structure (S 3) measuring c.3.0m N-S by 7.0m E-W that may have extended further to the south and east.

Rubbish pits

- 7.7.11 In the north and east of Trench 1, a series of possible rubbish pits were excavated. A sequence of cut features truncated the layer [656]. Stratigraphically the earliest was cut [638] measured 1.45m across and 0.20m deep and was characterised by sloping sides falling to a concave base. The pit was filled with dark brown sandy silt with occasional fragments of charcoal, animal bone and cbm. Roman coins were found in the pit; SF 132 dated AD 364-378, SF 133 dated AD 353-364 and SF 130 and SF 131 are thought to date to the 3rd or 4th century. Pit [638] was truncated by a similar shaped pit [634] filled with a similar sandy silt.
- 7.7.12 Approximately 8m to the east of the concentration of pitting described above a large sub-rectangular pit [413] was excavated. The cut was characterised by near vertical sides falling to a flat base and was filled by silty sands overlain by a sandy silt. The middle fill [414] was notable for fragments of burnt animal bone, as well as fragments of cbm and pot. The pottery found in the pit dated AD 240-400.
- 7.7.13 Further to the east another large pit [389] was recorded characterised by steeply sloping sides falling to a flat base and was filled by a sequence of sandy silts with inclusions of occasional fragments of charcoal and occasional fragments of animal bone. Pottery found in the pit suggests deposition in the 4th century and a coin (SF 52) was dated to AD 335-341. Details of all the rubbish pits are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill	Pot date
638	1.45m N-S x 0.90m E-W	0.20m	Ovoid	637	240 -400
634	1.25m E-W x 0.45m N-S	0.30m	Sub-circular	633	100-400
575	3.30m E-W x 1.20m N-S	0.25m	Rectangular	620	1580-1650

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				576	250-400
413	2.40m N-S x 2.24m E-W	0.42m	Sub-rectangle	412	
				414	240-400
				411	
389	2.70m N-S x 2.40m E-W	0.67m	Sub-rectangular	400	200-400
				399	300-400
				392	320-400
				393	240-400
				390	200-400

Fire pit

7.7.14 Both pits [638] and [634] were truncated by a large shallow rectangular feature [575] (fill [576], [620]). The cut [575] was characterised by sloping sides falling to a flat base with a central circular concave depression c.1.0m across and 0.08m deep. The basal fill [620] was a mottled mid brown-yellow silty sandy clay. Post-medieval pottery assigned to this context is almost certainly contamination. The upper fill was reddish brown (scorched?) silty sand with frequent burnt daub and charcoal. Roman pottery from the upper fill [576] dated to AD 250-400. Eleven coins were also recovered from this deposit; SF 101, SF 103, SF 104, SF 105, SF 114 and SF 120 are all thought to date to the 3rd or 4th century, SF 110 and SF 112 are identified as 4th-century coins, and SF 102 dated AD 353-364, SF 118 dated AD 364-378 and SF 122 dates to AD 335-341. It may be that pit [575] represented a fire pit or a pit dug to dispose of fire rake-out.

Trench 1 (south)

Made ground

- 7.7.15 In the south of Trench 1, overlying the supposed Phase 3.4 rubbish pit [1127] (see para 7.6.30) was a sequence of silty clays. The basal layer [1153] included fragments of cbm, animal bone and pottery dated AD 250-400. The upper layer [1128] included lumps of ragstone as well as fragments of animal bone, cbm and pottery dated AD 200-400. These deposits measured 4.10m E-W by 2.98m OD and sloped to the south from 3.94m OD to 3.77m OD.
- 7.7.16 In the south-east of Trench 1, a sequence of dumped deposits was recorded. The deposits were composed of compacted silty sandy clays with fragments of charcoal, cbm, animal bone, metal and pottery. Pottery from the basal layer [1156] dated AD 120-300, fragments of a copper-alloy bracelet (SF 298) along with later Roman pot sherds were retrieved from the middle layer [1139] and from the uppermost deposit [1032] pottery dated AD 300-400 and two coins (SF 294 and SF

295) thought to be 3rd or 4th century were found. These layers appear to have formed a new ground surface approximately 4.0m across at between 3.90m OD and 3.72m OD. A notable find from layer [1032] was a large piece of worked stone that was probably part of heavily weathered altar stone or funerary monument. The stone appears to have been discarded and used to consolidate the ground.

Building 3 (B 3)

- 7.7.17 Located in the south-east of Trench 1 truncating made ground [1139] described above were two possible post pits [1103] and [1072]. Pit [1103] was partially truncated by the later feature [1072]. Both pits were filled with similar sandy silt and were characterised by sloping sides falling to a concave base. Lumps of stone found in [1103] may have been used as post packing.
- 7.7.18 The pits [1103] and [1072] were covered by a layer of firmly compacted clayey sand silt [975] with frequent flint gravel and fragments of cbm, charcoal, animal bone, wall plaster, metal and pottery. The layer measured 4.30m E-W by 3.20m N-S and was 0.15m thick (max) and was at between 4.10m OD and 3.76m OD. The layer [975] was truncated by another possible post pit [986].
- 7.7.19 Approximately 5m to the north of the series of pits described above, a shallow pit [1041] was recorded characterised by near vertical sides falling to a flat base. The middle fill [1047] of the pit was broken brick and tile with lumps of rag and limestone, and it may this represented a foundation pad for a timber upright.
- 7.7.20 The possible post pits and the foundation base described above appear to have been set out on a N/S axis over c.5.5m. The features could represent the western end of a building (B 3) that extended to the east. Details of the post pits are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill	Pot date
1103	0.85m x 0.70m	0.20m	Circular	1102	240-400
1072	1.25m E-W x 0.90m N-S	0.52m	Sub-circular	1071	200-400
986	1.05m x 0.75m	0.45m	Ovoid	979	200-400
1041	0.90m N-S x 0.70m E-W	0.12m	Sub-circular	1052	
				1047	
				1040	250-400

7.7.21 Feature [1041] (see para 7.7.19) was partially truncated on its northern edge by an E/W orientated linear feature [1036] (fill [1033]). The cut measured 2.06m E-W by 1.44m wide and 0.14m deep but was truncated to the east and west. The cut was characterised by steeply sloping

- sides falling to a flat base. The fill was a sandy clayey silt with frequent fragments of daub, cbm, animal bone, pieces of stone and pottery. The pottery is dated to AD 200-400.
- 7.7.22 Truncating the feature [1036] was a probable posthole [1010] (fill [1009]). The circular feature measured 0.50m in diameter and 0.22m deep. The cut was characterised by steeply sloping sides falling to a flat base. The fill was a grey silt. Pottery found in the posthole dated to AD 100-300.
- 7.7.23 Feature [1036] and posthole [1010] may represent the remains of an east/west aligned wall and a return, to the north/south wall represented by the pit [1041] and the cluster of pits to the south

Hedgerow?

- 7.7.24 In the south-west of Trench 1, a series of cut features were recorded that formed an E/W alignment of intercutting pits at least 6.50m long. The pits were relatively shallow ranging from 0.17m to 0.47m in depth. The cuts were generally characterised by sloping sides falling to a slightly concave base and all were filled with similar yellow-brown silty sand. The pits were not particularly productive for cultural material with only very occasional fragments of cbm and animal bone recorded in the fills. What pottery that was collected however is consistent with a 4th-century date for their deposition and a 3rd- or 4th-century coin (SF 324) was found in pit [1196].
- 7.7.25 These features are not thought to be refuse pits but a hedgerow is a possibility. The pits follow the line of the earlier boundary ditch laid out in Phase 3.2 and they may represent vegetation colonising the softer ground of the earlier feature and indeed re-establishing the boundary.
- 7.7.26 Approximately 4.0m to the north of the putative hedgerow described above an isolated possible posthole [1061] (fill [1060]) was recorded. The ovoid shaped cut measured 0.45m x 0.29m x 0.29m deep and was characterised by steeply sloping sides falling to a flat base. A loose sandy silt filled the cut.
- 7.7.27 A metre to the south of the hedgerow another isolated stakethole [1024] (fill [1023]) was recorded. The sub-circular shaped cut measured 0.10m across and 0.33m deep. The cut was characterised by steeply sloping sides falling to a pointed base. The isolation of the two features described above makes further interpretation difficult.

Timber lined well

7.7.28 In the south-west of Trench 1, a square timber lined well was excavated. The sub-circular construction cut [1194] 3.20m by 2.40m and 1.32m deep. Lining the well was a timber structure [1157] 1.2m square composed of assorted planks set on edge, retained by small stakes at the

corners. All the timbers were of oak. The well appears to have been quite crudely built (for full details see Goodburn Appendix 13). The backfill to the construction cut was a sandy clayey silt [1193]. Pottery found in this deposit dated to AD 200-400 and the cbm dated to AD 120-250.

7.7.29 The basal fill [1154] of the well itself was grey/black coarse sandy silt with frequent fragments of metal, animal bone, pottery and occasional fragments of leather and glass, 0.87m thick. The pottery is dated AD 240-300. The tip of an iron knife (SF 322) was found in context [1154] and fourteen coins were also recovered and most of these dated to the 4th century, the latest dated coin (SF 320) dating to AD 364-378. The upper fill [1150] of the well was also a sandy silt but with a high organic component and inclusions of fragments of animal bone, glass, metal, cbm, leather and pottery. The pottery dated to AD 240-400 and a coin (SF 302) is thought to be either 3rd or 4th century. A notable find from context [1150] was a cosmetic palette (SF 301).

Rubbish pits

7.7.30 To the south of the putative hedgerow, four pits were excavated. The large pit [1043] was characterised by steeply sloping sides falling to flat base. The fill was grey black coarse sandy silt with occasional fragments of charcoal. Approximately 6m to the east of pit [1043] another couple of intercutting features were recorded. Pit [1114] was characterised by near vertical sides falling to a flat base and was filled with greenish-brown sandy silt with occasional fragments of daub, cbm, pottery and animal bone. Pit [1092] was filled with grey sandy silt with occasional fragments of metal, pottery, cbm and degraded wood. In the south-central part of Trench1 was the shallow pit [1137] filled with silty sand. The function of all the pits is uncertain but refuse disposal is possible. Details of the rubbish pits are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill	Pot date
1043	1.40m N-S x 1.25m E-W	0.34m	Rectangular	1042	150-300
1114	1.77m N-S x 1.34m E-W	0.15m	Sub-rectangular	1113	
1092	1.30m N-S x 0.88m E-W	0.31m	Sub-rectangular	1091	240-400
1137	c.0.70m across	0.13m	Sub-rectangular	1136	

Trench 2

Made ground

7.7.31 In the south-west corner of Trench 2, a sequence of deposits was recorded. The basal layer [2079] was sandy silt with frequent fragments of cbm, lumps of stone, metal, animal bone and pottery. The pottery is dated to AD 250-400 and a coin (SF 635) recovered from this deposit is

dated AD 365-367. The layer [2079] was covered by another deposit of sandy silt [2070] also with fragments of cbm, charcoal, animal; bone, pottery, and lumps of stone. Pottery found in this deposit is dated AD 340-400 and a coin (SF 616) also recovered from the layer dated to AD 354-361. Both deposits are thought to represent demolition debris and the destruction of the building in the close proximity possibly building B 2 (see Phase 3.4).

- 7.7.32 The demolition layers described above were in turn covered by a deposit of sandy silt [2066] overlain by silty clay [1681]. Pottery from layer [2066] and deposit [1681] dated to AD 250-400. A coin (SF 462) found in layer [1681] dated to AD 350-353 and was notable for a chi-rho symbol. These deposits formed the remnants of a new ground surface measuring 1.40m N-S by 1.34m E-W between 4.26m OD and 3.95m OD.
- 7.7.33 Another sequence of dumped deposits spread over an area measuring 4.50m E-W by 4.0m N-S was recorded in the south-east of Trench 2. The basal layer was a spread of sandy silty gravel [1776] with occasional fragments of cbm, charcoal, animal bone, metal and pottery. The ceramics dated to AD 240-400 and a coin (SF 504) recovered from the deposit was dated AD 354-361. The gravel layer [1776] was in turn covered by a sequence of sandy silt deposits ([1770], [1762], [1746] and [1741]). Pottery dating to AD 250-400 was found in all of the layers along with a number of coins; in layer [1770] two coins (SF 497 and SF 499) are thought to date to the 3rd-or 4th-century, coin SF 500 from context [1762] was dated AD 330-335, coin SF 489 found in [1746] dated to AD 348-350, and coin SF 481 recovered from layer [1741] dated to AD 367-375. Fragments of a copper-ally bracelet (SF 498) were found in context [1770] and layer [1741] was notable for the recovery of part of a Roman lava quern stone. These deposits which may have been dumped or deposited by erosion or a combination of both, appear to have formed a stabilised ground horizon at between 4.56m OD and 4.24m OD.
- 7.7.34 Further to the west and separated from the sequence of made ground described above was layer [1756]. The sandy silt deposit measured 3.84m N-S by 2.50m E-W and was 0.17m thick. The level was between 4.41m OD and 4.26m OD. Pottery found in the layer dated to AD 350-400, the cbm dated to AD 270-350, and a coin (SF 493) dated to AD 343-348; a lead weight (SF 490) was also recovered from this layer. It seems probable that context [1756] represented the same ground horizon as that to the east.
- 7.7.35 In the north-east of Trench 2, overlying the Phase 3.4 E/W orientated ditch [1989] (see para 7.6.41) was a sequence of sandy silt deposits ([1986] and [1938]) that covered an area 1.0m x 0.96m. No pottery was recovered from these layers but a coin (SF 597) found in the upper layer [1938] was identified as 3rd or 4th century in date. The level on [1938] was at 6.03m OD.

Building 3 (B3)

An Archaeological Assessment of Land at the Highway, Wapping Lane, Pennington Street and Chigwell Hill, London E1, London Borough of Tower Hamlets (Parcel 4)

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7.7.36 Pit [1801] (fill [1800]) was recorded on the western edge of Trench 2 and was characterised by sloping sides falling to a flat base. The pit measured 0.78m x 0.76m and 0.16m deep and was filled with grey-brown sandy silt with fragments of cbm, animal bone and pottery. The pottery dated to AD 350-400. The pit may be part of the E/W aligned north wall of Building 3 recorded to the west in Trench 1. If the latter was the case then a building at least 5.0m wide (E/W axis) can be postulated.

Post pits

7.7.37 Located in the north-east of Trench 2, was a cluster of four possible post pits [2043], [1973], [1978] and [1963]. The features truncated the Phase 3.4 E/W aligned ditch [1983] (see para 7.6.39). The pits were up to 0.74m in diameter and 0.29m deep and were characterised with sloping sides falling to a flattish base. All the features were filled with similar mottled grey-brown and yellow silty sand. The features are tentatively interpreted as post pits but a horticultural origin cannot be ruled out. Details of the post pits are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill	Pot date
2043	0.46m N-S x 0.46m E-W	0.20m	Sub-rectangular	2040	
1973	0.60m x 0.24m	0.18m	Ovoid	1972	
1978	0.58m E-W x 0.36m N-S	0.13m	Sub-circular	1977	
1963	0.74m N-S x 0.46m E-W	0.29m	Sub-circular	1962	250-400

7.8 Phase 3.6: Roman Early 5th century (Figure 10)

Trench 1 (north)

Made ground

7.8.1 In the north-west of Trench 1, dumped deposits of sandy silts and sandy clayey silts ([451], [450], [438], [516] and [194]) overlay features assigned to Phase 3.5 and appear to have formed a stable ground horizon at c.7.17m OD. Late Roman ceramics dated AD300-400 were recovered from contexts [516] and [194]. A number of Roman coins were also recovered from these deposits including; SF 93 dated AD 364-378 and SF 94 AD 350-353 found in context [516], and from context [450] coins SF 76 dated AD 353-364, SF 75 dated AD 364-378, and SF 72 dated AD 388-402. Also retrieved from context [450] were fragments of a copper-alloy bracelet (SF 81).

Rubbish Pitting

- 7.8.2 In the north of Trench 1 a series of pits was recorded. The pits ranged in size from 2.59m-0.76m across and up to 1m deep. Typically silty sands or sandy silts with inclusions of fragments of charcoal and animal bone and occasional pottery filled the pits.
- 7.8.3 In the north-west were pits [445], [386], [497], and [166]. Two 4th-century coins were recovered from pit [445] one (SF 62) dated to AD 364-378 and the other SF 64 dated to AD 330-335.
- 7.8.4 In the north-east of Trench 1, another group of pits were excavated. Pit [484] contained cbm dated 1240-1900 but because of the stratigraphic position of the feature, this is thought to be intrusive.
- 7.8.5 Further to the east of pit [484] another sequence of inter-cutting pits ([360], [379] and [375]) was recorded. In pit [360] were found two coins; SF 42 dated AD 311-313 and SF 44 dated AD 335-341.
- 7.8.6 Another sequence of pits ([771], [769], [715], [722]) were excavated in the central part of Trench 1 truncating the Phase 3.3 E/W aligned ditch [807] (see para 7.6.39). In pit [771] four possible lead rings (SF 166, SF 167, SF 168 and SF 169) were found. Another lead ring (SF 163) was recovered from pit [769]. Also found in pit [769] was SF 163 a large fragment of lead that may have been part of a lead coffin or tank. Pit [715] truncated both pit [771] and [769]. Seven lead rings (SF 142, SF 143, SF 144, SF 145, SF 153, SF 154 and SF 155) were found in pit [715]. Interestingly pit [715] also produced a piece of glass described as a pear shaped prunt that may be early Saxon and date to the 5th century. Pit [715] was truncated by pit [722] and 6 lead weights (SF 147, SF 148, SF 149, SF 150, SF 151 and SF 152) were recovered from pit [722].
- 7.8.7 To the west of the pits described above and separated from them by a modern truncation were two further pits [920] and [918]. It may be that contexts [920] and [918] represent the same feature and if so a pit measuring 2.70m across can be conjectured. A lead ring (SF 188) was also found in pit [918].
- 7.8.8 All the rubbish pits in the north of Trench 1 are detailed in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill	Pot date
445	2.59m E-W x 1.49m N-S	1.01m	Ovoid	444	
				443	240-400
386	1.84m E-W x 0.98m N-S	0.53m	Sub-circular	385	300-400
497	1.01m E-W x 0.54m N-S	0.83m	Sub-rectangular	498	
166	0.83m N-S x 0.50m E-W	0.59m	Indeterminate	165	
				153	240-400

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484	1.40m N-S x 1.0m E-W	0.38m	Indeterminate	483	
360	1.75m N-S x 0.80m E-W	0.64m	Indeterminate	359	340-400
379	0.90m N-S x 0.65m E-W	0.36m	Ovoid	380	120-240
375	0.76m N-S x 0.48m E-W	0.17m	Ovoid	374	270-400
771	1.38m E-W x 1.24m N-S	0.22m	Ovoid	770	240-400
769	0.80m E-W x 0.60m N-S	0.24m	Indeterminate	768	200-400
715	0.88m E-W x 0.86m N-S	0.33m	Sub-circular	714	240-400
722	1.12m E-W x 0.76m N-S	0.30m	Ovoid	721	240-400
920	0.70m E-W x 0.36m N-S	0.09m	Sub-circular	919	
918	0.83m N-S x 0.83m E-W	0.22m	Sub-circular	917	240-400

Fence Line 4

7.8.9 A series of possible postholes were recorded in the central part of Trench 1, that are assigned to Phase 3.6 because of their stratigraphic position. The postholes were characterised by near vertical or steeply sloping sides falling to a slightly concave base and all were filled with similar silty clay. The postholes appear to form a N/S orientated fence line (Fence Line 4) at least 2.5m long. Details of the postholes are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill
741	0.23m x 0.22m	0.33m	Circular	740
753	0.13m x 0.12m	0.19m	Circular	752
737	0.50m E-W x 0.26m N-S	0.69m	Ovoid	736
743	0.08m x 0.06m	0.05m	Circular	742
745	0.26m x 0.20m	0.12m	Circular	744
747	0.12m x 0.10m	0.11m	Circular	746
749	0.15m x 0.12m	0.21m	Circular	748
751	0.14m x 0.08m	0.11m	Sub-circular	750
755	0.14m x 0.10m	0.14m	Sub-circular	754

Trench 1 (south)

Made ground

7.8.10 In the south-east of Trench 1, a deposit of sandy silt [1005] and broken pieces of Roman brick and tile dated AD 120-250 was overlain by sandy silt [996] with fragments of cbm, pottery, and animal bone. The recovered ceramics dated to AD 240-400 and from layer [1005] two 3rd- or 4th-

century coins (SF 227 and SF 228) were recovered. The level on [996] was at c.4.66m OD.

- 7.8.11 The layer [996] was truncated by a pit, [968], (described below) and the pit was in turn covered by a sequence of dumped deposits of sandy silt ([956], [953] and [899]). The basal deposit [956] contained fragments of pottery, cbm, metal, lead slag, and animal bone. The ceramics dated to AD 330-400 and a coin also found in layer [956] is thought to be 3rd or 4th century. From the upper deposit [899] came pottery dated AD 200-400 as well as two coins SF 189 dated to the 3rd or 4th century and SF 187 dated AD 353-364. The highest level on these deposits was at 4.91m OD.
- 7.8.12 Further to the south of the deposits described above a clayey silt layer [925] was recorded. The layer measured 3.50m E-W x 2.28m N-S and c.0.30m thick. The layer was notable for inclusions of frequent hammerscale and metal slag. Ceramics dated AD 300-400 was also found along with fifteen 3rd- or 4th-century coins. The latest dated coins from this group were three, dated to AD 364-378 (SF 206, SF 209 and SF 210). The highest level on the layer was at 4.37m OD.
- 7.8.13 In the south-west of Trench 1, a sequence of deposits was recorded (layers [959], [974], [1076], [1008] and [1028]). These layers were composed of dark grey/brown sandy silts overlain by clayey sandy silts that appear to have formed a ground horizon that sloped to the south falling from c.4.90m OD to a low of 4.13m OD. These dumped deposits included fragments of pottery, cbm, metal and animal bone. Ceramics dating to AD 240-400 were found in layer [1008]. Pottery dating to AD 200-300 was retrieved from context [1076]. Ceramics dated to AD 325-400, a coin (SF 224) and a crossbow brooch (SF 223) was recovered from layer [974]. While pottery dating to AD 330-400, was retrieved from context [959].
- 7.8.14 Just to the east of the sequence of dumped deposits described above was another sequence of similar soils ([1101], [1087] and [1075]). Late Roman pottery was retrieved from these deposits. From context [1087] 16 Roman coins were retrieved, the following coins are dated SF 280 AD 318-324, SF 281 AD 330-335, SF 282 AD 354-361, SF 289 AD 364-378, SF 290 AD 353-361 and SF 291 AD 353-361.
- 7.8.15 In the south-west corner of Trench 1, the Phase 3.5 well [1194] (see para 7.7.28) was covered by a clayey sand [1068] overlain by a sandy gravel [1053]. Pottery found in the basal deposit dated to AD 240-400 while the pot from the upper deposit dated to AD 150-400. Two coins were also recovered from context [1053] (SF 324 and SF 235) and both are thought to be 3rd or 4th century.

Rubbish Pitting

7.8.16 Layer [996] (see para 7.8.9) was truncated by a sub-rectangular shaped pit [968] (fill [967]) that

measured 0.95m E-W by 0.75m N-S and 0.60m deep. The cut was characterised by sloping sides falling to a concave base. The fill was a sandy silt with frequent fragments of cbm and occasional fragments of charcoal, metal slag, burnt flint, animal bone and burnt daub. The ceramics from the pit dated to AD 250-400 and a coin (SF 198) is thought to be either 3rd or 4th century. A socketed spearhead possibly dating to the 5th century (see Appendix 6) was also retrieved from the pit.

- 7.8.17 Truncating layer [925] was a possible pit [924] (fill [923]) sub-rectangular in shape that measured 1.54m E-W by 1.18m N-S and 0.27m deep. The cut was characterised by sloping sides falling to a flat base. The fill of the pit was a sticky clay with fragments of pottery, cbm, metal and animal bone. A T-shaped staple (SF 193) was retrieved from the fill and the ceramics dated to AD240-400. The pit may have been used to dispose of domestic waste.
- 7.8.18 A large pit [1048] (fill [1037]) truncated layer [1053] (see above). The pit sub-circular in shape was characterised by steeply sloping sides falling to a slightly concave base and measured 3.60m by 2.66m and 0.65m deep but was truncated to the north and south. Dark brown sandy silt filled the pit. Late Roman pottery found in the pit dated to AD 240-400.
- 7.8.19 Pit [1048] was in turn truncated by the rectangular shaped pit [977] (fill [978]) that measured 0.92m x 0.70m x c.1.0m deep but was heavily truncated to the east. Roman pottery was also found in this feature.

Timber lined drain

7.8.20 Layer [1075] (see above) was also truncated by probable timber lined drain [1004] (fill [1022], [1002], [1003], [992], [991]). The construction cut measured 2.0m E-W by 0.50m N-S and 0.58m deep but it was truncated to the east and west. The drain itself was c.0.10m wide and was composed of wooden stakes retaining a horizontal timber; however, the timber was very degraded and did not survive lifting. Roman pottery recovered from the sandy silt fill of the drain dated to AD 240-400.

Trench 2

Made Ground

- 7.8.21 In the north-east of Trench 2, patches of sandy silt (contexts [1947], [1948] and [1949] probably represent a ground horizon at c.6.09m OD. Roman cbm dated AD 55-250 was found in layer [1947].
- 7.8.22 Further deposits of made ground were recorded in the south-west where a layer of compacted sandy silt [1789] with occasional fragments of cbm, lumps of stone, animal bone and pottery was

recorded. The layer measured 1.75m N-S by 1.38m E-W and c.0.04m thick. The level was at 4.77m OD. A notable find recovered from the layer was a lead weight (SF 514). The ceramics dated to AD 250-400.

Building 4 (B 4)

7.8.23 Three post pits between 0.75m and 0.46m in diameter and 0.30m and 0.13m deep were recorded in the south-west of Trench 2. All the post pits were characterised by steeply sloping sides falling to a concave base. Layer [1789] was truncated by post pit [1796] notable for a sandy silt fill with very frequent pieces of broken brick and tile and medium to large lumps of stone. The post pit [1796] was in turn covered by a layer of compacted sandy silt with patches of clay [1787]. The level on this layer was at 4.84m OD. Pottery found in the layer dated to AD 350-400. Full details of the post pits are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill	Pot date
1796	0.46m N-S x 0.34m E-W	0.30m	Ovoid	1795	
1751	0.75m E-W x 0.43m N-S	0.20m	Sub-circular	1750	
1740	0.66m E-W x 0.38m N-S	0.13m	Sub-circular	1739	250-400

7.8.24 The post pits described above appear to represent the north-west corner of a building that measured at least 1.50m N-S by c.2.0m E-W and would have extended further to the south and east.

E/W orientated linear feature

7.8.25 The northern side of layer [1787] was also truncated by an E/W orientated linear feature [1738] (fill [1744], [1742], [1737], [1745]). The cut measured 5.30m long by 0.82m wide 0.59m deep. It terminated at the west and was truncated to the east. The cut was characterised by steeply sloping sides falling to a flat base. A sequence of sandy silts with occasional fragments of cbm, lead, animal bone and pottery filled the cut. The latest dated ceramics were found in the uppermost fill [1745] and dated to AD 300-400. The interpretation for this feature is uncertain but a robbed-out sill beam or a drip gully possibly associated with Building 4 identified immediately to the south are possible.

Post pit in the north-east

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7.8.26 In the north-east of Trench 2, layer [1947] was truncated by a probable post pit [1944] (fill [1943]). The sub-circular shaped cut measured 0.48m N-S by 0.46m E-W by 0.43m deep but was truncated to the west. The cut was characterised by steeply sloping sides falling to a concave base. The fill was a sandy silt. The isolation of the pit [1944] makes further interpretation difficult.

7.9 Phase 4: Medieval (Figure 11)

Trench 1 (north)

Agricultural/horticultural soil

7.9.1 In the north-west of Trench 1, dark grey/brown sandy silt deposits ([364], [372], [381] 382]) were recorded up to 0.30m thick. The highest level was at 7.50m OD. These deposits are interpreted as the remnants of an agricultural type soil that probably formed in the post-Roman era. A small amount of Roman residual pottery was recovered as well as some post-medieval cbm dated 1630-1850 found in context [374].

Trench 1 (south)

Rubbish pit

7.9.2 In the south of Trench 1, a large sub-rectangular pit [1035] (fill [1034]) was excavated. The cut measured 1.65m N-S x 1.20m E-W x 0.58m deep and was characterised by steeply sloping sides falling to a flat base. The fill dark grey/brown silty sandy clay with occasional fragments of cbm, charcoal and animal bone and Roman pottery. However, the stratigraphic position of the feature does suggest a possible post Roman origin. The pit may have been used for rubbish disposal,

Gully

- 7.9.3 The pit described above was truncated by linear NW/SE aligned cut [981] (fill [980]) which was possibly a drainage gully. The cut measured 5.50m long by 0.55m wide and 0.21m deep but was truncated to the east and west and was characterised by sloping sides falling to a flat base that inclined to the east falling from 3.83m OD to 3.66m OD. The fill was a sandy silt that contained residual Roman pottery and cbm.
- 7.9.4 Approximately 1.50m further to the west what may be the butt-end of the gully [988] (fill [987]) was excavated. The cut measured 1.20m long by 0.70m wide and 0.26m deep but it was truncated to the east and was characterised by sloping sides falling to a flat base at 3.85m OD.

Pieces of medieval tile were recovered from the sandy silt fill. Overall the gully measured at least 7.70m long.

Posthole

- 7.9.5 In the south-west of Trench 1, an isolated possible posthole [1021] (fill [1020]) was excavated. The circular cut measured c.0.34m in diameter and 0.82m deep and was characterised by steeply sloping sides falling to a concave base. From the clayey silt/sand fill residual Roman pottery and cbm was collected as well as some broken medieval tile.
- 7.9.6 The posthole described above was covered by deposits of silty sand with frequent gravel ([994] and [984]) that measured 4.0m by 2.50m and c.0.15m thick. These deposits may have been the result of downhill erosion. Pottery dated to 1480-1600 was recovered from the uppermost layer context [984]. The level on layer [984] was at 3.78m OD.

Trench 2

Pitting

- 7.9.7 In the east of Trench 2, two cut features ([2077] and [2054]) were excavated that may represent post pits but this is far from certain (dimension details are given in the table below). The two pits were set only 0.20m apart and were characterised by steeply sloping sides falling to a flat base. Similar sandy clayey silt filled both features. Pit [2077] was covered by a layer of sandy clayey silt [2060], 0.20m thick. Layer [2060] was truncated by pit [2054]. Only Roman ceramics were found in the pits but the layer produced medieval pottery dated 1240-1400 and it is thought that the pits represent medieval rather than Roman activity.
- 7.9.8 A third cut feature [1957] was excavated about 2.50m to the north-east of the pitting described above. Although the fill was similar to that of the putative post pits the shallowness of the feature does suggest that this was not a structural feature. Nevertheless, the feature did produce pieces of medieval tile.

Cut features in Trench 2

Context	Dimensions	Depth	Shape in	Fill	Pot date	Cbm date
No			plan			
2077	0.69m N-S x 0.45m E-W*	0.35m	Sub-circular	2076		50-160
2054	0.64m N-S x 0.30m* E-W	0.30m	Sub-circular	2051	200-400	
1957	N-S 1.00m* x 0.84m* E-W	0.04	Sub-circular	1955		1180-1450

*Truncated dimension

7.10 Phase 5.1: 17th century (1600-1660/1680) (Figure 12)

Trench 1 (north)

Quarry pit

- 7.10.1 In the central part of Trench 1 (north), a cut feature [464] (fill [463) was excavated that measured 1.58m E-W by 1.56m N-S and 0.35m deep but it was truncated to the east and west. The cut was characterised by sloping sides falling to a flat base. A reddish brown gravelly sand filled the pit. The lack of any cultural material found in the pit makes further interpretation difficult although a quarry pit is a possibility.
- 7.10.2 Possible quarry pit [464] was covered by a layer of dark brown sandy silt [402] 0.05m thick. Pottery recovered from the layer dated to 1580-1650. A piece of bone working waste (SF 53) was also retrieved from the layer. The highest level was at 7.49m OD.

Post-medieval Fence Line 1 and 2 (PMFL 1 and 2)

- 7.10.3 In the north-east of Trench 1 a N/S line of five stakeholes (PMFL 1) was recorded spread over a distance of 1.60m and may represent a fence line. Stakehole [222] produced pottery dated 1630-1680.
- 7.10.4 A second possible fence line (PMFL 2) was recorded in the west of the trench with three postholes spread out E-W over a distance of c.2.0m. Pottery dated 1600-1700 was found in posthole [101] and pottery dated 1580-1900 was retrieved from posthole [104]. The fence lines are an indication that the land in the north of the site was being partitioned out with areas demarcated perhaps as a prelude to more intensive utilisation. Details are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill
PMFL 1				
199	0.03m in dia.	0.09m	Circular	198
201	0.07m in dia	0.12m	Circular	200
203	0.08m in dia.	0.08m	Circular	202
213	0.18m in dia.	0.06m	Circular	212
222	0.04m	0.05m	Circular	221

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Context No	Dimensions	Depth	Shape in plan	Fill
PMFL 2				
101	0.20m E-W x 0.16m N-S	0.16m	Rectangular	100
103	0.09m x 0.08m	0.10m	Square	102
105	0.20m in dia.	0.07m	Circular	104

Postholes and post pits

7.10.5 To the east of Fence Line 1 was a group of seven possible postholes and post pits roughly laid out on a SW/NE axis over c.7.0m. The cuts were characterised by near vertical or steeply sloping sides falling to flat or concave bases. Most of the features were filled with similar dark brown silts although pit [493] was notable for a fill composed of light brown grey silty sand. Cut [232] was also notable for frequent fragments of brick (dated 1630-1850) and coal. Unfortunately the alignment of these features do not make a convincing structural footprint and they may not all be necessarily related or contemporaneous. Full details are given in the table below.

Context No	Dimensions	Depth	Shape in plan	
493	0.40m x 0.30m	0.16m	Oval	492
234	0.21m E-W x 0.09m* N-S	0.10m	Sub-circular	233
120	0.40m x 0.32m	0.27m	Circular	119, 118
237	0.12m x 0.02m	0.3m	Rectangular	236
232	0.62m E-W x 0.51m N-S	0.31m	Rectangular	231
239	0.12m N-S x 0.10m E-W	0.18m	Rectangular	238
284	0.07n x 0.07m	0.07m	Square	283

7.10.6 In the west-central part of Trench 1 (north), two further probable post pits set only 0.70m apart (centre to centre) were recorded. The cuts were characterised by near vertical sides falling to a flat base and were filled with similar dark brown clayey silt. Pottery found in pit [327] dated to 1580-1900 and clay tobacco pipe dating to 1640-1660 was retrieved from pit [329]. Full details are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill
327	0.42m E-W x 0.37m N-S	0.09m	Sub-rectangular	326
329	0.62m E-W x 0.54m N-S	0.11m		328

Pitting representing specialist activity

7.10.7 Excavated in the north of Trench 1 were six pits particularly notable for the concentration of animal bone found. Three of the pits were located towards the north-east ([316], [441], [470]) and another group was to the north-west ([367], [307], [362]). The pits varied in size from 5.90m across to 1.70m and in depth from 0.94m to 0.38m but all were characterized by vertical or near vertical sides falling to a flat base and all were filled with similar dark grey brown sandy silt. The ceramic evidence is consistent with all the features originating in the 17th century. The pits are detailed in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay tobacco
						pipe
316	1.30m N-S* x	0.38m	Sub-rectangular	315	1630-1800	
	1.20m E-W*			216	1580-1700	
441	5.90m E-W x	0.76m	Sub-rectangular	423	1580-1600	
	4.80m N-S			424	0-400	
				434	1580-1650	
				435	1480-1500	
				439	1350-1500	
				440	0-400	
				454		
				462		
470	5.40m* N-S x	0.94m	Sub-rectangular	469	1480-1500	
	4.10m* E-W					
367	1.70m N-S x	0.60m	Sub-rectangular	366	1580-1700	
	1.50m* E-W					
362	2.0m N-S x 1.60m	0.48m	Sub-rectangular	361	1630-1650	1660-
	E-W					1680
307	2.32m E-W* x	0.58m	Rectangular	278		
	1.90m N-S			256	1550-1700	

^{*}Truncated dimension

7.10.8 The bone assemblage from the pits described above, included cattle and sheep/goat and a bias towards head and foot parts and is interpreted as butchers waste with an element of waste form glue manufacturing (see Appendix 14).

Gully?

- 7.10.9 In the east central part of Trench 1 (north), a N/S aligned feature [477] (fill [478]) was excavated. The cut measured 2.45m N-S by 0.20m E-W and 0.10m deep and was butt ended to the south but truncated to the north and east. The fill was a mid grey very fine sand with occasional charcoal and animal bone fragments. Whilst no dating evidence was retrieved from this feature its stratigraphic position does suggest that the feature originated in the 17th century. The feature [477] is interpreted as a possible drainage gully.
- 7.10.10 Another possible gully [179] (fill [178]) was recorded in the north-west sector of Trench 1. The cut measured 0.61m N-S by 0.48m E-W and 0.15m deep but it was truncated to the east and west. The cut was characterised by vertical sides falling to a slightly concave base and was filled with dark brown/grey sandy silt. It may be that this feature represents an E/W aligned drainage gully but this is not certain.

Domestic rubbish pits

7.10.11 Ranging across Trench 1 (north) was a multitude of pits that are interpreted as domestic rubbish pits. Typically the fills of these features were dark grey sandy silts with frequent fragments of cbm and charcoal and occasional fragments of animal bone and very occasional shell fragments. Pit [442] was notable for the recovery of 2 cannon balls (SF 1596 and SF 1597). Full details of the rubbish pits are given in the table below.

Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
282	0.76m* N-S x	0.63m	Sub-rectangular	281		
	0.62m* E-W					
303	0.73m* E-W x	0.17m	Sub-rectangular	302	1580-1650	
	0.42m* N-S					
267	1.94m E-W x	0.45m	Sub-rectangular	277	1630-1680	1640-1660
	0.96m* N-S			266	1580-1700	1580-1910
442	3.60m E-W x	1.0m	Sub-rectangular	459	1550-1700	
	1.46m N-S			427	1590-1650	
				422		1580-1910
433	0.70m* E-W x	0.40m	Sub-rectangular	432		
	0.40m* N-S					
425	0.80m* N-S x	0.30m	Sub-rectangular	426	1580-1900	
	0.45m* E-W					

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Context No	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay tobacco pipe
276	1.38m N-S x 0.52m* E-W	0.14m	Sub-rectangular	275 271	1630-1680 1630-1680	1580-1910
258	1.28m* N-S x 0.76m E-W	0.19m	Sub-rectangular	257	1630-1680	1580-1910
152	0.40m* N-S x 0.30m* E-W	0.51m	Indiscernible	151		
294	1.24m E-W x 0.86m	0.13m	Rectangular	293	1580-1700	1580-1910
406	1.0m* N-S x 0.70m E-W	0.11m	Sub-rectangular	405		
251	1.06m * E-W x 0.94m N-S	0.19m	Ovoid	245	1630-1680	
263	1.75m E-w x 0.50m* N-S	0.20m	Sub-rectangular	248	1630-1680	
218	2.35m E-W x 0.65m* N-S	0.45m	Sub-rectangular	264 217	1630-1680	Late 19th c
529	1.0m E-W x 0.90m N-S	0.50m	Sub-circular	528 527 526		
403	1.90m N-S x 1.20m* E-W	0.54m	Sub-rectangular	404		
520	1.20m* N-S x 1.0m* E-W	0.66m	Indiscernible	519		
365	1.10m* N-S x 0.90*m E-W	0.09*m	Sub-rectangular	343	1580-1650	
318	1.95m* E-W x 1.0m* N-S	0.28m	Sub-rectangular	317	1630-1700	c.1660
274	1.80m E-W x 1.50m* N-S	0.82m	Circular	273	1630-1680	1640-1660
292	1.30m E-W x 0.50m N-S	0.28m	Ovoid	291	1630-1650	
287	0.74m E-W x 0.42m N-S	0.17m	Sub-rectangular	286		1580-1910

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Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
296	0.56m E-W x	0.67m	Sub-rectangular	295	1630-1680	
	0.28*m N-S					
305	1.06m E-W x	0.10m	Sub-rectangular	304	1580-1650	1580-1900
	0.60m N-S					
354	0.44m* N-S x	0.33m	Indiscernible	353		
	0.40m*					
323	0.58m* E-W x	0.53m	Indiscernible	322		
	0.50m* N-S					

^{*}Truncated dimension

Dumped deposits

7.10.12 In the central part of the Trench 1 (north), partly overlying the pit [406] was dumped deposit [394] composed of sandy clay with inclusions of animal bone and cbm fragments. Close by another dumped deposit of silty sand [395] was also recorded at 7.26m OD. Pottery found in layer [395] dated to 1580-1900.

Trench 1 (south)

Made ground

7.10.13 In Trench 1 (south) an extensive layer of mid greyish brown sandy silt [922] was excavated. The deposit measured 9.07m E-W by 4.60m N-S and c.0.30m thick (maximum) and sloped to the south falling from 4.48m OD to 3.90m OD. Residual Roman pottery and 19th-century ceramics thought to be intrusive were recovered from the layer.

Drain

7.10.14 The southern edge of layer [922] was truncated by an E/W aligned linear cut [819] (fill [818]). The cut measured 4.85m long by at least 0.32m wide and 0.38m deep and was characterised by near vertical sides falling to a flat base that inclined to the east. The fill was loose grey/brown silty sand with frequent fragments of animal bone, oyster shell and cbm. Pottery found in the fill dated to 1550-1650. The cut may have been a drain or drainage gully.

Pitting

- 7.10.15 The western edge of layer [922] was truncated by pit [878] (fill [877]). The sub-rectangular shaped cut measured 0.80m N-S by 0.50m E-W and 0.30m deep and was characterised by sloping sides falling to a flat base. The fill was dark grey/brown clayey silt with occasional fragments of brick and tile. The function of this pit is uncertain.
- 7.10.16 Circa 2.0m to the north of layer [922] another larger sub-rectangular shaped pit was excavated [1173] (fill [1172]). The cut measured 2.86m E-W by 2.06m N-S and 0.29m deep but it was truncated to the north and was characterised by sloping sides falling to a flat base. The fill was sandy gravelly silt with frequent cbm, moderate animal bone and occasional lead fragments. Residual Roman pottery and cbm were recovered from this feature but post-medieval ceramics and cbm were also within the fill. The function of this pit is also uncertain but a rubbish pit or cess pit are possible.

Trench 2

Post-medieval Structure 1 (PMS 1)

7.10.17 Across Trench 2 a series of post pits and postholes were excavated. In the south-west, three possible post pits ([1853], [1961] and [1572]) may have formed the south-east corner of a structure that measured at least 2.87m N-S by 2.37m E-W.

Post-medieval Structure 2 (PMS 2)

7.10.18 In the central part of the trench four post pits ([1607], [2164], [2185] and [2128]) may have formed the south-west corner of a structure that measured 8.99m E-W by 3.22m N-S. Post pit [2164] was notable for the survival of degraded wood [2162] that represented the actual post tip. Cut [2128] was characterised by vertical sides falling to a flat base with a depression at the east end that probably held the post.

Post-medieval Fence Line 3 (PMFL 3)

7.10.19 In the north-east of the trench an E/W alignment of postholes may represent a third structure ([1729], [1855] [1857], [1835], [1832], [1663], [1625] and [1628]) possibly a fence line that extended for a least 4.43m. The dating evidence retrieved from all the postholes and post pits excavated in Trench 2 and assigned to Phase 5.1 is consistent with the features originating in the

17th century. Full details of all the post pits and postholes excavated in Trench 2 are given in table below.

Post pits and postholes in Trench 2

Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
1607	1.08m N-S	0.18m	Rectangular	1606		1640-1660
	0.60m E-W					
2164	0.45m N-S	0.44m	Sub-rectangular	2163		
	0.24m* E-W			2165		
				2162		
				2161		
2185	0.48m* E-W	0.10m	Sub-rectangular	2184		1640-1660
	0.38m* N-S					
2128	1.15m E-W	0.23m	Rectangular	2127	1580-1700	
	0.35m* N-S					
1853	0.80m N-S	0.22m	Ovoid	1852	1630-1700	1580-1740
	0.40m E-W					
1961	0.63m E-W	0.15m	Rectangular	1964	1580-1700	1580-1740
	0.23m N-S			1960		
1572	0.38m* N-S	0.26m	Indeterminate	1571		1610-1640
	0.20m* E-W					
1729	0.20m* N-S	0.35m	Sub-circular	1728	1630-1680	
	0.18m* E-W					
1855	0.12m x 0.11m	0.25m	Rectangular	1854		
1857	0.34m E-W	0.25m	Rectangular	1856	1580-1600	1580-1740
	0.25m N-S					
1835	0.42m E-W	0.24m	Sub-circular	1834	1550-1700	
	0.32m N-S					
1832	N-S 0.50m	0.33m	Sub-rectangular	1831		1700-1740
	0.45m E-W					
1663	0.35m N-S	0.15m	Rectangular	1662		
	0.25m E-W					
1625	0.24m E-Wm	0.10m	Rectangular	1623		

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Context No	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay tobacco pipe
	0.16m N-S			1624		
1628	0.78m E-W x	0.39m	Sub-rectangular	1661		
	0.66m N-S			1660		
				1626		
				1627		

Made ground

- 7.10.20 Post-pit [1853] (see int the table above) was covered by a layer of greyish brown clayey silt [1848] that measured 1.70m N-S by 1.26m and 0.09m thick. Pottery dated 1612-1650 and clay tobacco pipe dated 1580-1740 were found in this layer. The highest level was at 4.49m OD.
- 7.10.21 Another patch of made ground [1573] was recorded in the central part of the Trench. The layer of silty sand measured 0.74m x 0.65m x 0.22m thick and the level was at 5.01m OD. Pottery dated 1550-1900 and clay tobacco pipe dated 1580-1740 was recovered from the deposit.
- 7.10.22 In the east central part of Trench 2, a sequence of sandy clayey silts ([1953], [1953] was recorded covering a small area measuring 1.76m x 1.70m. The highest level was at 5.90m OD. Pottery dated 1580-1700 was found in these deposits

Cess pit

7.10.23 Located in the south-east of Trench 2 was a heavily truncated sub-rectangular shaped feature [1659] (fill [1669], [1658], [1657]). The cut measured 1.86m N-S by 0.84m E-W and 0.76m deep but it was truncated to the east. Decayed timber [1669] was observed to partially line the cut which was filled by a dark sandy silt with frequent fragments of charcoal/coal and occasional fragments of shell and cbm. Pottery dated 1580-1630 and clay tobacco pipe dated 1640-1660 were recovered from the fill. The fill [1658] was capped by a layer of clay [1657] 0.15m thick which is thought to have been a deliberate sealing of the pit. The feature is interpreted as the remains of a timber lined cess pit.

Rubbish pitting

7.10.24 In the east of Trench 2, a series of pits were excavated that were filled with similar dark greyish brown sandy silt with frequent fragments of charcoal, cbm and pottery. The features are

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interpreted as rubbish pits. Details are given in the table below.

Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
1656	0.88m N-S x 0.64m*	0.09m	Sub-rectangular	1655	1550-1700	
	E-W					
1967	1.04m N-S x 0.96m	0.15m	Indeterminate	1958	1580-1650	1580-1740
	E-W					
1932	0.80m* E-W x	0.09m	Indeterminate	1931	1550-1700	
	0.20m* N-S					
1934	0.98m E-W x 0.80m	0.64m	Sub-rectangular	1933	1580-1640	1640
	N-S					
1946	0.66m* E-W x	0.16m	Sub-rectangular	1945	1630-1700	
	0.18m* N-S					
1615	0.65m* N-S x	0.47m	Indeterminate	1614	1590-1700	1610-1640
	0.14m* E-W					

Trench 3

7.10.25 In Trench 3 dumped deposits of sandy silt ([2186] and [2187]) were recorded across the trench.

The highest level was at 4.11m OD. Pottery dating to 1580-1700 was recovered from these layers.

7.11 Phase 5.2: Late 17th century to early 18th century (1660-1720) Figure 13

Trench 1 (north)

Garden/horticultural type soil

7.11.1 In the west central part of the Trench were deposits of garden or horticultural type soils ([193], [186] and [184)) that because of their stratigraphic position are assigned to Phase 5.2. The ceramic evidence is consistent for a late 17th-century date for deposition with pottery dating to 1645-1680 recovered from layer [184], pottery dated 1550-1700 found in layer [186] and ceramics dated to 1630-1680 recovered from layer [193]. The highest level on these deposits was at 7.58m OD.

Post-medieval Building 1 (PMB 1)

- 7.11.2 In the north of Trench 1, masonry remains were unearthed that represent a building (PMB 1) that would have continued beyond the limits of the excavation to the north and fronted onto The Highway.
- 7.11.3 Context [147] represents the construction cut for an E/W aligned wall [50] with a N/S return at the western end. The cut measured 6.80m long with the N/S return element 1.02m long but it was truncated to the north. The cut was 0.69m deep and was characterised by vertical sides falling to a flat base. The wall measured 6.72m long, 0.33m wide and survived to a maximum height of 0.57m (5 courses). The N/S return at the west end was 0.70m long. The wall was built with unfrogged orange fabric bricks bonded with a creamy soft mortar. There was some 19th-century rebuild to the wall represented by the use of yellow fabric brick and the wall had been rendered in the 19th century with Portland type cement. Pottery found in the backfill [146] to the construction cut dated to 1600-1650 and clay tobacco pipe also retrieved from the backfill dated to 1660-1680.
- 7.11.4 Wall [50] probably continued further to the east beyond a later intrusion where it was recorded as context [51]. Here the wall measured 1.08m E-W and at the east end returned to the north. The N/S aligned element was 1.10m long. Pottery dated 1630-1680 was found in the backfill [83] of the construction cut [77]. The masonry contexts [50] and [51] probably represent a wall 10.14m long (E-W) that represented the back wall to the building (PMB 1).
- 7.11.5 The internal face of wall [50] was abutted by N/S aligned wall [49]. Only a single course of this freestanding wall survived which measured 3.90m long 0.24m wide and continued beyond the limits of the excavation to the north. The wall [49] divided PMB 1 into at least two rooms (Rooms 1 to the east and Room 2 to the west) c.4.60m wide (internal E-W dimension).

Room 1

- 7.11.6 In Room 1, built against the east face of wall [49] was a sunken masonry feature [96] formed of single course of unfrogged orange fabric bricks bonded with a soft creamy mortar. The internal wall of the masonry was lined with tile. Externally the feature measured 0.50m N-S by 0.33m E-W and was filled with a clayey silt [95] with occasional fragments of animal bone, shell, metal and clay tobacco pipe. The purpose of the feature is not certain but a drainage function is a possibility.
- 7.11.7 Feature [96] was covered by a thin layer of clayey silt [93] with frequent fragments of cbm, chalk and patches of coal dust. The deposit measured 3.94m N-S by 2.25m E-W and 0.02m thick. On top of this makeup layer was laid a brick floor [48] composed of unfrogged orange and purple

fabric bricks laid on bed. The level of the floor was at 7.10m OD.

7.11.8 Contexts [76] and [16] probably represent the same sequence of floor makeup and brick floor that survived further to the east in the south-east corner of Room 1. The level on the brick floor [16] was at 7.14m OD.

Room 2

- 7.11.9 In Room 2, abutting the west face of wall [49] was a layer of compacted light grey mortar [172]. The deposit measured 3.92m N-S by 1.20m E-W by 0.05m thick and is interpreted as a bedding layer for a floor subsequently removed. The level was at 7.08m OD.
- 7.11.10 Within the footprint of Room 2 a sub-rectangular pit was excavated [131] (fill [130], [121]). The cut measured 0.84n E-W by 0.78m N-S and 0.52m deep but it continued beyond the edge of excavation to the north. The cut was characterised by near vertical sides falling to a concave break of slope at the flat base. The fill was a sandy silt with occasional fragments of cbm, animal bone and towards the base, shell. Pottery found in the fill dated to 1645-1700 and the clay tobacco pipe dated to 1660-1680. The pit appeared to be deliberately capped with a grey silty mortar [121], 0.10m thick. The level on the mortar was at 7.01m OD. The regularity of the pit and its location inside of Room 2 suggests that the feature may not originally have been dug as a rubbish pit and a storage pit is suggested with the filling in and capping of the pit seen as closure deposits.
- 7.11.11 Pit [131] was partially truncated by pit [133] (fill [132]) which measured 0.86m E-W x 0.35m N-S and 0.23m deep but the feature extended beyond the limits of the excavation to the north. The cut was characterised by sloping sides falling to a flat base. A sandy silt with broken brick and pan tile filled the pit. The function of the pit is uncertain but it may be related to a phase of repair or rebuilding.

Brick lined well

7.11.12 Circa 4.0m to the rear of PMB 1 a brick lined well [312] (fill [330], [310], [311], [308], [297]) was excavated. The circular shaped construction cut measured 2.56m x 2.06m and 1.99m deep and was characterised by vertical sides falling to a flat base. The base of the cut was lined with a wooden barrel 1.04m in diameter. However, the timber was too poorly preserved to survive excavation. Above the barrel were three courses (0.18m high) of unfrogged orange fabric brick laid in header fashion. Clay tobacco pipe recovered from the backfill [311] of the construction cut dated to 1660-1680. The primary fill [308] of the well was a sandy silt c.1.0m thick that produced

pottery dated 1680-1720 and clay tobacco pipe dated 1680-1710. Pottery dated 1680-1900 and clay tobacco pipe dated 1680-1710 was recovered from the upper fill [297].

Barrel wells

- 7.11.13 Immediately to the rear of building PMB 1, and truncating layer [269] (see below para 7.11.24) was a barrel well [206] (fill [262], [339], [338], [211], [195]). The circular construction cut 1.63m N-S by 1.53m E-W and 1.65m deep and was characterised by vertical sides falling to a flat base. The cut was lined with degraded wood [339] thought to be the remains of a barrel c.0.43m in diameter. In the silty sand [262] backfill to the construction cut was found pottery dating 1680-1700 including six Frechen ware jugs and clay tobacco pipe dated 1660-1680. The well was infilled with a sequence of sandy silts and silty sand. From the basal fill [338] came pottery dated 1630-1680 and clay tobacco pipe dating to c.1680. Pottery dated 1645-1680 was found in the uppermost fill [195].
- 7.11.14 Another barrel well [136] (fill [187], [135], [148], [134]) was located just to the west of PMB 1, (an indication that there was no adjacent building to the west of PMB 1 in this phase). The circular construction cut measured 2.06m x 1.98m x 1.50m deep, however the sides of the cut had slumped and it is probably that the construction cut was over excavated. The construction cut held a wooden barrel c.0.64m in diameter. Unfortunately the timber was very poorly preserved and did not survive lifting. The backfill of the construction cut was a sequence of silty sands [187] and [135] and in the upper deposit [135] was found pottery dated 1630-1680 and clay tobacco pipe dated 1660-1680. The primary fill of the well was greenish grey/brown sandy clayey silt [148] 0.63m deep. Pottery found in context [148] dated to 1670-1690. Two small finds were also recovered a book clasp (SF 24) and a glass marble (SF 25). The upper sandy silt [134] fill of the well also produced pottery dated 1670-1690 and clay tobacco pipe dating to c.1680.
- 7.11.15 Approximately 3.50m to the east of well [312] and truncating pit [260] was barrel well [272] (fill [349], [348], [350], [342]). The circular shaped cut measured 1.75m x 1.62m x 1.92m deep and was characterised by vertical sides falling to a flat base. The cut held a 1.0m diameter barrel [349] unfortunately the timber was too degraded to survive excavation. The construction cut was backfilled with mid greyish brown silty sand [350]. The primary fill of well was a silty clay [348] 0.97m thick and pottery dated 1680-1700 and clay tobacco pipe dated 1680-1710 was recovered from this deposit. The upper fill of clayey silt [342] produced pottery dated 1630-1680 and clay tobacco pipe dated 1680-1700.
- 7.11.16 In the north-west of Trench 1, truncating layer [184] (see above para 7.11.1) was circular shaped cut [253] (fill [346], [252]). The feature measured 1.84m E-W by 1.46m N-S and 1.20m deep and was characterised by vertical sides falling to a flat base. The basal fill was greyish black sandy silt

[346] 0.31m thick. Pottery dated 1665-1680 and clay tobacco pipe dated 1660-1680 was found in the fill [346]. The upper sandy clayey fill [252] produced pottery dating to 1665-1680 and clay tobacco pipe dated 1660-1680. The feature may represent a barrel well but if so then the barrel was completely degraded.

7.11.17 Another barrel well [542] (fill [540], [541] [533]) was excavated in the west central part of the Trench 1 (north). The sub-circular construction cut measured 1.06m E-W x 0.60m N-S x 0.28m deep but it was truncated to the north and east. The cut was characterised by sloping sides falling to a flat base. The cut, held a barrel represented by degraded wood [540] 0.50m in diameter. A clayey sandy silt [541] filled the construction cut. The well was filled with a silty sandy clay [533] and produced pottery dating to 1580-1700 and clay tobacco pipe dated 1660-1680.

Cess pit

- 7.11.18 In the west central part of the trench, a brick lined pit was excavated. The rectangular construction cut [32] measured 2.40m E-W by 1.90m N-S by 0.86m deep and was characterised by vertical sides falling to a flat base. The construction cut was lined with unfrogged orange fabric brick [31] (210mm x 100mm x 50mm) bonded with clayey silt. Seven brick courses survived with the bottom course laid on edge, the next six courses laid in stretcher fashion and the top course laid as headers. Pottery dated 1550-1700 was found in the sandy silt [87] backfill of the construction cut.
- 7.11.19 The brick lined pit was constructed with a cross wall creating two chambers; the smaller compartment to the west measured 1.50m x 0.25m (internally) and the larger chamber measured 1.20m x 1.10m. Two brick sized voids in the cross wall connected the two chambers. The larger chamber was further divided by a timber plank [60] laid horizontally unfortunately the wood was much degraded and did not survive excavation.
- 7.11.20 A dark brown/grey silty sand [58] filled the smaller chamber and pottery dated 1630-1680 as well as fragments of clay tobacco pipe were found in this deposit. The larger compartment was filled by a sequence of silty clay and silty sands ([45], [35], [39], [34]). From the basal deposit [45] came pottery dated 1680-1800. Clay tobacco pipe dated 1700-1740 was found in the uppermost deposit context [34].

Hedgerow or bedding trench

7.11.21 Approximately 1.50m to the rear of the south-west corner of PMB 1 an E/W aligned linear feature was excavated [479] (fill [480]). The cut measured 3.60m long, 0.90m wide and 0.22m deep and

was truncated to the west and was characterised by irregular edges sloping to a flat base. A dark brownish black sandy clay with occasional fragments of charcoal/coal and animal bone. The feature is interpreted a possible hedgerow or bedding trench.

Postholes

7.11.22 About 2.44m to the south and rear of PMB 1 were 6 postholes on a broadly E/W alignment. The features may represent a fence line that extended for at least 7.74m or be the remnants for some other ephemeral structure(s). Details are given in the table below.

Context	Dimensions	Depth	Shape in	Fill	Pot date	Clay
No			plan			tobacco
						pipe
431	0.48m N-S x 0.42m	0.02m	Circular	430	1660-1680	1660-1680
	E-W					
418	0.42m E-W x 0.32m*	0.09m	Sub-circular	417	1580-1700	1660-1680
	N-S					
421	0.60m N-S x 0.50m*	0.05m	Sub-circular	420		
	E-W					
240	0.60m E-W x 0.50m	0.20m	Circular	241	1630-1680	
	N-S					
314	0.65m E-W x 0.18m*	0.13m	Sub-circular	313	1580-1700	
	N-S					
475	0.30m N-S x 0.10m*	0.22m	Sub-circular	476		
	E-W					

Rubbish pits

7.11.23 Across the north of Trench 1 a series of probable rubbish pits was excavated. Typically, all these features were filled with a similar dark brown sandy clayey silt with frequent charcoal/coal fragments. Details are given in the table below.

Context	Dimensions	Depth	Shape	Fill	Pottery	Clay
No					date	tobacco
						pipe
230	2.96m N-S x 1.12m E-W	0.25m	Ovoid	177	1670-1700	1680-1710

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No date tobaccopipe 247 1.26m* E-W x 0.58m Sub-rectangular 0.78m* N-S 1680-17: 243 1.04m E-W x 0.27m Sub-rectangular 0.76m* N-S 242 0.76m* N-S 437 1.85m* E-W x 0.35m Sub-rectangular 1.15m* N-S 1.15m* N-S 223 3.20m* E-W x 1.25m Sub-rectangular 398 1630-1680 397 1630-1700 396 1630-1680 401 1630-1680 401 1630-1680 401 1630-1680 1640-1660
247 1.26m* E-W x 0.58m Sub-rectangular 244 1680-179 243 1.04m E-W x 0.27m Sub-rectangular 242 0.76m* N-S 0.35m Sub-rectangular 436 1580-199 437 1.85m* E-W x 0.35m Sub-rectangular 436 1580-199 223 3.20m* E-W x 1.25m Sub-rectangular 398 1630-1680 1630-1680 2.50m* N-S 396 1630-1680 401 1630-1680 1640-1680
0.78m* N-S 243 1.04m E-W x 0.27m Sub-rectangular 242 0.76m* N-S 437 1.85m* E-W x 0.35m Sub-rectangular 436 1.15m* N-S 223 3.20m* E-W x 1.25m Sub-rectangular 398 1630-1680 2.50m* N-S 396 1630-1680 401 1630-1680 1640-166
243 1.04m E-W x 0.27m Sub-rectangular 242 0.76m* N-S 1.85m* E-W x 0.35m Sub-rectangular 436 1580-19 1.15m* N-S 3.20m* E-W x 1.25m Sub-rectangular 398 1630-1680 2.50m* N-S 396 1630-1700 396 1630-1680 401 1630-1680 1640-168
0.76m* N-S 437 1.85m* E-W x 0.35m Sub-rectangular 436 1.15m* N-S 223 3.20m* E-W x 1.25m Sub-rectangular 398 1630-1680 2.50m* N-S 397 1630-1700 396 1630-1680 401 1630-1680
437 1.85m* E-W x 1.15m* N-S 0.35m Sub-rectangular 436 1580-199 223 3.20m* E-W x 2.50m* N-S 1.25m Sub-rectangular 398 1630-1680 397 1630-1700 396 1630-1680 401 1630-1680 401 1630-1680 1640-1680
1.15m* N-S 223 3.20m* E-W x 1.25m Sub-rectangular 398 1630-1680 2.50m* N-S 396 1630-1680 401 1630-1680 1640-166
223 3.20m* E-W x 1.25m Sub-rectangular 398 1630-1680 2.50m* N-S 396 1630-1680 401 1630-1680 1640-166
2.50m* N-S 397 1630-1700 396 1630-1680 401 1630-1680 1640-166
396 1630-1680 401 1630-1680 1640-160
401 1630-1680 1640-166
391 1630-1650
270 1630-1680 1730-178
219 Mid 17th c
388
387 1630-1700 1640-166
373 1630-1680 1640-166
363 1630-1650 1660-168
204 1.40m* N-S x 0.82m Sub-rectangular 225 1580-19
1.22m E-W 205 1630-1680 1680-17
112 1.70m E-W x 1.0m* 0.80m Sub-rectangular 111 1630-1680 1660-168
N-S
157 1.95m N-S x 0.86m Sub-circular 171 1630-1680 1640-163
0.83m* E-W
156 1670-1690 1580-19 ⁻¹
341 1.80m* N-S x 0.83m Sub-rectangular 340 1580-1700 1580-19
1.58m* E-W
325 333 1630-1650 1640-166
324 1630-1650 1640-166
309 1630-1680 1610-164
356 2.24m* E-W x 0.43m Indeterminate 355
0.57m*
260 1.64m E-W x 0.52m Rectangular 259 1630-1680 1660-168
1.18m* N-S

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Context	Dimensions	Depth	Shape	Fill	Pottery	Clay
No					date	tobacco
						pipe
345	0.86m N-S x 0.78m	0.18m	Sub-circular	344	1630-1700	
	E-W					
321	0.96m* E-W x	0.35m	Cub-circular	320	1580-1650	1660-1680
	0.62m N-S			319	1580-1700	1580-1910
280	1.20m* E-W x	0.23m	Sub-rectangular	279	1630-1680	1660-1680
	0.78m E-W					
301	0.52m* N-S x	0.17m	Indeterminate	300	1550-1700	1580-1910
	0.26m* E-W					
299	1.20m N-S x	0.38m	Sub-circular	298	1580-1700	1580-1910
	0.80m* E-W					
290	1.54m N-S x	0.47m	Sub-rectangular	289	1630-1700	1660-1680
	0.65m* E-W					
1084	1.08m N-S x 1.0m	0.39m	Sub-rectangular	1083	Mid 17thc	1660-1680
	E-W					
Uncertain f	function				1	•
185	0.60m* E-W x	0.13m	Indeterminate	169		1580-1910
	0.30m* N-S					

- 7.11.24 One group ([230], [247], [243], [437], [260] and [223]) was located to the rear of building PMB 1. Pit [223] was notable for its very regular shape, large size and depth, and multiple fills. Interpreted as a rubbish pit this may have been its secondary use and it may originally have been used as a cess pit. The pit truncated the hedgerow feature [479]. Pit [223] was covered by a sequence of clayey sandy silts context [369] and [269] that extended 5.84m E-W by 3.24m. The highest level was at 7.56m OD. From these deposits was recovered pottery dating to 1630-1680 and clay tobacco pipe dated 1660-1680.
- 7.11.25 A second group of 6 rubbish pits ([204], [112], [157], [341], [325], and [356] and) were excavated in the north-west of Trench. Pit [212] was notable for the number of small finds; including iron scissors (SF 17), copper-alloy button (SF 18), ivory comb (SF 19) and a fine copper-alloy chain (SF 20) recovered from fill [111].
- 7.11.26 Pit [356] which partially truncated well [253] was in turn covered by a layer of sandy silty clay [220]. The deposit measured 2.59m E-W x 0.84m N-S x 0.12m deep with a highest level at 7.60m OD. Pottery found in layer [220] dated to 1580-1650 and the clay tobacco pipe dated to 1580-1910.

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- 7.11.27 A third group of pits ([345], [321], [280], [301], [299], [290] and [1084]) was located close to the south-east corner of building (PMB 1).
- 7.11.28 A heavily truncated pit [185] was excavated to the south-west of building (PMB 1) filled with a dark grey brown clayey sandy silt. The function of this pit is uncertain but refuse disposal is a possibility.

Trench 1 (south)

Sill beam

7.11.29 Located in the west central part of Trench 1 (south) was an E/W aligned linear feature [958] (fill [957]). The cut measured 3.15m E-W by 0.50m N-S and 0.10m deep but it was truncated to the west and south. The fill was a soft mid brown clayey silt thought to be the remains of rotted out timber. It may be that the feature was the remains of a sill beam used to support a timber or masonry superstructure and represents a wall line. However, it is uncertain if this feature was part of a building.

Postholes

7.11.30 Approximately 0.50m to the south of the sill beam [958] a possible posthole [970] was excavated but it is uncertain if the posthole and sill beam are in association. A second posthole [950] was excavated c.11m further to the east but the isolation of this feature makes any further interpretation difficult. Details of both postholes are given in the table below.

Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
950	0.53m* N-S x	0.31m	Sub-rectangular	949	1720-1760	1580-1910
	0.36m E-W					
970	0.38m in dia	0.32m	Circular	969		

Gully

7.11.31 Approximately 1.20m to the south-east of the sill beam [958] was another linear feature [822] (fill [782]) that may be the remains of a drainage gully. The cut measured 2.78m E-W by 0.48m N-S x 0.25m deep but was truncated both to the east and west. The cut was characterised by steeply sloping sides falling to a flat base. The fill was a light grey sandy clayey silt with frequent

fragments of cbm and occasional fragments of clay tobacco pipe, pot, animal bone, glass and decayed wood. The pottery dated to 1670 and the clay tobacco pipe to 1680-1710.

Rubbish pits

7.11.32 Across Trench 1 (south], a series of cut features were excavated. Similar mid-grey brown sandy silt with inclusions of pottery sherds and fragments of clay tobacco pipe, animal bone, brick and/or tile, and coal/charcoal filled these features. The pits were probably for the disposal of domestic refuse. Details are given in the table below

Context No	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay tobacco pipe
870	2.18m N-S x 0.54m E-W	0.48m	Sub-rectangular	869		
1014	1.30m* N-S x 0.70m* E-W	0.26m	Indeterminate	1013		1580-1910
952	2.30m* E-W x 0.86m* N-S	0.47m	Sub-rectangular	951	L17/E18th	1680-1710
929	1.04m* E-W x 0.64m* N-S	0.20m	Indeterminate	940	1680-1700	1580-1910
966	1.130m E-W x 0.60m* N-S	0.19m	Indeterminate	965		
964	4.62m* E-W x 0.88m* N-S	0.62m	Sub-rectangular	898	1825-1900 intrusive	1700-1710
945	1.0m* E-W x 0.70m* N-S	0.31m	Sub-circular	944	1701-1711	1640-1670
943	1.08m* E-W x 0.33m* N-S	0.53m	Indeterminate	942	L17/E18th	
1030	1.36m E-W x 0.18m* N-S	0.30m	Sub-rectangular	1029		

7.11.33 On the east side of the trench, a cut feature [874] (fill [884], [873]) was excavated that measured 1.56m E-W by 0.84m N-S and 0.99m deep but it was truncated to the east and west. The cut was characterised by steeply sloping sides falling to a slightly concave base. The fill was a light grey sandy gravelly silt overlain by clayey silt with only very occasional inclusions of animal bone and cbm. The only dating evidence was clay tobacco pipe stem dated 1580-1910. The purpose of this feature is uncertain.

Trench 2

Made ground

- 7.11.34 In the east-central part of the Trench 2, a sequence of sandy silt [2064] overlain by silty sand [2055] was recorded. The deposits covered an area of 1.50m N-S by 1.0m and the highest level was at 4.98m OD. In these 'dumped' deposits were found pot sherds dated 1580-1700 and clay tobacco pipe dated 1580-1740. Layer [2055] was truncated by pit [2059] (see below para 7.11.46).
- 7.11.35 A similar deposit [2115] of made ground was recorded c.5.0m to the west. Context [2115] measured 4.26m E-W x 2.35m N-S and 0.30m thick. The highest level was at 4.81m OD. Pottery recovered from context [2115] was also dated to 1580-1700.
- 7.11.36 Another patch of firmly compacted sandy silt [1827] was recorded in the north-east of the trench.

 The deposit measured 2.40m by 1.42m and was at 6.07m OD. Pottery found in this deposit dated to 1550-1700 and the clay tobacco pipe dated to 1680-1710.

Post-medieval Building 2 (PMB 2)

- 7.11.37 In the south-east of the trench, the remains of a building fronting onto Pennington Street was revealed. Context [1701] represented the construction cut for the back E/W aligned wall of a cellar. The cut measured 3.60m E-W by 1.0m N-S by 0.95m deep but it was truncated to the east and continued south beyond the limits of the excavation. Context [1678] represented a masonry wall 2.20m long and 0.40m wide with a possible return to south at the east and west end. It is uncertain if the return at the east end represents an internal dividing wall within the cellar or merely a recess perhaps for shelving. The wall was built with unfrogged orange bricks laid in alternating bonds of header and stretcher with little of the bonding material surviving.
- 7.11.38 Abutting the east end of wall [1678] was wall [1700] also running E/W. Wall [1700] measured 1.04m long by 0.31m wide and survived to a height 0.52m (7 courses) but it was truncated to the east. The wall was built with unfrogged orange bricks laid in stretcher fashion and bonded with pale grey lime mortar. The backfill [1699] of the construction cut produced pottery dated 1630-1680 and clay tobacco pipe dated 1700-1740. Overall wall [1678]/[1700] measured 3.25m E-W.
- 7.11.39 Abutting and to the south of context [1700] was a sequence of sandy silt deposits [1725] and [1724] 0.36m thick. Pottery found in these deposits dated 1580-1700 and the upper layer [1724] also produced clay tobacco pipe dated 1660-1680. These deposits were makeup for a brick floor [1717] that measured 0.94m E-W by 0.20m N-S. The floor was built with unfrogged orange bricks

laid on bed and the level on the floor was at 3.86m OD.

7.11.40 A similar sequence abutted the south of context [1678]. Here the floor makeup [1732] produced pottery dated 1480-1600 and was overlain by the remnants of a brick floor [1731] recorded at 3.84m OD.

Cess pit

- 7.11.41 Approximately 3.0m to the north-west of PMB 2, a brick lined cess pit [1562] was excavated. The construction cut [1563] measured 2.54m E-W x 1.70m N-S x 0.78m deep and was characterised by vertical sides falling to a flat base. The construction cut was lined with 8 courses of unfrogged orange bricks [1562] bonded with grey sandy silt. The backfill of the construction cut was sandy silt [1645]. Clay tobacco pipe found in the backfill dated to 1580-1740 and a copper-alloy button (SF 446) was also found. On the base of the cess pit were the remains of three timber 'joists' ([1638] fill [1637], [1640] fill [1639] and [1642] fill [1641]). The cuts ranged from 1.08m-0.74m x 0.38m-0.17m x 0.06-0.07m deep and were filled with degraded wood. The 'joists' may have supported a wooden floor since degraded or removed. The cess pit [1562] was filled with soft grey/brown sandy silt with occasional fragments of oyster shell and charcoal. Pottery found in the fill dated to 1670-1800 and clay tobacco pipe dated to 1680-1710.
- 7.11.42 A possible cess pit [1533] (fill [1541], [1532]) was excavated approximately 5.0m to the north-east of cess pit [1562] (described above). The cut measured 2.20m N-S by 0.64m E-W x 0.87m deep but it was truncated to the west. The cut was characterised by vertical sides falling to a flat base. The basal fill was reddish brown sandy silt [1541] with occasional fragments of pottery, cbm, animal bone, glass and charcoal/coal, 0.46m thick. Pottery found in [1580] dated to 1580-1700 and the clay tobacco pipe dated to 1680-1710. The upper fill was greenish brown silt [1532] with inclusions of animal bone and broken tile. Pottery dated 1600-1650 was recovered from the fill [1532] as well as clay tobacco pipe dated 1660-1680.
- 7.11.43 In the north-east of the trench, another possible cess pit [1721] (fill [1743], [1720]) was recorded. The cut measured 1.85m N-S x 0.40m E-W x 0.51m deep but it was truncated to the west. The cut was characterised by vertical sides falling to a flat base. A sequence of sandy silts filled the pit. The basal deposit [1743] 0.17m thick produced pottery dated 1630-1680 and clay tobacco pipe dated 1680-1710. Ceramics from the upper deposit [1720] dated to 1680-1720 and the clay tobacco pipe dated to 1680-1710.

Barrel well

- 7.11.44 In the east central part of the trench a barrel well was excavated. The sub-circular shaped construction cut [1599] measured 2.16m N-S by 1.94m E-W and 0.85m deep and was characterised by near vertical sides falling to a slightly concave base. The barrel was represented only by a brown stain [1565] at the base of cut [1599]. The backfill to the construction cut was sandy silty gravel [1598] that produced only Roman residual pottery and cbm dated very broadly 1630-1900. The fill of the well was dark grey/brown sandy silt with frequent fragments of animal bone, pot sherds, occasional fragments of oyster shell and scraps of metal. Pottery found in the well dated to 1700-1750 and the clay tobacco pipe dated to 1680-1710.
- 7.11.45 Another barrel well was excavated in the south-central part of the trench. The construction cut [2074] measured 1.16m E-W by 0.52m N-S and 0.52m deep but was truncated to the east and south. The cut was characterised by vertical sides falling to a flat base. The wooden barrel had fully degraded and survived only as dark brown soil [2063]. Pottery found in the silty sand [2073] backfill of the construction cut dated to 1550-1700. The well was filled with a basal deposit of silty clay [2065] 0.07m thick. Pottery found in context [2065] dated to 1665-1750. The upper fill was a sandy silt [2062] with occasional fragments of charcoal/coal, cbm and animal bone. Clay tobacco pipe dated 1550-1700 was recovered from fill [2062] but the pottery dated to 1805-1900 and is thought to be intrusive.

Rubbish pitting

7.11.46 A series of pits were excavated across Trench 2. Typically, these features were filled with mid brown sandy or clayey silts with fragments of pottery, cbm and animal bone. A hair curler (SF 455) was found in pit [1668], a hone stone (SF 441) was recovered from fill [1604] of pit [1605] and two cannon balls (SF 1596 and SF 1597) were retrieved from pit [1540]. The features are interpreted as probable rubbish pits. Dimensions are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay tobacco pipe
1864	0.98m N-S x 0.24m* E-W	0.28m	Indeterminate	1863	1863	
1612	1.10m* N-S x 0.46m* E-W	0.35m	Sub-rectangular	1611		
1568	0.50m* N-S x 0.16m* E-W	0.56m	Indeterminate	1567		
1668	1.20m N-S x 0.70m	0.38m	Sub-rectangular	1667		

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Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
	E-W					
1579	1.24m N-S x 0.62m	0.25m	Ovoid	1578		
	E-W					
2059	0.52m* E-W x	0.25m	Sub-circular	2058		
	0.22m* N-S					
1605	1.16m* N-S x	0.30m	Indeterminate	1613	1580-1900	1580-1710
	0.50m* E-W			1604	1580-1900	1680-1710
2104	0.95m* E-W x	0.37m	Sub-circular	2103		
	0.66m* N-S					
2094	0.64m* E-W x	0.42m	Sub-rectangular	2093	1580-1700	
	0.36m* N-S					
1540	1.40m* N-S x	0.30m	Sub-rectangular	1539	1680-1720	1680-1710
	0.78m* E-W					
1555	0.94m N-S x 0.92m	0.32m	Sub-rectangular	1554	1680-1750	1680-1710
	E-W					
1570	0.70m* N-S x	0.31m	Indeterminate	1569		
	0.32m* E-W					
1685	0.80m* E-W x	0.12m	Sub-rectangular	1684	1600-1800	1680-1710
	0.56m N-S					
1748	1.0m* N-S x 0.30m*	0.34m	Indeterminate	1749	1680-1800	1730-1910
	E-W			1747	1580-1846	1680-1710
1771	0.65m* E-W x	0.33m	Sub-rectangular	1769	1660-1700	1680-1710
	0.25m* N-S					
1753	0.60m* E-W x	0.19m	Sub-circular	1752	1710-1760	c.1680
	0.30m N-S					
1775	1.45m N-S x 0.24m*	0.34m	Sub-rectangular	1774	1680-1700	1680-1710
	E-W					

7.11.47 In the north-east of the trench, two features [1924] and [1956] were excavated filled with similar blackish brown sandy silt. However, the shallowness of the features less than 0.09m suggests that these pits were not rubbish pits and their purpose is uncertain. Full details are given in the table below.

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Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
1924	0.60m N-S x 0.56m*	0.05m	Sub-rectangular	1925	1580-1700	1580-1740
	E-W					
1956	0.70m N-S x 0.40m*	0.09m	Sub-circular	1954		
	E-W					

^{*}Truncated dimension

7.12 Phase 6.1: 18th century (1720-1780) (Figure 14)

Trench 1 (north)

Post-medieval Building 1 (retained)

- 7.12.1 In the north of Trench 1 the building (PMB 1) was retained although some minor alterations were recorded. In Room 2, a probable posthole was recorded [94] (fill [92], [91]). The oval shaped cut (which truncated Phase 5.2 deposit [121]) measured 0.51m x 0.34m x 0.13m deep. The cut was characterised by steeply sloping sides falling to a slightly concave base. The basal fill was a light grey hard mortar with frequent fine gravel inclusions which may have acted as a post pad for a timber upright. The upper fill was silt and degraded timber and may have represented the remains of the timber post.
- 7.12.2 Immediately to the north of posthole [94] was the remains of a brick lined drain [110] (fill [109], [108]). The construction cut measured 0.56m N-S x 0.46m E-W x 0.08m and it continued to the north beyond the limits of the excavation. The cut was characterised by sloping sides falling to a flat base. The west side of the cut was lined with ½ bat bricks laid on bed. The fill of the drain was clayey silt [108] in which was found fragments of clay tobacco pipe and pottery dated to 1580-1700.

Post-medieval Building 3 (PMB 3)

- 7.12.3 In the north central part of the trench, masonry remains were recorded that probably represent a new building (PMB 3) adjacent and to the west of PMB 1.
- 7.12.4 Context [144] represented a construction cut for the E/W aligned wall foundation [114]. The cut measured 1.10m long by 0.42m wide and 0.73m deep on the south side and 0.35m deep on the north side but was truncated to the east and west. The cut was characterised by vertical sides

- falling to a flat base. Approximately 0.50m to the east, another stretch of probably the same wall as [114] was recorded as [180] (fill [192], [117], [116, [115]). The foundation measured 2.48m long by 0.44m wide and 0.66m deep. Overall the wall line [114] /[117] was 4.10m long.
- 7.12.5 Context [126] represented the construction cut for a N/S aligned wall [127]. The cut measured 2.20m long by 0.68m wide and 0.08m deep but it continued beyond the edge of the trench to the north and was truncated to the south. The cut was characterised by vertical sides falling to a flat base. The cut held a wall 2.20m long by 0-.40m wide and surviving to a height of 0.66m. The wall was built with unfrogged orange bricks bonded with a soft grey mortar with frequent fragments of chalk. It is thought that this wall was the east wall of PMB 3 and a party wall between that building and PMB 1 to the east.
- 7.12.6 Recorded only in south facing section and abutting the west face of N/S wall [127] was a sandy silt [268] floor makeup 0.24m thick. Overlying layer [268] was the remains of a brick floor [265]. The floor was built with unfrogged orange bricks laid on bed. The highest level was at 7.43m OD.
- 7.12.7 It is possible to conjecture the building (PMB 3) measuring at least 5.15m N-S by 4.28m E-W. The building comprising at least one room continued north beyond the limits of the excavation.

Wells

7.12.8 In the north-west part of Trench 1, a brick lined well was recorded. The circular shaped construction cut [64] measured 1.68m x 1.28m and at least 1.30m deep and was characterised by vertical sides. The well was lined with 4 courses of unbonded and unfrogged orange bricks [41] laid in an irregular fashion with whole and ½ bat bricks. Below the bricks, the well was probably lined with a barrel but this had completely degraded. The construction cut was backfilled with clayey sandy silt [90] overlain by a sandy silt [53]. Pottery found in context [90] dated 1700-1760 and the clay tobacco pipe dated 1700-1740. The backfill [53] produced pottery dated 1680-1700 and clay tobacco pipe dated 1680-1710. The well was filled with a sequence of sandy silts ([66], [10] and [9]). The basal deposit [66] produced pottery dated 1700-1720 and clay tobacco pipe dated 1700-1740, in context [10] was found ceramics dated 1701-1711 and clay tobacco pipe dated 1680-1710, while from the upper fill [9] pottery dated 1670-1800 was retrieved.

Cess pits

7.12.9 Circa 1.80m to the rear of PMB 3 a brick lined cess pit was recorded. The construction cut [55] measured 1.82m E-W by 1.52m N-S by 0.56m deep and was characterised by vertical sides falling to a flat base. The cut was lined with unfrogged orange bricks [54] laid in stretcher fashion

with occasional headers and bonded with a pale grey mortar. The basal fill of the cess pit was a clayey sandy silt [46] 0.33m thick. Pottery found in context [46] dated to 1760-1780 and the clay tobacco pipe dated to 1580-1910. The upper fill was compacted sandy clayey silt [14] that produced pottery dated 1770-1800 and clay tobacco pipe dated 1770-1845.

7.12.10 A further 4.50m to the south-west of cess pit [54] was a second cess pit. The rectangular shaped construction cut [175] measured 2.35m E-W by 0.94m N-S and 0.60m deep but it was truncated to the south. The cut was characterised by vertical sides falling to a flat base. Lining the pit was unfrogged orange bricks with the bottom course laid as headers and the surviving upper 4 courses laid as stretchers, all bonded with a soft pale grey chalky mortar. A silty sand [176] backfilled the construction cut. The fill of the cess pit was a dark brown-grey silty sand that produced pottery dating to 1700-1720 and clay tobacco pipe dated 1700-1710.

Tanning Pit

- 7.12.11 In the central part of Trench 1, a timber lined pit probably used for tanning was excavated. The rectangular construction cut [561] measured c.3.50m E-W by 1.94m N-S by 0.61m deep and was characterised by vertical sides falling to a flat base.
- 7.12.12 The base of cut [561] was truncated by a cut feature [582] (fill [635], [583]). Cut [582] was sub-rectangular in shape and measured 1.95m E-W by 0.85m N-S 0.45m deep. The cut was characterised by steeply sloping sides falling to a flat base. A sequence of sandy clay filled the cut. The upper deposit [583] produced pottery dated 1580-1700. It may that the feature [582] represents the repeated cleaning out of the pit [561]. Covering the feature [582] and lining the base of the cut was a layer of clay [636] 0.05m thick.
- 7.12.13 The sides of the cut were lined with timber planking laid on edge and retained with driven stakes. Posthole [588] (fill [587]) may have represented another of the retaining timber uprights.
- 7.12.14 A sequence of silty sand and clays ([591], [660], [623] and [663]) backfilled the construction cut. Pottery found in context [660] dated to 1710-1760 and 18th-century ceramics were retrieved from fill [623]. The basal fill of pit was a silty sandy clay [574] 0.30m thick and this was overlain by a clayey silt [559]. Pottery found in the fill [574] dated to 1720-1760 and from the context [559] came pottery dated 1745-1770.

Rubbish pits

7.12.15 In Trench 1 (north) a series of pits were excavated; four of the pits were laid out on a N/S axis to the west of (PMB 3) and a fifth (context [182]) was located to the east of the retained building

(PMB 1). These features are interpreted as rubbish pits and details are given in the table below.

Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
124	1.90m* E-W x 1.30m	0.46m	Sub-rectangular	123	1720-1800	c.1680
	N-S					
288	2.25m N-S x 1.94m	0.54m	Irregular	285	1580-1700	
	E-W					
182	1.42m E-W x 1.03m	0.43m	Rectangular	181	1660-1680	1660-1680
	N-S					
517	1.48m N-S x 1.28m	0.38m	Rectangular	518	18th c	1580-1910
	E-W					
868	1.22m N-S x 1.20m	0.38m	Rectangular	867	1701-1711	1700-1740
	E-W					

^{*}Truncated dimensions

Uncertain function – planting holes?

7.12.16 A group of cut features located to the south-east of building (PMB 1). These small pits were all filled with similar dark grey clayey silts and their function is uncertain although planting holes is a possibility. Details are given in the table below.

Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
161	0.60m N-S x 0.26m*	0.09m	Ovoid	160		Mid 17th c
	E-W					
189	0.54m* N-S x 0.42m	0.21m	Ovoid	188	1630-1700	1580-1910
	E-W					
337	0.30m N-S x 0.22m*	0.14m	Sub-rectangular	336		
	E-W					
155	0.66m* E-W x 0.55m	0.16m	Ovoid	154	1580-1700	1580-1910
	N-S					

7.12.17 To the east of the pits described above a linear feature [208] (fill [207]) was excavated. The cut measured 1.66m n-S by 0.39m E-W by 0.19m deep but was truncated to the north and south.
The cut was characterised by steeply sloping sides falling flat base. The fill was a clayey silt with

occasional fragments of cbm, slate, burnt flint and clay tobacco pipe. The purpose for this shallow trench is uncertain but the excavator thought it may represent a hedgerow.

Trench 1 (south)

E/W aligned ditch

7.12.18 In the central part of Trench 1 (south) an E/W aligned ditch [946] (fill [[941], [930], [897]) was excavated. The cut which was butt-ended to the west and truncated to the east measured 5.68m long by 0.67m wide and 0.60m deep. The cut was characterised by steeply sloping sides falling to a slight concave base. A sequence of silts and sandy silts filled the ditch but only the upper deposits, context [897], produced any dating evidence; pottery dated 1710-1760 and clay tobacco pipe dated 1680-1710. It is uncertain as to the purpose of the ditch but it could possibly demarcate an area of activity or a property boundary.

Made ground

- 7.12.19 Ditch [946] was covered by a layer of dark grey-brown sandy silt [901]. The deposits measured 10.25m E-W by 0.92m N-S (max) and 0.11m thick. The highest level was at 5.03m OD. Fragments of clay tobacco pipe and pottery dated 1650-1750 were retrieved from this layer.
- 7.12.20 In the eastern and central part of Trench 1 (south) deposits of clayey silt (contexts [773] and [875]) were recorded between 5.11 and 5.04m OD. Eighteenth-century pottery was recovered from both layers and clay tobacco pipe dated to 1680-1710 was recovered from context [875].

Cess pits

- 7.12.21 In the central part of the trench, the remains of a brick lined putative cess pit [766] (fill [765]) were unearthed. The rectangular shaped construction cut measured 2.40m N-S by 2.20m E-W and 0.66m deep. The cut was characterised by vertical sides falling to a flat base. Lining the pit was the remnants of the cess pit wall built with unfrogged orange bricks. The cess pit had largely been truncated by modern intrusion.
- 7.12.22 In close proximity to the cess pit described above, a series of five pits ([793], [888], [824], [780] and [894]) were excavated that because of their size, profile and regularity are thought to originally also have been cess pits. Details are given in the table below.

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Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
888	2.65m N-S x 2.40m	0.36m	Rectangular	886	1690-1730	1700-1740
	E-W					
793	2.60m E-W x 0.52m*	0.61m	Sub-rectangular	792	1580-1700	1580-1910
	N-S					
824	1.52m E-W x 1.40m*	0.38m	Sub-rectangular	823	1740-1760	1700-1740
	N-S					
780	2.32m N-S x 0.94m	0.60m	Rectangular	779	1720-1760	1730-1740
	E-W					
894	2.10m N-S x 1.50m*	0.73m	Sub-rectangular	893	1760-1780	1680-1710
	E-W					

^{*}Truncated dimensions

Rubbish pitting

7.12.23 Across the area of Trench 1 (south), a series of cut features was recorded. Four of the pits (context [848], [850], [863] and [883]) were recorded only in section but are nevertheless grouped with those excavated in plan. Typically, the features were filled dark greyish brown silty sand with frequent sherds of pottery and fragments of cbm, animal bone, metal, glass and occasional wood. It is thought that these pits represent rubbish pitting. Details are given in the table below.

Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
865	0.64m*N-S x 0.30m*	0.30m	Sub-circular	864	1720-1780	
	E-W					
845	1.50m* E-W x 0.90m	0.57m	Sub-rectangular	844	1740-1770	1730-1780
	N-S					
774	1.40m N-S x 0.42m*	0.30m	Sub-rectangular	767	1760-1790	1580-1910
	E-W					
804	2.70m* N-S x	1.16m	Sub-rectangular	815	1740-1780	1730-1780
	1.94m* E-W					
892	0.90m N-S x 0.80m*	0.38m	Ovoid	891	1740-1770	1730-1780
	E-W					

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Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay		
No						tobacco		
						pipe		
846	1.64m* N-S x 1.53m	0.54m	Sub-rectangular	837	1700-1720	1580-1910		
	E-W							
830	1.15m E-W x 1.12m*	0.55m	Ovoid	829	18th c	1580-1910		
	N-S							
876	2.38m E-W x 1.66m*	0.48m	Irregular	866	E 18th c	M17th-		
	N-S					E18thc		
826	2.08m E-W x 1.98m	0.33m	Irregular	781	1740-1770	1730-1780		
	N-S							
Recorded	Recorded only in section							
848	1.0m N-S	0.50m	Indeterminate	847		1700-1740		
850	2.05m N-S	0.69m	Indeterminate	849	18th c	1700-1740		
863	1.60m N-S	0.60m	Indeterminate	862				
883	0.50m N-S	0.25m	Indeterminate	859				

^{*}Truncated dimensions

E/W aligned drain

7.12.24 Cess pit [780] (see above), was truncated by an E/W aligned feature [803] (fill [802]). The cut measured 2.62m E-W by 0.60m N-S by 0.69m deep but it was truncated to the east and west. The cut was characterised by vertical sides falling to a flat base that inclined towards the east. A gravelly silty sand filled the feature from which 18th-century pottery and 17th-century clay tobacco pipe was recovered. The function of the feature is uncertain but a drain is a possibility.

Trench 2

Post-medieval Building 2 (PMB 2)

7.12.25 The building PMB 2 was probably retained in this phase however the cellars appear to have been filled in. To the east the basal deposit of sand and gravel [1711] produced pot dated 1670-1800 and clay tobacco pipe dated 1680-1710, while to the west, in a similar deposit [1714] was found pottery dating to 1630-1700 and clay tobacco pipe dated 1660-1680. Overlying the sand and gravel were deposits of silty clayey sand; to the east context [1709] in which was found pot dated 1670-1800 and clay tobacco pipe dated 1680-1710 and to the west in context [1708] pot dating to 1580-1700 and clay tobacco pipe dated 1680-1710 was found.

Post-medieval Building 4 (PMB 4)

7.12.26 In the east of Trench 2, a N/S aligned wall foundation was unearthed with at the north end a return to the east. The construction cut [1692] measured 3.61m N-S by 0.94m E-W and 0.33m deep and was characterised by vertical sides falling to a flat base. The construction cut held a masonry foundation [1693] built with unfrogged red brick dated 1750-1900, laid in an English bond pattern and bonded with off white grey chalky mortar. The surviving masonry measured 2.64m long by 0.43m wide at its bottom course and then stepped in to to form a wall 0.35m wide and 0.36m in height. The return to the east at the north end was c.0.70m long and may represent a buttress. Pottery found in the backfills [1690] and [1691] to the construction cut dated to the late 18th century and 1775-1800 and the clay tobacco pipe dated 1700-1740 and 1730-1800 respectively.

Made ground

7.12.27 In the south-west of Trench 2, a small patch of silty sand [1814] was recorded. The layer measured 0.93m x 0.80m x 0.12m thick and was at 4.16m OD. As well as Roman residual pottery and cbm, pot dated 1580-1700 and clay tobacco pipe dated 1730-1910 was also found. Another layer of silty sand [2078] was recorded in the south-central part of the trench. The deposit here measured 4.60m x 2.0m and was at between 4.83m OD and 4.64m OD. Pottery dating to 1770-1900 was recovered from layer [2078]. Layers [1814] and [2078] are thought to represent 'dumped' deposits that accumulated in Trench 2 during the 18th century.

Well

7.12.28 In the central part of Trench 2 was a brick lined well. The circular shaped construction cut [2178] measured 1.38m in diameter and 0.48m deep and was characterised by vertical sides falling to a flat base. The cut was lined with mostly broken unfrogged, orange bricks [2176], laid in an irregular pattern and bonded with a grey chalky mortar. A sandy gravel [2177] backfilled the construction cut.

Cess pits

7.12.29 Phase 5.2 cess pit [1562] was modified probably in Phase 6.1. The original pit was filled in with sandy silt [1561]. Pottery found in the fill dated 1770-1800 and the clay tobacco pipe dated 1700-1740. A new smaller chamber [1536] (fill [1535], [1545], [1534]) was inserted into the original pit.

The construction cut [1536] truncated fill [1561] and measured 1.04m E-W and 0.62m deep. Lining the cut and abutting the western internal face of the earlier cess pit was new brickwork consisting of unfrogged orange bricks bonded with a creamy pale grey mortar with flecks of chalk and charcoal. The basal fill was a green-grey sandy silt [1545] 0.25m thick. Pottery found in this deposit dated to 1700-1720 and the clay tobacco pipe dated to 1700-1740. The fill [1545] was covered by dark brown sandy silt [1534]. Pottery retrieved from [1534] dated to 1760-1780 and the clay tobacco pipe dated to 1700-1740.

- 7.12.30 In the north-east part of the trench, a second probable cess pit was excavated. The construction cut [1794] measured 2.28m x 2.25m x 0.76m deep and was characterised by vertical sides falling to a flat base. Lining the cut was unfrogged orange bricks [1786] bonded with a light grey-brown mortar with chalk flecks. Pottery dated 1580-1700 and clay tobacco pipe dating to 1580-1740 was found in the sandy silt [1793] backfill to the construction cut. The cess pit was filled with sandy silt [1777] and from this deposit was recovered pot dated 1740-1800 and clay tobacco pipe dated 1760-1780. Adjacent and abutting the south wall of the cess pit was the remains of a brick floor [1797] that measured 0.52m by 0.35m. The level on the floor was at 6.22 m OD.
- 7.12.31 Another possible cess pit was excavated in the north-east of the trench. The rectangular construction cut [1509] measured 1.27m x 1.08m and 0.37m deep and was characterised by vertical sides falling to a flat base. The pit was lined with orange bricks [1508] with some ½ and ½ bats, laid in stretcher fashion. Pottery dating to the 17th century was recovered from the clayey silt [1507] backfill of the construction cut. The chamber was filled with a sequence of clayey silt deposits ([1523], [1515] and [1506]). Pottery dating to 1720-1760 and clay tobacco pipe dated 1730-1780 was recovered from contexts [1515] and [1506].

Postholes

- 7.12.32 In the central part of the trench, a possible posthole [1617] (fill [1616]) was excavated. The oval shaped hole measured 0.30m by 0.20m by 0.07m deep but it was truncated to the east. The cut was characterised by steeply sloping sides falling to a concave base. The grey-brown fine sandy silt fill produced pottery dated 1740-1830. The posthole [1617] was truncated by pit [1595].
- 7.12.33 Another possible posthole [2069] (fill [2068]) was c.6.0m to the south-west of the putative posthole [1617]. The posthole which truncated layer [2078] measured 0.38m x 0.23m and 0.25m deep. The cut was characterised by near vertical sides falling to a base that sloped to the south. The silty sandy fill produced pottery dated 1680-1800.
- 7.12.34 A third posthole [1914] (fill [1912], [1911]) was recorded in the north-east of the trench. The sub-rectangular cut measured $0.35m \times 0.30m \times 0.26m$ and was characterised by near vertical sides

falling to a base that inclined to the west. A sequence of silts filled the cut. Pot dated 1580-1740 was recovered from fill [1911]. The features described above may represent postholes, however their isolation makes any further interpretation difficult.

Rubbish pits

7.12.35 Across Trench 2, a series of cut features was excavated, predominantly sub-rectangular in shape and filled with a similar grey/brown sandy silt with frequent fragments of charcoal and occasional animal bone, shell and cbm. The features are interpreted as possible rubbish pits. Details are given in the table below.

Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
1666	1.46m E-W x	0.26m	Sub-rectangular	1665	1740-1770	1730-1780
	1.38m* N-S			1664	1740-1780	1730-1780
1698	0.52m* N-S x	0.30m	Sub-circular	1697		
	0.44m* E-W					
1689	2.04m* E-W x	0.69m	Indeterminant	1688	1740-1800	
	1.56m* N-S					
1695	0.96m N-S x 0.66m	0.37m	Ovoid	1694		
	E-W					
1587	1.30m*E-W x	0.54m	Rectangular	1586	1775-1840	1700-1740
	1.20m N-S					
1595	1.20m N-S x	0.25m	Sub-rectangular	1594	1740-1800	1700-1740
	0.95m* E-W					
1715	1.89m N-S x	0.90m	Sub-rectangular	1710	1740-1760	1700-1710
	0.30m* E-W					
1713	1.30m* E-W x	0.49m	Indeterminant	1716	1660-1800	1680-1710
	1.22m* N-S			1712	1740-1800	1730-1780
1764	1.93m N-S x	1.07m	Sub-rectangular	1763	1600-1700	1580-1740
	0.92m* E-W			1759	1700-1730	1700-1740
				1758	L17th/E18th	1700-1740
				1757	1720-1760	1730-1780
1734	1.21m N-S x	0.48m	Sub-rectangular	1736	1670-1690	1680-1710
	1.06m* E-W			1733	1660-1680	1700-1710

7.13 Phase 6.2: Late 18th/Early 19th century (1780-1840) (Figure 15)

Trench 1 (north)

Post-medieval Buildings 1 and 3 (retained)

7.13.1 The buildings PMB 1 and PMB 3 probably remained standing throughout Phase 6.2. In PMB 1, Room 2 a buttress [52] was built against the east facing side of wall [127] (the party wall between PMB 1 and PMB 3). The masonry [52] measured 0.60m x 0.50m x 0.45m in height, and was built with unfrogged orange bricks dated 1666-1800. The bricks were bonded with a hard, light grey mortar that suggested construction between 1750-1850. The buttress may represent the southern buttress for a fireplace with the northern buttress located beyond the edge of excavation.

Culvert/sewer

7.13.2 In the north of the trench, a culvert was excavated running from the rear of PMB 3 under the back wall and floor of the building and extending north beyond the limits of the excavation. The construction cut [99] measured 6.24m long by 0.72m wide and 1.09m deep and was characterised by near vertical sides falling to a base that inclined to the north, sloping from 7.26m OD to 6.50m OD. The culvert [75] was built with unfrogged orange bricks with no bonding material visible. It may be that any mortar used in the construction had been eroded way. The bricks were dated 1780-1900. Silty sand filled the culvert and pottery identified as 19th century was recovered from this deposit.

Rebuild of PMB 3

7.13.3 The construction of culvert [75] appears to have necessitated some rebuilding of the back wall [114] (see Phase 6.1) of the building PMB 3. The surviving rebuilt section of wall [79] was built with roof tile used as a levelling course and then unfrogged, orange bricks, dated 1790-1900, laid in an irregular pattern with some ½ and ¼ bats, bonded with a mid grey mortar with chalk and charcoal flecking. The masonry [79] measured 0.96m long by 0.40m wide and 0.32m in height.

Post-medieval Building 5 (PMB 5)

7.13.4 In the north-west of the trench, the remains of another building (PMB 5) fronting onto The Highway were unearthed. Context [142] represents an E/W aligned wall foundation. The masonry was composed of unfrogged purple and orange bricks, laid in alternate header and stretcher fashion and bonded with a light grey gritty mortar. The foundation was 4.85m long by 0.40m wide and 0.33m in height (four courses) with at the west end a truncated N/S return, 0.60m long. The brickwork [142] is dated 1666-1850 and the mortar suggests a date of construction 1780-1900. The sandy silt [209] backfill of the construction cut produced only residual pottery dated 1650-1680 and some fragments of clay tobacco pipe.

7.13.5 Further to the west of [142] the wall line continued represented by context [141] a 1.70m long by 0.35m wide stretch of foundation. The c.1.60m gap between [142] and [141] probably represents an entranceway. Overall the building measured at least 8.29m E-W by 4.61m N-S and continued to the north and west beyond the limits of the excavation.

Rooms 1 and 2

- 7.13.6 The stub of masonry projecting north of [142] probably represents the remains of an internal wall that separated the building into at least two rooms. Room 1 to the east and Room 2 to the west can both be conjectured to be at least 4.50m (N-S) by 4.0m (E-W). Within Room 2 the remains of a rough stone floor [140] was recorded. The floor measured 3.45m E-W by 0.45m N-S and was at 7.34m OD.
- 7.13.7 Within Room 2, a sunken feature was recorded. The circular construction cut measured 0.60m in diameter and 0.31m deep and was characterised by vertical sides falling to a flat base. The base was covered with stone slabs [249] upon which the brick lining [235] (3 courses) was built. The unfrogged orange bricks were dated 1666-1850 and the mortar suggests a date for construction between 1750-1900. Filling the feature was a loose grey silty sand [246] which produced some fragments of clay tobacco pipe. The function of this feature is not known.

Wells

- 7.13.8 In the east-central part of the trench a well [86] ([30], [71], [6]) was recorded. The oval shaped construction cut measured 2.0m N-S x 1.75m E-W and 0.89m deep and was characterised by near vertical sides falling to a flat base. The cut was lined with unfrogged orange bricks laid in header fashion with only silt bonding. The brick dated to 1780-1850. No dating evidence was retrieved from the silty clay backfilling the construction cut. However, in the clayey silt [6] fill of the well pottery dated 1740-1780 and fragments of clay tobacco pipe were found.
- 7.13.9 In the south-central part of the trench, another well [553] was excavated. The circular construction cut [537] measured c.2.80m in diameter by 0.75m deep and was characterised by vertical sides falling to a flat base. The cut was lined with unfrogged orange fabric brick dated 1750-1900.

Sandy silt [558] backfilled the construction cut. A dark brown sandy silt [536] filled the well in which pottery dated 1820-1840 and clay tobacco pipe dated 1680-1745 was found.

- 7.13.10 A third well was recorded in the central part of the trench. The oval shaped construction cut [376] measured 1.30m E-W by 1.80m N-S and 1.79m deep and was characterised by vertical sides falling to a flat base. The cut was lined with unfrogged orange bricks [378] bonded with a sandy lime mortar dated 1750-1900. The well lining had substantially collapsed and only the bottom four courses remain intact. Pottery dated 1820-1900 was recovered from the silty sand [377] fill of the well.
- 7.13.11 Another possible well was excavated in the south-west of the trench. Here the sub-circular construction cut [928] measured 1.30m E-W by 0.60m N-S by 0.33m deep but was truncated to the south by modern intrusion. The cut was lined with unfrogged orange bricks [927] laid in header fashion. A clayey sandy silt [926] backfilled the construction cut. Unfortunately, no dating evidence was recovered from this deposit.

Cess pits

- 7.13.12 In the north-west of the trench, to the rear of PMB 5 a probable cess pit was excavated. The rectangular shaped construction cut measured 1.50m x 1.40m x 0.94m deep and was characterised by vertical sides falling to a flat base. The cut was lined with orange bricks [3] bonded with a grey sandy mortar. The bricks were dated 1780-1900 and the mortar suggests construction between 1750-1850. The chamber was sub-divided by an L-shaped wall [2] constructed with similar bricks to the main chamber. The smaller chamber measured 0.60m x 0.30m (internally). The silty sand backfill to the construction cut produced pottery dated 1630-1800 and residual clay tobacco pipe dated 1660-1680.
- 7.13.13 Context [42] represented a single course of an E/W line of frogged orange bricks that abutted the outside north-west corner of the cess pit [3] at ground level. The brickwork measured 0.63m long and 0.23m wide. The level was at 7.23m OD. The masonry may have formed part of a structure perhaps the privy associated with the cess pit [3].
- 7.13.14 A second larger cess pit [5] was located 4.30m to the south of cess pit [3]. The rectangular construction cut [63] measured 2.10m N-S x 1.80m x 0.93m deep and was characterised by vertical sides falling to a flat base. The cut was lined with unfrogged orange bricks laid in English bond. Filling the cess pit was a basal deposit of silty sand [13] 0.10m thick in which was found pottery dated 1770-1800 and clay tobacco pipe dating to 1700-1740. The upper deposit was a greenish brown silty sand that produced pottery dated 1840-1900.

An Archaeological Assessment of Land at the Highway, Wapping Lane, Pennington Street and Chigwell Hill, London E1, London Borough of Tower Hamlets (Parcel 4)

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Drainage system

7.13.15 Context [56] represents the construction cut for a drainage system associated with the cess pits [3] and [5]. The cut measured 3.70m N-S by 0.64m E-W and c.0.19m deep with a E/W aligned spur at the north end that measured 2.70m long by 0.50m wide. The cut was characterised by vertical sides falling to flat base that inclined to the south falling from 7.16m OD to 6.96m OD. The drain [8] was built unfrogged orange bricks laid on bed with the sides of the drain two courses high laid in stretcher fashion. The base of the drain fell from 7.23m OD to 7.14m OD. The silty sandy gravel [57] backfill of the construction cut produced pottery dated 1800-1840. At the south end of the drain was another E/W aligned feeder drain [78]. All that survived of the drain were a few shallow frogged orange bricks laid on bed in header fashion.

Trench 1 (south)

Made ground

7.13.16 A strip of firmly compacted silty sand [764] was recorded in the central part of the trench. The deposit measured 5.54m E-W by 0.40m N-S and was c.0.30m thick. Pottery recovered from the layer dated 1580-1700 and the clay tobacco pipe dated 1610-1640. However, these finds are thought to be residual as the stratigraphic position of context suggests formation consistent with the late 18th century. The level on the layer was at 5.34m OD.

E/W wall foundation (Post-medieval Building PMB 6)

7.13.17 In the west-central part of the trench, a c.2.0m stretch of an E/W aligned brick wall was recorded. The construction cut [759] measured 2.36m long by 0.53m wide and 0.36m deep and was characterised by near vertical sides falling to a flat base. The cut held a foundation [738] built with unfrogged, orange bricks, laid in alternate courses of header and stretcher with the bottom course of header on edge, bonded with a light grey mortar. The bricks are dated 1700-1900 and the mortar suggests construction after 1830. The wall foundation measured 1.95m long by c.0.30m wide and 0.38m high (5 brick courses) and it continued beyond the limits of the excavation to the west. At the east end the brickwork projected c.0.20m to the north suggesting a return in that direction. It is thought that the masonry may be the remains of a building extending to the north and west.

Cess pits

7.13.18 Approximately 3.30m to the east of wall [738] a brick lined cess pit was excavated. The

rectangular shaped construction cut [763] measured 2.10m N-S by 1.20m E-W and 1.32m deep. The cut was characterised by vertical sides falling to a flat base. The cut was lined with unfrogged orange bricks [739], laid in an irregular pattern but with the bottom course all headers on edge and bonded with light grey sandy mortar. The bricks were dated 1700-1900 and the mortar suggests construction after 1750. A feature of the walling of the cess pit was deliberately created voids (a brick wide) that would have allowed the liquid in the pit to drain away. The silty sand [775] backfill to the construction cut produced clay tobacco pipe dated 1660-1680. The sandy silt [762] basal fill of the cess pit was 0.20m thick and produced pottery dating to 1830-1900 and clay tobacco pipe dated 1770-1845. The upper sandy silt [75] produced pottery dated 1840-1900 and clay tobacco pipe dated 1830-1845.

- 7.13.19 On the east side of the trench, a brick lined cess pit [856] was recorded. The rectangular shaped construction cut [857] measured 2.40m E-W by 1.75m N-S and 0.97m deep. The cut was characterised by vertical sides falling to a flat base. Lining the cut were unfrogged orange bricks randomly coursed and bonded only with silt. Again, voids in the brickwork were noted. A clayey silt [855] backfilled the construction cut. The basal fill [921] of the cess pit was dark brown clayey sandy silt 0.47m thick. Pottery from this deposit dated to 1830-1900 and the clay tobacco pipe dated to 1840-1860. The upper fill was a grey brown silty coarse sand [854] and pottery from this deposit dated to the mid-19th century and the clay tobacco pipe dated to 1840-1880.
- 7.13.20 In close proximity to the brick lined cess pits described above three other pits were excavated which because of their large size, rectangular shape and vertical sides are interpreted as possible unlined cess pits. A similar gravelly sandy silt with frequent fragments of pottery, clay tobacco pipe, cbm, and occasional fragments of glass, metal, decayed wood, oyster shell and coal filled the features. Details of the pits are given in the table below.

Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
797	2.40m N-S x 1.45m	0.97m	Rectangular	796	1810-1830	1790-1820
	E-W					
816	1.60m N-S x 1.36m	0.68m	Rectangular	801	1770-1800	1730-1780
	E-W			800	1760-1780	1730-1780
795	1.20m N-S x 1.0m	>0.61m	Square	794	1830-1900	
	E-W					

Rubbish pitting

7.13.21 Three other pits were excavated in Trench 1 (south) all with similar grey-brown sandy silt fills with frequent fragments of cbm, pottery and occasional clay tobacco pipe and animal bone. These pits are thought to represent domestic rubbish pits. Details of the pits are given in table below.

Context	Dimensions		Depth	Shape in plan	Fill	Pot date	Clay
No							tobacco
							pipe
787	1.20m N-S	Х	0.19m	Sub-rectangular	786	18th c	1580-1910
	0.62m* E-W						
882	0.61m* N-S	Х	0.50m	Indeterminate	881	18/19th c	
	0.40m* E-W						
834	1.15m* E-W	Х	0.57m	Sub-rectangular	833	E19th c	1730-1780
	0.98m N-S						

^{*}Truncated dimensions

Trench 2

Post-medieval Building 2 (PMB 2) (retained)

- 7.13.22 Walls [1678] and [1700] (see Phase 5.2) of PMB 2 were overlain by robber trenches [1677] (fill [1676]) and [1679] (fill [1680]) an indication that these walls had now been reduced. Pottery dating to 1780-1830 was recovered from the fill [1676].
- 7.13.23 However the walls [1678]/[1700] do appear to have been rebuilt with wall [1672]. The surviving masonry [1672] formed of a single course of unfrogged orange bricks that measured 1.96m E-W by c.0.40m N-S.
- 7.13.24 Approximately 2.0m to the north of wall [1672] another parallel wall foundation [1547] was recorded. The construction cut measured 2.44m E-W by 0.56m N-S and 0.20m deep but was truncated to the east and south. The cut was characterised by near vertical sides falling to a flat base. Only a single course of the foundation remained, built with unfrogged orange bricks dated 1580-1740 bonded with a moderately hard light yellow sandy mortar with frequent flecks of chalk. Pottery recovered from the backfill [1546] of the construction cut dated to 1790-1820.
- 7.13.25 It may be that the wall foundation [1547] was associated with the building PMB 2 to the south and represents an extension. However, if this is the case then the return to the south at the west end must have been destroyed by later activity.

Post-medieval Building 4 (PMB 4) (retained)

- 7.13.26 It is thought that the building PMB 4 on the eastern side of the trench was retained in this phase. Furthermore, there is some evidence that the building may have been at least in part rebuilt or modified. To the east of masonry [1693] (see Phase 6.1) a parallel N/S aligned wall [1559] was recorded. Only a single course of this wall survived, built with unfrogged orange bricks bonded with off white grey lime mortar; it measured 1.10m long by 0.22m wide. The bricks were dated post 1780.
- 7.13.27 Abutting the east face of wall [1559] was a layer of compacted sandy silt [1558] that measured 1.03m N-S by 0.34m E-W and 0.04m thick. This layer of floor makeup supported a brick floor [1557] also constructed with unfrogged orange bricks laid on bed and bonded with a dark grey ashy mortar. These bricks were also dated to post 1780. The level on the floor was at 6.02m OD. Both the wall [1559] and floor [1557] are thought to represent later internal alterations and suggest that building PMB 4 had at least two ground floor rooms.

Wells

- 7.13.28 Well [2176] (see Phase 6.1) appeared to have been deliberately filled in by a sequence of sandy silts ([2182], [2180], [2175]) during Phase 6.2. Ceramics found in these deposits suggest that they accumulated in the early 19th century. Found in the basal fill [2183] was pottery dated 1830-1900 and clay tobacco pipe dated 1730-1900. A notable find recovered from context [2183] was a toy cannon (SF 680). Fill [2182] produced pottery dated 1830-1900 and clay tobacco pipe dated 1770-1860, from fill [2180] was retrieved tobacco pipe dated 1730-1900, while the uppermost deposit [2175] produced pottery dated 1820-1840 and clay tobacco pipe dated 1840-1880.
- 7.13.29 However, further wells were probably sunk in Phase 6.2. Approximately 2m to the north of PMB 2 a well was excavated. The sub-circular shaped construction cut [1512] measured 1.58m E-W by 1.0m N-S x 0.89m deep but it was truncated to the south. The cut was characterised by vertical sides falling to a flat base. The well was lined with unfrogged orange and purple bricks [1511] mostly ½ bat size and occasional flint nodules and pieces of stone. The coursing was random and there was no trace of mortar. The well was filled with light grey silty sand [1510] that produced pottery dated 1820-1830 and clay tobacco pipe dated 1820-1845.
- 7.13.30 Another well was recorded in the north-east of Trench 2. Here the circular shaped construction cut [2170] measured 1.61m x 1.16m x 1.14m deep and was characterised by vertical sides falling to a flat base. Unfrogged orange bricks [2169] (mostly ½ bat size) laid in stretcher fashion lined the cut. Pottery found in the backfill [2168] to the construction cut dated 1760-1830 and the tobacco pipe dated 1730-1910. A sequence of sandy silts ([2171], [2167], [2156]) filled the well and the latest dated pottery found in these deposits dated 1830-1900 and the latest dated clay tobacco pipe recovered from the fill [2167] dated to 1840-1860.

Cess pits

- 7.13.31 A cess pit was excavated in the south-central part of the trench. The rectangular construction cut [1521] measured 2.25m E-W x 1.70m N-S x 0.77m deep and was characterised by vertical sides falling to a flat base. The cut was lined with unfrogged orange bricks [1520] (dated 1700-1900) laid in predominately stretcher fashion and in an irregular pattern, bonded with sandy silt. Frequent voids in the brickwork provided drainage for the liquid effluent to soak away. A sandy silt [1519] backfilled the construction cut. The basal fill was a sandy silt [1531] 0.30m thick. Pottery from this deposit dated to 1830-1850 and the clay tobacco pipe dated to 1820-1860. Numerous small finds were recovered from fill [1531]; included copper-alloy button (SF 418), shell button (SF 389) and a glass bead (SF 390). The upper sandy silt fill [1518] produced similarly dated pottery and clay tobacco pipe and a further collection of small finds including; copper-alloy thimble (SF 382), bone handle (SF 384) and a bone handled knife (SF 386).
- 7.13.32 To the west (rear) of building PMB 2, another brick lined cess pit was recorded. The rectangular shaped construction cut [1544] measured 2.14m by 1.57m and 1.43m deep and was characterised by vertical sides falling to a flat base. The cut was lined with unfrogged orange bricks laid in an English bond pattern and bonded with a soft grey-brown lime mortar. Again, frequent voids in the brickwork were noted. The basal fill was a silty clay [1556] 0.05m thick that produced pottery dated 1790-1820 and clay tobacco pipe dated 1770-1780. The secondary [1549] and tertiary [1542] silty clays produced pottery dated 1830-1850 and in the fill [1542] clay tobacco pipe was also retrieved dated 1840-1860.
- 7.13.33 Approximately 2.87m to the north of cess pit [1520] was a large unlined pit [1514] (fill [1513]). The rectangular shaped cut measured 2.95m E-W x 2.48m N-S x 0.90m deep and was characterised by vertical sides falling to a flat base. The fill was a dark grey brown sandy silt with fragments of cbm, animal bone, pottery, glass, metal, clay tobacco pipe and slag. Pottery recovered from the pit is dated 1830-1850. Also recovered from the fill were numerous small finds including a copperalloy ring (SF 371), copper-alloy buttons (SF 398 and SF 404), a bone button (SF 419), a metal furniture mount (SF 427), two toy marbles (SF 397 and SF 414), and two Victorian pennies (SF 428 and SF 431) dated 1838-1860. The pit may have been used for cess and later deliberately filled in with domestic rubbish.

Post pits

7.13.34 In the east-central part of the trench two possible post pits [1619] and [1636] were excavated. The cuts were characterised by steeply sloping sides falling to a pointed base and both were filled with

similar sandy silts. The post pits were set 5.68m apart (centre to centre) but it is uncertain as to what kind of structure or structures they may have formed part of. Details are given in the table below.

Context No	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay tobacco pipe
1619	0.92m N-S x 0.66m*	0.23m	Sub-circular	1621		
	E-W			1618	1805-1900	
1636	1.09m N-S x 0.68m* E-W	0.25m	Sub-circular	1635	1770-1830	1700-1740

^{*}Truncated dimensions

Rubbish Pitting

- 7.13.35 Across Trench 2 numerous pits were excavated. A group of five pits ([1593], [1644], [1675], [1630] and [1601]) was located on the western side of the trench. These large but relatively shallow pits (the deepest pit [1675] was 0.48m deep) were all filled with a similar mid grey-brown sandy silt with frequent fragments of cbm and occasional oyster shell and animal bone.
- 7.13.36 Another concentration of six pits (1723], [1719], [1703], [1632], [1585] and [1577]) was recorded in the south-west of Trench 2. A similar grey-brown clayey silt with occasional fragments of animal bone, oyster shell, cbm and coal filled the pits. In the central part of the trench three pits ([1527], [1538] and [1517) were located close to the cess pit [1514] (see above).
- 7.13.37 All the other 16 pits were located on the eastern side of the trench to the north of the post pits described above and to the west (and rear) of building PMB 4. Pit [1575] was notable for the base being truncated by a probable posthole [1589] (fill [1588]). The posthole measured 0.28m x 0.18m x 0.10m deep and was filled with a gravelly silt. The cut was characterised by steeply sloping sides falling to a flat base. The posthole may be an indication that the pit had been revetted with timber. These features were filled with similar mid brown-grey sandy silt with occasional fragments of cbm, glass, metal and oyster shell.
- 7.13.38 It is thought that the pits described above were domestic rubbish pits. Details are given in the table below.

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1592 1680-1800 1680 1644 1.90m E-W x 0.84m 0.46m Sub- rectangular 1675 0.82m E-W x 0.52m 0.48m Ovoid 1674 1805-1820 N-S	•
1593 1.65m E-W x 1.0m N-S 0.31m Sub-rectangular 1597 1785-1835 18th 1596 1820-1900 1700 1592 1680-1800 1680 1644 1.90m E-W x 0.84m N-S 0.46m Sub-rectangular 1643 1800-1840 1674 1805-1820 1674 1674 1805-1820 1674 1674 1805-1820 1674 1674 1805-1820 1674 1674 1805-1820 1674 1674 1805-1820 1674 1674 1674 1674 1674 1674 1674 1674)-1740 O-1710
N-S rectangular 1596 1820-1900 1700 1592 1680-1800 1680 1644 1.90m E-W x 0.84m 0.46m Sub-rectangular 1675 0.82m E-W x 0.52m 0.48m Ovoid 1674 1805-1820 N-S	D-1740 D-1710
1592 1680-1800 1680 1644 1.90m E-W x 0.84m 0.46m Sub- rectangular 1675 0.82m E-W x 0.52m 0.48m Ovoid 1674 1805-1820 N-S	0-1710
1644 1.90m E-W x 0.84m 0.46m Sub-rectangular 1643 1800-1840 1675 0.82m E-W x 0.52m 0.48m Ovoid 1674 1805-1820 N-S	
N-S rectangular 1675 0.82m E-W x 0.52m 0.48m Ovoid 1674 1805-1820 N-S)-1845
1675 0.82m E-W x 0.52m 0.48m Ovoid 1674 1805-1820 N-S)-1845
N-S)-1845
)-1845
	D-1845
1630 2.20m N-S x 0.80m 0.27m Rectangular 1629 Mid 19th c 1800	
E-W	
1601 2.60m N-S x 1.04m 0.20m Rectangular 1600 1800-1840 1800	0-1845
E-W	
1723	D-1900
N-S	
1719 0.59m* N-S x 0.31m Sub- 1718 1730	D-1900
0.44m* E-W rectangular	
1703 0.74m* N-S x 0.48m Indeterminate 1702 1580-1700	
0.62m* E-W	
1632 1.40m N-S x 0.60m* 1.0m Sub- 1631 Mid 19th c	
E-W rectangular	
1585 1.48m N-S x 1.18m* 0.86m Sub-circular 1584 1830-1900	
E-W	
1577 1.36m* E-W x 0.51m Sub-circular 1576	
0.58m* N-S	
1538 1.70m E-W x 0.70m* 0.70m Sub- 1537 1820-1850 1820	0-1845
N-S rectangular	
1517 1.35m E-W x 0.76m 0.38m Sub- 1516 1800-1830 1770	0-1845
N-S rectangular	
1527 2.70m* N-S x 0.47m Indeterminate 1530 1770-1800 1730	D-1780
0.66m* E-W 1526 1760-1820 1730	0-1780
1646 0.50m* N-S x 0.39m Sub-circular 1647 1805-1900 1760	D-1780
0.50m*E-W	
1551 1.03m* E-W x 0.82m 1.15m Irregular 1550 Mid 19th c	-
N-S	

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Context	Dimensions	Depth	Shape in plan	Fill	Pot date	Clay
No						tobacco
						pipe
1575	2.18m N-S x 0.66m*	0.48m	Sub-	1574	1770-1820	1730-1780
	E-W		rectangular			
1529	1.88m* N-S x	0.40m	Sub-	1528	1770-1820	1680-1710
	0.70m* E-W		rectangular			
1524	0.68m*N-S x 0.53m*	0.54m	Indeterminate	1523	1770-1820	1770-1800
	E-W					
1505	0.89m N-S x 0.85m*	0.25m	Ovoid	1504	1740-1800	1730-1910
	E-W					
1503	1.24m N-S x 0.70m*	0.69m	Sub-	1522	1790-1820	1680-1710
	E-W		rectangular	1502	E19th c	1730-1780
1687	2.15m N-S x 1.30m	1.85m	Ovoid	1696	1830-1850	1770-1845
	E-W			1686	1770-1830	1830's
1654	2.40m N-S x 1.70m	0.54m	Sub-	1653	1760-1780	1740-1780
	E-W		rectangular			
1649	0.87m* N-S x	0.44m	Indeterminate	1648	1775-1830	1730-1780
	0.54m* E-W					
1634	0.92m N-S x 0.50m*	0.24m	Sub-	1633	1790-1830	1730-1760
	E-W		rectangular			
1602	1.46m* N-S x 1.17m	0.60m	Ovoid	1603	1720-1760	1700-1740
	E-W					
1591	1.31m E-W x 0.92m*	0.38m	Sub-	1590	1720-1760	1730-1780
	N-S		rectangular			
1581	0.58m* N-S x	0.81m	Indeterminate	1580	1580-1900	
	0.26m* E-W					
1583	1.17m N-S x 1.0m*	0.85m	Sub-	1582	1800-1840	1700-1740
	E-W		rectangular			
1553	1.0m N-S x 0.60m*	0.55m	Sub-circular	1552	Mid 19th c	
	E-W					

^{*}Truncated dimensions

7.13.39 In the east-central part of the trench, an irregular shaped cut [1843] (fill [1842]) was excavated. The feature measured 0.91m E-W x 0.48m N-S and only 0.08m deep. A dark brown sandy clayey silt with flecks and small fragments of cbm and coal/charcoal filled the pit. Pottery recovered from

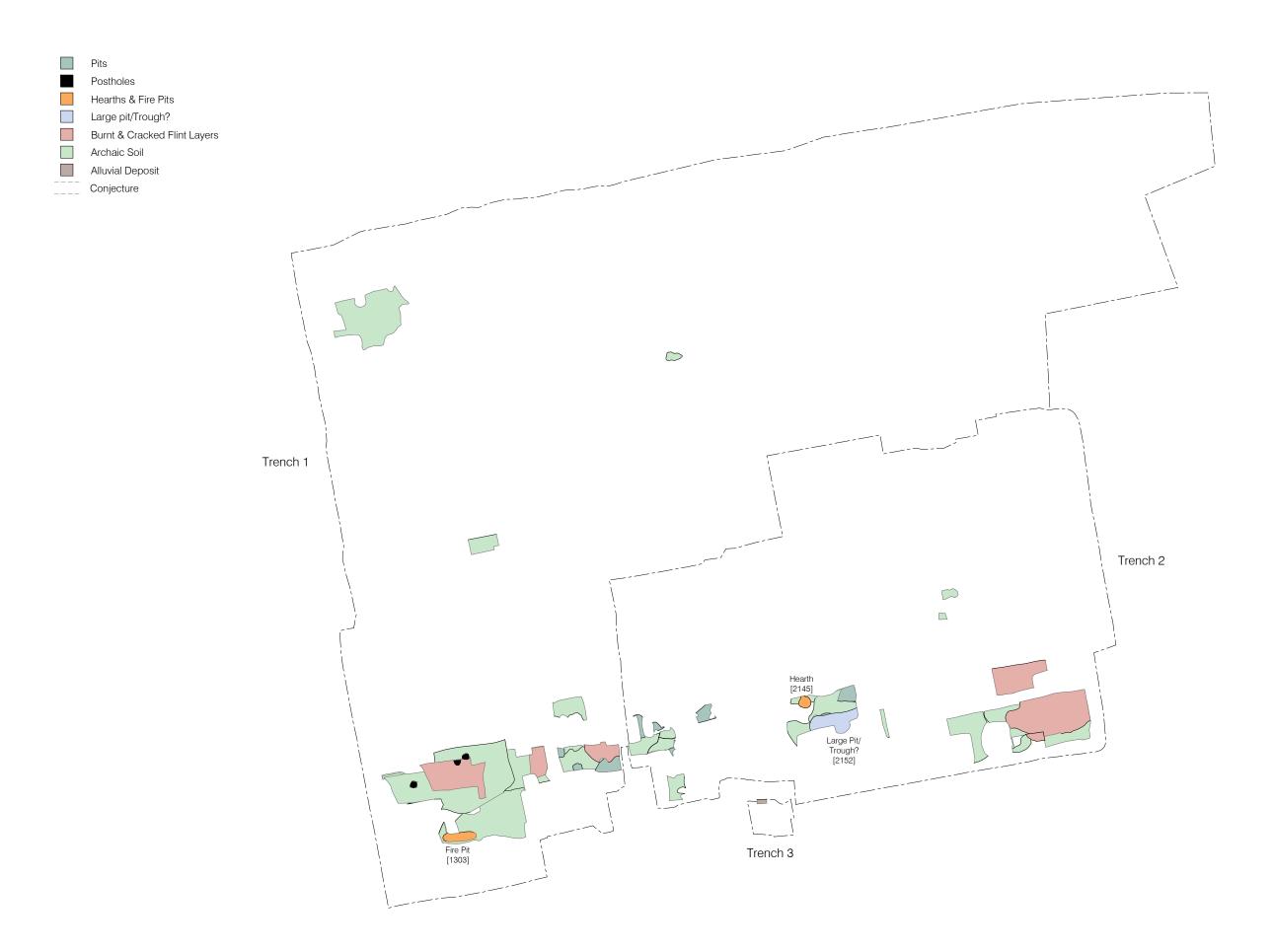
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the fill is dated 1770-1820. The irregular shape and shallowness of the feature suggest that it was not a rubbish pit and its purpose is uncertain.

7.14 Phase 7 (Not Illustrated)

7.14.1 Phase 7 represents structures and deposits dated to the late 19th and early 20th century. The principal feature of this phase was the remains of a building located in the north of the Trench 1, between PMB 3 and PMB 5. The building was characterised by concrete foundations and concrete floors. Phase 7 is not regarded archaeologically significant and therefore has not been described in detail in this report.













Ditches
Pits

Oven

Well

Postholes/Post Pits Beam Slots

Internal Surfaces

Timber Drain

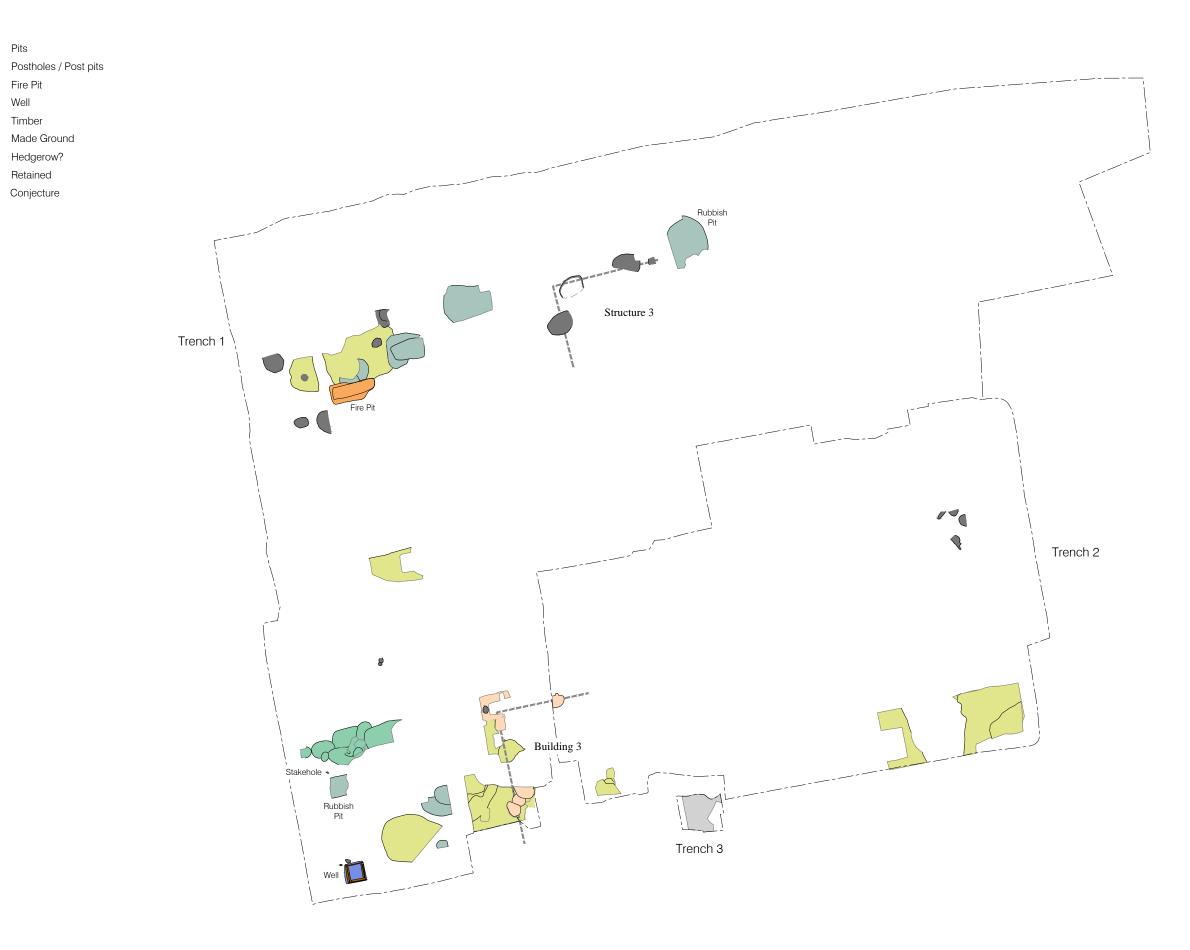
Made Ground

Conjecture

Water Conduit System



Pits Postholes Drainage Ditch Gravel Surfaces Made Ground Conjecture



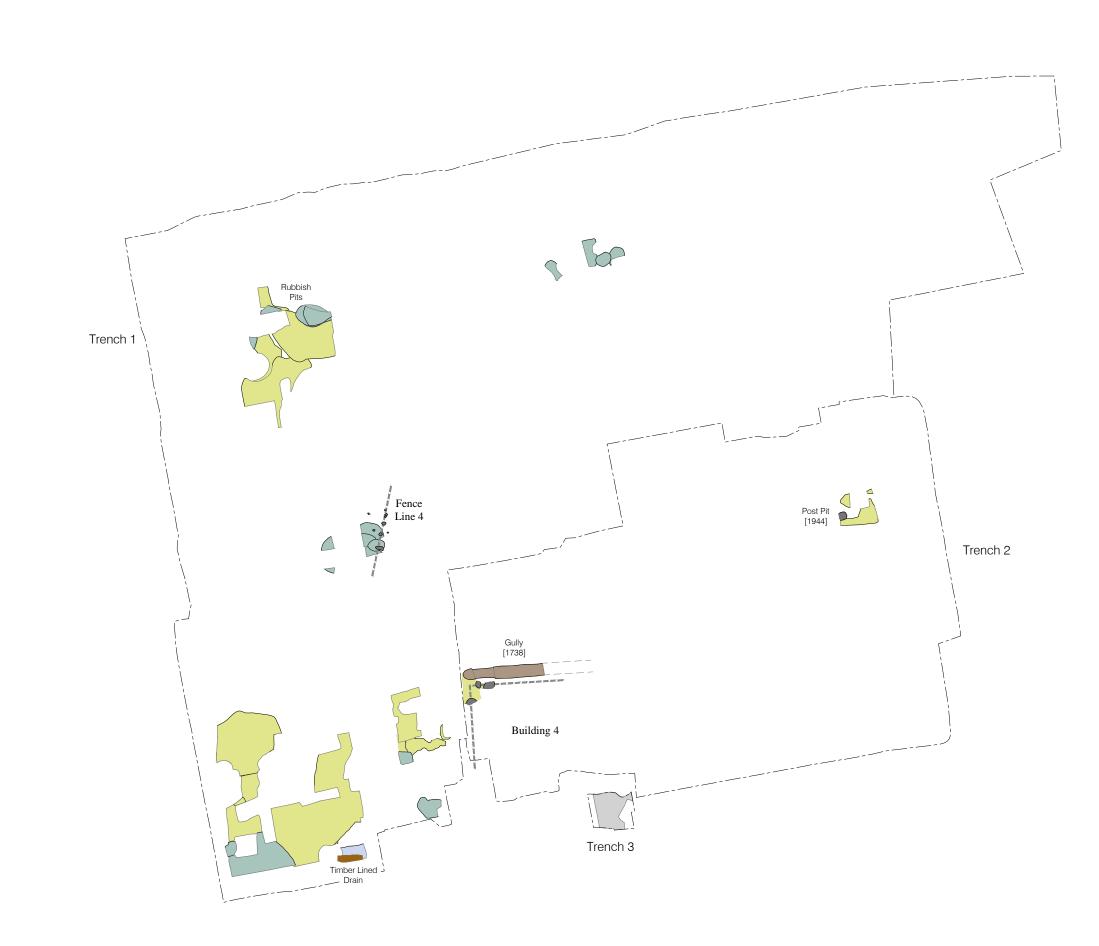


Pits

Fire Pit

Timber Made Ground Hedgerow?

Retained Conjecture



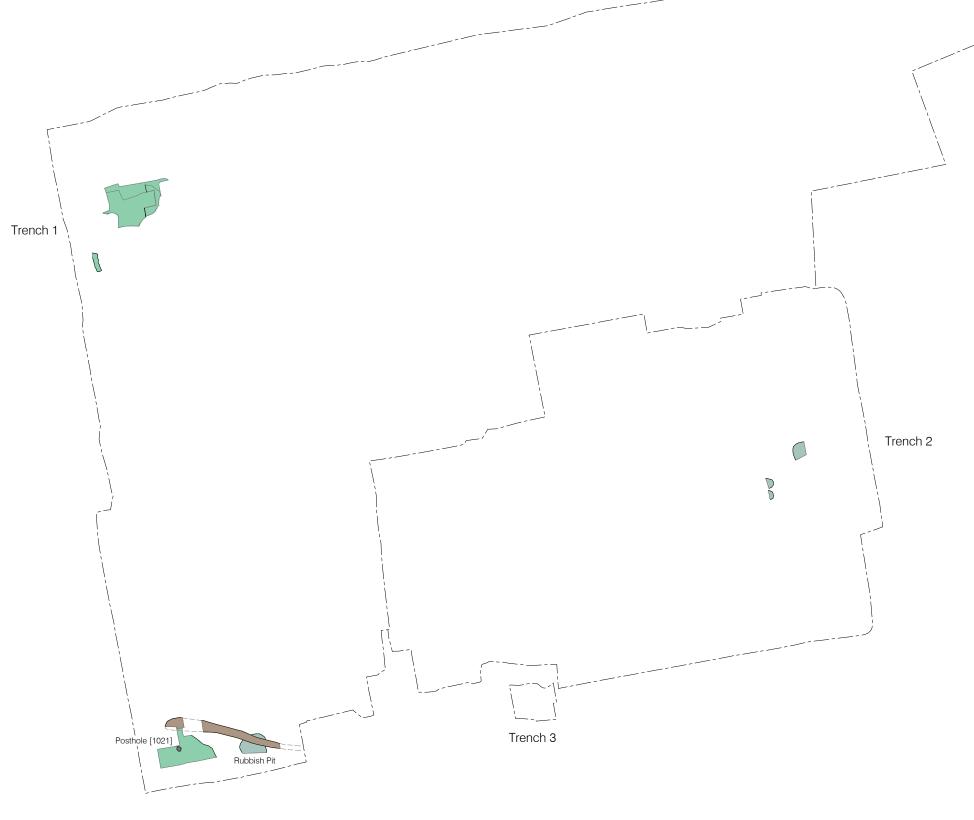


Pits
Postr
Ditch
Made

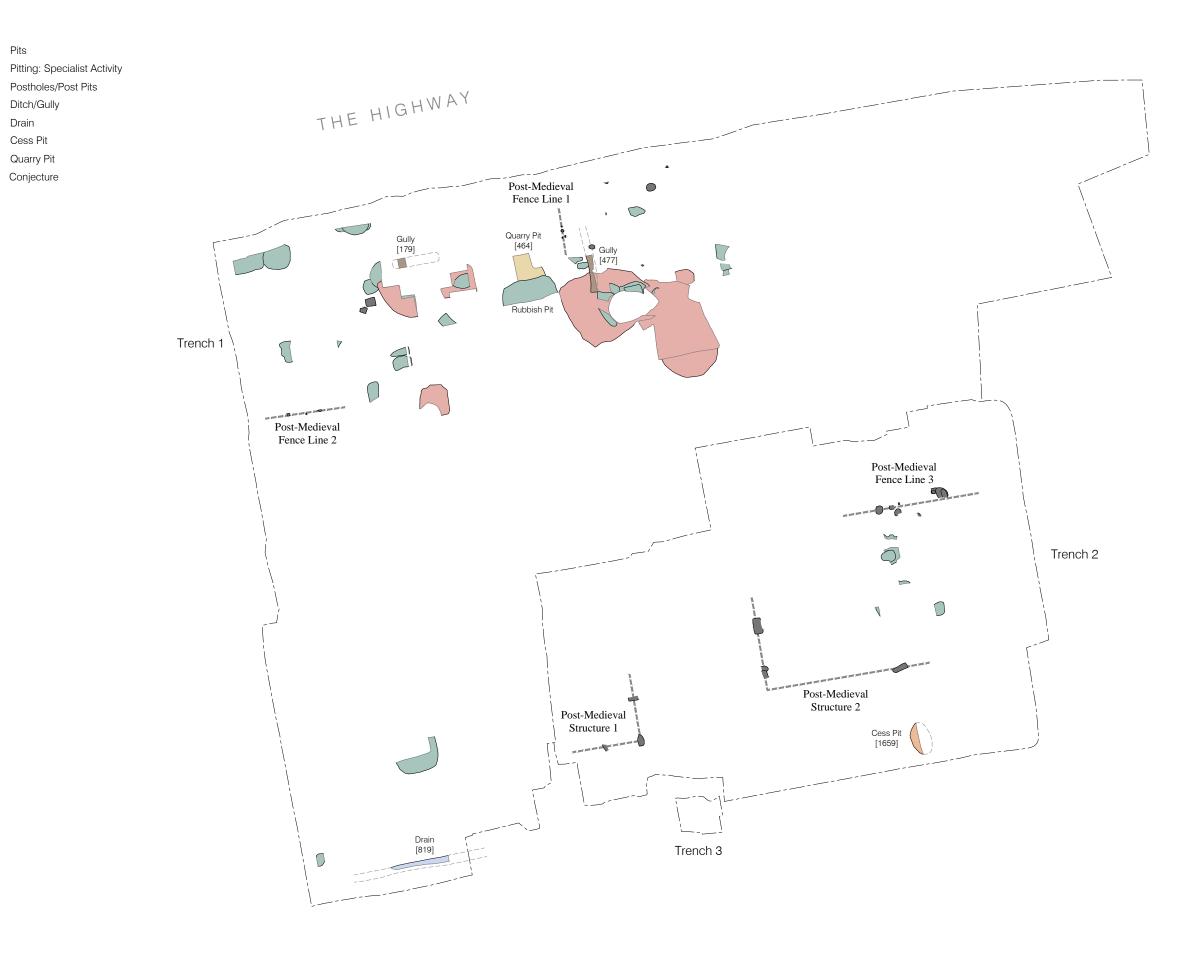
Postholes Ditch/Gully Drain

Made Ground Timber Retained Conjecture







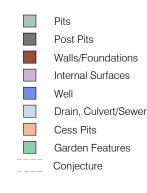




Pits

Ditch/Gully

Drain Cess Pit Quarry Pit Conjecture





22/02/19 MR





Pits Post Pits

Well

Cess Pits

Conjecture

Plate 1: Trench 1, looking south



Plate 2: Trench 2, looking south



Plate 3: Trench 2, looking south

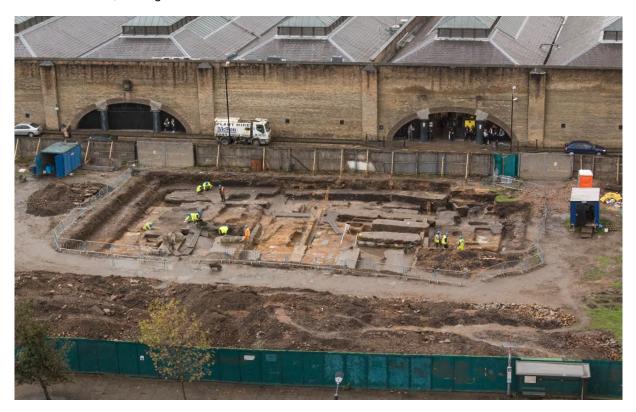


Plate 4: Trench 1 facing north: Showing (photo centre) Roman oven possibly internal to Building 1 (Phase 3.3). In the bottom left is the discarded stone funerary monument lying face down (Phase 3.5)



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Plate 5: North-west corner of Trench 1 facing north. Note the Roman postpits (Phase 3.3) set in a circular pattern (photo centre)



Plate 6: Trench 1 looking east. Post-medieval Building 1 Phase 5.2 (Photo centre)



Plate 7: North-west part of Trench 1 looking east. Cess pit and drainage system Phase 6.2



Plate 8: Trench 1 looking south-east. Post-medieval Building 5 in the foreground



8 ARCHAEOLOGICAL PHASE DISCUSSION

8.1 Phase 1: Natural

- 8.1.1 Natural sand and gravel identified as Taplow Gravel, part of the Quaternary terrace sediments, was encountered in the north of the site at at between 7.15m OD and 6.19m OD sloping down to the south of site at 3.28m OD in the south-west and at 2.81m OD in the south-east.
- 8.1.2 A series of at least 3 palaeo-channels generally on an east/west alignment dissected the gravel. Similar features had been recorded in the earlier excavations at TOC02 immediately to the east.

8.2 Phase 2: Prehistoric (Bronze Age)

- 8.2.1 Phase 2 represents the earliest identifiable archaeological features and deposits unearthed on the site. The features and deposits have been assigned to Phase 2 on the grounds of their stratigraphic position and are thought to be of a prehistoric origin. The handful of pottery sherds recovered from these deposits are thought to date to the Late Bronze Age.
- 8.2.2 Analysis of the flint assemblage (see Appendix 2) suggested that they had been manufactured over a very broad period from the Mesolithic to the Bronze Age. The earliest material dated to the Mesolithic/early Neolithic and was the largest element consisting of nearly two-thirds of the collection. This material clearly demonstrates the importance of the marginal river zone for exploitation by early prehistoric peoples.
- 8.2.3 In the north-west of the site, in Trench 1, archaic soils were encountered at between 7.21-7.01m OD. It is thought that these deposits probably represent the remnants of an archaic sub-soil surviving on the summit of the escarpment that overlooked the Thames flood plain and marsh lands to the south. Further deposits of archaic soil were recorded further down the escarpment slope in both Trenches 1 and 2, falling to a low of 3.36m OD in the south-west of Trench 1. It is thought that these soils were formed by a combination of downhill erosion and bioturbation. Whilst most of these layers were devoid of any cultural material a few pot sherds were unearthed and are identified as part of the early post-Deverel Rimbury ceramic tradition dating to c.1 000BC (see Appendix 4). Struck flint was also recovered from a couple of the contexts.
- 8.2.4 Approximately a third of the worked flint assemblage was characteristic of the Late Bronze Age and included scrapers, blades and awls that might suggest that the site was a foci for hide working.
- 8.2.5 A striking feature of the Late Bronze Age deposits in the southern part of the site in both Trenches 1 and 2 was the spread of burnt flint at or around the 4.50m OD contour. One possibility is that

these deposits represent the remnants of burnt mounds (see Appendix 3). The mounds are likely to have been reduced over time by down-hill erosion and the terracing effects of later settlement to produce the shallow spread of material recorded here. Numerous lithics and a small amount of Late Bronze Age pottery was recovered from these deposits in Trench 2.

- 8.2.6 At TBF10 there is not only a concentration of burnt flint, but also a possible fire-pit [1301] excavated in Trench 1 and the hearth [2145] in Trench 2. Furthermore, in Trench 2 a large sub-rectangular pit [2152] may also be in association with the burnt flint and could have acted as a water trough.
- 8.2.7 Throughout Britain and Ireland burnt mound sites commonly date to the Bronze Age although Neolithic burnt mounds have been excavated in Clowanstown, County Meath, Ireland (Archaeology Ireland, winter 2007, 12). Burnt mounds or fulacht fiadh (in Irish) are characterised by large quantities of heat shattered stone, a location close to water, and a site away from permanent settlement, characteristics that are replicated at Tobacco Dock.
- 8.2.8 The general sequence observed on 'burnt mound' sites is generally as follows; the digging of a pit or pits which functioned as troughs for holding water. Excavated troughs are generally found to be rectangular or sub-rectangular in shape. A fire was set near the top the trough upon which the stone was heated and the hot stones subsequently dropped into the water. The resultant boiling water was then used for a variety of purposes. Once the water heating process was complete the trough was cleaned out and the stones cast aside creating the mound. The usual interpretations for burnt mound features are 'cooking sites' or alternatively 'sweat lodges' or 'saunas' however a number of alternative explanations have been put forward including brewing, wool processing and corn parching. The possible association of the processing of animal hides and the burnt mounds is another intriguing avenue of investigation.
- 8.2.9 Further enigmatic pitting was recorded across the southern part of the site. Little dating evidence was recovered from these features and their function is uncertain but their stratigraphic position suggests a prehistoric origin.
- 8.2.10 In the south-west of Trench 1, three possible postholes were recorded. Unfortunately, these features do not appear to demarcate a convincing structure and their dating is not certain.

8.3 Phase 3.1: Roman 1st/2nd century

8.3.1 Phase 3.1 represents the earliest phase of Roman occupation of the site probably dating to the 1st or early 2nd century. The northern part of Trench 1 was characterised by a series of pits probably sand/gravel extraction pits. Large quantities of sand and gravel would have been necessary for the construction of the road, supposedly only c.100m to the north of the site, laid

out in the late 1st century.

- 8.3.2 There was also evidence that the escarpment slope may have been terraced as early as the 1st or 2nd century. Deposits that are thought to represent levelled ground were recorded at c.7m, 6m, 4m and 3.40m OD.
- 8.3.3 In north of Trench 1, evidence for actual occupation was limited to possible drainage ditch [791]. However, in the south of Trench 1 two parallel fence lines that continued into Trench 2 (Fence Line 1 & 2) were identified. The fence lines were set c.3.50m apart and may demarcate an E/W aligned track.
- 8.3.4 In the east of Trench 2, there was further evidence that the land was sub-divided and partitioned into separate properties and/or different zones of activity with the unearthing of an E/W orientated ditch [2002]/[2158]. A notable find recovered from the ditch was the skeletal remains of a medium sized pony (see Appendix 14).
- 8.3.5 It was also in the east of Trench 2, that postholes (Structure 1) were excavated that may represent the west end of a timber framed building identified in the TOC02 excavations (Douglas *et al.* 2011, 10).
- 8.3.6 The only small find recovered from deposits in Phase 3.1 was a possible gaming piece (SF 165) (see Appendix 6) recovered from a levelling layer [772] excavated in the north-west of Trench 1.

8.4 Phase 3.2: Roman 3rd century

- 8.4.1 Phase 3.2 dates to the first half of the 3rd century when there certainly appears to be an intensification of activity. In the south of the site, dumped deposits were recorded in both Trenches 1 and 2 that were probably were formed by colluvial erosion but an anthropogenic component is also suspected.
- 8.4.2 An E/W orientated ditch (BD 1) was recorded in the north of Trench 1 and here the ditch appeared to terminate to the west and continue beyond the area of excavation to the east.
- 8.4.3 In the south-west of the site, another substantial E/W aligned ditch (BD 2) was excavated. The ditch appeared to terminate in the south-west of Trench 2 but continued across Trench 1 with an overall length of at least 19.50m. Similar E/W orientated boundary ditches dating to approximately the same period were excavated on TOC02, HGA02 and further to the east on LD74 and LD76 (Douglas *et al.* 2011, 12-13, fig. 9).
- 8.4.4 The ground to the north of the ditch (BD 1) was apparently still utilised for quarry pitting suggesting perhaps that the land here was still marginal to settlement. However fragmentary remains including possible beam slots and a scatter of postholes suggest that a few perhaps

temporary structures and/or buildings were erected in the north-west of the site.

- 8.4.5 Further possible structures were recorded in the south of the site. In the south-west of Trench 2 a cluster of postholes may represent the north-west corner of a structure (S 2) and in the east further postholes were excavated on the same E/W axis. In the north-east of Trench 2 possible surface deposits and a posthole and post pit features may be an indication of structures in this location.
- 8.4.6 Additional evidence of settlement was the earliest putative Roman rubbish pits excavated in the south of the site, in Trenches 1 and 2. These pits contained not only pottery and cbm but also a small quantity of animal bone, predominantly cattle bone.

8.5 Phase 3.3: Roman 3rd/4th century

- 8.5.1 Phase 3.3 represents a continuation of activity on the site probably in the second half of the 3rd century. The earlier boundary ditches of Phase 3.2 may have silted up but new boundary ditches appear to have been dug. Located In the north of Trench 1 was an E/W aligned ditch (BD 3) buttended to the west while c.17m to the south a parallel ditch line (BD 4) was excavated. The southern ditch line (BD 4) was interrupted with a 3.20m wide gap presumably an entranceway. The ditches may have demarcated property boundaries or different zones of activity but also controlled access and channelled movement of people and animals.
- 8.5.2 Clear evidence that the land between the northern and southern boundary ditches in Trench 1 was now occupied was a timber lined well [565] sited in the north-west. Dating evidence from the fill of the construction cut and the fills of the well suggests that the well was in use for only a relatively short duration and that the sinking of the well and its disuse both took place in the 3rd century. A notable collection of animal bone was recovered from the well. Interestingly the wide variety of skeletal parts suggests animal processing as well as food waste (see Appendix 14).
- 8.5.3 An intriguing set of features about 6m to the east of the well was a circular pattern of putative postholes Although, the interpretation for these features is uncertain it has been suggested that the posts could have supported a tank or lifting gear. However, it does seem odd that none of the putative post pits produced any pottery or cbm.
- 8.5.4 A few pits were also excavated in the north of Trench 1 and these may have functioned as rubbish pits but this is not certain nevertheless the ceramic evidence is consistent with a 3rd-century date for their use.
- 8.5.5 In the south of the site straddling Trench 1 and 2, a series of post pits and fragments of possible beam slots probably represent the remains of a clay-and-timber building (Building 1). The

- rectangular building measured c.13.0m E-W by c.6.0m N-S but it may have extended further to the south beyond the area of excavation. The building layout within the trench appeared to be one room with a N/S running corridor to the west.
- 8.5.6 Dating evidence from the floor make up deposits within Building 1 are consistent with a 3rd-century date for its construction. However, the structural features particularly the pattern of the post pits suggests that some of these features relate not to the initial phase of construction but successive phases of renewal and re-building until its disuse perhaps in the 4th century.
- 8.5.7 Interestingly fragments of mud brick were recovered from the dumped deposit [2031] (see Appendix 11) and it was suggested (Douglas *et al.* 2011, 30) that mud brick or pise walls were a construction technique that may have been employed in some of the clay-and-timber buildings on HGA02.
- 8.5.8 Building 1 enclosed an oven perhaps suggesting that at least part of the building was used as a kitchen or bakery. Similar structures were unearthed in the TOC02 excavations although in those examples the ovens appear to have been located outdoors.
- 8.5.9 A possible network of drains perhaps timber lined was identified in the south of the site. It may be that this drainage system worked as a conduit supplying potable water to Building 1. In the excavations of TOC02 just such a system of timber drains is thought to have supplied water to the clay-and-timber buildings located in south-east of the site (Douglas *et al.* 2011).
- 8.5.10 To the north and west of Building 1, a spread of compacted gravel perhaps representing a yard surface appears to have been laid. The surface also showed some evidence of repair suggesting sustained use.
- 8.5.11 In the east of Trench 2 a concentration of pitting perhaps used for domestic refuse disposal was further evidence for 3rd-century occupation of the site.

8.6 Phase 3.4: Roman 4th century

- 8.6.1 Phase 3.4 represents probably the first half of the 4th century when Building 1 in the south of the site, appears to have gone out of use and was probably demolished. The dating from the rake-out deposits associated with the oven suggest that it continued to be used until the 4th century. Furthermore, the dating evidence recovered from the overlying deposits is consistent with a mid-4th-century date for the demolition of Building 1.
- 8.6.2 Deposits of silty sand were recorded in the south and east of Trench 2, possibly the result of downhill erosion and/or deliberately dumped material. The ceramic material is consistent with a 4th-century date for the deposition of these soils. Interestingly comparable soils and soil formation

- processes of a similar date were recorded in the south of the TOC02 excavations where it was suggested that a collapse of the terrace may also have contributed to the soil accumulation.
- 8.6.3 The destruction of Building 1 did not mean an end of Roman settlement on the site. Postholes and post pits excavated in both Trench 1 and 2 are an indication that a second structure, probably a building (Building 2) was erected at least in part over the footprint of Building 1. Building 2 can be conjectured to extend at least 7.50m E-W and 4.5m N-S.
- 8.6.4 There is also evidence that the gravel 'yard' surface identified in the south-west of Trench 1, in Phase 3.3, was resurfaced in Phase 3.4. Postholes arranged on a broad E/W axis suggest that perhaps a fence line (Fence Line 3) divided the 'yard'. It is also interesting that this putative property boundary was also roughly in alignment with the supposed north wall of Phase 3.3 Building 1 perhaps suggesting a continuation of property boundaries. The E/W aligned ditch [1055] also truncating the gravel surface only reinforces the importance of this boundary.
- 8.6.5 A stretch of E/W orientated ditch [1983]/[2002] at least 5.50m long was excavated approximately along the line of the 6m OD contour on the east side of Trench 2. Interestingly a ditch on the same alignment was excavated further to the east on TOC02 (Douglas *et al.* 2011, fig. 9).
- 8.6.6 Other possible structures defined by postholes and post pits were recorded in the east of Trench 2 and in the north of Trench 1. Unfortunately, these putative structural features did not make compelling evidence for buildings. The most convincing alignment suggested the north-west corner of structure (Structure 2) in the east-central part of Trench 1.
- 8.6.7 Another E/W aligned ditch [707] was unearthed in the north of Trench 1. This feature may also represent a boundary, certainly the postholes representing suspected structures were located to the south of the ditch and a series of pits were located to the north.
- 8.6.8 Pitting in the north of Trench 1 may have been for the disposal of domestic refuse, although this is far from certain. The pitting suggests that the land in the north of Trench 1 continued to remain marginal to settlement. More definite rubbish pits were recorded in the south of Trench 1 truncating the gravel surface.

8.7 Phase 3.5: Roman Late 4th century

8.7.1 Phase 3.5 represents the second half of the 4th century. In the south of the site, Building 2 of Phase 3.4 appears to have been demolished and was partly covered by dumped deposits that included quantities of cbm, pottery, animal bone and ragstone. A notable find was part of a stone altar or funerary monument (see Appendix 11) that had been used as part of the consolidation of the ground. The heavily weathered stone probably carved in the 2nd century from oolithic

limestone is likely to have originated from a nearby redundant monument.

- 8.7.2 Dumped deposits were also recorded in the south-west and south-east of Trench 2. In the south-east these deposits were also interpreted as demolition debris deriving from either the destruction of Building 2 (see Phase 3.4) or Building 3 (see below).
- 8.7.3 In the south-east of Trench 2, a notable object recovered from layer [1756] was a lead ring in the form of a perforated disc (SF 490). A further 23 similar lead rings were recovered from pits and layers assigned to Phase 3.6.
- 8.7.4 Truncating the dump layers described above were structural features including post pits, postholes and a possible beam slot that appear to delineate Building 3. The building measured at least c.6.0m N-S by 5.0m E-W. The quantity of daub, cbm and wall plaster recovered from these features suggests that the structure was a building.
- 8.7.5 Interestingly a possible hedgerow appears to form a E/W boundary feature to the west of Building 3 and in alignment with the supposed north end of the building. This boundary appears to have been maintained throughout the 3rd and 4th century (see Phases 3.2-3.5).
- 8.7.6 To the south of the hedgerow, in the south-west of Trench 1, a timber lined well was excavated. The dating evidence for the construction of the well is consistent with it being sunk in the 4th century and the latest dated coin (SF 320) gives a terminus post quem date of AD 364-378 for its disuse and filling in. The animal bone assemblage from the well may represent the waste from a nearby butcher's shop/market (see Appendix 14).
- 8.7.7 Other structural possible features were recorded in the north of Trench 1, where large post pits could be the remains of a substantial building(s). These features were in two groups set c.10m apart on a broadly E/W alignment. Unfortunately, these features do not make convincing building floor plans although a structure(s) extending further to the north could be envisaged.
- 8.7.8 A group of possible postholes recorded on the east side of Trench 2 might be an indication for further structures in this location.
- 8.7.9 Putative rubbish pits were recorded in the north of Trench 1, the *terminus post quem* date for at least two of the pits [638] and [575] is AD 364-378. These pits may post-date the possible structures also excavated in this location as they appear to lie within or very close to any conjectured structure. The putative fire pit [575] was also notable for the quantity of coins, 14 in all, recovered from the pit. Pit [413] was notable for the large collection of animal bone, all cattle or cattle size. The high proportion of head and feet bones in the assemblage suggests that they may have been derived from a butcher's shop, while the burnt bone mainly limbs may be the waste from a glue manufacture (see Appendix 14).

8.7.10 Other possible rubbish pits were also recorded to the west of Building 3, in the south-west of Trench 1.

8.8 Phase 3.6: Roman Early 5th century

- 8.8.1 Phase 3.6 represents the last phase of Roman occupation of the site probably in the early 5th century. In Trenches 1 and 2 the footprint of Building 3 (see Phase 3.5) was covered by demolition debris and a sequence of sandy silt deposits evidence that Building 3 had been pulled down. A second lead ring (SF 514) similar to the perforated disc recovered in Phase 3.5 was recovered from layer [1789] recorded in Trench 2.
- 8.8.2 Further dumped deposits were recorded to the south and west of the demolished Building 3 as well as in the north of Trench 1. Found in layer [194] in the north of Trench 1 was the latest dated Roman coin (SF 72) dated AD 388-402.
- 8.8.3 In the south-west of Trench 2, there was some evidence for a further building (Building 4) with three postholes that may define the north-west corner of a structure. An E/W orientated possible beam slot or drip gully could be associated with Building 4.
- 8.8.4 Another structure was the possible N/S orientated picket line (Fence line 4) recorded in the north of Trench 1. The dimensions of the individual postholes suggest a fairly flimsy and perhaps temporary or short-lived structure.
- 8.8.5 A possible post pit recorded on the east side of Trench 2 may be related to structures further to the east, in the area of the earlier excavations of TOC02.
- 8.8.6 Probable rubbish pits were excavated in both the north and south of Trench 1 and are further evidence of continued occupation of the site in the very late Roman period. Of particular interest was the group of pits recorded in the central part of Trench 1. Here a further 22 lead rings were found (see Appendix 6). Although the pits containing the lead rings are interpreted as rubbish pits it may be that the deposition of so many lead rings might suggest that these objects represented structured deposition perhaps a closure deposit. A further notable find was a possible Saxon spearhead (see Appendix 6) recovered from a rubbish pit in the south of Trench 1.

8.9 Phase 4: Medieval

8.9.1 Phase 4 represents the medieval period when the site appears to have been open ground and marginal to settlement. Only a handful of cut features were attributed to this phase including a possible rubbish pit and posthole in the south of Trench 1 and three pits of uncertain function in the east of Trench 2. In Trench 1 the putative rubbish pit was truncated by a drainage gully.

Across the site deposits of dark grey/brown sandy silt were also excavated.

8.9.2 A small assemblage of pieces of probably 12th- or 13th-century peg and bat tile was collected from Phase 4 deposits. Other finds included some animal bone predominantly cattle bone and two iron hinges.

8.10 Phase 5.1: 17th century (1600-1660/1680)

- 8.10.1 Phase 5.1 represents the period 1600-1660/1680 when there is a notable increase in activity across the site. In the north of Trench 1, postholes and post pits were probably part of fence lines or enclosures that sub-divided the area probably into different area of activity or property boundaries. Numerous cut features including gullies and particularly rubbish pits in Trench 1 (north) attest to actual settlement of the site. Of particular interest were the pits filled with animal bone that are thought to represent waste from butchers and glue manufacturing.
- 8.10.2 In the south-west of Trench 1, a linear feature [819] suggested that the ground here continued to be affected by drainage problems. Although no rubbish pits were identified some pitting was recorded including a possible cess pit.
- 8.10.3 Trench 2 was notable for numerous potholes and post pits they may have formed structures in the south-west, central and eastern part of the site. It is uncertain whether these structures were pens, enclosures or flimsy buildings. Again, domestic rubbish pits and a probable cess pit attest to occupation of the site. The animal bone assemblage for this phase showed an approximate equal amount of cattle and sheep/goat while rabbit and chicken (an expensive item in the 17th century) formed only a minor part of the diet (see Appendix 14).
- 8.10.4 There had been substantial growth in London's suburbs in the earlier 17th century particularly near the river Thames and along the arterial roads leading to the docks. A view (Guillery 2009, 47 pl. 25) of the Ratcliff Highway shows some of Shadwell's larger timber houses of the 1630s and 1640s. Some of these were jettied and gable fronted. Whilst the archaeological excavation did not reveal any convincing evidence of such buildings within the area of excavation, however this could easily have been because of later development impacting and obliterating any such evidence. The excavation did reveal evidence for occupation, particularly a concentration of rubbish pits set along the northern part of the site, south of The Highway.

8.11 Phase 5.2: Late 17th to Early 18th century (1660-1720)

8.11.1 Phase 5.2 represents the period 1660-1720 when the remains of the first post-medieval buildings (PMB 1 and 2) were encountered. PMB 1 was in the north of Trench 1 and would have fronted

- onto The Highway. The building measured (externally) at 10.15m E-W by at least 4.31m N-S and was divided into at least two ground floor rooms (Rooms 1 and 2) both approximately 4.60m wide (internal). The width of the building foundations (at least 0.33m) suggests that the building was of at least 2 possibly 3 storeys.
- 8.11.2 To the rear of PMB 1 were located 3 wells, a cess pit and numerous rubbish pits. Further rubbish pits, wells and a cess pit were situated to the west of PMB 1 and these features may be associated with another property probably located further to the west of the area of excavation. Interestingly 28 pieces of bone-working waste were recovered from the rubbish pits in the north of Trench 1 perhaps an indication of industrial/craft activity being undertaken in the proximity. Two pieces of ivory working waste (SF 46 and SF 608) were also recovered from this phase (one from Trench and the other from Trench 2) an indication that this imported material was also being worked on site.
- 8.11.3 Other small finds (see Appendix 12) recovered from the site (the majority coming from the rubbish pitting in Trench 1) included dress accessories such as copper-alloy buttons, a copper-alloy shoe buckle, an ivory comb, household items predominantly knives and knife handles of wood, bone and ivory and a group of objects associated with book-keeping including a small oval seal, and a letter opener.
- 8.11.4 Other deposits and features to the rear of PMB 1 included horticultural type soils, a possible bedding trench and a scattering of postholes.
- 8.11.5 In the south of Trench 1, what was interpreted as a rotted timber sill beam [958] was unearthed. The feature along with a posthole to the south of the putative ground beam may be evidence for a timber building in this location but this is far from certain.
- 8.11.6 A possible drainage gully [822] located to the south of the sill beam together with the numerous rubbish pits to the south and east of the sill beam, is an indication of 'backyard' activity. Furthermore, the lack of rubbish pits to the north of the sill beam could be an indication that this ground fell within the footprint of a building.
- 8.11.7 Timber weatherboard built houses were a feature of London's suburbs, particularly in east and south-east London. An 18th-century example, a 2-storey timber house stood in St John's Hill Wapping and was photographically recorded in the early 20th century (Guillery 2009, 46 pl. 22).
- 8.11.8 In the south of Trench 2, the remains of a second building PMB 2 fronting onto Pennington Street were unearthed. The remains included the back wall and part of the floor to a cellar of at least two rooms. Overall the building measured (externally) at least 3.25m E-W by at least 0.51m N-S. The width of the wall between 0.40m and 0.31m wide suggests a building of at least two storeys.
- 8.11.9 Pennington Street was laid out on the north edge of a marsh in 1678-80 following the granting of

building leases by a major landowner, John Pennington. This was an unusually large development of a hundred or more houses and the building PMB 2 appears to be part one of those houses. Some of these houses survived to be photographically recorded in the 1920s (see Guillery 2009, 55, pl. 32). The photograph shows the corner of Chigwell Hill and Pennington Street and a terrace of about 40 houses with a frontage of one room on 3 storeys. Pennington's building leases stipulate a 17 feet (5.18m) frontage (Guillery 2009, 54). The almost 'classical' facade is of plat bands stepped up and down over doorways some of which had pedimental hoods. The small upper-storey windows below the modillioned eaves cornice indicate that the stairways were to the front. Artisans and better off labourers of the 1680s would have certainly aspired to occupy these 3 room houses Again, a well, cess pit and rubbish pits to the rear (and north) of PMB 2 are indicative of backyard' activity. A barrel well and further rubbish pitting in the south-west of Trench 2 might be related to a separate property whose remains were not extant in the excavation area but may have occupied a location further to the south. Furthermore, a concentration of rubbish pitting and the remains of a cess pit in the north-east of Trench 2 may be related to a building further to the east but outside the area of excavation.

- 8.11.11 The animal bone assemblage reflected the increasing intensity of occupation and was once again a mixture of domestic food waste and some craft or industrial waste. The evidence for craft working included a quantity of sheep/goat foot bones recovered from the barrel well in Trench 1 (north) are thought to be indicative of tawing waste. A main component of the non-food waste was a collection of horse bone retrieved from pits [223] and [325] in the north of Trench 1 that is thought to be evidence of a knackers yard in the vicinity
- 8.11.12 The food waste component demonstrated a similar proportion of cattle and sheep/goat with a notable increase in pig over the previous phase. There was a notable increase in young calves and probably the consumption of veal. There was also a wider variety of other food types including chicken, rabbit, goose, mallard, hare and teal. A single whale bone could also represent food waste. Notably larger stock was a characteristic of this phase compared to the earlier post-medieval phase and is evidence of improvements in animal husbandry and breeding.

8.12 **Phase 6.1: 18**th century (1720-1780)

8.12.1 Phase 6.1 represents the period 1720-1780, when occupation of the site not only continued but intensified. In the north of Trench 1 the building PMB 1 was retained and to the west an adjacent building (PMB 3) was constructed. The extant remains of PMB 3 represented a single ground floor room that extend north beyond the area of excavation and would have fronted onto The Highway. The room and the building measured 4.28m E-W by at least 5.15m N-S. The width of the walls 0.40m-0.44m suggested a multi-storey building but it is uncertain if the building was one

or two rooms deep.

- 8.12.2 A cess pit [54] to the rear of PMB 3 probably represented a privy associated with the building and a rubbish pit to the rear of the retained building (PMB 2) is evidence for continued occupation.
- 8.12.3 Further rubbish pits, cess pit and a well arranged along the west side of Trench 1 (north) are typical 'backyard' features and suggest that there were properties fronting onto Chigwell Hill during this phase although the remains of these buildings do not fall within the excavated area or were destroyed by later development impact.
- 8.12.4 In the central part of Trench 1 (north), a tanning pit [561] was recorded. The planking lining the pit was reused pine floor boards and the uprights were a mix of pine off-cuts and reused oak ships timbers. Interestingly the mix of reused timbers and structural techniques is parallelled in post-medieval tanning pits excavated in Bermondsey (see Appendix 13).
- 8.12.5 The fairly small size of the tanning pit suggests that it was perhaps used in the manufacture of the lighter leather industry (tawing). The post-medieval animal bone assemblage indicates that the north-west of the site was a focus for both animal butchery, craft waste and perhaps glue manufacture from the 17th century (Phase 5.1 and 5.2) and the tanning pit suggests that this activity continued well into the 18th century. Further evidence for a taw yard was the high proportion of sheep/goat metapodials retrieved from pit [845] located 11.89m to the south and excavated in Trench 1 (south).
- 8.12.6 In the central part of Trench 1 (south), an E/W aligned ditch [946] may have marked the boundary between two adjacent properties. Cess pits and rubbish pits associated with these properties were excavated to the north and south of the ditch. These features, typical of backyards, suggest that the properties here would have fronted onto Chigwell Hill.
- 8.12.7 In Trench 2, the building PMB 2 appears to have been retained although the cellar was probably filled in. A cess pit [1536] located to the rear of PMB 2 was probably used by the residents. A well and rubbish pits to the west of PMB 2 are probably related to other properties that would have fronted onto Pennington Street although the remains of these buildings were not extant within the trench.
- 8.12.8 Some 11.26m to the north of PBM 2, the partial remains of another building (PMB 4) were revealed with a N/S aligned wall [1693] at least 2.64m long and 0.43m wide. The wall appeared to be the back wall to a multi-storey building that fronted to the east and presumably onto a passage or open court. Indeed, Rocque's map of 1746 shows a passage named 'Angel A.' connecting Pennington Street to The Highway in approximately the right location. The alley is still shown on Horwoods map of 1813 but by 1870 (OS map 1870) it exists only as a narrow passage called Lavender Place and although entered from Pennington Street offers no through way to The

Highway.

- 8.12.9 Further cess pits and rubbish pits were excavated to the rear and in close proximity to PMB 4 and are likely to be related to the occupation of that building. Interestingly, from the cess pit [1508] located just to the north of PMB 4, a notable collection of cat bones was recovered probably representing at least 6 cats. Dog bones from two puppies were also retrieved from the cess pit.
- 8.12.10 Evidence for a particularly exotic pet and a very rare archaeological find was the recovery of guinea pig bones from pit [1666], a rubbish pit excavated in the south-west of Trench 2. Interestingly, the nearby excavations at HGA02 also produced guinea pig remains.
- 8.12.11 The animal bone assemblage was now dominated by sheep/goat over cattle and a continuing increase in pig. The representation of chicken notably increases and for the first time turkey is also represented. Of particular interest is an example of a cockerel's spur sawn off about a third along its length. This practice is usually taken as an indication of cock-fighting (see Appendix 14).
- 8.12.12 The small finds assemblage included dress accessories dominated by copper-alloy pins but also three copper-alloy buttons and horn button, three combs (one bone and 2 ivory) and a finger ring. Household objects included: a copper-alloy candle stick, spoon, a curtain ring and two thimbles; two tang-hafted knives with wooden handles, and an antler cutlery handle. Other notable finds reflected perhaps leisure pastimes including a ceramic gaming piece and a very small dice (Appendix 12).

8.13 Phase 6.2: Late 18th/Early 19th century (1780-1840)

- 8.13.1 Phase 6.2 represented the period 1780-1840. In Trench 1 (north) the buildings PMB 1 and PMB 3 appear to have been retained although some alterations were undertaken. In PMB 1 a possible fireplace was built in Room 2 against the party wall between PMB 1 and PMB 3. While to the rear of PMB 3 a culvert was constructed that extended north under the back wall and floor of the building and continued beyond the area of excavation. It is thought that the culvert was a sewer that would have taken waste effluence from a privy in the backyard of PMB 3 probably to a main sewer underneath The Highway.
- 8.13.2 To the west of PMB 3 another building (PMB 5) was constructed. The building PMB 5 measured at least 8.29m E-W by 4.61m N-S. If the building fronted north onto The Highway then this would make this the largest street frontage of any building excavated at TBF10 and the building significantly larger than the 'small' house typical of the Shadwell area. The width of the foundation at 0.40m suggests a building of at least 2 storeys and the surviving ground plan revealed a building divided into at least 2 (equally sized) ground floor rooms. A doorway in the western room (Room 2) would have allowed access to the rear. The large size of the building might suggest an

- imposing house but the rough stone floor and the sunken circular masonry feature on Room 2 suggest that the building may have at least in part an industrial or mercantile purpose.
- 8.13.3 To the rear and south of PMB 5, a system of connected cess pits and drains might be related to the building PMB 5 or to another building located further to the west and outside the area of excavation. No less than four wells were also recorded across Trench 1 (north) providing evidence that the residents continued to draw their potable water from these sources. The proximity of wells and cess pits easily explains why much of the water supply was contaminated and together with poor hygiene why water-borne diseases like cholera were rampant in the first half of the 19th century.
- 8.13.4 In Trench 1 (south) overlying the sill beam [958] recorded in Phase 5.2 was an E/W orientated wall foundation [738]. It may be that the masonry remains represent a replacement to the earlier timber structure. The masonry building (PMB 6) would have extended further to the west and north and fronted onto Chigwell Hill. Analysis of the mortar used in the brickwork suggests that it was built post 1830.
- 8.13.5 In Trench 2, PMB 2 at least in part appears to have been rebuilt and an outshot extended to the rear. The building PMB 4 also appears to have been retained and there was evidence for some internal alterations or rebuilding.
- 8.13.6 Wells and cess pits were recorded across Trench 1 (south) and Trench 2 but there was a particular concentration of putative rubbish pits in Trench 2. These features produced the largest collection of post-medieval small finds including personal objects particularly dress accessories such as copper-alloy pins and buttons, bone and shell buttons, glass beads, a bone and ivory comb and an ivory fan. Also a group of dress accessory objects associated with time pieces including fobs and a copper-alloy watch winder. Household furnishing objects included curtain rings, wall hooks, furniture handle and fittings, bone and ivory cutlery handles and copper-alloy and bone spoons. Specialised kitchen objects included a copper-alloy cup weight and an iron trivet. Copper-alloy thimbles and a pair of iron scissors may be related to textile working. A writing slate and slate pencils attest to literacy skills and there were a group of small finds related to leisure including ceramic marbles, bone gaming pieces and a brass toy cannon (Appendix 12).
- 8.13.7 A small but particularly significant assemblage of bone working waste was recovered predominantly from the cess pits and rubbish pits excavated in Trench 2. This included sawn-off ends of cattle metatarsals, six pieces of bone disc or button-making waste as well as waste from ivory and red deer antler working. These finds suggest perhaps small scale but specialised manufacture enterprises.
- 8.13.8 The animal bone assemblage from Phase 6.2 continued to be dominated by sheep/goat over cattle and an increasing representation of pig. There was also a great representation of poultry

particularly chicken and rabbit. An interesting find amongst the food waste was a single turtle bone. The species of turtle has not yet been determined but Green turtles were imported live from the Caribbean and eaten as part of Victorian 'fine' dining. Such an expensive item may seem a little incongruous in such a working-class area of London and an explanation may be that the bone is representative of 'craft' waste. Another exotic animal represented in the animal bone collection albeit unstratified was the tooth from an Indian elephant. The trade and import of ivory and live wild animals including elephants was undertaken in the nearby London docks.

- 8.13.9 Dog and cat bones continued to be collected from mainly the rubbish and cess pits of Trench 2 a particular interesting item was a dog mandible with a broken and worn canine and a signs of major trauma indicating a severe blow to the snout. It is thought that this bone was an indication of dog-fighting.
- 8.13.10 An interesting species representation within the animal bone assemblage was the skull of a black rat (*Rattus rattus*) found in a mid-19th-century rubbish pit [1630] excavated in Trench 2. The remains of black rats were also recovered from 19th-century contexts in the earlier excavations of TOC02 (Douglas 2004). By this later period the black rat in Britain had been largely replaced by the larger and more aggressive brown rat (*Rattus norvegicus*) but the docks appear to have been a last stronghold for the species, perhaps because ships were continuing to bring in new arrivals (see Appendix 14).

9 ORIGINAL RESEARCH AIMS AND OBJECTIVES AND REVISED RESEARCH QUESTIONS

9.1 The objective of the archaeological excavation was to identify, excavate and to preserve by record any significant archaeological remains that will be disturbed by the proposed development. The archaeology excavation sought to address the following specific research aims as originally outlined in the Written Sceme of Investigation (Hawkins 2010):

Topography

- 9.2 Previous excavations on the eastern part of the site revealed the slope of an escarpment overlooking Wapping marshes and the River Thames to the south. Of note was the possibility a gravel spur in the centre of the site extending southward reported in the evaluation of 1997 (Douglas 1997). The excavation should have the opportunity to test this topographic model.
- 9.2.1 The levels on the terrace gravel at TBF10 are unsurprisingly comparable with the levels on the gravel recorded at TOC02 which were between c.6.45m OD and 2.93m OD. The excavation at TBF10 confirmed the topographic model of the site located on the south facing slope of an escarpment overlooking the Thames flood plain. However, no spur of higher ground for the centre of the site could be demonstrated.

Prehistoric

- 9.3 The lithic assemblage from the earlier excavations at Tobacco Dock (TOC02 and CYD96) suggested only occasional and sporadic low-key visitation of the site, commencing in the Mesolithic/early Neolithic and continuing into later prehistoric periods. However, the nature and presence of prehistoric activity on the study site is considered uncertain.
- 9.3.1 The excavation TBF10 demonstrated that in the earlier prehistoric period, activity at Shadwell although probably sporadic was also quite intensive. The location of the site on an escarpment overlooking lower-lying wet lands may have been particularly advantageous and therefore favoured by prehistoric peoples, who may have wished to exploit the varied resources of the riverine environment including fish, game, seasonal grazing, and plants (edible, medicinal and as a raw material).
- 9.3.2 The TBF10 excavations also suggested much more sustained activity was happening in the Late

Bronze Age with the deposition of large quantities of burnt and cracked flint forming a burnt mound.

- 9.3.3 Perhaps a comparable feature was excavated at Reading Business Park where a Late Bronze Age, 'burnt mound' was unearthed that measured c.85m in length, c.25m in width and 0.20m in depth. The feature ran parallel and close to a putative palaeo-channel (Brossler 2001, 133). At TBF10, a silty clay excavated in Trench 3 may represent a fluvial deposit and a water-channel just to the south of the concentration of burnt flint.
- 9.3.4 At Reading very few finds were recovered from the burnt mound although some of the pottery sherds showed evidence for exposure to extreme heat. Furthermore, the charcoal assemblage suggested that the mound had accumulated over a period of time (Ibid). At TBF10 a similar paucity of finds associated with the putative burnt mound was also noted.
- 9.3.5 Burnt mounds are often interpreted as cooking sites however the general lack of settlement detritus and food debris, as at TBF10 appears to contradict this. This gave rise to the supposition that the sites might have been used opportunistically during hunting expeditions but the sheer quantity of burnt flint suggests that the site was used over a considerable period, a characteristic unlikely to arise from ad hoc cooking on a hunting trip. An alternative theory is that the sites were sweat lodges or saunas. Light structures perhaps pole frames draped with animal skins could have enclosed hot rocks plunged in water. Such steam baths have an obvious function associated with personnel cleanliness but also may have had ritual, purification, social and or medicinal purpose.
- 9.3.6 Brewing and tanning have also been suggested as activities that might have been responsible for burnt mounds. At TBF10 there may be some evidence for the latter activity. Analysis of the latter prehistoric flint tools suggested that they were mostly used to scrape, cut and pierce animal hides and that these lithics may also be in association with the burnt flint. Together this evidence might suggest that the site was a foci for animal hide processing.

Roman

- 9.4 What evidence is there for a Roman road forming a precursor to The Highway?
- 9.4.1 Current archaeological opinion is that a Roman road could have passed c.100m to the north of the study site. This conjecture remains a reasonable assumption.
- 9.5 Is there evidence for 'town planning' through land preparation for the Roman settlement at Shadwell and the creation of the settlement itself?

- 9.5.1 The earliest Roman structure identified on TOC02, represented by postholes and beam slots is thought to date to the 2nd century. However, the structure was difficult to interpret and its purpose uncertain. The archaeological evidence suggests that occupation of the site during the 2nd century was perhaps peripheral to any foci of settlement.
- 9.5.2 Not surprisingly a similar pattern of settlement was recorded at TBF10 where the northern part of the site and the part of the site closest to the putative Roman road appears to have been exploited for the quarrying of sand and gravel. There was evidence for land plots and possibly the terracing of the escarpment (earlier than previously thought, see below). However, evidence of building was limited to the eastern side of the site and a few postholes that may be part of a 2ndcentury structure identified on TOC02.
- 9.5.3 It was in the period post AD 260 that the settlement at Shadwell is thought to have intensified. The Late Roman ditches in the north of TOC02 ran from west to east while a broadly contemporary boundary ditch unearthed on the HGA02 site inclined from east to west. This suggests that some kind of watercourse may have existed, on the line of Wapping Lane and could have separated the two sites. Nevertheless, the main period of occupation, i.e. post AD 260 at TOC02, was contemporary with the bath house complex unearthed at HGA02. In addition some of the ceramic building material recovered from the TOC02 site had the same signature marks to that found at HGA02. This certainly suggests that the development of the two sites was closely connected. Furthermore, the phasing of the Shadwell 'tower' sites (LD74 and LD76) also show a similar pattern of occupation with a marked increase of activity post AD 260.
- 9.5.4 The evidence from TBF10 further supports the contention that the Roman settlement at Shadwell was largely a 3rd-century foundation which reached its peak post AD 250. It is also apparent that all the Shadwell sites are broadly contemporary and may form part of Late Roman settlement that is more integrated and significant than hitherto realised. However, large-scale terracing of the slope down to the Rover Thames appears to occur prior to the settlement of the study site in the late 3rd century.

9.6 What further evidence is there for the morphology and function of the Roman settlement at Shadwell?

9.6.1 The evidence from Shadwell suggests a predominantly Late Roman civilian extra mural settlement approximately 1.2km to the east and downstream of *Londinium*. Shadwell's location and its development in the 3rd century might be at least in part explained by its role as a port or 'gateway' community with links to Essex, Hertfordshire and Kent as well as other places in southern Britain and further afield to the continent (Douglas *et al.* 2011).

- 9.6.2 In the south-east quadrant of the TOC02 site, the excavations revealed a series of at least four buildings, constructed one on top of the other. The clay-and-timber buildings of the 3rd and 4th century appear to have been superseded by a final building in the late 4th century/early 5th century that, at least in part, had masonry foundations. Similar clay-and-timber buildings were found at HGA02 and LD74. At TBF10 a sequence of at least four clay-and-timber buildings have been unearthed in the south of the site with traces of other timber structures found to the north and east. The evidence unearthed at TBF10 suggest that the settlement at Shadwell appears to have continued up until the early 5th century.
- 9.7 The excavation should establish the pattern of construction and spatial distribution between buildings, or the alleyways between buildings and wells, pits, and yards to the rear of the buildings. The patterns of buildings and alleyways and their alignments may relate to the Roman road to the north.
- 9.7.1 The earlier excavations at Shadwell established a pattern of spatial distribution between buildings; with alleyways between buildings and wells, pits and yards. The layout and alignment of buildings, ditches, wells and alleyways appear to relate both to the Roman road to the north but also a presumed waterfront to the south (Douglas et al. 2011, fig. 8). At TBF10 the buildings, ditches, wells and open spaces continued to conform to the morphology of settlement established in the excavations to the east of the site. However, there was no evidence for the location of the Roman waterfront.
- 9.8 What is the environmental background to the site in the Roman period?
- 9.8.1 The environmental sampling of the Roman deposits was only able to give an indication of arable or disturbed/waste land.

Post-medieval

- 9.9 What was the morphology of the settlement and socio-economic status of the study site in the post-medieval and early modern period?
- 9.9.1 The cartographic evidence (Ogilby and Morgan 1676) was confirmed by the excavations of TOC02 and TBF10 and shows that the site was developed from the 17th century onwards. Initially development appears to have been around the edges of the site with the central area given over to gardens and backyards. The site seems to have been further developed in the 18th century with the gradual 'filling in' of the central open space. The site continued to be developed

- in piecemeal fashion in the 19th century, as individual owners adapted their properties to suit their needs, so that by the middle of the century the central formerly open area had been significantly encroached upon.
- 9.9.2 The excavations at TOC02 and TBF10 have revealed detailed information on the building materials used in construction, types of buildings and their development of the buildings over time.
- 9.9.3 In previous excavations at TOC02 and at TBF10 important finds assemblages relating to trades and crafts undertaken during the post-medieval era were recovered from wells, cess and rubbish pits.
- 9.9.4 At TOC02 part of the ceramic assemblage may have indicated the location of an 18th-century apothecary shop and in the 19th century a coffee-shop. At TBF10 a group of Frechen ware drinking vessels were recovered from the backfill [262] of the construction cut for a 17th-century barrel well that was located immediately to the rear of a building (PMB 1). A large collection of clay tobacco pipe was also retrieved from deposits associated with the well. The pottery and the clay tobacco pipe is thought to have derived from a drinking establishment, quite possibly PMB 1.
- 9.9.5 The post-medieval ceramic assemblage from TOC02 was predominantly domestic in character and for the 17th and 18th century indicated that at least some of households were well-to-do and of the 'middling' sort. Unsurprisingly a similar pottery assemblage was collected at TBF10. As at TOC02 significant proportion of the pottery assemblage at TBF10 may relate to specific households and identifiable buildings.
- 9.9.6 The finds of hair curlers both at TOC02 and TBF10 suggest that at least some of the residents were of the higher economic and social status. Furthermore, the presence of a small collection of blue and white tin-glazed tile at TBF10 suggests that at least some of the houses were well appointed
- 9.9.7 The relatively high proportion and diversity of imported pottery at TBF10 and at TOC02 for the 17th and 18th century is evidence for international trading networks that this port community were engaged in. Further evidence for maritime trade were the sherds of Martabani jars that were used to store fresh water on ships.
- 9.9.8 Some of the pottery assemblage at TBF10 may relate to industrial processes on going at Tobacco Dock or in the locality. They included 17th-century braziers, a handmade bowl that had been subjected to high temperatures, a glass slag crucible, sugar moulds and pottery wasters and saggers that probably derived from the Hermitage pothouse
- 9.9.9 The large assemblage of clay tobacco pipe collected from TBF10 and TOC02 will inform our understanding of the cultural significance of smoking in the home and in drinking and dining

- establishments such as inns, public houses, coffee shops and tea houses etc as well as helping to identify such premises that were operating at Tobacco Dock.
- 9.9.10 At TBF10, in the 17th and 18th century there was animal bone evidence for a tan yard, butchery, glue manufacture and bone working, which appears to have continued well into the 19th century.
- 9.9.11 Most of the development of the site in the excavations at TBF10 and at TOC02 was domestic in character. Nevertheless, throughout the post-medieval period the workplace and domestic occupation were closely interwoven. At TOC02 and at TBF10 with PMB 5, some of the buildings at least in part were thought to be industrial/commercial in character.
- 9.9.12 At the beginning of the 19th century the whole area of Shadwell and Wapping was transformed with the construction of the London docks. The docks brought about a demographic change to the population, as labourers from all over the country but particularly Ireland came first to build the docks and then to work in them (Darby 2011, 69). The pottery assemblage from TOC02 and TBF10 demonstrate a clear decline in the social status of the site during the 19th century.
- 9.9.13 An Ottoman pipe found at TBF10 complements the two discovered at TOC02. These pipes are very rare in a British archaeological context and are also an indication of possible central European or near Eastern connections in the 19th century. Two continental porcelain pipe bowls found at TBF10 may be an indication of German immigrants.
- 9.9.14 The animal bone assemblage from TBF10 mostly represented food waste and when combined with the assemblage from TOC02 should provide a basis for detailed analysis of dietary habits and food procurement strategies throughout the post-medieval period, a period when the local area underwent significant change; from a relatively prosperous neighbourhood home to skilled artisans but also some 'professionals' to an area of high density working-class housing.
- 9.10 What environmental and/or climatic factors influenced the development of the floodplain in the post-Roman period?
- 9.10.1 None of the environmental samples could provide any information on the environmental and/or climatic factors that shaped the development of the Thames floodplain in the post Roman era.

9.11 Revised Research questions

9.11.1 The excavation at TBF10 has raised a number of additional research questions. These are:

Prehistoric

- 9.11.2 The discovery of a burnt mound at TBF10 greatly alters our perception of the site and the nature of the occupation of it during the prehistoric era particularly during the Bronze Age. Additional parallels within the region should be sought and the interpretation of the burnt mound and the debate between cooking and bathing considered further. However, as Irish tradition and the legend of *Dubh Ruis* in which the hero cooks a deer and subsequently baths in the cooking pit with the woman *Mis*, shows that the two activities of cooking and bathing need not be mutually exclusive (Barfield and Hodder 1987).
 - What is the significance of the burnt mound and how does this alter our perception of the prehistoric activity in the Shadwell area?
 - How does the lithic assemblage shed light on the interpretation of the burnt mound? And might tanning or hide working be an explanation for the formation of the 'burnt mound' at TBF10.

Roman

- 9.11.3 The Roman small finds assemblage included an early crossbow brooch SF 223 and belt fitting SF 656 and both of these objects are often associated with the military or officials of the late Roman state. To what extent is their presence at Shadwell significant in interpreting the nature of the settlement?
 - How do the Roman small finds advance our understanding of the nature of the settlement at Shadwell?
- 9.11.4 Other Roman small finds included copper-alloy and shale bracelets, hair pins and glass beads as well as toilet instruments such as the cosmetic palette (SF 301). Household objects included a gaming counter (SF 165) and an iron knife (SF 322). Agricultural objects included a copper-alloy animal bell (SF 594) and a linchpin was evidence for wheeled transport.
 - How do these objects add to our understanding of the settlement at Shadwell?
 - Can their distribution tell us more about the morphology of the settlement?
 - Can areas or zones of particular activity be identified?
 - Can particular buildings and structures be associated with certain specific activities or associated with social status?
- 9.11.5 The Roman pottery assemblage perhaps not surprisingly was broadly comparable to the pottery assemblages from TOC02 and HGA02. At TBF10 the most frequent fabrics represented were unsourced SAND and CSGW followed by the sourced fabrics AHFA, BB2 and OXWW. The most frequent imported pottery was amphora that included Spanish, Gaulish and North African wares.

Only a small percentage (1.19% by sherd count and 0.0008% by weight) of the pottery was Samian from Eastern and Central Gaul.

- How does the imported pottery particularly the amphora indicate the trading connections of the settlement and how might they have changed over the Late Roman period?
- What does the spatial distribution of the Samian across the Shadwell sites (TOC02, HGA02, LD74 and LD76) tell us about the nature of the site.
- Is the apparent foci of Samian pottery to the east of the site at LD74 and LD76 an indication of an official or semi-official source of supply?
- 9.11.6 The Roman pottery assemblage strongly reflected activities associated with the storage, preparation and serving of food stuffs.
 - How does this compare with the other Shadwell sites?
 - Can specific areas, zones or buildings on the site be identified with particular activities by analysis of the spatial distribution of the pottery assemblage?
- 9.11.7 The presence of Mayan and Porchester D wares is an indication that the site continued to be occupied up until the late 4th/early 5th century.
 - How might the Late Roman pottery assemblage inform our understanding of the site in the last decades of Roman occupation?
- 9.11.8 The Roman coin assemblage for TBF10 clearly indicated late 3rd- and 4th-century activity comparable with numismatic evidence from TOC02. However, a new characteristic of the assemblage was a peak of coin loss in the period AD 364-378. A few coins were found that date to the period AD 388-402, an indication that the site continued to be occupied until the end of the 4th century and the first decades of the 5th century (see Appendix 7).
 - How does the coin assemblage inform our understanding and demise of the Roman settlement at Shadwell?
- 9.11.9 The animal bone assemblage for the Roman phases was predominately cattle bone with a much smaller proportion of sheep/goat and pig. There was only a very limited representation of chicken and red deer. Whilst much of this assemblage probably derived from general household waste a significant proportion was indicative of specialist activity including butchery and glue manufacture.
 - How does the animal bone assemblage at TBF10 compare with the collections from the other Shadwell sites (TOC02, HGA02, LD74 and LD 76)?
 - How does the animal bone assemblage at Shadwell compare with the collections from late Roman *Londinium* and other extramural settlements such as Old Ford.

- 9.11.10 Londinium in the 3rd and 4th century was a far different place to the burgeoning and booming entrepôt of the late 1st and early 2nd century. The excavations at Shadwell are particularly important in our understanding and broader interpretation of Londinium and its change in function and how population dispersed.
- 9.11.11 Between the 1st/2nd century and the 3rd/4th century there had been a structural shift in the economy of Roman Britain marked by an increasing regionalization of exchange with a greater emphasis on trade within Britain at the expense of the inter-provincial trade dominant in the early Empire (Millett 1990, 157).
- 9.11.12 Nevertheless, inter-provincial trade remained an important element in the functioning of the Empire. The army on the Rhine (and in northern Britain) needed vast amounts of grain and other supplies which could not be produced locally due to disruptions thereabouts. Britain supplied much of this grain and probably other strategic supplies (leather and iron) and this was probably the back bone of the province's wealth.
- 9.11.13 A still prevalent view is that in the Late Roman period Londinum was in a state of economic decline and with a contracting population and shrinking mercantile/manufacturing base exemplified by the disuse of the riverside quays in the middle of 3rd century. However, this scenario is a little at odds with the apparent prosperity of much of southern and lowland Britain. By apparent contrast to Londinium the city's hinterland seems to have been flourishing in the mid to late 3rd century such as at the settlements at Shadwell and Old Ford.
- 9.11.14 If we accept that southern Britain was actually a very productive and prosperous place then rather than Londinium's economic collapse, things may just have been different with a more sedate city surrounded by smaller but vibrant and active settlements. In particular, the settlement at Shadwell and its function as a port should be further considered. An interesting suggestion is that in the late Roman period, trade may actually have by-passed Londinium with a more dispersed pattern of trade, and a series of ports and havens in the lower Thames estuary linking the hinterland of south-east Britain with the rest of Britain and the continent. An interesting observation from John Shepherd is the sites at Thamesmead and Erith which show agricultural activity and settlement in the 4th century also seem to demonstrate a supply of pottery in this case Much Hadham ware, coming down directly from its production centre in Hertfordshire and apparently avoiding Londinium.
- 9.11.15 How the settlement at Shadwell fits in a pattern of trade and settlement elsewhere in the lower Thames estuary is a key research question.
- 9.11.16 The presence in the Roman pottery assemblage of Mayen and Porchester D wares does indicate that the site continued to be occupied until at least the late 4th or early 5th century. TBF10 therefore is also a crucial site in understanding the demise of Roman Britain and the shift to a

society dominated by Saxon cultural mores, traditions and language.

- 9.11.17 A key question of the Late Roman / post-Roman period at Shadwell is what is the evidence for abandonment versus transition?
- 9.11.18 At TBF10 24 lead rings were found. These intriguing objects have been categorised into 6 broad types. The perforated lead discs are objects usually dated to the Early Saxon period and a number have been recovered from sites in the Thames valley including Mucking and most notably from Hammersmith where five examples were recovered from a sunken featured building (SFB). The objects have been classified as weights and are usually interpreted as loom or fishing nets but this is uncertain and ingots are another possibility (Cowie and Blackmore 2008, 204). Of course, the Roman settlement at Shadwell would have been a ready source of lead, large quantities of which would have been used in the bathhouse and in the piped water supply network. A large lump of solidified molten lead was retrieved from layer [975] in Phase 3.5 and scraps of lead and lead slag were notable in some of the deposits of Phase 3.6.
- 9.11.19 The group of lead rings found at TBF10 are unprecedented for a Romano-British site and their similarity with early Anglo-Saxon examples might suggest that these objects are early post Roman (5th century) objects. As Gerrard points out the recycling of Roman material into Anglo-Saxon objects is one of the fundamental transformations that material culture underwent during the fifth century.
- 9.11.20 Another possible early Saxon object was spearhead found in a pit [968] (Phase 3.6). Intriguingly a sherd of glass, the fragment with a tear-shaped prunt, may date to the 5th century and be of Germanic origin. However, no Early Saxon pottery or other definitively Early Saxon artefacts were unearthed. Furthermore, no features or deposits could be dated to the later 5th or 6th century (a notoriously difficult period to identify in the archaeological record). Evidence for Middle and Late Saxon occupation of the site is also absent. It would appear that whatever happened at the end of the Roman period the site did not re-emerge as a Saxon settlement.

Post-medieval

9.11.21 The earlier archaeological excavations of TOC02 produced evidence that suggested that the site was progressively developed from at least the 17th century and to have been fully developed by the mid-18th century. The excavations at TBF10 showed the same pattern of development. The population of Shadwell throughout the 17th and 18th century was largely artisans and labourers. This expanding population was principally dependent upon the river and port activities not only mariners, shipbuilders, watermen but also those trades that serviced the seafarers; victuallers, chandlers, rope makers, brewers, distillers, publicans and inn-keepers and those that processed

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the imported raw materials like sugar houses workers and dyers.

- 9.11.22 The excavations at TBF10 and at TOC02 produced a wealth of cultural material including significant assemblages of pottery, clay tobacco pipe, small finds, animal bone and building material that has important implications regarding social status, gender, work, domestic activities and leisure/pastimes.
- 9.11.23 Further consideration should be given to the following:
 - How do the post-medieval buildings floor plans and layout inform us about the organisation of space and social status?
 - What trades and occupations can be attributed to the residents of the site during the post-medieval period?
 - How far does the archaeological evidence support Guillery's characterisation of 18th-century Shadwell as a relatively decent and socially homogeneous working place?
 - How does the archaeological evidence demonstrate the social changes that marked the 19th century and in particularly the development of the port of London.

10 IMPORTANCE OF THE RESULTS, FURTHER WORK AND PUBLICATION PROPOSAL

10.1 Importance of the Results

- 10.1.1 The findings at TBF10 have the potential to further our knowledge of the Mesolithic and early Neolithic activity in the lower Thames region. Furthermore, the discovery of a 'burnt mound' feature dating to the Bronze Age changes our perception of the site and potentially contributes significantly to our understanding of how these rather enigmatic features may have been formed.
- 10.1.2 The Roman archaeological remains at TBF10 will add to our knowledge and understanding of the extent and development of the settlement at Shadwell. The Roman pottery assemblage will certainly contribute to our understanding of Late Roman pottery supply but also its consumption and deposition.
- 10.1.3 The transition from a Late Roman society to a Germanic society is a little understood if much debated subject. It is in the 5th century that new forms of material culture, architectural styles and social customs and mores emerge (Gerrard 2013). The findings at Shadwell have the potential to make a significant contribution to this topic. In particular, the Late Roman coinage, the lead rings and the 5th-century (Saxon?) spearhead and the apparent abandonment of the Roman settlement testify to a site and society in a period of flux.
- 10.1.4 In the medieval period the site appears to have been largely open ground, probably exploited agriculturally but marginal to settlement.
- 10.1.5 In the post-medieval period the growth of London's eastern suburbs was principally dependent upon the expanding port and the associated manufacturing trades. The site at Shadwell very much exemplifies this pattern of development. At Tobacco Dock the study site was increasingly developed principally for domestic housing but also for some commercial and small scale industrial purposes from the 17th century onwards. Study of the archaeological remains unearthed and the finds recovered from the excavations at Shadwell have the potential to greatly extend our knowledge of the development of a settlement so intrinsically linked to the expansion of the London docks and maritime international trade in the 17th, 18th and 19th centuries.

10.2 Further work

General

10.2.1 The results of the archaeological excavation will be compared and contrasted with other sites in the vicinity including those at TOC02, HGA02, CYD96, LD76 and LD74. The preliminary phasing

of the Roman stratigraphy at TBF10 should be compared with the phasing of TOC02 and in particular a continuation and equivalence of archaeological deposits and features sought. This would further our understanding of the morphology of the Roman settlement and its development over time.

- 10.2.2 Roman sites further east, along the estuary should be sought and compared, so that the Shadwell settlement is considered in the wider context of the lower Thames region and as part of a network of settlements and trading connections that are both provincial/regional and imperial/international.
- 10.2.3 Analysis of the distribution of the artefactual evidence including the pottery, small finds and coins may provide additional information for the use of use of the buildings and of the open spaces.
- 10.2.1 The post-medieval building remains will be overlain on a series of historic maps of the area in order to aid interpretation of the structures. Documentary research will be undertaken to attempt to determine who the inhabitants of these buildings might be. This work will include the study of baptismal records, household inventories and census returns to identify the occupations represented, trades or businesses undertaken and social status of the inhabitants and occupiers of the site during the post-medieval period.

Lithics

10.2.2 It is suggested that densities and distribution of the lithic assemblage should be plotted so as to reveal any spatial patterning and contextual associations that might aid interpretation of the finds and the site in the prehistoric period. Other prehistoric 'burnt mound' sites should be sought and compared both regionally and nationally and the alternative explanations for their formation further considered.

Prehistoric pottery

10.2.3 The abraded nature of the prehistoric pottery means that no further work is required.

Roman pottery

10.2.4 Further work on the Roman pottery assemblage will focus on the contextual analysis and the identification of key groups. The assemblage also needs to be considered in more detail in particularly in comparison to the other Shadwell sites. At TBF10 the Roman pottery assemblage reflects a variety of activities associated with the storage, preparations and serving of foodstuffs. Further study of the distribution of the pottery may contribute to a better understanding of the different activities and their foci within the settlement. The distribution of the East Gaulish Samian across the Shadwell sites may add to our appreciation of the significance of the settlement and its role in the wider context of the Lower Thames estuary in the Late Roman period.

Roman small finds

10.2.5 The excavation at TBF10 produced a small but significant group of small finds predominantly Late

Roman that should be compared with objects found in the earlier excavations at Tobacco Dock. A small finds report should be included in the publication.

Lead rings and spear

10.2.6 The possible 5th-century objects are of particular importance and will require further study. The spear should be further conserved and its form definitively established. The spear will require illustration and photography. The lead rings will require illustration and photography. Further research of the lead rings might include scientific analysis to determine their exact composition.

Roman coins

10.2.7 Some 291 Roman coins were recovered from the excavation at TBF10 overwhelmingly dating to the 3rd and 4th centuries. The coins should be integrated into the stratigraphic analysis. These coins should be compared to the other Shadwell sites, sites in the London region and nationally and a coin report included in the publication. Of special interest was a coin SF 315 dated AD 309-312, minted in Ostia. This coin will require photography.

Roman animal bone

10.2.8 Further work on the Roman animal bone assemblage would aim at determining animal useage, species representation, exploitation strategies and size of domestic stock. Comparisons should be made with the other Shadwell sites, the nearby settlement at Bow as well as the City and Southwark. A major topic of study would be to understand the relationship between *Londinium* and the smaller satellite settlements. In particular to see if settlements like Shadwell were sources of food supply for *Londinium* or acting as intermediaries to sources further to the north and east. Or, if settlements like Shadwell supplied other markets.

Roman timber

10.2.9 The small assemblage of Roman water-logged wood derived from the well [1157] in the southwest of Trench 1 (Phase 3.5) is of regional importance adding as it does to our growing corpus of less forma carpentry derived from *Londinium's* satellite settlements. Further work is recommended to include comparison with other similar structures.

Environmental samples

10.2.10 The environmental evidence may also reflect types of refuse and patterns of discard as well as use of space for both the Roman and post-Roman periods.

Glass

10.2.11 The small assemblage of late Roman glass and the late 16th to 17th-century glass should be included in the publication. Of particular importance was the sherd of late 4th or early 5th century glass that may be of Germanic origin. Illustration of 16 Roman vessel fragments, 1 near complete

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vessel profile and 9 vessel fragments of late 16th- and 17th-century date and photographs of 18th to early 20th-century groups from individual households are recommended.

Human bone

10.2.12 The small assemblage of residual human bone recovered a single Roman context and 3 post-medieval contexts requires no further work.

Post Roman pottery

10.2.13 The post-Roman pottery assemblage is of local and regional importance and some of the ceramics are of national importance. Several of the vessels will require illustration, photography and reconstruction. It is recommended that the pottery assemblages from the earlier excavations at Tobacco Dock (CYD96 and TOC02) be brought together. The pottery report should be studied alongside the small finds, clay tobacco pipe and glass collections and integrated into the publication in an integrated form. Further work would seek to identify specific pottery groups to individual properties so as to inform activities undertaken (domestic and commercial), social status and social aspirations for particular households. The assemblage has the potential to demonstrate how the community changed over the post-medieval period. It is recommended that 36 vessels are illustrated (six of which additionally require photographing) and 14 vessels are photographed (six of which need reconstructing).

Clay tobacco pipe

10.2.14 The large assemblage of clay tobacco pipe should be combined with the collections from the earlier sites (CYD98 and TOC02) at Tobacco Dock. The assemblage has the potential to identify drinking establishments and to inform on the local industry and supply of clay tobacco pipes. Some 46 clay tobacco pipe bowls are recommended to be illustrated and the continental porcelain bowl from context [2156] should be photographed.

Building material

10.2.15 A section will be written concentrating on the types of the late Roman buildings and the bath house dumped materials, considering the reuse and origin of early Roman tile and brick from central London. A section will be written examining the types of construction materials (brick, mortar, roofing tile, floor tile) used in the residential structures associated with the post-medieval expansion of this part of East London (Shadwell). The source of the different roof/paving/levelling stone types will be examined and they will be compared with the assemblage of stone from the earlier excavations. Further analysis will seek to determine whether the low density material is tuffstein or a tuffstein mortar. A petrological report (with photomicrographs of thin sections) will be prepared for the different rock types with a table of rock types and map of geological sources Some of the more ornate items such as decorative box flue tiles, tubuli, tegula mammata, some

signature marks, may require photography and illustration at publication. Publication photographs of the altar and palette are required together with the tuffstein or tuffstein mortar.

Post Roman small finds

10.2.16 The excavation at TBF10 produced a significant assemblage of post-medieval small finds including dress accessories, household and personal objects that inform our understanding of the lives of the residents. Some of the items will require further study and illustration. In particular, the enigmatic lathe turned bone objects will require further identification.

Post-medieval animal bone

10.2.17 Further work on the post-medieval bone assemblage should consider the increasing representation of sheep and a corresponding increase in mutton consumption. Size of the domestics and implications for improvements in animal husbandry would be further studied. The specialist assemblages need to be further researched in particular the possible glue manufacture waste, butchers and tanning waste and comparison with similar assemblages sought. Further identification will need to made for the guinea pig, large rabbit and turtle remains. Further study of the elephant tooth would confirm if it was an Indian elephant and the age of the beast at death.

Fish bone

10.2.18 The fish bone assemblage for the post-medieval period is of some importance and requires further work to complete a detailed recording and full analysis of the collection to be made. The assemblage has the potential to provide an insight into the local diet of the inhabitants of Shadwell, as well as to further our understanding of the fisheries and the supply of fish to market, during the 18th and 19th century.

Post-medieval timber

10.2.19 Further work on the post-medieval timbers would target the re-used boat timbers in the tanning pit [561] detailed in Phase 6.1. These timbers demonstrate changes to post-medieval boat building technology and as such require detailed description and illustration.

10.3 **Publication Proposal**

- 10.3.1 The evidence for prehistoric activity at Tobacco Dock (site TOC02 and HGA02) was published briefly (Douglas *et al.* 2011). However, any new publication will need to consider further the evidence for the prehistoric period, as the discovery of a Bronze Age 'burnt mound' feature at TBF10 does alter our perception of the site.
- 10.3.2 The phases of Roman occupation at TBF10 represent a continuation of the settlement at Shadwell that has been published by PCA (Douglas *et al.* 2011) and by MOLAS (Lakin *et al.* 2002). The publication of the Roman period at TBF10 would show how the remains here fitted

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into the wider settlement pattern. Consideration could then be given to the setting of Shadwell in to the context of a late Roman satellite and riverine settlement and its relationship with *Londinium*, other regional settlements particularly further east and along the estuary and the wider empire.

- 10.3.3 It is recommended that the prehistoric and Roman periods at TBF10 be published as an article in a peer reviewed journal such as the *Transactions of the London and Middlesex Archaeological* Society. The lead rings and spear should additionally be published as a note in *Medieval* Archaeology.
- 10.3.4 The post-Roman phases for the earlier PCA sites of CYD98, TOC02 and HGA02 remain unpublished and together with the findings made at TBF10 these sites provide a wealth of information and knowledge on the development of Shadwell in the post-medieval period. It is recommended that the post-medieval phases of these sites be fully analysed and integrated into a single monograph report.

11 CONTENTS OF THE ARCHIVE

11.1 The contents comprises:

11.1.1 The paper archive:

	Scale	Sheets
Context sheets		2076
Plans	1:20	1442
Sections	1:10	46
Drawings	1:10	8

11.1.2 The photographic archive:

Colour slide	13 Films
Black & White	20 Films
Digital Format	799 shots

11.1.3 The finds archive:

Material	Вох				
Antler	1				
Bone	147				
Cbm	85				
Ceramic	3				
Clay	1				
Coal	1				
Compos	1				
Copper	8				
Daub	5				
Flint	1				
Glass	30				
Hammerscale	1				
Horn	1				
Iron	9				
Ivory	4				
Jet	1				

Material	Вох
Lead	5
Leather	1
Lithic	8
Marble	1
Mortar	3
Pot	172
Shale	2
Shell	8
Silver	1
Slag	8
Slate	5
Stone	35
Stone?	1
Clay Tobacco Pipe	18
Wood	1

12 ACKNOWLEDGEMENTS

- 12.1 Pre-Construct Archaeology Limited would like to thank Messila House Limited for their generous funding of the excavation. A particular thank you to Duncan Hawkins of CgMs Consulting for his support and encouragement. Thanks, are also extended to Kim Stabler and Adam Single of English Heritage (Greater London Archaeological Advisory Service) for their advice.
- 12.2 The author would like to thank Peter Moore for his project management, Jon Butler for the post-excavation management and the editing of this report, and Mark Roughley for the illustrations. Thanks, are extended to Richard Archer for the surveying of the site and to Strephon Duckering for his onsite photography. Thank you to all site staff for their hard work at times in harsh conditions and a special thank you to Ireneo Grosso and Matthew Edmonds for their assistance and support.
- The following specialists are thanked for their reports Barry Bishop (struck and burnt flint), Mike Seager Thomas (prehistoric pottery), Katie Anderson and Eniko Hudak (Roman pottery), James Gerrard (Romano-British and early Anglo-Saxon small finds and Roman coins), Marta Perez Fermandez (environmental archaeology), James Young Langthorne (human bone), Damian Goodburn (waterlogged woodwork), Kevin Rielly (animal bone), Philip Armitage (fish bone), Märit Gaimster (post-Roman metal and small finds), Kevin Hayward and Amparo Valcarcel (ceramic building material and stone), Chris Jarrett (post-Roman pottery and clay tobacco pipe), and John Shepherd (glass).

13 BIBLIOGRAPHY

Archaeology Ireland, winter 2007, 12.

Barber, B. and Bowsher, D., 2000. *The Eastern cemetery of Roman London: Excavations 1983-1990*. Museum of London Archaeological Service Monograph 4.

Barfield, L. and Hodder, M., 1987. 'Burnt mounds and sauna, and the prehistory of bathing'. *Antiquity* 61 (233), 370-379.

Bishop, B., 1996. An Archaeological Evaluation at Coopers Yard Shadwell, Pre-Construct Archaeology Unpublished Report.

Brossler, A., 2001. 'Reading Business Park: the results of phase 1 and 2', in J. Brück (ed.), Bronze Age Landscapes Tradition and Transformation.

Coombe, P.C., Grew, F.G., Hayward, K.M.J. and Henig, M., 2015. Corpus Signorum Imperii Romani, Great Britain 1.10 Roman Sculpture from London and the south-East, Oxford.

Cowie, R. and Blackmore, L., 2008. *Early and Middle Saxon rural settlement in the London region*. Museum of London Archaeological Service Monograph 41.

Darby, M., 2011. Piety and Piracy: The history of Wapping and St Katherine's. London.

Douglas, A., 1997. An Archaeological Evaluation At 130-162 The Highway (Tobacco Dock Factory Shops, Phase 2 – New Building). Pre-Construct Archaeology Unpublished Report.

Douglas, A., 2004. Phased Summary and Assessment Document of the Excavations at 130-162 The Highway, London Borough of Tower Hamlets. Pre-Construct Archaeology Unpublished Report.

Douglas, A., Gerrard, J. and Sudds, B., 2011. *A Roman Settlement and Bath House at Shadwell: Excavations at Tobacco Dock and Babe Ruth restaurant, The Highway, London.* Pre-Construct Archaeology Monograph 12.

Gerrard, J., 2013. The Ruin of Roman Britain: An Archaeological Perspective. Cambridge University Press.

Gibbard, P.L., 1994. Pleistocene history of the lower Thames Valley. Cambridge University Press.

Guillery, P., 2009. The Small House in Eighteenth Century London. Yale University Press.

Hawkins, D., 2010. Written Scheme of Investigation for an Archaeological Excavation, Post Excavation and Publication Exercise: Land at The Highway, Wapping Lane, Pennington Street and Chigwell Hill, London E1 (Parcel 4). CgMs Consulting Unpublished Report.

Johnson, T., 1975. 'A Roman signal-tower at Shadwell, E1 an interim note.' *Transactions of the London and Middlesex Archaeological Society* 26, 278-280.

Jonson, T., 1979. The Roman Forts of the Saxon shore. London.

Lakin, D. with Seeley, F., Bird, J., Rielly, K., and Ainsley, C., 2002. *The Roman tower at Shadwell, London: a reappraisal.* Museum of London Archaeological Service Archaeological Studies Series 8.

Millett, M., 1990. The Romanization of Britain: An essay in Archaeological Interpretation. Cambridge.

Moore, P., 2010 revised 2014. Archaeological Excavation at Tobacco Dock (The Plazza), The Highway, London Borough of Tower Hamlets; Site Specific Health and Safety Method Statement and Risk Assessment. Pre-Construct Archaeology Unpublished Report.

Ove Arup & Partners, 1994. A Desktop Assessment, Tobacco Dock Factory Shops Phase II – New Building. Ove Arup Unpublished Report.

Weinreb, B. and Hibbert, C., 2008 (3rd edition). The London Encyclopaedia. London.

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APPENDIX 1: CONTEXT INDEX

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1	1	6.2	1		Masonry	Blocking of drain	7.21	
2	1	6.2	2		Masonry	Dividing wall	7.22	6.41
3	1	6.2	3		Masonry	Cess pit	7.37	6.67
4	1	6.2			Fill	Fill of cess pit [5]	6.42	
5	1	6.2	5		Masonry	Cess pit	6.93	5.92
6	1	6.2			Fill	Fill of well [30]	7.52	7.25
7	1	6.2	8		Masonry	N/S drain	7.4	7.14
8	1	6.2	8		Masonry	E/W drain	7.51	7.14
9	1	6.1			Fill	Fill of well [41]	7.09	
10	1	6.1			Fill	Fill of well [41]	7.01	
11	1	7.1	11		Fill	Fill of structure [12]	7.51	
12	1	7.1	12		Masonry	Brick square structure with concrete base	7.55	7.42
13	1	6.2			Fill	Fill of cess pit [5]	6.02	
14	1	6.1			Fill	Fill of cess pit [54]	7.43	
15	1	6.2			Fill	Demolition rubble	7.46	
16	1	5.2	16		Masonry	Brick floor	7.15	7.14
17	1	7.2	19		Masonry	Concrete foundation	7.18	
18	1	7.2	18		Masonry	Concrete foundation	7.13	
19	1	7.2	19		Masonry	Wall	7.78	7.18
20	1	7.2	19		Masonry	Wall	7.41	7.25
21	1	7.1	40		Masonry	Wall	7.49	
22	1	7.1	40		Masonry	Wall	7.41	
23	1	7.1	40		Masonry	Wall	7.42	
24	1	7.1	40		Masonry	Wall	7.63	
25	1	7.1	40		Masonry	Wall	6.93	
26	1	7.1	40		Masonry	Wall	7.43	
27	1	6.2	27		Masonry	Stone - base?	6.45	6.42
28	1	6.1			Fill	Fill of cut [72]	6.78	
29	1	6.1			Fill	Fill of [59]	6.9	
30	1	6.2	30		Masonry	Well	7.52	6.74
31	1	5.2	31		Masonry	Sunken brick structure	6.95	6.18
32	1	5.2	32		Cut	Construction cut for [31]	6.93	6.07
33	1					Void		
34	1	5.2			Fill	Fill of [31]	6.83	6.54
35	1	5.2			Fill	Fill of [31]	6.73	6.51
36	1	7.1	40		Masonry	Wall	7.43	
37	1	7.1	40		Masonry	Wall	7.52	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
38	1	7.2	40		Masonry	Blocking	7.43	
39	1	5.2			Fill	Fill of [31]	6.82	6.55
40	1	7.1	40		Masonry	Wall	7.57	
41	1	6.1	41		Masonry	Well	7.29	
42	1	6.2	42		Masonry	East-west masonry	7.23	7.18
43	1	6.2			Fill	Fill of cut [44]	6.64	
44	1	6.2	44		Cut	Ovoid shallow cut	6.64	6.56
45	1	5.2			Fill	Lower fill of [31]	6.5	6.47
46	1	6.1			Fill	Fill of cess pit [54]	7.13	6.8
47	1	6.2	47		Cut	Construction cut for [42]	7.2	7.07
48	1	5.2	48		Masonry	Floor?	7.1	7.07
49	1	5.2	49		Masonry	Wall	7.09	
50	1	5.2	50		Masonry	Wall	7.65	
51	1	5.2	51		Masonry	Wall	7.47	
52	1	6.2	52		Masonry	Wall rebuild	7.56	
53	1	6.1			Fill	Backfill of construction cut [64]	7.31	
54	1	6.1	54		Masonry	Cess pit	7.48	
55	1	6.1	55		Cut	Construction cut for [54]	7.48	6.82
56	1	6.2	56		Cut	Construction cut for drain [8] & [7]	7.35	6.96
57	1	6.2			Fill	Backfill of construction cut [56]	7.25	
58	1	5.2			Fill	Fill of cess pit [31]	6.85	
59	1	6.1	31		Cut	Truncating [31]		6.88
60	1	5.2	31		Timber	Horizontal plank		
61	1	6.2			Fill	Mortar bedding for [42]	7.2	7.07
62	1	6.2			Fill	Backfill to construction cut [63]	7	
63	1	6.2	63		Cut	Construction cut for cess pit [5]	7	6.07
64	1	6.1	64		Cut	Construction cut for well [41]	7.2	5.9
65	1	7.1	40		Masonry	Structure - internal	7.4	6.91
66	1	6.1	- 40		Fill	Fill of well [41]	6.53	0.51
67	1	7.1	40		Masonry	Concrete floor	7.02	6.99
68	1	7.1	40		Masonry	Concrete floor	7.02	0.33
69	1	7.1	40		Masonry	Concrete floor	7.02	
			70			Backfill to construction cut		
71	1	6.2			Fill	[86]	7.51	
72	1	6.1	_		Cut	Truncates [31]	6.8	6.6
73	1	7.2	73		Masonry	Stanchion base	7.24	7.18
74	1	7.2	73		Cut	Construction cut for [73]	7.43	
75	1	6.2	75		Masonry	N/S culvert	7.49	6.87

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
76	1	5.2	1 1011	00011011	Layer	Floor makeup	7.09	02)
77	1	5.2	77		Cut	Construction cut for [51]	7.74	7.34
78	1	6.2	78		Masonry	Single course of brick	6.95	6.86
79	1	6.2	79		Masonry	Rebuild of wall [114]	7.65	7.21
						Construction cut for cess pit		
80	1	6.2	80		Cut	[3] Backfill to construction cut	7.33	6.39
81	1	6.2			Fill	[82]	6.91	
82	1	6.2	82		Cut	Construction cut [78] Backfill to construction cut	6.92	6.84
83	1	5.2			Fill	[77]	7.49	
84	1	6.2			Fill	Backfill to construction cut [80]	7.33	
85	1	5.2			Fill	Fill of cut [77]	7.5	
86	1	6.2	86		Cut	Construction cut for well [30]	7.53	6.64
87	1	5.2			Fill	Fill of construction cut [32]	6.93	
88	1	6.1			Fill	Fill of cut [89]	7.18	
89	1	6.1	89		Cut	Posthole	7.18	6.98
90	1	6.1			Fill	Fill of construction cut [64]	6.92	
91	1	6.1			Fill	Fill of [94]	6.97	
92	1	6.1	92		Fill	Mortar fill of cut [94]	6.98	
93	1	5.2	93		Layer	Makeup for floor [48]	7.03	7.01
94	1	6.1	94		Cut	Posthole	6.96	6.83
95	1	5.2			Fill	Fill of [96]	6.97	
96	1	5.2	96		Masonry	Drain?	6.97	6.89
97	1	6.2			Fill	Fill of culvert [75]	7.06	
98	1	6.2			Fill	Fill of culvert [75]		
99	1	6.2	99		Cut	Construction cut for [75]	7.59	6.5
100	1	5.1			Fill	Fill of cut [101]	6.96	
101	1	5.1	101		Cut	Posthole	6.96	6.79
102	1	5.1			Fill	Fill of cut [103]	6.98	
103	1	5.1	103		Cut	Stakehole	6.98	6.88
104	1	5.1			Fill	Fill of cut [105]	7.03	
105	1	5.1	103		Cut	Posthole	7.03	6.96
106	1	7.2	106		Masonry	Stanchion base?	7.64	6.99
107	1	7.2	106		Cut	Construction cut for [106]	7.64	7.33
108	1	6.1			Fill	Fill of drain [109]	6.9	
109	1	6.1	109		Masonry	Drain?	7.01	6.95
110	1	6.1	110		Cut	Construction cut for [109]	6.98	6.9
111	1	5.2			Fill	Fill of cut [112]	7.43	
112	1	5.2	112		Cut	Rubbish pit	7.43	6.63
113	1	5.2	113		Cut	Construction cut for [96]	6.96	6.87

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
114	1	6.1	114		Masonry	E/W wall	7.6	6.98
115	1	6.1	115		Masonry	E/W wall	7.62	7.6
116	1	6.1	116		Masonry	E/W wall	7.65	7.47
117	1	6.1	117		Masonry	E/W wall	7.62	7.25
118	1	5.1			Fill	Fill of cut [120]	6.98	
119	1	5.1			Fill	Fill of cut [120]	6.8	
120	1	5.1	120		Cut	Pit	6.98	6.71
121	1	5.2	121		Layer	Floor makeup?	7.01	
122	1	5.2	122		Masonry	Stone floor	7.43	7.38
123	1	6.1			Fill	Fill of cut [124]	7.36	
124	1	6.1	124		Cut	Rubbish pit	7.36	6.9
125	1	6.1			Fill	Backfill to construction cut [126]	7.03	6.96
126	1	6.1	126		Cut	Construction cut for [127]	7.03	6.91
127	1	6.1	127		Masonry	N/S wall	7.66	7.6
128	1	6.1			Fill	Fill of cut [129]	6.98	6.96
129	1	6.1	129		Cut	Pit?	6.88	6.73
130	1	5.2			Fill	Fill of cut [131]	7.02	6.91
131	1	5.2	131		Cut	Pit	6.98	6.47
132	1	5.2			Fill	Fill of cut [133]	7.06	7.02
133	1	5.2	133		Cut	Pit	7.06	6.83
134	1	5.2			Fill	Fill of barrel well	7.01	
135	1	5.2			Fill	Backfill to the construction cut [136]	7.09	6.82
	1		126		Cut	Construction cut for barrel well		
136 138	1	5.2 7.1	136 138		Masonry	Stone threshold	7.09 7.53	5.59 7.42
139	1	7.1	139		Masonry	Rebuild	7.53	
140	1	6.2	140		Masonry	Stone cobble floor	7.34	7.46 7.25
140	1	6.2	140		Masonry	E/W wall	7.34	7.25
142	1	6.2	142		Masonry	E/W wall	7.46	7.2
			174			Backfill to construction cut		1.2
143	1	6.1			Fill	[144] Construction cut for wall	7.6	
144	1	6.1	144		Cut	[114]	7.6	6.87
145	1	5.2			Fill	Backfill to cut [149] Backfill to construction cut	7.58	7.47
146	1	5.2			Fill	[147]	7.37	7.2
147	1	5.2	147		Cut	Construction cut for wall [50]	7.62	6.93
148	1	5.2			Fill	Primary fill of barrel well	6.22	
149	1	5.2	149		Cut	Linear cut alongside wall	7.57	7.2
150	1	6.2	150		Cut	Construction cut for [79]	7.6	7.19
151	1	5.1			Fill	Fill of cut [152]	7.23	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
152	1	5.1	152		Cut	Pit	7.23	6.72
153	1	3.6			Fill	Top fill of cut [166]	7.22	
154	1	6.1			Fill	Fill of cut [155]	7.36	7.3
155	1	6.1	155		Cut	Planting hole?	7.36	7.21
156	1	5.2			Fill	top fill of cut [157]	7.49	7.24
157	1	5.2	157		Cut	Rubbish pit	7.42	6.56
158	1	7.1			Fill	Fill of cut [159	7.52	
159	1	7.1	159		Cut	Pit	7.55	7.21
160	1	6.1			Fill	Fill of cut [161]	7.23	
161	1	6.1	161		Cut	Planting hole?	7.23	7.19
162	1	7.1			Fill	Fill of cut [163]	7.34	7.27
163	1	7.1	163		Cut	Construction cut for [139]	7.34	7.25
164	1	7.1	164		Masonry	Rebuild	7.46	7.21
165	1	3.6			Fill	Fill of cut [166]	7.23	6.72
166	1	3.6	166		Cut	Pit	7.14	6.55
167	1	7.2	40		Cut	Construction cut	7.51	
168	1	7.1	168		Cut	Construction cut	7.51	6.66
169	1	5.2			Fill	Fill of cut [185]	7.51	
170	1	5.2			Fill	Fill of cut [157]	6.98	6.74
171	1	5.2			Fill	Fill of cut [157]	7.09	6.62
172	1	5.2	172		Layer	Floor makeup	7.08	7.04
173	1	6.1			Fill	Fill of cess pit [174]	6.7	6.19
174	1	6.1	174		Masonry	Cess pit	6.65	6.2
175	1	6.1	175		Cut	Construction cut for [174]	6.76	6.16
176	1	6.1			Fill	Backfill to construction cut [175]	6.76	6.47
177	1	5.2			Fill	Fill of cut [230]	7.41	
178	1	5.1			Fill	Fill of cut [179]	6.66	
179	1	5.1	179		Cut	Gully	6.5	6.48
180	1	6.1	189		Cut	Construction cut	7.07	6.93
181	1	6.1			Fill	Fill of cut [182]	7.37	
182	1	6.1	182		Cut	Rubbish pit	7.37	6.94
183	1	7.1	183		Cut	Construction cut for [164]	7.43	7.1
184	1	5.2	184		Layer	Sandy silt - post-med	7.56	7.37
185	1	5.2	185		Cut	Pit	7.49	7.36
186	1	5.2	186		Layer	Garden soil?	7.56	
187	1	5.2			Fill	Backfill to construction cut [136]	6.35	6.29
188	1	6.1			Fill	Fill of cut [189]	7.41	7.37
189	1	6.1	189		Cut	Planting hole?	7.23	7.19

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
190	1	6.1	i idii	Occilon	Fill	Fill of cut [191]	7.03	00)
191	1	6.1	191		Cut	Posthole	7.05	6.78
192	1	6.1	192		Fill	Fill of cut [180]	7.48	55
193	1	5.2	193		Layer	Garden soil?	7.58	7.25
194	1	3.6	194		Layer	Sandy clayey silt	7.13	6.72
195	1	5.2			Fill	Fill of cut [206]	7.46	
196	1	3.3			Fill	Fill of cut [197]	6.99	
197	1	3.3	197		Cut	Stakehole	6.99	6.88
198	1	5.1			Fill	Fill of cut [199]	6.99	
199	1	5.1	201		Cut	Stakehole	6.99	6.95
200	1	5.1			Fill	Fill of cut [201]	6.99	
201	1	5.1	201		Cut	Stakehole	6.99	6.87
202	1	5.1			Fill	Fill of cut [203]	6.99	
203	1	5.1	201		Cut	Stakehole	6.99	6.91
204	1	5.2	204		Cut	Rubbish pit	7.39	6.4
205	1	5.2			Fill	Fill of cut [204]	7.39	7.2
206	1	5.2	206		Cut	Construction cut for barrel well	7.45	6.29
207	1	6.1			Fill	Fill of cut [208]	7.24	7.17
208	1	6.1	208		Cut	Hedge row?	7.36	7.17
209	1	6.2			Fill	Backfill to construction cut [210]		
210	1	6.2	210		Cut	Construction cut for wall [142]	7.57	7.12
211	1	5.2			Fill	Fill of cut [206]	7.06	6.97
212	1	5.1			Fill	Fill of cut [213]	6.99	
213	1	5.1	201		Cut	Posthole	6.99	6.93
215	1	6.2	215		Cut	Construction cut for wall [141]	7.3	7.15
216	1	5.1			Fill	Fill of cut [316]	7.34	7.08
217	1	5.1	217		Fill	Fill of cut [218]	7.18	7.11
218	1	5.1	218		Cut	Pit	7.18	6.73
219	1	5.2			Fill	Fill of cut [223]	7.49	7.2
220	1	5.2	220		Layer	Dumped deposit	7.6	7.53
221	1	5.1			Fill	Fill of cut [222]	6.99	
222	1	5.1	197		Cut	Stakehole	6.99	6.94
223	1	5.2	223		Cut	Rubbish pit	7.01	6.36
225	1	5.2			Fill	Fill of cut [204]	7.16	6.42
226	1	3.3			Fill	Fill of cut [227]	6.89	
227	1	3.3	227		Cut	Stakehole	6.89	6.8
228	1	3.3			Fill	Fill of cut [229]	6.89	
229	1	3.3	227		Cut	Stakehole	6.89	6.76

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
230	1	5.2	230		Cut	Pit	7.47	7.22
231	1	5.1			Fill	Fill of cut [232]	6.86	
232	1	5.1	232		Cut	Pit	6.86	6.55
233	1	5.1			Fill	Fill of cut [234]	6.99	
234	1	5.1	234		Cut	Posthole	6.99	6.92
235	1	6.2	235		Masonry	Sunken feature	6.9	6.83
236	1	5.1			Fill	Fill of cut [237]	6.89	
237	1	5.1	227		Cut	Stakehole	6.89	6.86
238	1	5.1			Fill	Fill of cut [239]	6.96	
239	1	5.1	239		Cut	Posthole	6.96	6.78
240	1	5.2	240		Cut	Pit	7.43	7.22
241	1	5.2			Fill	Fill of cut [240]	7.43	
242	1	5.2			Fill	Fill of cut [243]	7.43	
243	1	5.2	243		Cut	Pit	7.43	7.16
244	1	5.2			Fill	Fill of cut [247]	7.43	
245	1	5.1			Fill	Fill of cut [251]	7.47	
246	1	6.2			Fill	Fill of feature [235]	6.9	
247	1	5.2	247		Cut	Pit	7.43	6.85
248	1	5.1			Fill	Fill of cut [263]	6.93	
249	1	6.2	249		Masonry	Stone slab - base	6.71	
250	1	6.2	250		Cut	Construction cut for [235]	6.81	6.62
251	1	5.1	251		Cut	Rubbish pit	7.51	7.32
252	1	5.2			Fill	Fill of barrel well	7.4	6.51
253	1	5.2	253		Cut	Construction cut for barrel well	7.4	6.27
254	1	6.1	254		Cut	Possible soakaway	6.36	5.88
255	1	6.1	20.		Fill	Fill of cut [254]	6.36	0.00
256	1	5.1	256		Fill	Fill of cut [307]	7.5	7.26
257	1	5.1			Fill	Fill of cut [258]	7	
258	1	5.1	258		Cut	Pit	7	6.81
259	1	5.2			Fill	Fill of cut [260]	7.43	
260	1	5.2	260		Cut	Rubbish pit	7.43	6.91
262	1	5.2	262		Fill	Fill of cut [206]	6.43	-
263	1	5.1	263		Cut	Pit	6.93	6.73
264	1	5.1			Fill	Fill of cut [218]	6.85	-
265	1	6.1		1	Masonry	Brick floor	7.43	7.33
266	1	5.1	266		Fill	Fill of cut [267]	7.36	
267	1	5.1	267		Cut	Rubbish pit	7.36	6.91
268	1	6.1	-	1	Layer	Floor makeup	7.41	7.4

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
269	1	5.2	269		Layer	Garden/horticultural soil	7.56	7.38
270	1	5.2			Fill	Fill of cut [223]	7.24	6.86
271	1	5.1			Fill	Fill of cut [276]	6.87	6.78
272	1	5.2	272		Cut	Construction cut for barrel well	7.4	5.48
273	1	5.1			Fill	Fill of cut [274]	6.97	
274	1	5.1	274		Cut	Pit	6.97	6.15
275	1	5.1			Fill	Fill of cut [276]	6.78	
276	1	5.1	276		Cut	Pit	7.1	
277	1	5.1			Fill	Fill of cut [267]	6.98	
278	1	5.1			Fill	Fill of cut [307]	7.32	7.29
279	1	5.2			Fill	Rubbish pit	7.41	7.35
280	1	5.2	280		Cut	Rubbish pit	7.41	7.35
281	1	5.1			Fill	Fill of cut [282]	7.56	7.36
282	1	5.1	282		Cut	Heavily truncated pit	7.37	6.74
283	1	5.1			Fill	Fill of cut [284]	7.45	
284	1	5.1	284		Cut	Stakehole	7.45	7.38
285	1	6.1			Fill	Fill of cut [288]	7.01	6.47
286	1	5.1			Fill	Fill of cut [287]	7.37	
287	1	5.1	287		Cut	Pit	7.33	7.2
288	1	6.1	288		Cut	Pit	7.01	6.47
289	1	5.2			Fill	Fill of cut [290]	7.55	7.37
290	1	5.2	290		Cut	Pit	7.55	7.08
291	1	5.1			Fill	Fill of cut [292]	7.17	7.1
292	1	5.1	292		Cut	Pit	7.17	6.89
293	1	5.1			Fill	Fill of cut [294]	7.1	6.97
294	1	5.1	294		Cut	Pit	7.1	6.97
295	1	5.1			Fill	Fill of cut [296]	7.39	
296	1	5.1	296		Cut	Pit	7.39	6.72
297	1	5.2			Fill	Upper fill of well	7.36	
298	1	5.2			Fill	Fil of cut [299]	7.54	7.37
299	1	5.2	299		Cut	Rubbish pit	7.54	7.16
300	1	5.2			Fill	Fill of cut [301]	7.39	
301	1	5.2	301		Cut	Pit	7.39	7.02
302	1	5.1			Fill	Fill of cut [303]	7.42	
303	1	5.1	303		Cut	Pit	7.39	7.25
304	1	5.1			Fill	Fil of cut [305]	7.43	
305	1	5.1	305		Cut	Pit	7.43	7.33
307	1	5.1	307		Cut	Large pit	7.31	6.73

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
308	1	5.2	308		Fill	Primary fill of well [310]	6.42	
309	1	5.2			Fill	Upper fill of cut [325]	6.92	6.6
310	1	5.2	310		Masonry	Well	6.94	6.71
311	1	5.2			Fill	Backfill to construction cut [312]	7.36	
312	1	5.2	312		Cut	Construction cut for [330]	7.36	6.05
313	1	5.2	313		Fill	Fill of cut [314]	7.4	
314	1	5.2	314		Cut	Pit	7.4	7.27
315	1	5.1			Fill	Fill of cut [316]	7.33	7.05
316	1	5.1	316		Cut	Rubbish pit	7.25	6.87
317	1	5.1			Fill	Fill of cut [318]	6.87	
318	1	5.1	318		Cut	Pit	6.87	6.59
319	1	5.2			Fill	Upper fill of cut [321]	7.37	
320	1	5.2			Fill	Fill of cut [321]	7.43	7.24
321	1	5.2	321		Cut	Pit	7.47	7.12
322	1	5.1			Fill	Fill of cut [323]	7.49	
323	1	5.1	323		Cut	Pit	7.49	6.98
324	1	5.2			Fill	Fill of cut [325]	7.01	6.45
325	1	5.2	325		Cut	Large pit	7.01	5.91
326	1	5.1			Fill	Fill of cut [327]	7.39	
327	1	5.1	327		Cut	Pit	7.39	7.3
328	1	5.1			Fill	Fill of cut [329]	7.41	
329	1	5.1	327		Cut	Pit	7.41	7.3
330	1	5.2	330		Timber	Barrel well	6.06	5.37
331	1	5.1			Fill	Fill of cut [332]	7.08	
332	1	5.1	292		Cut	Irregular feature	7.15	7.05
333	1	5.2			Fill	Fill of cut [325]	6.45	5.91
334	1	3.4			Fill	Fill of cut [335]	7.28	7.15
335	1	3.4	335		Cut	Posthole	7.28	7.09
336	1	6.1			Fill	Fill of cut [337]	7.34	
337	1	6.1	337		Cut	Posthole	7.34	7.2
338	1	5.2			Fill	Fill of cut [206]	6.29	5.8
339	1	5.2	339		Fill	Degraded wood	6.29	
340	1	5.2			Fill	Fill of cut [341]	6.96	
341	1	5.2	341		Cut	Rubbish pit	6.96	6.13
342	1	5.2			Fill	Fill of cut [272]	7.4	6.69
343	1	5.1			Fill	Fill of cut [365]	7.52	7.44
344	1	5.2			Fill	Fill of cut [345]	7.19	7.07
345	1	5.2	345		Cut	Pit	7.19	7.01

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
346	1	5.2			Fill	Fill of barrel well	6.51	6.27
348	1	5.2			Fill	Fill of barrel well	6.45	
349	1	5.2			Fill	Degraded wood	6.45	
350	1	5.2			Fill	Backfill to construction cut [272]	6.48	6.26
351	1	3.5			Fill	Fill of cut [352]	6.96	6.89
352	1	3.5	352		Cut	Pit?	7.09	6.89
353	1	5.1			Fill	Fill of cut [354]	7.22	
354	1	5.1	354		Cut	Pit	7.14	6.89
355	1	5.2			Fill	Fill of cut [356]	7.56	
356	1	5.2	356		Cut	Pit	7.56	7.14
359	1	3.6			Fill	Fill of cut [360]	7.38	7.21
360	1	3.6	360		Cut	Pit	7.39	6.75
361	1	5.1			Fill	Fill of cut [362]	6.22	
362	1	5.1	362		Cut	Pit	6.22	5.74
363	1	5.2			Fill	Fill of cut [223]	7.56	6.9
364	1	4	364		Layer	Sandy silt	6.99	6.86
365	1	5.1	365		Cut	Heavily truncated feature	7.41	7.32
366	1	5.1			Fill	Fill of cut [367] - large amount of animal bone	7.42	
367	1	5.1	367		Cut	Rubbish pit	7.42	6.82
368	1	3.5			Fill	Fill of cut [352]	6.69	6.65
369	1	5.2	369		Layer	Clayey silt	7.55	
372	1	4	372		Layer	Horticultural soil?	7.44	
373	1	5.2			Fill	Fill of cut [223]	7.31	6.9
374	1	3.6			Fill	Fill of cut [375]	7.26	
375	1	3.6	375		Cut	Pit	7.26	7.09
376	1	6.2	376		Cut	Construction cut for well [378]	6.91	5.46
377	1	6.2			Fill	Fill of well[378]	6.63	
378	1	6.2	378		Masonry	Well	6.59	5.56
379	1	3.6	379		Cut	Small pit	7.35	7.01
380	1	3.6			Fill	Fill of cut [379]	7.37	7.33
381	1	4	381		Layer	Agricultural soil?	7.5	7.3
382	1	4	382		Layer	Occupation layer	7.46	7.22
383	1	1			Layer	Natural sand		
384	1	1			Layer	Natural gravel & sand		
385	1	3.6			Fill	Fill of cut [386]	7.31	
386	1	3.6	386		Cut	Rubbish pit?	7.31	6.77
387	1	5.2			Fill	Fill of cut [223]	6.99	6.77
388	1	5.2			Fill	Fill of cut [223]	6.91	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
389	1	3.5	389		Cut	Possible quarry pit	7.49	6.82
390	1	3.5			Fill	Fill of cut [389]		7.31
391	1	5.2			Fill	Fill of cut [223]	6.91	6.72
392	1	3.5			Fill	Fill of cut [389]	7.31	7.11
393	1	3.5			Fill	Fill of cut [389]	7.2	6.9
394	1	5.1	394		Layer	Sandy clay	7.35	
395	1	5.1	395		Layer	Dumped deposit	7.26	
396	1	5.2			Fill	Fill of cut [223]	6.82	
397	1	5.2			Fill	Fill of cut [223]	7.15	6.36
398	1	5.2			Fill	Fill of cut [223]	7.01	6.36
399	1	3.5			Fill	Fill of cut [389]	6.97	6.86
400	1	3.5			Fill	Fill of cut [389]	6.98	6.87
401	1	5.2			Fill	Fill of cut [223]	6.73	
402	1	5.1	402		Layer	Sandy silt	7.49	7.39
403	1	5.1	403		Cut	Pit	7.06	6.5
404	1	5.1			Fill	Fill of cut [403]	7.06	6.76
405	1	5.1			Fill	Fill of cut [406]	7.19	
406	1	5.1	406		Cut	Shallow pit	7.15	7.04
407	1	3.2			Fill	Fill of cut [408]	7.34	
408	1	3.2	408		Cut	Linear cut	7.34	6.98
409	1	3.2	409		Layer	Possible surface	7.42	7.4
410	1	3.4			Fill	Fill of cut [419]	6.83	6.73
411	1	3.5			Fill	Fill of cut [413]	7.22	6.97
412	1	3.5			Fill	Fill of cut [413]	7.01	6.76
413	1	3.5	413		Cut	Rubbish pit	7.15	6.17
414	1	3.5			Fill	Fill of cut [413]	6.99	6.9
417	1	5.2			Fill	Fill of cut [418]	7.4	
418	1	5.2	418		Cut	Rubbish pit	7.4	7.31
419	1	3.4	419		Cut	Pit	6.99	6.49
420	1	5.2			Fill	Fill of cut [421]	7.45	
421	1	5.2	421		Cut	Pit	7.45	7.4
422	1	5.1			Fill	Fill of cut [442]	7.44	7.38
423	1	5.1			Fill	Fill of cut [441]	7.3	7.25
424	1	5.1			Fill	Fill of cut [441]	7.3	7.29
425	1	5.1	425		Cut	Linear cut	6.9	6.61
426	1	5.1			Fill	Fill of cut [425]	6.9	6.71
427	1	5.1			Fill	Fill of cut [442]	7.41	7.33
428	1	3.5			Fill	Fill of cut [429]	7.35	
429	1	3.5	429		Cut	Pit	7.35	7.05

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
430	1	5.2			Fill	Fill of cut [431]	7.22	
431	1	5.2	431		Cut	Shallow pit	7.22	7.2
432	1	5.1			Fill	Fill of cut [433]	7.22	
433	1	5.1	433		Cut	Pit	7.22	6.63
434	1	5.1			Fill	Fill of cut [441]	7.44	7.36
435	1	5.1			Fill	Fill of cut [441]	6.6	6.58
436	1	5.2			Fill	fill of cut [437]	7.3	7.16
437	1	5.2	437		Cut	Pit	7.28	6.86
438	1	3.6	438		Layer	Occupation layer	7.17	7.01
439	1	5.1			Fill	Fill of cut [441]	6.96	6.86
440	1	5.1			Fill	Fill of cut [441]	7.14	6.8
441	1	5.1	441		Cut	Large pit	7.32	6.56
442	1	5.1	442		Cut	Large quarry pit?	7.44	6.44
443	1	3.6			Fill	Fill of cut [445]	7.36	7.21
444	1	3.6			Fill	Fill of cut [445]	7.21	6.35
445	1	3.6	445		Cut	Pit	7.36	6.35
446	1	3.4	446		Cut	Small pit	7.33	7.07
447	1	3.4			Fill	Fill of cut [447]	7.43	7.36
448	1	3.4	448		Cut	Small pit	7.19	7.02
449	1	3.4			Fill	Fill of cut [448]	7.28	7.23
450	1	3.6	450		Layer	Sandy clayey silt	7.31	6.85
451	1	3.6	451		Layer	Dumped deposit - demo	7.14	7.07
452	1	3.5			Fill	Fill of cut [453]	7.2	
453	1	3.5	453		Cut	Small pit	7.2	7.09
454	1	5.1			Fill	Fill of cut [441]	7.07	6.72
455	1	3.5	455		Cut	Post pit?	7.09	5.81
456	1	3.5			Fill	Fill of cut [455]		
457	1	3.4	457		Cut	Pit?	7.47	7.23
458	1	3.4			Fill	Fill of cut [457]	7.45	
459	1	5.1			Fill	Fill of cut [442]	7.34	7.17
460	1	5.2	460		Cut	Small pit	6.95	6.59
461	1	5.2			Fill	Fill of cut [461]	6.95	6.88
462	1	5.1			Fill	Fill of cut [441]	7.08	6.88
463	1	5.1			Fill	Fill of cut [464]	7.41	7.34
464	1	5.1	464		Cut	Quarry pit?	7.34	6.99
465	1	3.5			Fill	Fill of cut [466]	6.79	6.44
466	1	3.5	466		Cut	Large pit	6.52	6.24
467	1	2	467		Layer	Dark brown sandy silt	6.91	6.83
469	1	5.1			Fill	Fill of cut [470]	7.39	6.89

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
470	1	5.1	470		Cut	Large rubbish pit - animal bone	7.36	6.45
471	1	3.5			Fill	Fill of cut [465]	6.48	
472	1	3.5			Fill	Fill of cut [473]	6.78	6.72
473	1	3.5	473		Cut	Pit	6.98	6.66
474	1	3.5	474		Layer	Silty sand	7.17	6.97
475	1	5.2			Cut	Small pit	7.37	7.07
476	1	5.2			Fill	Fill of cut [475]	7.37	
477	1	5.1	477		Cut	Linear N/S	7.4	7.2
478	1	5.1			Fill	Fill of cut [477]	7.4	7.3
479	1	5.2	479		Cut	Ditch/gully	7.5	7.28
480	1	5.2			Fill	Fill of cut [479]	7.5	7.3
481	1	3.1			Fill	Fill of [482]	6.71	6.69
482	1	3.1	482		Cut	Quarry pit?	6.59	6.32
483	1	3.6	-		Fill	Fill of cut [484]	7.37	7.34
484	1	3.6	484		Cut	Irregular	7.42	7.04
485	1	3.1			Fill	Fill of cut [486]	6.64	
486	1	3.1	486		Cut	Small pit	6.64	6.47
487	1	3.4			Fill	Fill of cut [488]	7.04	6.94
488	1	3.4	488		Cut	Pit	7.04	6.47
489	1	3.5			Fill	Fill of cut [490]	7.35	7.34
490	1	3.5	490		Cut	Pit	7.54	6.88
491	1	1	491		Layer	Disturbed natural	7.15	6.76
492	1	5.1	-		Fill	Fill of cut [493]	7.02	
493	1	5.1	493		Cut	Posthole	7.02	6.86
494	1	3.4	494		Fill	Sandy silty clay	7.11	6.92
495	1	3.4			Fill	Fill of cut [496]	7.35	7.19
496	1	3.4	496		Cut	Pit	7.05	6.68
497	1	3.6	497		Cut	Pit	7.38	6.26
498	1	3.6			Fill	Fill of cut [497]	7.38	
499	1	3.3	499		Fill	Fill of cut [504]	7.35	7.33
500	1	3.3	499		Fill	Fill of cut [523]	7.5	7.41
501	1	3.3	499		Fill	Fill of cut [524]	7.41	6.98
502	1	3.4	499		Fill	Fill of cut [525]	7.32	
504	1	3.3	504		Cut	E/W ditch	7.26	6.79
505	1	3.4			Fill	Fill of cut [506]	7.22	
506	1	3.4	506		Cut	Pit	6.96	6.65
507	1	3.4			Fill	Fill of cut [512]	6.92	6.64
508	1	3.1			Fill	Fill of cut [509]	6.71	6.63

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
509	1	3.1	509		Cut	E/W ditch	6.7	6.54
510	1	3.1			Fill	Fill of cut [509]	6.63	6.6
511	1	3.1			Fill	Fill of cut [509]	7	
512	1	3.4	512		Cut	Pit	6.66	6.54
513	1	3.5			Fill	Fill of cut [515]	7.13	
514	1	3.5	514		Fill	Post packing	7.19	7.13
515	1	3.5	515		Cut	Posthole	7.15	6.58
516	1	3.6	516		Layer	Occupation layer	7.18	6.94
517	1	6.1	517		Cut	Small pit	6.38	6
518	1	6.1			Fill	Fill of cut [517]	6.4	6.08
519	1	5.1			Fill	Fill of cut [520]	7	6.79
520	1	5.1	520		Cut	Pit	7	6.34
521	1	3.2			Fill	Fill of cut [522]	6.58	
522	1	3.2	522		Cut	Pit	6.58	6.14
523	1	3.3	504		Cut	E/W ditch		
524	1	3.3	504		Cut	E/W ditch	7.41	6.92
525	1	3.4	525		Cut	Pit	7.36	7.09
526	1	5.1			Fill	Fill of cut [529]	7.39	7.01
527	1	5.1			Fill	Fill of cut [529]	7.29	7.15
528	1	5.1			Fill	Fill of cut [529]	7.25	7.01
529	1	5.1	529		Cut	Pit	7.41	6.97
532	1	3.5	532		Layer	Possible surface	7.17	6.97
533	1	5.2			Fill	Fill of barrel [540]	6.5	
534	1	3.5			Fill	Fill of cut [535]	7.2	6.95
535	1	3.5	535		Cut	Pit	7.23	6.95
536	1	6.2			Fill	Fill of cut [537]	6.22	
537	1	6.2	537		Cut	Construction cut for large circular sunken brick lined feature	6.22	5.43
538	1	3.5	550		Cut	Posthole	6.97	6.66
539	1	3.5	550		Fill	Fill of cut [538]	6.97	0.00
540	1	5.2	540		Fill	Degraded wood - barrel		6.25
541	1	5.2	J40		Fill	Fill of barrel [540]	6.51	6.25
			_			Construction cut for barrel		
542	1	5.2	542		Cut	[540]	6.45	6.17
543	1					Context sheet missing		
544	1	3.2	544		Fill	Upper fill of cut [584]	7.39	7.17
545	1	3.2			Fill	Fill of cut [584]	7.22	6.94
546	1	3.2			Fill	Fill of cut [584]	7.21	7.06
547	1	3.4		2	Fill	Fill of cut [548]	7.31	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
548	1	3.4	548	2	Cut	Small pit	7.32	7.03
549	1	3.2	549		Layer/Fill	Sandy silt	7.39	
550	1	3.5	550		Fill	Fill of cut [455]		
551	1	3.5			Fill	Fill of cut [552]	6.82	6.68
552	1	3.5	552		Cut	Pit	6.82	6.41
553	1	6.2	553		Masonry	Circular sunken feature	5.8	5.25
554	1	3.2			Fill	Fill of cut [555]	6.46	6.32
555	1	3.2	555		Cut	N/S ditch	6.43	6.26
556	1	3.4	556		Cut	Linear N/S cut	7.13	6.87
557	1	3.4			Fill	Fill of cut [556]	7.06	7.01
558	1	6.2			Fill	Backfill to construction cut	6.22	
559	1	6.1			Fill	Fill of timber structure [560]	6.09	
560	1	6.1	561		Timber	Horizontal strut	5.93	
561	1	6.1	561		Cut	Construction cut for tanning pit	6.17	5.56
562	1	3.2	562	2	Fill	Fill of cut [572]		
563	1	3.2		2	Fill	Fill of cut [572]	7.18	6.87
564	1	3.3			Fill	Backfill of construction cut [565]	6.94	6.51
						Construction cut for Roman		
565	1	3.3	565		Cut	well	7.32	4.95
566	1	3.2			Fill	Fill of cut [884]	6.97	6.82
567	1	3.5	567		Cut	Pit	7.08	6.72
568	1	3.5			Fill	Fill of cut [567]	7.03	7.02
569	1	3.2			Fill	Fill of cut [884]	7.1	6.73
570	1	3.3			Fill	Fill of cut [565]	7.09	6.51
571	1	3.2			Fill	Fill of cut [884]	7.07	6.62
572	1	3.2	572	2	Cut	Quarry pit?	7.07	6.37
573	1	6.1	561		Timber	Horizontal strut	6.06	
574	1	6.1			Fill	Fill of tanning pit	5.87	5.77
575	1	3.5	575		Cut	Pit	7.01	6.6
576	1	3.5			Fill	Fill of cut [575]	6.94	6.93
577	1	3.4		2	Fill	Fill of cut [548]		
578	1	1		2	Layer	Soil horizon - sandy silt		
579	1	3.2		2	Fill	Fill of cut [572]	0 = :	0.15
580	1	3.2		2	Fill	Fill of cut [572]	6.74	6.48
581	1	3.3			Fill	Fill of Roman well	6.15	5.55
582	1	6.1	582		Cut	Linear E/W feature	5.52	5.06
583	1	6.1	EC :		Fill	Fill of cut [582]	5.52	5.39
584	1	3.2	584		Cut	Quarry pit?	7.01	6.49
585	1	3.1			Fill	Fill of cut [586]	6.71	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
586	1	3.1	586		Cut	Quarry pit?	6.71	6.39
587	1	6.1			Fill	Fill of cut [588]	5.42	
588	1	6.1	561		Cut	Posthole	5.42	5.34
589	1	3.3	565		Timber	Well lining	6.03	5.98
590	1	3.1			Fill	Fill of cut [626]	7.06	6.67
591	1	6.1			Fill	Backfill to construction cut [561]	6.17	5.56
592	1	6.1	561		Timber	Upright	5.81	
593	1	6.1	561		Timber	Upright	5.75	
595	1	6.1	561		Timber	Plank on edge	5.78	
596	1	6.1	561		Timber	Upright	6.04	
597	1	6.1	561		Timber	Plank on edge	5.96	
598	1	6.1	561		Timber	Upright	6.09	
599	1	6.1	561		Timber	Plank on edge	6.03	
600	1	6.1	561		Timber	Upright	5.81	
601	1	3.2			Fill	Fill of cut [624]	6.87	6.85
602	1	3.4			Fill	Fill of cut [603]	6.97	
603	1	3.4	603		Cut	Posthole	6.97	6.44
604	1	3.1			Fill	Fill of cut [626]	7.06	6.9
605	1	6.1			Timber	Plank on edge		
606	1	6.1			Timber	Upright		
607	1	6.1			Timber	Upright	6.04	
608	1	3.2	608		Cut	Posthole	6.83	6.57
609	1	3.2			Fill	Fill of cut [608]	6.83	
610	1	3.5			Fill	Fill of cut [611]	6.79	
611	1	3.5	611		Cut	Pit	6.79	6.59
612	1	3.4			Fill	Fill of cut [613]	6.55	
613	1	3.4	603		Cut	Posthole	6.85	6.55
614	1	3.4			Fill	Fill of cut [615]	6.98	
615	1	3.4	603		Cut	Posthole	6.98	6.37
616	1	3.4			Fill	Fill of cut [617]	6.98	6.91
617	1	3.4	603		Cut	Posthole	6.98	6.91
618	1	3.4			Fill	Fill of cut [619]	6.85	
619	1	3.4	603		Cut	Posthole	6.83	6.41
620	1	3.5	620		Fill	Fill of cut [575]	6.76	6.74
621	1	6.1	561		Timber	Upright	5.8	
622	1	6.1	561		Timber	Plank on edge	5.58	
623	1	6.1			Fill	Backfill to construction cut [561]	5.58	
624	1	3.2	624		Cut	Quarry pit?	6.79	5.75

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
625	1	3.1			Fill	Fill of cut [626]	7.11	6.53
626	1	3.1	626		Cut	Quarry pit?	7.14	6.45
627	1	6.1	561		Cut	Stakehole	5.53	
628	1	6.1	561		Cut	Stakehole	5.49	
629	1	6.1	561		Cut	Stakehole	5.5	
630	1	6.1			Fill	Fill of cut [627]	5.53	
631	1	6.1			Fill	Fill of cut [628]	5.49	
632	1	6.1			Fill	Fill of cut [629]	5.5	
633	1	3.5			Fill	Fill of cut [634]	6.92	6.67
634	1	3.5			Cut	Pit	6.92	6.67
635	1	6.1			Fill	Fill of cut [582]	5.37	5.24
636	1	6.1			Fill	Fill of cut [561]	5.56	
637	1	3.5			Fill	Fill of cut [638]		
638	1	3.5	638		Cut	Shallow pit	7.03	6.83
639	1	3.2	639		Cut	Quarry pit?	6.88	6.53
640	1	3.5			Fill	Fill of cut [641]	7.14	
641	1	3.5	641		Cut	Posthole	6.94	6.89
642	1	3.2			Fill	Fill of cut [639]	6.96	6.72
643	1	3.2	639		Cut	Quarry pit?	6.94	
644	1	3.2			Fill	Fill of cut [643]	6.94	
645	1	3.2	639		Cut	Quarry pit?	6.98	
646	1	3.2			Fill	Fill of cut [645]	6.98	
647	1	3.2	639		Cut	Quarry pit?	6.93	
648	1	3.2			Fill	Fill of cut [647]	7.01	
650	1	3.3			Fill	Fill of well [589]	5.04	5.02
651	1	3.3	565		Fill	Fill of well [589]	5.48	
652	1	3.2			Fill	Fill of cut [639]	6.94	
653	1	3.2	639		Cut	Quarry pit?	6.94	6.48
654	1	3.2			Fill	Fill of cut [653]	7.01	6.67
655	1	3.3			Fill	Backfill to construction cut [565]	7.19	
656	1	3.5	656		Layer	Possible surface	7.16	6.87
657	1	3.3			Fill	Fill of cut [658]	6.82	
658	1	3.3	658		Cut	Pit	6.73	6.63
659	1	3.3			Fill	Backfill to construction cut [565]	7.09	
660	1	6.1			Fill	Fill of cut [661]	6.04	5.65
661	1	6.1	661		Cut	Unknown function	6.04	5.65
662	1	3.3	662		Layer	Possible surface	7.11	6.65
663	1	6.1	002		Fill	Fill of cut [661]	5.84	0.00

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
664	1	3.2			Fill	Fill of cut [665]	6.08	6
665	1	3.2	665		Cut	Quarry pit?	6.08	5.46
666	1	3.2			Fill	Fill of cut [667]	6.89	
667	1	3.2	667		Cut	Post pit?	6.89	6.3
668	1	3.3		4	Fill	Fill of cut [669]	6.05	
669	1	3.3	669	4	Cut	Small pit	6.05	5.41
670	1	3.3			Fill	Fill of cut [671]	6.07	6.05
671	1	3.3	671		Cut	Small pit	6.07	5.78
672	1	3.3		4	Fill	Fill of cut [673]	5.92	
673	1	3.3	673	4	Cut	Pit	5.92	5.67
674	1	3.4			Fill	Fill of cut [707]	7.12	7.07
675	1	3.3			Fill	Fill of cut [676]	7.01	6.75
676	1	3.3	676		Cut	Small pit	7.01	6.75
677	1	3.3			Fill	Fill of cut [678]	6.11	6.04
678	1	3.3	678	4	Cut	Shallow pit	6.11	5.87
679	1	3.3			Fill	Fill of cut [680]	6.1	
680	1	3.3	680		Cut	Shallow pit	6.1	5.86
681	1	3.1			Fill	Fill of cut [682]	7.03	6.93
682	1	3.1			Cut	Post-pit	7.03	6.57
683	1	3.3			Fill	Fill of cut [684]	6.94	
684	1	3.3	684		Cut	Posthole	6.94	6.48
685	1	3.1	685		Layer	Occupation layer	7.04	6.73
686	1	3.2			Fill	Fill of cut [687]	6.93	
687	1	3.2	687		Cut	Posthole	6.93	6.42
688	1	3.2			Fill	Fill of cut [688]	6.98	
689	1	3.2	689		Cut	Posthole	6.97	6.57
690	1	3.3			Fill	Fill of cut [691	5.91	5.84
691	1	3.3	691		Cut	Pit	6.07	5.54
692	1	3.3			Fill	Fill of cut [693]	6.05	
693	1	3.3	693		Cut	Pit	6.05	5.74
694	1	3.3			Fill	Fill of cut [695]	5.85	5.82
695	1	3.3	695	4	Cut	Pit	6.04	5.73
696	1	3.1			Fill	Fill of cut [697]	7.03	6.94
697	1	3.1	697		Cut	Pit	7.03	6.78
698	1	3.2		4	Fill	Fill of cut [665]	6.08	6.03
699	1	3.3			Fill	Fill of cut [700]	6.91	
700	1	3.3	700		Cut	Posthole	6.91	6.42
701	1	3.3			Fill	Fill of cut [702]	6.83	
702	1	3.3	702		Cut	Posthole	6.83	6.58

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
703	1	3.1			Fill	Fill of cut [710]	6.94	
704	1	3.3			Fill	Fill of cut [705]	6.9	
705	1	3.3	705		Cut	Posthole	6.9	6.4
706	1	3.1			Fill	Fill of cut [710]	6.84	6.78
707	1	3.4	707		Cut	E/W linear feature	7.15	6.89
708	1	3.3			Fill	Fill of cut [709]	6.95	
709	1	3.3	709		Cut	Posthole	6.95	6.45
710	1	3.1	710		Cut	Pit	7.05	6.33
711	1	3.3			Fill	Fill of cut [724]	6.96	
712	1	3.3			Fill	Fill of cut [713]	6.98	
713	1	3.3	713		Cut	Posthole	6.98	6.48
714	1	3.6			Fill	Fill of cut [715]	6.07	
715	1	3.6	715		Cut	Pit	6.07	5.74
716	1	3.1			Fill	Fill of cut [717]	7.03	6.89
717	1	3.1	717		Cut	Quarry pit?	7.03	6.39
718	1	3.3			Fill	Fill of cut [719]	6.95	6.56
719	1	3.3	719		Cut	Posthole	6.95	6.56
720	1	3.3			Fill	Fill of cut [724]	6.89	
721	1	3.6			Fill	Fill of cut [722]	6.04	6.02
722	1	3.6	722		Cut	Pit	6.04	5.74
723	1	3.3			Fill	Fill of cut [724]	6.87	6.82
724	1	3.3	724		Cut	Pit	7.09	6.47
725	1	3.1			Fill	Fill of cut [735]	7.06	6.08
726	1	3.3	726		Cut	Group of post pits	7.09	6.4
727	1	3.3			Fill	Fill of cut [728]	7.01	
728	1	3.3	728		Cut	Posthole	7.01	6.57
729	1	3.2			Fill	Fill of cut [730]	6.72	
730	1	3.2	730		Cut	Stakehole	6.72	6.5
731	1	3.2			Fill	Fill of cut [732]	7.02	
732	1	3.2	732		Cut	E/W gully	7.03	6.9
733	1	3.2			Fill	Fill of cut [734]	6.98	
734	1	3.2	734		Cut	Posthole	7	6.76
735	1	3.1	735		Cut	Large pit	7.06	6.31
736	1	3.6			Fill	Fill of cut [737]	5.95	5.76
737	1	3.6	737		Cut	Posthole	5.95	5.26
738	1	6.2	738		Masonry	E/W wall	5.28	4.99
739	1	6.2	739		Masonry	Cess pit lining	5.27	4.65
740	1	3.6			Fill	Fill of cut [741]	6.09	
741	1	3.6	741		Cut	Posthole	6.09	5.76

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
742	1	3.6	i iaii	Occilon	Fill	Fill of cut [743]	6.09	00)
743	1	3.6	741		Cut	Posthole	6.09	6.04
744	1	3.6	7-11		Fill	Fill of cut [745]	6.13	0.04
745	1	3.6	741		Cut	Posthole	6.13	6.01
746	1	3.6	7-11		Fill	Fill of cut [747]	6.17	0.01
747	1	3.6	741		Cut	Posthole	6.17	6.06
748	1	3.6			Fill	Fill of cut [749]	6.17	0.00
749	1	3.6	741		Cut	Posthole	6.17	5.96
750	1	3.6			Fill	Fill of cut [751]	6.17	0.00
751	1	3.6	741		Cut	Posthole	6.17	6.06
752	1	3.6			Fill	Fill of cut [753]	6.12	0.00
753	1	3.6	753		Cut	Posthole	6.12	5.93
754	1	3.6	700		Fill	Fill of cut [755]	6.12	0.00
755	1	3.6	753		Cut	Posthole	6.12	5.98
756	1	3.1	756	5	Layer	Surface	6.12	6.08
757	1	6.2			Fill	Fill of cess pit [739]	4.81	4.65
						Backfill to construction cut		1.00
758	1	6.2			Fill	[759] Construction cut for wall	5.31	
759	1	6.2	759		Cut	[738]	5.31	4.95
760	1	3.1			Fill	Fill of cut [761]	6.93	6.71
761	1	3.1	761		Cut	Orientated E/W	6.93	6.71
762	1	6.2			Fill	Fill of cess pit [739] Construction cut for cess pit	4.21	4.05
763	1	6.2	763		Cut	[739]	5.3	3.98
764	1	6.2	764		Layer	Silty sand - made ground	5.34	5.1
765	1	6.1	766		Masonry	Remains of cess pit	4.58	4.4
766	1	6.1	766		Cut	Construction cut for [765]	4.97	4.33
767	1	6.1			Fill	Fill of cut [774]	4.97	
768	1	3.6			Fill	Fill of cut [769]	5.99	
769	1	3.6	769		Cut	Pit	5.99	5.75
770	1	3.6			Fill	Fill of cut [771]	6.14	6.01
771	1	3.6	771	5	Cut	Pit	6.15	5.93
772	1	3.1	772		Layer	Occupation layer	7.03	6.81
773	1	6.1	773		Layer	Clayey silt - levelling layer	5.04	5
774	1	6.1	774		Cut	Pit	5	4.71
775	1	6.2			Fill	Backfill to construction cut [763]	5.3	4.64
776	1	3.1			Fill	Fill of cut [778]	6.73	
777	1	3.1			Fill	Fill of cut [778]	6.78	
778	1	3.1	778		Cut	Shallow pit	6.77	6.54
779	1	6.1			Fill	Fill of cut [[780]	4.87	4.61

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
780	1	6.1	780		Cut	Shallow pit	4.87	4.27
781	1	6.1			Fill	Fill of cut [826]	4.57	4.43
782	1	5.2			Fill	Fill of cut [822]	4.71	4.47
784	1	3.1			Fill	Fill of cut [785]	6.91	
785	1	3.1	785		Cut	Pit	6.91	6.49
786	1	6.2			Fill	Fill of cut [787]	5.07	5
787	1	6.2	787		Cut	Shallow pit	5.07	4.88
788	1	3.1			Fill	Fill of cut [789]	6.78	
789	1	3.1	789		Cut	Shallow pit	6.78	6,62
790	1	3.1			Fill	Fill of cut [791]	6.83	
791	1	3.1	791		Cut	Linear N/S feature	6.83	6.32
792	1	6.1			Fill	Fill of cut [793]	4.99	4.77
793	1	6.1	793		Cut	Pit	4.99	4.38
794	1	6.2			Fill	Fill of cut [795]	4.61	4.58
795	1	6.2	795		Cut	Pit - modern	4.61	4
796	1	6.2			Fill	Fill of cut [797]	4.96	4.92
797	1	6.2	797		Cut	Cess pit	5.12	4.13
798	1	3.1			Fill	Fill of cut [799]	7.16	
799	1	3.1	799		Cut	Pit	7.16	6.81
800	1	6.2			Fill	Fill of cut [816]	5.08	5.07
801	1	6.2			Fill	Fill of cut [816]	5.08	4.76
802	1	6.1			Fill	Fill of cut [803]	4.88	4.62
803	1	6.1	803		Cut	Drain	4.88	4.19
804	1	6.1	804		Cut	Pit	4.48	4.18
805	1	3.3			Fill	Fill of cut [807]	6.01	
806	1	3.3		5	Fill	Fill of cut [807]	5.81	
807	1	3.3	807	5	Cut	E/W ditch	6.1	5.37
808	1	3.1			Fill	Fill of cut [791]	6.83	
809	1	3.2			Fill	Fill of cut [810]	7.14	
810	1	3.2	810		Cut	Posthole	7.14	7.03
811	1	3.2			Fill	Fill of cut [812]	7.18	
812	1	3.2	812		Cut	Pit	7.18	6.93
813	1	2	813		Layer	Consolidation/levelling layer	7.21	7.07
814	1	3.1	814		Layer	Consolidation/levelling layer	7.04	6.81
815	1	6.1			Fill	Fill of cut [804]	4.54	4.41
816	1	6.2			Cut	Rubbish pit	5.08	4.4
817	1	3.1	817	7	Layer	Levelling layer?	6.8	6.79
818	1	5.1			Fill	Fill of cut [819]	3.97	3.71
819	1	5.1	819		Cut	E/W aligned feature	3.97	3.59

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
820	1	3.1	820	7	Layer	Levelling layer?	6.8	6.75
821	1	3.1	821	7	Layer	Levelling layer?	6.91	6.63
822	1	5.2	822		Cut	Drain	4.71	4.54
823	1	6.1			Fill	Fill of cut [824]	4.57	4.34
824	1	6.1	824		Cut	Pit	4.57	4.19
826	1	6.1	826		Cut	Tip line?	4.57	4.2
827	1	2			Fill	Fill of cut [828]	7.09	7.06
828	1	2	828		Cut	Irregular	7.09	6.86
829	1	6.1			Fill	Fill of cut [830]	4.43	4.41
830	1	6.1	830		Cut	Pit	4.43	3.91
831	1	2			Fill	Fill of cut [832]	7.16	
832	1	2	832		Cut	Irregular	7.16	6.97
833	1	6.2			Fill	Fill of cut [834]	5.06	
834	1	6.2	834		Cut	Pit	5.06	4.44
835	1	3.2			Fill	Fill of cut [836]	6.56	6.21
836	1	3.2	836		Cut	E/W ditch	6.55	6.29
837	1	6.1			Fill	Fill of cut [846]	4.57	4.42
838	1	1	838	5	Fill	Fill of alluvial channel	6.15	5.84
839	1	1		5	Fill	Fill of alluvial channel	5.99	5.33
840	1	1		5	Layer	Natural	5.92	5.84
841	1	1		5	Layer	Natural	6.19	5.33
842	1	1		5	Fill	Fill of alluvial channel	5.96	5.33
843	1	1		5	Fill	Fill of alluvial channel	5.61	5.33
844	1	6.1			Fill	Fill of cut [845]	4.94	
845	1	6.1	845		Cut	Pit	5.04	4.49
846	1	6.1	846		Cut	Pit	4.57	4.2
847	1	6.1		6	Fill	Fill of cut [848]	5.02	
848	1	6.1		6	Cut	Pit	5.02	4.55
849	1	6.1		6	Fill	Fill of cut [850]	5.23	
850	1	6.1		6	Cut	Rubbish pit	5.23	4.54
851	1	5.1		6	Layer	Made ground	5.17	
852	1	2		6	Fill	Fill of cut [853]	4.68	
853	1	2		6	Cut	Stakehole	4.68	4.48
854	1	6.2			Fill	Fill of cess pit [856]	4.65	4.59
855	1	6.2			Fill	Backfill to construction cut [857]	4.87	
856	1	6.2	856		Masonry	Brick lining to cess pit	4.87	
857	1	6.2	857		Cut	Construction cut for cess pit [856]	4.87	3.85
858	1	1		6	Layer	Colluvial gravel	4.92	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
859	1	6.1		6	Fill	Fill of cut [883]	5.22	
860	1	3.1			Fill	Fill of cut [861]	7.21	
861	1	3.1	861		Cut	Small pit	7.21	6.98
862	1	6.1		6	Fill	Fill of cut [863]	5.23	
863	1	6.1		6	Cut	Pit	5.23	4.63
864	1	6.1			Fill	Fill of cut [865]	4.96	
865	1	6.1	865		Cut	Small pit	4.97	4.67
866	1	6.1			Fill	Fill of cut [876]	4.28	4.21
867	1	6.1			Fill	Fill of cut [868]	6.02	
868	1	6.1	868		Cut	Rubbish pit	6.03	5.65
869	1	5.2			Fill	Fill of cut [870]	4.78	4.77
870	1	5.2	870		Cut	Pit	4.78	4.29
871	1	1		7	Layer	Natural sand and gravel	6.71	6.08
872	1	1		7	Layer	Redeposited natural?	6.69	6.48
873	1	5.2			Fill	Fill of cut [874]	4.99	
874	1	5.2	874		Cut	Linear E/W feature	5.11	4.12
875	1	6.1	875		Layer	Clayey silt	5.11	4.97
876	1	6.1	876		Cut	Pit	4.5	4.12
877	1	5.1			Fill	Fill of cut [878]	3.84	3.67
878	1	5.1	878		Cut	Pit	3.84	3.54
879	1	1		5	Layer	Colluvial deposit?	5.84	5.82
881	1	6.2			Fill	Fill of cut [882]	4.87	
882	1	6.2	882		Cut	Pit	4.87	4.37
883	1	6.1		6	Cut	Pit	5.22	4.97
884	1	5.2			Fill	Fill of cut [874]	4.5	
885	1	1	885		Layer	Levelling layer	6.39	6.13
886	1	6.1			Fill	Fill of cut [888]	5.12	4.72
887	1	3.4	887		Layer	silty sandy gravel	4.95	4.59
888	1	6.1	888		Cut	Pit	5.11	4.75
889	1	1		6	Layer	Natural terrace gravel	5.01	
890	1	1		6	Layer	Natural clay	4.51	
891	1	6.1			Fill	Fill of cut [892]	4.5	4.42
892	1	6.1	892		Cut	Pit	4.5	4.12
893	1	6.1			Fill	Fill of cut [894]	4.7	4.5
894	1	6.1	894		Cut	Rubbish pit	4.7	3.97
895	1	5.2			Fill	Fill of cut [896]	4.65	
896	1	5.2	896		Cut	Small pit	4.65	4.6
897	1	6.1			Fill	Fill of cut [946]	4.85	4.79
898	1	5.2			Fill	Fill of cut [964]	5.11	5.07

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
899	1	3.6	899		Layer	Silt	4.91	4.78
900	1	3.6	900		Layer	Sandy clayey silt	6.25	6.1
901	1	6.1	901		Layer	Possible horticultural soil	5.03	4.93
902	1	3.3			Fill	Fill of cut [903]	4.76	4.74
903	1	3.3	903		Cut	Posthole	4.76	4.43
904	1	3.1			Fill	Fill of cut [906]	6.67	6.29
905	1	3.1			Fill	Fill of cut [906]	6.68	6.21
906	1	3.1	913	8	Cut	Pit	6.68	6.21
907	1	3.4	907		Layer	Sandy silty gravel layer - surface?	5.11	4.75
908	1	3.1		8	Fill	Fill of cut [909]	6.49	6.1
909	1	3.1	913	8	Cut	Quarry pit?	6.49	6.1
910	1	3.1		8, 9	Fill	Fill of cut [911]	6.46	
911	1	3.1	913	8, 9	Cut	Quarry pit?	6.46	6.05
912	1	3.1		8, 9	Fill	Fill of cut [913]	6.52	
913	1	3.1	913	8, 9	Cut	Quarry pit?	6.52	6.11
914	1	3.1			Fill	Fill of cut [915]	7.1	
915	1	3.1	915		Cut	Quarry pit?	7.1	6.62
916	1	2			Layer	Silty sandy gravel		
917	1	3.6			Fill	Fill of cut [918]	6.05	
918	1	3.6	918		Cut	Rubbish pit	6.05	5.83
919	1	3.6			Fill	Fill of cut [920]	5.98	
920	1	3.6	920		Cut	Pit	5.93	5.84
921	1	6.2			Fill	Bottom fill of cess pit [856]	4.27	
922	1	5.1	922		Layer	Sandy silt - colluvial?	4.48	3.9
923	1	3.6			Fill	Fill of cut [924]	4.36	4.22
924	1	3.6	924		Cut	Pit	4.36	4.09
925	1	3.6	925	19	Layer	Clayey silt	4.37	4.09
926	1	6.2	928		Fill	Backfill to construction cut [928]	6.21	
927	1	6.2	928		Masonry	Well	6.19	5.91
928	1	6.2	928		Cut	Construction cut for well [927]	6.21	5.83
929	1	5.2	929		Cut	Possible pit truncated to the north	4.97	4.77
930	1	6.1			Fill	Fill of cut [946]	4.77	4.58
931	1	3.3			Fill	Fill of cut [932]	6.08	
932	1	3.3	932		Cut	E/W ditch	6.08	5.25
933	1	3.5	933		Layer	Clayey sandy silt	6.17	5.93
934	1	3.4			Fill	Fill of cut [935]	6.08	5.98
935	1	3.4	935		Cut	Stakehole	6.09	5.87
936	1	3.4			Fill	Fill of cut [937]	6.05	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
937	1	3.4	937		Cut	Post pit	6.05	5.75
938	1	3.4			Fill	Fill of cut [939]	5.98	
939	1	3.4	939		Cut	Posthole	5.98	5.69
940	1	5.2			Fill	Fill of cut [929]	4.9	4.85
941	1	6.1			Fill	Fill of cut [946]	4.78	4.76
942	1	5.2			Fill	Fill of cut [943]	4.35	4.29
943	1	5.2	943		Cut	Pit	4.35	3.82
944	1	5.2			Fill	Fill of cut [945]	4.6	4.57
945	1	5.2	945		Cut	Pit	4.6	4.29
946	1	6.1	946		Cut	E/W ditch	4.94	4.34
947	1	3.4			Fill	Fill of cut [948]	5.85	
948	1	3.4	948		Cut	Posthole	5.85	5.71
949	1	5.2			Fill	Fill of cut [950]	4.9	
950	1	5.2	950		Cut	Pit	4.9	4.59
951	1	5.2			Fill	Fill of cut [952]	4.95	4.87
952	1	5.2	952		Cut	Rubbish pit	5.11	4.64
953	1	3.6	953		Layer	Sandy silt	4.57	4.46
954	1	3.4			Fill	Fill of cut [955]	5.88	
955	1	3.4	955		Cut	Quarry pit?	5.88	5.22
956	1	3.6	956		Layer	Sandy silt	4.7	4.48
957	1	5.2			Fill	Fill of cut [958]	4.92	4.88
958	1	5.2	958		Cut	Linear E/W cut	4.92	4.78
959	1	3.6	959		Layer	Clayey gravelly silt - occupation deposit?	4.92	4.78
960	1	3.4			Fill	Fill of cut [961]	4.88	4.82
961	1	3.4	961		Cut	Pit	5.07	4.54
962	1	3.5	962	21	Fill	Fill of cut [973]	4.52	4.37
963	1	3.4	963		Layer	Possible surface?	4.93	4.7
964	1	5.2	964		Cut	E/W ditch	5.11	4.49
965	1	5.2			Fill	Fill of cut [966]	4.88	4.87
966	1	5.2	966		Cut	Shallow pit	4.93	4.74
967	1	3.6			Fill	Fill of cut [968]	4.56	
968	1	3.6	968		Cut	Pit	4.56	3.99
969	1	5.2			Fill	Fill of cut [970]	4.67	4.58
970	1	5.2	970		Cut	Small pit	4.67	4.44
971	1	3.4	971		Layer	Silty sand	4.85	
972	1	3.5			Fill	Fill of cut [973]	4.38	
973	1	3.5	973	21	Cut	Pit	4.39	4.21
974	1	3.6	974		Layer	Dark grey, clayey gravelly silt	4.9	4.56

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
975	1	3.5	975	19	Layer	Clayey sandy silt	4.1	3.76
976	1	3.4	976	21	Layer	Sandy silt	4.31	
977	1	3.6	977		Cut	Pit	4	2.96
978	1	3.6			Fill	Fill of cut [977]	4	
979	1	3.5			Fill	Fill of cut [986]	4.17	4.05
980	1	4			Fill	Fill of cut [981]	4.04	
981	1	4	981		Cut	Gully	4.04	3.83
982	1	3.3			Fill	Fill of cut [983]	4.65	
983	1	3.3	983		Cut	Beam slot	4.65	4.35
984	1	4	984		Layer	Silty sand	3.78	3.69
985	1	3.4	985		Layer	Area of burnt daub	4.75	4.67
986	1	3.5	986		Cut	Pit	4	3.64
987	1	4			Fill	Fill of cut [988]	3.97	
988	1	4	988		Cut	Western terminus of gully [982]?	4.11	3.85
989	1	3.4	989		Layer	Post pad?	4.72	
991	1	3.6			Fill	Fill of cut [1004]		
992	1	3.6			Fill	Fill of cut [1004]		
993	1	3.4	993		Layer	Silty clay	4.76	4.58
994	1	4			Fill	Fill of cut [995]	3.83	
995	1	4	995		Cut	Possible tip line	3.89	3.38
996	1	3.6	996		Layer	Sandy silt	4.66	
997	1	3.2			Fill	Fill of cut [998]	6.39	
998	1	3.2	998		Cut	Posthole	6.39	6.16
999	1	3.2			Fill	Fill of cut [1000]	6.39	
1000	1	3.2	998		Cut	Posthole	6.39	6.16
1001	1	3.3	1001		Fill	Fill of cut [1007]	4.51	4.41
1002	1	3.6	1002		Timber	Fill of cut [1004]		
1003	1	3.6			Fill	Fill of cut [1004]		
1004	1	3.6	1004		Cut	Construction cut for timber structure [1002]	3.69	3.11
1005	1	3.6	1005		Layer	Cbm rubble possible floor makeup	4.99	4.77
1006	1	3.3	1006		Fill	Fill of cut [1007]	4.42	4.18
1007	1	3.3	1007		Cut	Pit	4.73	4.17
1008	1	3.6	1008		Layer	Occupation deposit	4.51	4.13
1009	1	3.5			Fill	Fill of cut [1010]	4.91	
1010	1	3.5	1010		Cut	Posthole	4.91	4.69
1011	1	3.3			Fill	Fill of cut[1012]	4.13	
1012	1	3.3	1012		Cut	Curvi-linear ditch	4.53	3.54
1013	1	5.2			Fill	Fill of cut [1014]	5.04	4.79

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1014	1	5.2	1014		Cut	Pit	5.04	4.79
1015	1	1	1015		Layer	Natural terrace gravel	5	3.28
1016	1	3.3			Fill	Fill of cut [1017]	4.67	
1017	1	3.3	1017		Cut	Posthole	4.67	4.03
1018	1	3.3			Fill	Fill of cut [1019]	4.62	
1019	1	3.3	1019		Cut	Posthole	4.62	4.19
1020	1	4			Fill	Fill of cut [1021]	3.63	
1021	1	4	1021		Cut	Posthole	3.63	2.81
1022	1	3.6			Fill	Fill of cut [1004]	3.36	3.26
1023	1	3.5			Fill	Fill of cut [1024]	4.95	
1024	1	3.5	1024		Cut	Stakehole	4.95	4.12
1025	1	3.5			Fill	Fill of cut [1046]	4.88	4.64
1026	1	3.4			Fill	Fill of cut [1027]	5.08	
1027	1	3.4	1027		Cut	Pit	5.08	4.64
1028	1	3.6	1028		Layer	Sandy silt	4.27	
1029	1	5.2			Fill	Fill of cut [1030]	4.47	
1030	1	5.2	1030		Cut	Pit	4.46	4.17
1031	1	3.3	1031		Masonry	Oven/hearth	4.47	4.33
1032	1	3.5	1032	19	Layer	Dumped deposit - contains alter stone	3.9	3.72
1033	1	3.5			Fill	Fill of cut [1036]	4.88	4.7
1034	1	4			Fill	Fill of cut [1035]	3.81	
1035	1	4	1035		Cut	Pit	3.81	3.16
1036	1	3.5	1036		Cut	E/W linear cut	4.88	4.7
1037	1	3.6			Fill	Fill of cut [1048]	3.84	
1038	1	3.4			Fill	Fill of cut [1039]	4.98	
1039	1	3.4	1039		Cut	Posthole	4.98	4.66
1040	1	3.5			Fill	Fill of cut [1041]	4.71	
1041	1	3.5	1041		Cut	Cut for a column base?	4.74	4.69
1042	1	3.5	1042		Fill	Fill of cut [1043]	4.21	
1043	1	3.5	1043		Cut	Pit	4.44	4.1
1044	1	3.4			Fill	Fill of cut [1045]	5.09	
1045	1	3.4	1045		Cut	Posthole	5.09	4.72
1046	1	3.5	1046		Cut	Pit	4.87	4.42
1047	1	3.5			Fill	Fill of cut [1041]	4.79	4.61
1048	1	3.6	1048		Cut	Pit	3.84	3.19
1049	1	3.5	1049		Layer	Sandy silt	4.74	4.51
1050	1	3.4			Fill	Fill of cut [1051]	5.05	5.01
1051	1	3.4	1051		Cut	Pit	5.05	4.85

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1052	1	3.5			Fill	Fill of cut [1041]	4.69	
1053	1	3.6			Layer	Gravel layer	3.39	3.21
1054	1	3.4			Fill	Fill of cut [1055]	5.01	
1055	1	3.4	1055		Cut	E/W gully?	5.01	4.72
1056	1	3.4			Fill	Fill of cut [1057]	5.15	
1057	1	3.4	1057		Cut	Pit	5.15	4.93
1058	1	3.5			Fill	Fill of cut [1059]	4.59	4.51
1059	1	3.5	1059		Cut	Small pit	4.59	4.42
1060	1	3.5			Fill	Fill of cut [1061]	5.13	
1061	1	3.5	1061		Cut	Posthole	5.13	4.76
1062	1	3.4			Fill	Fill of cut [1063]	5.03	
1063	1	3.4	1062		Cut	Shallow pit	5.03	4.84
1064	1	3.4			Fill	Fill of cut [1065]	4.86	
1065	1	3.4	1065		Cut	Small pit	4.89	4.75
1066	1	3.4			Fill	Fill of cut [1067]	4.6	
1067	1	3.4	1067		Cut	Pit	4.6	4.28
1068	1	3.6			Layer	Sandy clay layer	3.42	3.31
1070	1	3.5	1070		Layer	Occupation layer ?	4.63	4.49
1071	1	3.5			Fill	Fill of cut [1072]	4	
1072	1	3.5	1072		Cut	Pit	4	3.48
1073	1	3.5			Fill	Fill of cut [1074]	4.79	4.48
1074	1	3.5	1074		Cut	Pit	4.79	4.39
1075	1	3.6	1075		Layer	Dumped deposit - colluvial	4.59	3.66
1076	1	3.6	1076		Layer	Possible surface	4.73	4.5
1077	1	3.3			Fill	Fill of cut [1078]	3.92	
1078	1	3.3	1078		Cut	Pit	3.92	3.5
1079	1	3.4			Fill	Fill of cut [1080]	4.9	4.8
1080	1	3.4	1080		Cut	Posthole	4.9	4.52
1081	1	3.4			Fill	Fill of cut [1082]	5.11	
1082	1	3.4	1082		Cut	Posthole	5.11	4.74
1083	1	5.2			Fill	Fill of cut [1084]	7.39	
1084	1	5.2	1084		Cut	Rubbish pit	7.39	7.02
1085	1	3.3			Fill	Fill of cut [1086]	3.98	
1086	1	3.3	1086		Cut	Posthole	3.98	3.5
1087	1	3.6	1087		Layer	Gravelly sandy silt	4.11	3.73
1088	1	3.1			Fill	Fill of cut [1089]	7.44	7.05
1089	1	3.1	1088		Cut	Quarry pit?	7.44	7.05
1090	1	3.4	1090		Layer	Sandy clayey silt	4.65	4.38
1091	1	3.5			Fill	Fill of cut [1092]	4.02	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1092	1	3.5	1092		Cut	Pit	4.12	3.81
1093	1	3.3			Fill	Fill of cut [1094]	3.96	
1094	1	3.3	1094		Cut	Posthole	3.96	3.49
1095	1	3.2		12	Fill	Fill of cut [1097]	6.48	
1096	1	3.2		11, 13	Fill	Fill of cut [1109]	6.22	
1097	1	3.2	1097	12	Cut	Western terminus of ditch	6.48	5.94
1098	1	3.4			Fill	Fill of cut [1099]	4.81	4.76
1099	1	3.4	1099		Cut	Shallow pit	4.8	4.66
1100	1	3.1	1100		Layer	Surface?	2.95	
1101	1	3.6	1101		Layer	Dumped deposit	3.98	3.59
1102	1	3.5	1102		Fill	Fill of cut [1103]	4.03	3.91
1103	1	3.5	1103		Cut	Pit	3.94	3.75
1104	1	3.5			Fill	Fill of cut [1105]	4.59	4.45
1105	1	3.5	1105		Cut	Small pit	4.59	4.15
1106	1	3.1	1106		Layer	Surface?	3.89	
1107	1	3.5			Fill	Fill of cut [1108]	4.5	4.38
1108	1	3.5	1108		Cut	Posthole	4.5	4.03
1109	1	3.2	1109	11, 13	Cut	E/W ditch		
1110	1	3.1	1110		Layer	Occupation layer?	4.24	3.6
1111	1	3.5			Fill	Fill of cut [1112]	4.48	4.44
1112	1	3.5	1112		Cut	Pit	4.44	4.17
1113	1	3.5			Fill	Fill of cut [1114]	2.9	2.87
1114	1	3.5	1114		Cut	Pit		
1115	1	3.4	1115		Layer	Possible floor	4.5	4.42
1116	1	3.3			Fill	Fill of cut [1117]	3.71	
1117	1	3.3	1117		Cut	Posthole	3.71	3.37
1118	1	3.2		13	Fill	Fill of cut [1109]		
1119	1	3.2		13	Fill	Fill of cut [1109]		
1120	1	3.3			Fill	Fill of cut [1125]	3.68	3.45
1121	1	3.5			Fill	Fill of cut [1122]	4.42	4.19
1122	1	3.5	1122		Cut	Small pit	4.42	3.98
1123	1	3.3	1123	21	Layer	Possible base of N/S wall	4.52	4.42
1124	1	3.3	1123		Layer	Possible base of E/W wall	4.46	4.41
1125	1	3.3	1125		Cut	E/W aligned drain	3.57	2.66
1126	1	3.4			Fill	Fill of cut [1127]	3.98	3.86
1127	1	3.4	1127		Cut	Pit	3.98	3.67
1128	1	3.5			Fill	Fill of cut [1158]	3.94	3.77
1131	1	3.4			Fill	Fill of cut [1134]	4.57	
1132	1	3.4			Fill	Fill of cut [1133]	4.47	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1133	1	3.4	1133		Cut	Pit	4.47	4.19
1134	1	3.4	1134		Cut	Posthole	4.57	4.42
1135	1	3.4	1135		Layer	Sandy silt - possible floor?	4.67	4.51
1136	1	3.5			Fill	Fill of cut [1137]	3.88	
1137	1	3.5	1137		Cut	Small pit	3.88	3.75
1139	1	3.5	1139	19	Layer	Sandy silty clay - dumped deposit	3.99	3.74
1140	1	3.2		13	Fill	Fill of cut [1109]		
1141	1	3.2		13	Fill	Fill of cut [1109]		
1142	1	3.2		13	Fill	Fill of cut [1109]		
1143	1	3.2		11	Fill	Fill of cut [1109]		
1144	1	3.2		11	Fill	Fill of cut [1109]		
1145	1	3.2		11	Fill	Fill of cut [1109]		
1146	1	3.2		11	Fill	Fill of cut [1109]		
1147	1	3.2		11	Fill	Fill of cut [1109]		
1148	1	3.2		11	Fill	Fill of cut [1109]		
1150	1	3.5			Fill	Top fill of well [1157]	3.2	
1151	1	3.4	1151		Layer	Sandy silt	4.61	4.5
1152	1	3.3			Fill	Fill of cut [1012]	4.13	3.54
1153	1	3.5			Fill	Fill of cut [1158]	3.62	3.48
1154	1	3.5			Fill	Fill of well [1157]	3.07	
1155	1	3.5	1155	19	Cut	Pit	3.9	3.33
1156	1	3.5	1156	19	Fill	Fill of cut [1155]	3.93	3.51
1157	1	3.5			Timber	Structure no for well		
1158	1	3.5	1158		Cut	Pit	3.94	3.13
1159	1	3.5			Fill	Fill of cut [1160]	4.7	4.59
1160	1	3.5	1160		Cut	Shallow pit	4.7	4.36
1161	1	3.3	1161	21	Cut	Construction cut for oven/hearth	4.39	4.1
1162	1	3.4	1162	21	Layer	Clayey silt	4.34	4.28
1163	1	3.5	1157	14	Timber	Part of well [1157] - horizontal	2.9	
1164	1	3.5	1157	14	Timber	Part of well [1157] - horizontal	2.0	
					Timber	Part of well [1157] -	2.02	
1165	1	3.5	4457	14		horizontal Part of well [1157] -	2.83	
1166	1	3.5	1157	15	Timber	horizontal Part of well [1157] -	2.89	
1167	1	3.5	1157	15	Timber	horizontal Part of well [1157] -	2.99	
1168	1	3.5	1157		Timber	horizontal	3.01	
1169	1	3.3			Fill	Fill of cut [1161]	4.24	4.18
1170	1	3.3			Fill	Fill of cut [1171]	4.36	
1171	1	3.3	1171		Cut	Repair cut to floor	4.42	4.3

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1172	1	5.1			Fill	Fill of cut [1173]	4.54	4.41
1173	1	5.1	1173		Cut	Shallow pit	4.54	4.28
1174	1	3.4	1174		Layer	Levelling layer?	4.58	4.31
1175	1	3.3	1175		Fill	Fill of cut [1125]	3.36	3.11
1176	1	3.3			Fill	Fill of cut [1125]	3.3	2.8
1177	1	3.4	1177		Layer	Possible floor layer	4.5	4.45
1178	1	3.4			Fill	Fill of cut [1179]	3.87	3.44
1179	1	3.4	1179		Cut	Pit	3.98	3.35
1180	1	3.5			Fill	Fill of cut [1181]	4.7	4.39
1181	1	3.5	1181		Cut	Pit	4.7	4.3
1182	1	3.4	1182		Layer	Levelling?	4.34	4.17
1183	1	3.4			Fill	Fill of cut [1179]	3.87	3.44
1184	1	3.5			Fill	Fill of cut [1185]	4.53	4.33
1185	1	3.5	1185		Cut	Pit	4.53	4.15
1186	1	3.3	1186		Fill	Fill of cut [1221]	4.57	4.38
1187	1	3.4	1187		Layer	Sandy silt	4	3.61
1188	1	3.4			Fill	Fill of cut [1189]	3.97	
1189	1	3.4	1189		Cut	Posthole	3.97	3.1
1190	1	3.4	1190		Layer	Sandy silt	4.88	4.73
1191	1	3.5			Fill	Fill of cut [1192]	4.59	
1192	1	3.5	1192		Cut	Stakehole	4.59	4.29
1193	1	3.5	1193		Fill	Backfill to construction cut [1194]	3.37	2.58
1194	1	3.5	1194		Cut	Construction cut for well [1157]	3.4	2.08
1195	1	3.5			Fill	Fill of cut [1196]	4.48	4.16
1196	1	3.5	1196		Cut	Pit	4.48	4.15
1197	1	3.3	1197	21	Layer	Sandy silt with frequent gravel	4.43	4.18
1198	1	3.4	1198		Layer	Dumped deposit	3.97	3.82
1199	1	3.5			Fill	Fill of cut [1200]	4.5	4.18
1200	1	3.5	1200		Cut	Small pit	4.5	4.14
1201	1	3.3	1201		Fill	Fill of cut [1202]	3.86	3.51
1202	1	3.3	1202		Cut	N/S linear cut - drain?	3.76	3.36
1203	1	3.5	1157		Timber	Part of well [1157] - horizontal	3	
1204	1	3.5		15	Timber	Part of well [1157] - horizontal	2.89	
1205	1	3.5	1157		Timber	Part of well [1157] - horizontal	2.92	
1206	1	3.5			Timber	Part of well [1157] - horizontal	2.73	
1207	1	3.5			Timber	Part of well [1157] - horizontal	2.81	
1208	1	3.5			Timber	Part of well [1157] - horizontal	2.59	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1209	1	3.3			Fill	Fill of cut [1210]	4.3	
1210	1	3.3	1210		Cut	N/S linear cut - drain?	4.3	3.58
1211	1	3.5			Fill	Fill of cut [1212]	4.38	4.19
1212	1	3.5	1212		Cut	Pit	4.38	4.01
1214	1	3.3		19	Fill	Fill of cut [1215]	3.8	
1215	1	3.3	1215	19	Cut	Posthole	3.8	3.54
1216	1	3.3			Fill	Fill of cut [1217]	4.18	
1217	1	3.3	1217		Cut	N/S aligned possibly structural	4.18	3.76
1218	1	3.3	1218		Layer	Gravelly sandy silt	4.48	4.32
1219	1	3.3		19, 20	Fill	Fill of cut [1220]	3.69	
1220	1	3.3	1220	19, 20	Cut	E/W drain?	3.88	3.04
1221	1	3.3	1221		Cut	Rectangular cut filled with rubble	4.53	4.26
1222	1	3.5		14	Timber	Part of well [1157] - horizontal	2.55	
						Part of well [1157] -		
1223	1	3.5		15	Timber	horizontal Part of well [1157] -	2.6	
1224	1	3.5			Timber	horizontal Part of well [1157] -	2.55	
1225	1	3.5			Timber	horizontal	2.6	
1226	1	3.5			Timber	Part of well [1157] - horizontal Part of well [1157] -	2.58	
1227	1	3.5			Timber	horizontal	2.58	
1228	1	3.3		19, 20	Fill	Fill of cut [1220]	3.45	3.38
1229	1	3.3		19, 20	Fill	Fill of cut [1220]	3.69	3.27
1230	1	3.3			Timber	Vertical post		
1231	1	3.3			Cut	Cut for timber [1230]		
1232	1	3.3	1232		Layer	Sandy gravel - levelling?	4.57	4.46
1233	1	3.1	1233		Layer	Silty clay	3.23	3.18
1234	1	3.3			Fill	Fill of cut [1235]	4.57	
1235	1	3.3	1235		Cut	Posthole - possible re-ex of [1010]	4.57	4.34
1236	1	3.4	1236		Layer	Gravel surface?	5.17	4.9
1237	1	3.3			Fill	Fill of cut [1012]	4.53	4.13
1238	1	3.5			Timber	Part of well [1157] - horizontal		
1239	1	3.1	1239		Layer	Silty sandy gravel	3.13	3.09
1240	1	2	1240		Layer	Gravel levelling?	4.77	4.4
1241	1	3.1	1241		Layer	Silty sand	3.35	3.27
1242	1	3.1	1442		Layer	Silty sandy gravel	3.37	3.22
1243	1	3.3			Fill	Fill of cut [1244]	4.7	
1244	1	3.3	1244		Cut	Posthole	4.8	4.3
1245	1	3.3	1245	21	Layer	Levelling?	4.5	4.08

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1246	1	3.5	1194		Timber	Vertical post	2.88	
1247	1	3.3			Fill	Fill of cut [1248]	4.96	
1248	1	3.3	1248		Cut	Posthole	4.96	4.31
1249	1	3.3	1249		Layer	Sandy silt & gravel	5.13	4.71
1250	1	3.1			Fill	Fill of cut [1251]	4.36	
1251	1	3.1	1253		Cut	Posthole	4.36	4.14
1252	1	3.1			Fill	Fill of cut [1253]	4.47	
1253	1	3.1	1253		Cut	Posthole	4.47	4.12
1254	1	3.3			Fill	Fill of cut [1255]	4.81	4.68
1255	1	3.3	1255		Cut	Pit	4.81	4.57
1256	1	3.3			Fill	Fill of cut [1257]	5.05	
1257	1	3.3	1257		Cut	Shallow pit	5.05	4.92
1258	1	3.3			Fill	Fill of cut [1259]	4.2	
1259	1	3.3	1259		Cut	Posthole	4.2	3.46
1260	1	3.3			Fill	Fill of cut [1261]	3.85	
1261	1	3.3	1261		Cut	Shallow pit	3.85	3.67
1262	1	2	1262		Layer	Sandy gravel	4.53	4.29
1263	1	3.5	1194		Timber	Part of well [1157] - vertical		
1264	1	3.5	1194	14	Timber	Part of well [1157] - vertical		
1265	1	3.5	1194	14	Timber	Part of well [1157] - vertical		
1266	1	3.5	1194		Timber	Part of well [1157] - vertical		
1267	1	3.5	1194	14, 15	Timber	Part of well [1157] - vertical		
1268	1	3.5	1194		Timber	Part of well [1157] - vertical		
1269	1	3.5	1194		Timber	Part of well [1157] - vertical		
1270	1	3.5	1194		Timber	Part of well [1157] - vertical		
1271	1	3.5	1194	15	Timber	Part of well [1157] - vertical		
1272	1	3.2			Fill	Fill of cut [1274[4.8	4.73
1273	1	3.2			Fill	Fill of cut [1274[4.65	4.55
1274	1	3.2	1274		Cut	Pit	4.87	4.08
1275	1	3.3			Fill	Fill of cut [1276]	3.81	3.46
1276	1	3.3	1276		Cut	N/S ditch/gully	3.81	3.28
1277	1	3.2			Fill	Fill of cut [1278]	4.68	4.4
1278	1	3.2	1278		Cut	E/W ditch	4.65	3.95
1279	1	2	1279		Layer	Silty gravel	4.14	4.13
1280	1	2	1280		Layer	Sandy silt	4.12	4.1
1281	1	3.3	1281	20	Layer	Sandy silt - alluvial?	3.97	3.78
1282	1	2	1282		Layer	Sandy silt	4.05	3.99
1283	1	3.3			Fill	Fill of cut [1285]	3.58	3.28
1284	1	3.3			Fill	Fill of cut [1285]		

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1285	1	3.3	1285		Cut	E/W ditch/gully	3.58	2.92
1286	1	3.1	1286		Layer	Silty sand - levelling?	4.91	4.47
1287	1	3.3			Fill	Fill of cut [1289]	4.64	4.34
1288	1	3.3			Fill	Fill of cut [1289]	4.39	4.32
1289	1	3.3	1289		Cut	E/W ditch/gully	4.75	4.03
1290	1	3.3			Fill	Fill of cut [1291]	3.73	
1291	1	3.3	1291		Cut	Posthole	3.73	3.65
1292	1	3.5			Timber	Log from [1193]		
1293	1	2			Fill	Fill of cut [1294]	3.87	3.84
1294	1	2	1294		Cut	Small pit	3.87	3.59
1295	1	3.3	1295	20	Layer	Sandy clayey silt	3.73	3.48
1296	1	2	1296		Layer	Silty gravel	3.7	
1297	1	1	1297		Layer	Sandy gravel	3.98	3.51
1298	1	3.2			Fill	Fill of cut [1299]	4.3	4.28
1299	1	3.2	1299		Cut	E/W ditch	4.39	3.88
1300	1	3.2			Fill	Fill of cut [1278]	4.37	4.23
1301	1	3.5			Fill	Fill of cut [1194]	2.2	
1302	1	2			Fill	Fill of cut [1303]	3.43	3.3
1303	1	2	1303		Cut	Pit	3.43	3.15
1304	1	3.2	1304		Layer	Sandy silty gravel - dumped deposit	3.69	3.58
1305	1	3.1			Fill	Fill of cut [1306]	4.41	
1306	1	3.1	1306		Cut	Posthole	4.41	4.29
1307	1	3.1			Fill	Fill of cut [1308]	4.59	
1308	1	3.1	1308		Cut	Posthole	4.59	4.24
1309	1	3.1			Fill	Fill of cut [1310]	4.88	
1310	1	3.1	1310		Cut	Posthole	4.88	4.81
1311	1	3.3			Fill	Fill of cut [1312]	3.77	
1312	1	3.3	1312		Cut	N/S gully	3.75	3.42
1313	1	3.1	1313		Layer	Dump	4.43	4.2
1314	1	2			Fill	Fill of cut [1315]	4.21	
1315	1	2	1315		Cut	Shallow pit	4.21	4.11
1317	1	1	1015	16, 18	Layer	Silty gravel - natural	4.01	3.55
1318	1	2	1318	21	Layer	Burnt layer	4.23	4.12
1319	1	3.1	1319		Layer	Silty gravel	3.8	3.42
1320	1	3.1			Fill	Fill of cut [1321]		
1321	1	3.1	1321		Cut	Posthole	4.47	4.29
1322	1	3.1			Fill	Fill of cut [1323]	4	
1323	1	3.1	1323		Cut	Posthole	4	3.84

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1324	1	1	1324		Layer	Silty sandy gravel - levelling?	4.84	4.42
1325	1	2	1325	21	Layer	Sandy silt	4.25	3.97
1326	1	3.3	1326		Layer	Sandy clayey silt	3.88	3.56
1327	1	2	1327		Layer	Burnt flint horizon	4.44	4.05
1328	1	2	1328		Layer	Burnt flint horizon	4.31	4.18
1329	1	2	1329	21	Layer	Sandy clayey silt	4.14	3.9
1330	1	3.2	1330		Layer	Burnt flint horizon	4.36	3.81
1331	1	2		21	Fill	Fill of cut [1332]	3.87	3.79
1332	1	2	1332	21	Cut	Pit	3.87	3.46
1333	1	3.1	1333		Layer	Sandy clayey silt	3.65	3.55
1334	1	3.2	1334		Layer	Silty sandy clay with high organic content	3.73	3.42
1335	1	2			Fill	Fill of cut [1336]	3.99	
1336	1	2	1336		Cut	Small pit	3.99	3.69
1337	1	1	1337	21	Layer	Gravel - levelling?	4.17	3.74
1338	1	3.2			Fill	Fill of cut [1339]	3.49	
1339	1	3.2	1339		Cut	Stakehole	4.49	3.38
1340	1	1	1340		Layer	Gravelly silt - colluvial	4.13	3.9
1341	1	3.2	1341		Layer	Clayey silty sand - colluvial?	3.75	3.24
1342	1	2			Fill	Fill of cut [1343]	4.14	4.13
1343	1	2	1343		Cut	Small pit	4.14	3.99
1344	1	2	1344		Layer	Silty sandy gravel - levelling?	4.2	3.79
1345	1	1	1345		Layer	Clayey silt- colluvial?	4.06	3.82
1346	1	3.2	1346		Layer	Sandy clayey silt - colluvial	3.79	3.42
1347	1	3.2			Fill	Fill of pit [1362]	3.43	
1348	1	3.2			Fill	Fill of pit [1362]	3.49	
1349	1	2			Fill	Fill of cut [1350]	3.86	3.36
1350	1	2	1350		Cut	Large cut feature	3.86	3.22
1351	1	3.2	1351		Layer	Colluvial deposit?	3.58	3.3
1352	1	3.1	1352		Layer	Levelling?	4.09	3.47
1353	1	3.2			Fill	Fill of cut [1360]	3.15	3.11
1354	1	2	1354		Layer	Sand & gravel	6.07	
1355	1	1	1355	17	Layer	Sand & gravel	6.13	5.89
1356	1	3.2		20	Fill	Fill of cut [1360]	3.34	3.28
1358	1	1	1015	21, 22	Fill	Alluvium fill of palaeo- channel	4.8	3.93
1359	1	3.2	1359	20	Layer	Colluvial?	3.59	3.25
1360	1	3.2	1360	19, 20	Cut	Large pit	3.43	2.63
1361	1	3.2			Fill	Fill of cut [1362]	3.5	
1362	1	3.2	1362		Cut	Large pit	3.5	2.38

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1363	1	1		17	Fill	Fill of cut [1379]	6.17	5.91
1364	1	3.2	1364	20	Layer	Colluvial?	3.48	3.05
1365	1	3.2		19, 20	Fill	Fill of cut [1360]	3.29	3.05
1366	1	1		17	Fill	Fill of cut [1379]	5.77	5.51
1367	1	1			Fill	Fill of cut [1368]	3.74	3.43
1368	1	1	1368		Cut	Pit	3.74	3.1
1371	1	2			Fill	Fill of cut [1372]	3.92	
1372	1	2	1372		Cut	Possible posthole	3.92	3.68
1373	1	1	1379	17	Fill	Fill of cut [1379]	5.73	5.24
1374	1	3.2			Fill	Fill of cut [1375]	4.01	3.93
1375	1	3.2	1375		Cut	Possible posthole	4.01	3.64
1376	1	3.2			Fill	Fill of cut [1362]	2.76	
1377	1	1		18	Layer	Silty clayey sand - natural	4.76	4.26
1378	1	1	1379	17	Fill	Fill of cut [1379]	5.37	4.51
1379	1	1	1379	17	Cut	Palaeo-channel	6.34	4.31
1381	1	2	1015	22	Layer	Sandy silt reworked by bioturbation	3.99	3.77
1382	1	1	1015	16, 18	Layer	Sandy clayey gravel - natural	4.85	4.8
1383	1	1		18	Layer	Silty sandy clay - natural	4.76	4.16
1384	1	1		18	Layer	Silty clayey sand - natural	4.79	4.31
1385	1	1		18	Layer	Silty clayey sand - natural	4.73	4.26
1386	1	1		18	Layer	Silty clayey sand - natural	4.44	4.06
1387	1	1		16, 18	Layer	Clayey silty sand - natural	4.58	4
1388	1	1		18	Layer	Silty clayey sand - natural	4.66	4.31
1389	1	1		16	Layer	Clayey silty sand - natural	4.8	4.29
1390	1	1		16	Layer	Silty sandy clay - natural	4.59	3.97
1391	1	1		16	Layer	Clayey silty sand - natural	4.49	4.2
1392	1	1		16	Layer	Sand - natural	4.43	3.71
1393	1	1		16	Layer	Silty sand - natural	4.09	
1394	1	1		16	Layer	Sandy clay - natural	4.74	4.39
1395	1	3.5			Timber	Beam found in [1154]		
1396	1	1	1396	22	Cut	Palaeo-channel	4	2.75
1397	1	1	1396		Fill	Fill of cut [1396]	3.24	3.15
1398	1	1		22	Fill	Fill of cut [1396]	3.17	
1399	1	1		21	Fill	Fill of cut [1404]	3.55	3.29
1400	1	1		21	Fill	Fill of cut [1404]	3.54	2.94
1401	1	1		21	Fill	Fill of cut [1404]	3.98	2.99
1402	1	1		21	Fill	Fill of cut [1404]	3.51	3.07
1403	1	1		21	Fill	Fill of cut [1404]	3.11	2.73

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1404	1	1	1404	21	Cut	Palaeo-channel	3.99	2.73
1501	2	1	1501		Layer	Terrace gravel		
1502	2	6.2			Fill	Fill of cut [[1503]	5.05	
1503	2	6.2	1503		Cut	Rubbish pit	5.04	4.36
1504	2	6.2			Fill	Fill of cut [1504]	5	
1505	2	6.2	1505		Cut	Rubbish pit	5.02	4.73
1506	2	6.1	1506		Fill	Top fill of cess pit [1508]	6.02	
1507	2	6.1	1507		Fill	Backfill to construction cut [1509]	6.02	
1508	2	6.1	1508		Masonry	Cess pit	6.12	
1509	2	6.1	1509		Cut	Construction cut for cess pit [1508]	6.04	5.76
1510	2	6.2			Fill	Fill of well [1511]	4.99	4.87
1511	2	6.2	1511		Masonry	Well	4.99	4.2
1512	2	6.2	1512		Cut	Construction cut for well [1511]	5.09	4.2
1513	2	6.2	1513		Fill	Fill of cut [1514]	5.09	4.43
1514	2	6.2	1514		Cut	Rubbish/cess pit	5.04	4.43
1515	2	6.1	1515		Fill	Second fill of cess pit [1508]	5.94	5.77
1516	2	6.2	1010		Fill	Fill of cut [1517]	5.31	5.11
1517	2	6.2	1517		Cut	Small pit	4.8	4.42
1518	2	6.2	1017		Fill	Fill of cess pit [1520]	4.62	7.72
1519	2	6.2			Fill	Backfill to construction [1521]	4.7	
1520	2	6.2			Masonry	Cess pit	4.7	4.08
1521	2	6.2			Cut	Construction cut for cess pit [1520]	4.7	3.7
1522	2	6.2			Fill	Primary fill of cut [1503]	4.65	4.62
1523	2	6.2			Fill	Fill of cut [1524]	5	
1524	2	6.2			Cut	Rubbish pit	4.99	4.45
1525	2	6.1	1525		Fill	Primary fill of cess pit [1508]	5.77	5.76
1526	2	6.2			Fill	Top fill of cut [1527]	5.02	4.92
1527	2	6.2	1527		Cut	Rubbish pit	5.02	4.53
1528	2	6.2			Fill	Fill of cut [1529]	5.09	4.89
1529	2	6.2	1529		Cut	Rubbish pit	5.06	4.58
1530	2	6.2			Fill	Bottom fill of cut [1527]	4.87	4.77
1531	2	6.2			Fill	Primary fill of cess pit [1529]	4.01	
1532	2	5.2	1532		Fill	Upper fill of cut [1533]	5.04	4.79
1533	2	5.2	1533		Cut	Pit	5.17	4.3
1534	2	6.1			Fill	Backfill to cess pit [1535]	4.13	
1535	2	6.1	1535		Masonry	Cess pit - fill of cut [1536]	4.4	3.78
1536	2	6.1	1536		Cut	Construction cut for cess pit [1535]	4.38	3.76

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1537	2	6.2			Fill	Fill of cut [1538]	4.73	
1538	2	6.2	1538		Cut	Rubbish pit	4.73	4.04
1539	2	5.2	1539		Fill	Fill of cut [1540]	5.96	
1540	2	5.2	1540		Cut	Rubbish pit	5.96	5.74
1541	2	5.2			Fill	Primary fill of cut [1533]	4.76	4.47
1542	2	6.2			Fill	Backfill to cess pit [1543]	4.95	4.71
1543	2	6.2	1543		Masonry	Cess pit	5.89	4.55
1544	2	6.2	1544		Cut	Construction cut for cess pit [1543]	5.93	4.5
1545	2	6.1			Fill	Primary fill of cess pit [1535]	3.9	3.8
1546	2	6.2			Fill	Backfill to cut [1548]	4.84	
1547	2	6.2	1547		Masonry	E/W wall foundation	4.84	4.73
1548	2	6.2	1548		Cut	Construction cut for [1547]	4.83	4.63
1549	2	6.2			Fill	Backfill to cess pit [1543]	4.65	
1550	2	6.2			Fill	Fill of cut [1551]	6.09	5.37
1551	2	6.2	1551		Cut	Rubbish pit	5.81	4.63
1552	2	6.2			Fill	Fill of cut [1553]	5.33	5.04
1553	2	6.2	1553		Cut	Small pit	5.26	4.71
1554	2	5.2	1554		Fill	Fill of cut [1555]	5.26	5.14
1555	2	5.2	1555		Cut	Pit	5.17	4.94
1556	2	6.2			Fill	Primary fill of cess pit [1543]	4.69	4.6
1557	2	6.2	1557		Masonry	Brick floor	6.02	
1558	2	6.2	1558		Layer	Bedding layer of [1557]	5.95	
1559	2	6.2	1559		Masonry	N/S wall	5.99	5.95
1560	2	6.2	1560		Cut	Construction cut for [1559]	5.95	5.89
1561	2	6.1			Fill	Backfill to cess pit [1562]	4.38	
1562	2	5.2	1562		Masonry	Cess pit - fill of cut [1563]	4.32	3.55
1563	2	5.2	1563		Cut	Construction cut for cess pit [1562]	4.34	3.49
1564	2	5.2			Fill	Fill of cut [1565]	5.05	4.82
1565	2	5.2	1565		Cut	Impression left by barrel	5.03	4.29
1566	2	5.2			Fill	Primary fill of cess pit [1562]	3.78	3.68
1567	2	5.2			Fill	Fill of [1568]	4.12	
1568	2	5.2	1568		Cut	Heavily truncated feature	4.12	3.55
1569	2	5.2			Fill	Fill of cut [1570]	4.24	
1570	2	5.2	1570		Cut	Small pit	4.24	4.93
1571	2	5.1			Fill	Fill of cut [1572]	4.13	4.06
1572	2	5.1	1572		Cut	Small pit	4.13	3.87
1573	2	5.1	1573		Layer	Silty sand - made ground	5.01	4.93
1574	2	6.2			Fill	Fill of cut [1575]	4.98	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1575	2	6.2	1575		Cut	Rubbish pit	4.98	4.42
1576	2	6.2			Fill	Fill of cut [1577]	4.16	
1577	2	6.2	1577		Cut	Rubbish pit	4.16	3.65
1578	2	5.2			Fill	Fill of cut [1579]	5.01	4.98
1579	2	5.2	1579		Cut	Small pit	5.01	4.76
1580	2	6.2			Fill	Fill of cut [1581]	5.83	5.19
1581	2	6.2	1581		Cut	Small pit	5.82	4.98
1582	2	6.2			Fill	Fill of cut [1583]	5.87	5.16
1583	2	6.2	1583		Cut	Rubbish pit	5.92	5.07
1584	2	6.2			Fill	Fill of cut [1585]	4.19	
1585	2	6.2	1585		Cut	Rubbish pit	4.19	3.33
1586	2	6.1			Fill	Fill of cut [1587]	4.93	4.67
1587	2	6.1	1587		Cut	Rubbish pit	4.93	4.39
1588	2	6.2			Fill	Fill of cut [1589]	4.42	
1589	2	6.2	1589		Cut	Posthole	4.42	4.33
1590	2	6.2			Fill	Fill of cut [1591]	5.92	
1591	2	6.2	1591		Cut	Rubbish pit	5.93	5.55
1592	2	6.2			Fill	Upper fill of cut [1593]	4.96	
1593	2	6.2	1593		Cut	Pit	4.96	4.65
1594	2	6.1			Fill	Fill of cut [1595]	5	
1595	2	6.1	1595		Cut	Rubbish pit	5	4.78
1596	2	6.2			Fill	Fill of cut [1593]	4.96	
1597	2	6.2			Fill	Lower fill of cut [1593]	4.71	
1598	2	5.2			Fill	Fill of cut [1599]	5.1	4.7
1599	2	5.2	1599		Cut	Construction cut for barrel well [1565]	5.1	4.25
1600	2	6.2			Fill	Fill of cut [1601]	4.93	4.82
1601	2	6.2	1601		Cut	Rubbish pit	4.93	4.72
1602	2	6.2	1602		Cut	Rubbish pit	5.99	5.39
1603	2	6.2			Fill	Fill of cut [1602]	5.97	
1604	2	5.2			Fill	Upper fill of cut [1605]	5	
1605	2	5.2	1605		Cut	Shallow truncated pit	5.05	4.95
1606	2	5.1			Fill	Fill of cut [1607]	4.44	
1607	2	5.1	1607		Cut	Small pit	4.44	4.26
1608	2	5.1		25	Layer	Post-med made ground	4.34	4.26
1609	2	3.2		25	Layer	Roman horizon	4.02	3.78
1610	2	1		25	Layer	Sandy clay	3.73	3.66
1611	2	5.2			Fill	Fill of cut [1612]	4.94	
1612	2	5.2	1612		Cut	Pit	4.94	4.59

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1613	2	5.2	Fidii	Section	Fill	Lower fill of cut [1605]	4.87	(())
1614	2	5.1			Fill	Fill of cut [1615]	5.39	5.12
1615	2	5.1	1615		Cut	Rubbish pit	5.38	4.93
1616	2	6.1	1015		Fill	Fill of cut [1617]	4.87	4.93
1617	2	6.1	1617		Cut	Possible posthole	4.87	4.8
			1017		Fill	Upper fill of cut [1619]		4.0
1618	2	6.2	4040				5.01	4.70
1619	2	6.2	1619		Cut	Pit	5.02	4.79
1620	2	3.2	1620		Layer	Possible beaten earth floor?	6.29	6
1621	2	6.2	4000		Fill	Lower fill of cut [1619]	4.96	5.00
1622	2	2	1622		Layer	Sandy silt	5.46	5.38
1623	2	5.1			Fill	Fill of cut 1625] - post pipe	6.19	
1624	2	5.1			Fill	Fill of cut [1625]	6.19	
1625	2	5.1	1625		Cut	Posthole?	6.19	6.1
1626 1627	2	5.1 5.1			Fill	Fill of cut [1660] - post pipe Fill of cut [1660] - post packing	6.16 6.17	6.12 6.11
1628	2	5.1	1628		Cut	Post pit?	6.24	5.85
1629	2	6.2			Fill	Fill of cut [1630]	4.88	3.00
1630	2	6.2	1630		Cut	Rubbish pit	4.88	4.61
1631	2	6.2			Fill	Fill of cut [1632]	4.15	
1632	2	6.2	1632		Cut	Pit	4.15	3.36
1633	2	6.2			Fill	Fill of cut [1634]	6.01	
1634	2	6.2	1634		Cut	Rubbish pit	6	5.76
1635	2	6.2			Fill	Fill of cut [1636]	5.52	5.1.5
1636	2	6.2	1636		Cut	Rubbish pit	5.53	5.28
1637	2	5.2			Fill	Fill of cut [1638] - decayed wood	3.54	0.20
1638	2	5.2	1638		Cut	Cut for floor joist	3.54	3.48
1639	2	5.2			Fill	Fill of cut [1640]	3.52	
1640	2	5.2	1638		Cut	Cut for floor joist	3.52	3.45
1641	2	5.2			Fill	Fill of cut [1642] - decayed wood	3.57	
1642	2	5.2	1638		Cut	Cut for floor joist	3.57	3.46
1643	2	6.2			Fill	Fill of cut [1644]	4.87	4.72
1644	2	6.2	1644		Cut	Rubbish pit	4.94	4.48
1645	2	5.2			Fill	Backfill of construction cut [1563]	3.51	3.38
1646	2	6.2	1646		Cut	Small pit	6.2	5.89
1647	2	6.2			Fill	Fill of cut [1646]	6.28	
1648	2	6.2			Fill	Fill of cut [1649]	5.93	
1649	2	6.2	1649		Cut	Rubbish pit		
1650	2	5.1		25	Layer	Post-med made ground	4.21	4.03

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1651	2	3.2		25	Layer	Roman ? Horizon	4.06	3.98
1652	2	1		25	Layer	Sandy clay	3.81	3.75
1653	2	6.2			Fill	Fill of cut 1654]	6.15	5.95
1654	2	6.2	1654		Cut	Rubbish pit	6.26	5.5
1655	2	5.1			Fill	Fill of cut [1556]	5.57	5.54
1656	2	5.1	1656		Cut	Shallow pit	5.57	5.46
1657	2	5.1			Fill	Upper fill of cut [1659]	4.33	4.29
1658	2	5.1			Fill	Fill of cut [1659]	4.16	
1659	2	5.1	1659		Cut	Pit	4.33	3.57
1660	2	5.1	1660		Cut	Posthole	6.2	6
1661	2	5.1			Fill	Fill of cut [1628]	6.11	6.09
1662	2	5.1			Fill	Fill of cut [1663]	6.29	
1663	2	5.1	1663		Cut	Posthole	6.27	6.09
1664	2	6.1			Fill	Fill of cut [1666]	4.91	
1665	2	6.1			Fill	Fill of cut [1666]	4.92	4.79
1666	2	6.1	1666		Cut	Pit	4.92	4.66
1667	2	5.2			Fill	Fill of cut [1668]	4.92	4.9
1668	2	5.2	1668		Cut	Small pit	4.92	4.54
1669	2	5.1			Fill	Lower fill of cut [1559]	3.86	
1670	2	6.2	1670		Layer	Sandy silt	5.01	
1671	2	6.2			Fill	Backfill to construction cut [1673]	4.36	
1672	2	6.2	1672		Masonry	E/W wall foundation	4.36	4.3
1673	2	6.2	1673		Cut	Construction cut for wall foundation [1672]	4.36	3.73
1674	2	6.2			Fill	Fill of cut [1675]	4.58	
1675	2	6.2	1675		Cut	Small pit	4.58	4.25
1676	2	6.2			Fill	Fill of cut [1677]	4.33	
1677	2	6.2	1677		Cut	Robber trench	4.33	3.98
1678	2	5.2	1678		Masonry	E/W cellar wall	4.27	4.07
1679	2	6.2	1679		Cut	Robber trench	4.29	4.07
1680	2	6.2			Fill	Fill of cut [1679]	4.29	
1681	2	3.5	1681		Layer	Made ground - Roman ?	4.26	3.95
1682	2	7.1	1682		Fill	Fill of cut [1683]	6.24	5.89
1683	2	7.1	1683		Cut	Robber trench	6.24	5.07
1684	2	5.2			Fill	Fill of cut 1685	5.9	5.78
1685	2	5.2	1685		Cut	Small pit	5.9	5.78
1686	2	6.2			Fill	Upper fill of cut [1687]	6	5.21
1687	2	6.2	1697		Cut	Rubbish pit	5.95	4.1
1688	2	6.1			Fill	Fill of cut [1689]	5.01	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1689	2	6.1	1689		Cut	Pit	5	4.31
1690	2	6.1			Fill	Backfill to construction cut 1692	5.89	5.77
1691	2	6.1			Fill	Backfill to construction cut 1692	5.81	5.62
1692	2	6.1	1692		Cut	Construction cut for [1693]	5.94	5.54
1693	2	6.1	1693		Masonry	N/S wall foundation	5.95	5.62
1694	2	6.1			Fill	Fill of cut [1695]	4.96	
1695	2	6.1	1695		Cut	Small pit	4.96	4.59
1696	2	6.2			Fill	Primary fill of cut [1687]	4.26	4.22
1697	2	6.1			Fill	Fill of cut [1698]	4.16	
1698	2	6.1	1698		Cut	Small pit	4.15	3.85
1699	2	5.2			Fill	Fill of cut [1701]	4.35	4.24
1700	2	5.2	1700		Masonry	E/W cellar wall	4.04	
1701	2	5.2	1701		Cut	Construction cut for cellar [1700]/[1678]	4.35	3.4
1702	2	6.2			Fill	Fill of cut [1703]	4.07	4.02
1703	2	6.2	1703		Cut	Small pit	4.17	3.69
1704	2	7.1			Fill	Fill of cut [1705]	4.44	
1705	2	7.1	1705		Cut	Rubbish pit	4.51	3.84
1708	2	6.1			Fill	Backfill to masonry structure [1700]	4.31	
1709	2	6.1	1709		Fill	Backfill to masonry structure [1700]	4.32	
1710	2	6.1			Fill	Fill of cut [1715]	6.03	
1711	2	6.1			Fill	Backfill to masonry structure [1700]	3.97	
1712	2	6.1			Fill	Upper fill of cut [1713]	5.99	5.74
1713	2	6.1	1713		Cut	Rubbish pit	6.02	5.5
1714	2	6.1			Fill	Backfill to masonry structure [1700]	3.93	
1715	2	6.1	1715		Cut	Pit	6.05	5.12
1716	2	6.1			Fill	Bottom fill of cut [1713]	5.72	5.61
1717	2	5.2	1717		Masonry	Brick floor	3.86	3.85
1718	2	6.2			Fill	Fill of cut [1719]	4.13	
1719	2	6.2	1719		Cut	Small pit	4.17	3.86
1720	2	5.2			Fill	Upper fill of cut [1721]	6.04	5.86
1721	2	5.2	1721		Cut	Rubbish pit	6.07	5.53
1722	2	6.2			Fill	Fill of cut [1723]	4.31	
1723	2	6.2	1723		Cut	Small pit	4.38	4.23
1724	2	5.2			Layer	Floor make-up	3.76	
1725	2	5.2			Fill	Backfill to cellar [1700]/[1678] in order to raise floor	3.63	
1726	2	6.2			Fill	Upper fill of cess pit [1735]	4.53	4.44

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1727	2	6.2	i ian	Occion	Fill	Second fill of cess pit [1735]]	4.47	4.01
1728	2	5.1			Fill	Fill of cut [1729]	6.08	4.01
1729	2	5.1	1729		Cut	Posthole	6.08	5.76
1730	2	6.2	1120		Fill	Basal fill of cess pit [1735]	4.01	0.70
			1701			Brick floor - largely robbed		0.00
1731	2	5.2	1731		Masonry	out	3.84	3.83
1732	2	5.2			Layer	Floor make-up	3.79	
1733	2	6.1	4704		Fill	Upper fill of cut [1734]	5.99	5.9
1734	2	6.1	1734		Cut	Rubbish pit	6.01	5.48
1735	2	6.2	1735		Masonry	Brick lining to cess pit	4.53	3.83
1736	2	6.1			Fill	Basal fill of cut [1734]	5.82	5.71
1737	2	3.6		26	Fill	Second fill of cut [1738]	4.89	4.65
1738	2	3.6	1738	26	Cut	E/W aligned boundary ditch	4.95	4.36
1739	2	3.6			Fill	Fill of cut [1740]	4.79	
1740	2	3.6	1740		Cut	Pit Dumped deposit - made	4.79	4.66
1741	2	3.5	1741		Layer	ground	4.74	4.7
1742	2	3.6		26	Fill	Tertiary fill of cut [1738]	4.89	4.54
1743	2	5.2			Fill	Basal fill of cut [1721]	5.68	5.67
1744	2	3.6		26	Fill	Basal fill of cut [1738]	4.69	4.43
1745	2	3.6		26	Fill	Upper fill of cut [1738]	4.89	
1746	2	3.5	1746		Layer	Dumped deposit - made ground	4.67	4.41
1747	2	5.2			Fill	Upper fill of cut [1748]	5.9	
1748	2	5.2	1748		Cut	Pit	5.9	5.56
1749	2	5.2			Fill	Basal fill of cut [1748]	5.7	
1750	2	3.6			Fill	Fill of cut [1751]	4.87	
1751	2	3.6	1751		Cut	Post pit	4.87	4.67
1752	2	5.2			Fill	Fill of cut [1753]	5.56	
1753	2	5.2	1753		Cut	Pit	5.54	5.35
1754	2	3.3			Fill	Fill of cut [1755]	4.72	4.46
1755	2	3.3	1755		Cut	Posthole	4.63	4.3
1756	2	3.5	1756		Layer	Sandy silt - dumped deposit	4.41	4.26
1757	2	6.1			Fill	Upper fill of cut [1764]	6.15	5.91
1758	2	6.1			Fill	Fill of cut [1764]	5.98	-
1759	2	6.1			Fill	Fill of cut [1764]	5.98	
1760	2	3.3			Fill	Fill of cut [1761]	4.83	4.45
1761	2	3.3	1761		Cut	Posthole	4.83	4.26
1762	2	3.5	1762		Layer	Dumped deposit - made ground	4.64	4.31
1763	2	6.1			Fill	Fill of cut [1764]	5.4	5.17
1764	2	6.1	1764		Cut	Rubbish pit	6.13	5.18

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1765	2	3.3	1 1011	000000	Fill	Fill of cut [1766]	4.89	4.45
1766	2	3.3	1766		Cut	Posthole	4.89	4.14
1767	2	3.3			Fill	Fill of cut [1768]	4.82	4.41
1768	2	3.3	1768		Cut	Posthole	4.82	4.18
1769	2	5.2			Fill	Fill of cut [1771]	5.95	
1770	2	3.5	1770		Layer	Dumped deposit - made ground	4.4	4.32
1771	2	5.2	1771		Cut	Pit	6.17	5.84
1772	2	3.4	1772		Layer	Sandy silt	4.36	4.28
						Dumped deposit - made		
1773	2	3.4	1773		Layer	ground	4.36	4.13
1774	2	5.2	4775		Fill	Fill of cut [1775]	5.99	F 00
1775 1776	2	5.2 3.5	1775 1776		Cut Layer	Pit Dumped deposit - made ground	6.03 4.56	5.69 4.24
1777	2	6.1			Fill	Fill of cess pit [1786]	6.06	
1778	2	3.2	1778		Cut	Pit	4.48	4.24
1779	2	3.2			Fill	Fill of cut [1778]	4.48	
1780	2	3.4	1780		Layer	Dumped deposit - made ground	4.16	4.11
1781	2	3.4			Fill	Fill of cut [1782]	4.29	
1782	2	3.4	1782		Cut	Posthole	4.29	3.97
1783	2	3.4			Fill	Fill of cut [1784]	4.27	
1784	2	3.4	1784		Cut	Posthole	4.27	3.99
1785	2	3.2	1785		Layer	Sandy clayey silt - dumped deposit	4.24	4.08
1786	2	6.1	1786		Masonry	Cess pit lining	6.27	5.62
1787	2	3.6	1787		Layer	Sandy silt	4.84	
1788	2	3.4	1788		Layer	Sandy silt - dumped deposit	4.35	4.17
1789	2	3.6	1789		Layer	Possible surface	4.85	4.77
1790	2	3.2	1790		Layer	Sandy silt - surface layer?	4.84	4.81
1791	2	3.4	1791		Cut	Possible tip line	4.11	3.64
1792	2	1	1792		Layer	Gravelly sand- dumped deposit?	4.4	3.8
1793	2	6.1			Fill	Backfill to construction cut [1794] Construction cut for cess pit	6.27	6.11
1794	2	6.1	1794		Cut	[1786]	6.3	5.54
1795	2	3.6			Fill	Fill of cut [1796]	4.83	4.77
1796	2	3.6	1796		Cut	Posthole	4.77	4.47
1797	2	6.1	1797		Masonry	Brick floor	6.22	
1798	2	3.2	1798		Layer	Clayey silt - dumped deposit	4.06	4.03
1799	2	3.2			Fill	Fill of cut [1802]	4.31	
1800	2	3.5			Fill	Fill of cut [1801]	4.56	
1801	2	3.5	1801		Cut	Pit	4.63	4.4

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1802	2	3.2	1802		Cut	Shallow pit	4.32	4.23
1803	2	1	1803		Layer	Gravelly sand- naturally deposit?	4.12	3.83
1804	2	3.2	1804		Layer	Sandy silt	4.36	4.12
1805	2	3.1			Fill	Fill of cut [1807]	4.78	
1806	2	1	1806		Layer	Gravelly sand- naturally deposit?	4.14	3.81
1807	2	3.1	1807		Cut	Shallow pit	4.78	4,67
1808	2	6.1	1808		Layer	Bedding layer of [1797]	6.16	
1809	2	3.1			Fill	Fill of cut [1810]	4.77	
1810	2	3.1	1810		Cut	Pit	4.77	4.54
1811	2	3.1			Fill	Fill of cut [1812]	4.63	4.61
1812	2	3.1	1812		Cut	Posthole	4.61	4.49
1813	2	3.2	1813		Layer	Sandy silt - dumped deposit	4.23	3.96
1814	2	6.1	1814		Layer	Silty sand - made ground	4.16	4.14
1815	2	3.1			Fill	Fill of cut [1816]	4.59	
1816	2	3.1	1816		Cut	Posthole?	4.59	4.27
1817	2	3.1			Fill	Fill of cut [1818]	4.61	
1818	2	3.1	1818		Cut	Posthole	4.61	4.39
1819	2	3.1			Fill	Fill of cut [1820]	4.56	
1820	2	3.1	1820		Cut	Posthole	4.56	4.32
1821	2	3.1			Fill	Fill of cut [1822]	4.77	4.65
1822	2	3.1	1822		Cut	Posthole	4.74	4.5
1823	2	3.3			Fill	Fill of cut [1824]	3.97	
1824	2	3.3	1824		Cut	Pit	3.97	3.55
1825	2	3.1			Fill	Fill of cut [1826]	4.56	4.35
1826	2	3.1	1826		Cut	Posthole	4.47	4.02
1827	2	5.2	1827		Layer	Sandy silt	6.07	6
1828	2	2	1828		Layer	Silty sandy gravel	4.26	4.14
1829	2	3.3	1829		Layer	Sandy gravel	3.97	
1830	2	3.3	1830		Layer	Sandy gravel - possible surface	3.91	
1831	2	5.1			Fill	Fill of cut [1832]	6.03	5.98
1832	2	5.1	1832		Cut	Posthole	6.07	5.74
1833	2	1	1833		Layer	Sandy silty gravel	3.88	3.83
1834	2	5.1			Fill	Fill of cut [1835]	6.07	6.05
1835	2	5.1	1835		Cut	Posthole	6.07	5.83
1836	2	3.3			Fill	Fill of cut [1837]	4.45	
1837	2	3.3	1837		Cut	Posthole	4.47	4.19
1838	2	3.3			Fill	Fill of cut [1839]	4.45	
1839	2	3.3	1839		Cut	Posthole	4.41	4.17

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1840	2	3.1	I Idii	Occilon	Fill	Fill of cut [1841]	4.55	4.52
1841	2	3.1	1841		Cut	Posthole	4.55	4.29
1842	2	6.2	1041		Fill	Fill of cut [1843]	4.36	4.20
						Shallow feature - uncertain		
1843	2	6.2	1843		Cut	function	4.36	4.28
1844	2	3.3			Fill	Upper fill of cut [1845]	4.38	
1845	2	3.3	1845		Cut	Posthole	4.38	4.12
1846	2	3.2	1846		Layer	Sandy silt- dumped deposit	4.44	4.3
1847	2	1	1847		Layer	Gravelly sand	3.79	3.69
1848	2	5.1	1848		Layer	Clayey silt - dumped deposit	4.49	4.44
1849	2	2	1849		Layer	Sandy silt - dumped deposit	4.21	4.13
1850	2	1	1850		Layer	Silty clay	3.79	3.68
1851	2	1	1851		Layer	Silty sand	3.81	3.66
1852	2	5.1			Fill	Fill of cut [1853]	4.41	
1853	2	5.1	1853		Cut	Small pit	4.43	4.17
1854	2	5.1			Fill	Fill of cut [1855]	6.16	
1855	2	5.1	1855		Cut	Stakehole	6.14	5.89
1856	2	5.1			Fill	Fill of cut [1857]	6.14	
1857	2	5.1	1857		Cut	Posthole	6.14	5.89
1858	2	2	1858		Layer	Burnt flint	4.52	4.22
1859	2	3.2			Fill	Fill of cut [1860]	5.91	
1860	2	3.2	1860		Cut	Post pit	6.03	5.61
1861	2	1	1861		Layer	Silty sand	3.73	3.69
1862	2	3.3			Fill	Fill of cut [1845]	4.32	
1863	2	5.2			Fill	Fill of cut [1864]	3.97	3.94
1864	2	5.2	1864		Cut	Possible pit	3.97	3.69
1865	2	3.3			Fill	Fill of cut [1867]	3.62	3.45
1866	2	1	1866		Layer	Light yellowish grey gravel - fluvial	3.68	3.37
1867	2	3.3	1867		Cut	Pit?	3.56	3.31
1868	2	3.4	1868		Layer	Clayey sand silt - Roman? Dumped deposit	4.47	4.41
1869	2	2	1869		Layer	Silty sand	4	3.98
1870	2	3.2			Fill	Fill of cut [1860]	5.84	
1871	2	1	1871		Layer	Sandy clay	3.94	3.88
1872	2	1			Layer	Clayey sandy gravel unexcavated	3.83	3.7
1873	2	3.4			Fill	Upper fill f cut [1877]	4.48	
1874	2	3.1			Fill	Fill of cut [1885]	4.35	4.3
1875	2	3.3	1875		Fill	Upper fill of cut [1860]	6.07	
1876	2	3.2	1876		Layer	Gravel - surface?	6.18	6
1877	2	3.4	1877		Cut	Small pit	4.48	3.98

Contact No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
Context No.	2	3.3	Fidii	Section	Fill	Fill of cut [1879]	4.61	(100)
1879	2	3.3	1879		Cut	Small pit - function uncertain	4.62	4.24
1880	2	3.3	1079		Fill	Fill of cut [1881]	4.02	4.24
1881	2	3.3	1881		Cut	Posthole	4.39	4.24
1882	2	3.2	1882		Layer	Silty clay - surface?	5.99	4.24
1883	2	3.1	1002		Fill	Fill of cut [1885]	4.3	4.18
1884	2	3.1			Fill	Fill of cut [1885]	4.18	3.99
1885	2	3.1			Cut	Small pit - function uncertain	4.16	3.99
1886	2	3.3			Fill	Fill of cut [1887]	4.32	3.99
1887	2	3.3	1887		Cut	Posthole	4.41	4.18
	2		1001		Fill			4.10
1888		3.3				Fill of cut [1890]	4.39	
1889	2	3.3	4000		Fill	Fill of cut [1890]	4.34	4.00
1890	2	3.3	1890		Cut	Posthole	4.36	4.06
1891	2	3.1	4000		Fill	Upper fill of cut [1892]	5.96	5 .00
1892	2	3.1	1892		Cut	Post pit	6.02	5.62
1893	2	3.1			Fill	Fill of cut [1892]	5.94	5.8
1894	2	3.4			Fill	Basal fill of cut [1877]	4.25	4.24
1895	2	3.3			Fill	Fill of cut [1887] Clayey silt with frequent	4.27	4.18
1896	2	3.4	1896		Layer	burnt organic remains	4.49	4.45
1897	2	2	1897		Layer	Sandy silt	4.15	3.96
1898	2	3.1			Fill	Upper fill of cut [1903]	5.91	5.85
1899	2	3.2			Fill	Upper fill of cut [1901]	4.41	4.38
1900	2	3.2			Fill	Fill of cut [1901]	4.32	
1901	2	3.2	1901		Cut	Pit	4.41	3.99
1902	2	3.1			Fill	Fill of cut [1903]	5.8	
1903	2	3.1	1903		Cut	Pit of uncertain function	6.03	5.59
1904	2	1	1904		Layer	Sandy silt	4.1	3.96
1905	2	3.3	1905		Layer	Sandy silt - occupation layer?	4.56	4.47
1906	2	3.2			Fill	Fill of cut [1907]	4.47	
1907	2	3.2	1907		Cut	Posthole?	4.47	4.4
1908	2	3.2	1908		Layer	Sandy silt - surface layer?	4.48	4.47
1909	2	6.2			Fill	Backfill to construction cut [1910]	4.55	
1910	2	6.2	1910		Cut	Construction cut for cess pit [1735]	4.55	3.83
1911	2	6.1			Fill	Fill of cut [1914]	5.83	
1912	2	6.1			Fill	Fill of cut [1914]	5.82	
1913	2	2	1913		Layer	Sandy silt	4.4	4.1
1914	2	6.1	1914		Cut	Posthole	5.97	5.71
1915	2	3.3			Fill	Fill of cut [1916]	4.42	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1916	2	3.3	1916	Coolion	Cut	Stakehole	4.4	4.31
1917	2	3.2	.0.0		Fill	Fill of cut [1918]	4.43	
1918	2	3.2	1918		Cut	Stakehole	4.43	4.23
1919	2	3.3	1919		Layer	Clayey silt - surface?	4.44	4.42
1920	2	3.4	1920		Layer	Clayey silt - occupation layer	4.38	4.32
1921	2	3.3	1921		Layer	Sandy silt - surface layer?	4.43	
1922	2	3.3			Fill	Fill of cut [1923]	4.26	
1923	2	3.3	1923		Cut	Possible posthole	4.26	4.01
1924	2	5.2	1924		Cut	Shallow pit	5.97	5.92
1925	2	5.2			Fill	Fill of cut [1924]	6	
1926	2	1	1926, 1501		Layer	Sandy gravel	4.32	3.83
1927	2	3.3	,		Fill	Fill of cut [1928]	4.27	
1928	2	3.3	1928		Cut	Small pit	4.29	4.15
1929	2	2			Fill	Fill of cut [1930]	4.46	4.33
1930	2	2	1930		Cut	Possible pit	4.46	4
1931	2	5.1			Fill	Fill of cut [1932]	6.04	
1932	2	5.1	1932		Cut	Pit?	6.04	5.95
1933	2	5.1			Fill	Fill of cut [1934]	6	5.97
1934	2	5.1	1934		Cut	Small pit	5.97	5.33
1935	2	3.3			Fill	Fill of cut [1936]	4.37	
1936	2	3.3	1936		Cut	Pit?	4.37	4.12
1937	2	3.3	1937		Layer	Sandy silt - surface layer?	4.35	
1938	2	3.5	1938		Layer	Sandy silt	6.03	
1939	2	2	1939		Layer	Sandy silt - surface layer?	4.3	4.21
1941	2	3.1			Fill	Fill of cut [1942]	4.26	
1942	2	3.1	1942		Cut	Posthole	4.3	4.12
1943	2	3.6			Fill	Fill of cut [1944]	5.99	
1944	2	3.6	1944		Cut	Posthole	5.99	5.57
1945	2	5.1			Fill	Fill of cut [1946]	5.76	
1946	2	5.1	1946		Cut	Unknown function	5.72	5.56
1947	2	3.6	1947		Layer	Sandy silt - Roman surface?	6.04	6.01
1948	2	3.6	1947		Layer	Sandy silt - Roman surface?	6.1	
1949	2	3.6	1947		Layer	Sandy silt - Roman surface?	6.09	
1950	2	3.3	1950		Layer	Clayey sandy silt - possible occupation layer	4.26	
1951	2	3.2	1951		Layer	Clayey silt with frequent burnt organic remains	4.26	4.24
1952	2	5.1	1952		Layer	Sandy clayey silt - dumped deposit	5.87	5.73
1953	2	5.1	1953		Layer	Clayey silt - surface?	5.9	5.73

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1954	2	5.2			Fill	Fill of cut [1956]	5.76	
1955	2	4			Fill	Fill of cut [1957]	5.8	
1956	2	5.2	1956		Cut	Pit	5.73	5.64
1957	2	4	1957		Cut	Small pit	5.7	5.66
1958	2	5.1	1958		Fill	Fill of cut [1967]	5.96	5.94
1959	2	2	1959		Layer	Sandy silt	4.3	
1960	2	5.1			Fill	Upper fill of cut [1961]	4.33	
1961	2	5.1	1961		Cut	Pit	4.39	4.24
1962	2	3.5			Fill	Fill of cut [1963]	5.96	
1963	2	3.5	1963		Cut	Post pit	5.97	5.68
1964	2	5.1			Fill	Basal fill of cut [1961]	4.33	4.24
1965	2	3.3			Fill	Fill of cut [1966]	4.38	
1966	2	3.3	1966		Cut	Small pit	4.38	4.16
1967	2	5.1	1967		Cut	Unknown function	5.9	5.75
1968	2	3.4	1968		Layer	Possible top fill of cut [2002]	5.88	5.78
1969	2	2			Fill	Fill of cut [1974]	4.35	4.29
1970	2	3.3			Fill	Fill of cut [1971]	4.4	
1971	2	3.3	1971		Cut	Posthole	4.4	4.05
1972	2	3.5			Fill	Fill of cut [1973]	6.02	
1973	2	3.5	1973		Cut	Unknown function	6.03	5.85
1974	2	2	1974		Cut	Possible beam slot?	4.23	4.12
1975	2	2			Fill	Fill of cut [1976]	4.19	4.09
1976	2	2	1976		Cut	Unknown function	4.17	4.04
1977	2	3.5			Fill	Fill of cut [1978]	5.98	
1978	2	3.5	1978		Cut	Post pit	5.96	5.83
1980	2	3.4			Fill	Upper fill of cut [1983]	5.87	
1981	2	3.4			Fill	Fill of cut [1983]	5.98	5.74
1982	2	3.4			Fill	Basal fill of cut [1983]	5.75	5.63
1983	2	3.4	1983		Cut	E/W boundary ditch	5.97	5.49
1984	2	2			Fill	Fill of cut [1985]	4.17	3.99
1985	2	2	1985		Cut	Pit	4.16	3.97
1986	2	3.5	1986		Layer	Sandy silt	5.95	
1987	2	2	1987		Layer	Sandy silt - surface layer?	4.24	4.14
1988	2	3.4			Fill	Fill of cut [1989]	5.83	
1989	2	3.4	1989		Cut	Re-cut of E/W ditch [2002]	5.87	5.53
1990	2	2	1990		Layer	Sandy silt	4.14	4.1
1991	2	3.4	1991		Fill	Primary fill of cut [2002]	5.75	
1992	2	3.3			Fill	Fill of cut [1993]	4.37	4.27
1993	2	3.3	1993		Cut	Unknown function	4.37	4.27

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
1994	2	3.3			Fill	Fill of cut [1995]	4.26	
1995	2	3.3	1995		Cut	Posthole?	4.26	4.04
1996	2	3.4	1996		Fill	Fill of cut [2002]	5.73	5.67
1997	2	3.4	1997		Fill	Fill of cut [2002]	5.9	5.82
1998	2	3.3			Fill	Fill of cut [1999]	4.39	
1999	2	3.3	1999		Cut	Posthole?	4.39	4.24
2000	2	2			Fill	Upper fill of cut [2001]	4.39	
2001	2	2	2001		Cut	Unknown function	4.39	4.01
2002	2	3.4	2002		Cut	E/W boundary ditch	5.82	5.38
2003	2	2			Fill	Fill of cut [2001]	4.4	4.01
2004	2	1	2004		Layer	Re-deposited sandy gravel	4.38	4.16
2005	2	3.2			Fill	Fill of cut [2006]	4.11	
2006	2	3.2	2006		Cut	Small pit	4.11	3.98
2007	2	3.2			Fill	Fill of cut [2008]	4.1	
2008	2	3.2	2008		Cut	Posthole ?	4.1	3.97
2009	2	3.2			Fill	Fill of cut [2010]	5.67	
2010	2	3.2	2010		Cut	Posthole	5.67	5.54
2011	2	1	2011		Layer	Sandy silt with v. Freq gravel	5.78	5.7
2012	2	3.1			Fill	Fill of cut [2013]	5.76	5.64
2013	2	3.1	2013		Cut	Pit?	5.76	5.56
2014	2	3.1			Fill	Fill of cut [2015]	5.7	
2015	2	3.1	2015		Cut	Posthole?	5.7	5.51
2016	2	3.1			Fill	Fill of cut [2017]	4.09	
2017	2	3.1	2017		Cut	Shallow pit	4.09	4.01
2018	2	3.2			Fill	Fill of cut [2019]	5.66	
2019	2	3.2	2019		Cut	Posthole	5.66	5.52
2020	2	3.2			Fill	Fill of cut [2021]	4.09	
2021	2	3.2	2021		Cut	E/W linear - structural?	4.09	3.98
2022	2	3.2			Fill	Fill of cut [2023]	4.07	
2023	2	3.2	2023		Cut	Posthole	4.07	3.93
2024	2	3.4	2024		Layer	Sandy silt	5.83	
2025	2	3.2			Fill	Fill of cut [2026]	4.1	
2026	2	3.2	2026		Cut	Posthole	4.1	3.99
2027	2	3.4			Fill	Fill of cut [2028]	5.77	
2028	2	3.4	2028		Cut	Post pit?	5.71	5.63
2029	2	3.4			Fill	Fill of cut [2030]	5.76	
2030	2	3.4	2030		Cut	Pit?	5.67	5.49
2031	2	3.3	2031		Layer	Sandy silt	4.5	4.33
2032	2	3.1			Fill	Fill of cut [2033]	4.08	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
2033	2	3.1	2033		Cut	Unknown function	4.08	4.01
2034	2	3.2			Fill	Fill of cut [2035]	4.12	
2035	2	3.2	2035		Cut	Posthole	4.12	3.96
2036	2	3.1			Fill	Fill of cut [2037]	3.98	
2037	2	3.1	2035		Cut	Stakehole	3.98	3.94
2038	2	1	2038		Layer	Redeposited sandy silt - colluvial?	4.14	3.84
2039	2	3.4	2039		Layer	Sandy silt	5.71	5.52
2040	2	3.5			Fill	Fill of cut [2043]	5.54	5.53
2041	2	3.3			Fill	Fill of cut [2042]	4.43	
2042	2	3.3	2042		Cut	Posthole	4.43	4.14
2043	2	3.5	2043		Cut	Unknown function - may not be anthropogenic	5.76	5.34
2044	2	3.3	2044		Layer	Silty sandy gravel	4.54	4.32
2045	2	2	2045		Layer	Sandy silt	5.53	5.43
2046	2	1	2046		Layer	Sandy silt with v. frequent gravel - levelling or colluvial?	4.19	3.95
2047	2	3.3			Fill	Fill	4.37	
2048	2	3.2	2048		Layer	Sandy silty clay	4.32	
2049	2	1	2049		Layer	Sand & gravel - disturbed natural	5.76	5.3
2050	2	3.4	2050		Layer	Sandy silt	5.74	5.71
2051	2	4			Fill	Fill of cut [2052]	5.48	
2052	2	1	2052		Layer	Sandy silt - colluvial?	3.97	3.84
2053	2	3.3	2053		Cut	Unknown function	4.34	4.09
2054	2	4	2054		Cut	Post pit?	5.45	5.04
2055	2	5.2	2055		Layer	Silty sand - dumped deposit	4.98	4.91
2056	2	3.2	2056		Cut	Pit	4.59	4.55
2057	2	3.2			Fill	Fill of cut [2056]	4.61	
2058	2	5.2			Fil	Fill of cut [2059]	4.9	
2059	2	5.2	2059		Cut	Pit	4.9	4.65
2060	2	4	2060		Layer	Sandy clayey silt - surface/occupation?	5.6	5.48
2061	2				Fill	Fill of modern drain construction cut	4.84	
2062	2	5.2			Fill	Upper fill of [2063]	4.5	
2063	2	5.2	2063		Fill	Degraded timber - barrel	4.57	4.12
2064	2	5.2	2064		Layer	Sandy silt - dumped deposit	4.94	4.91
2065	2	5.2			Fill	Basal fill of [2063]	4.19	
2066	2	3.5	2066		Layer	Sandy silt - dumped deposit	4.22	4.1
2067	2	3.3	2067		Layer	Surface?	4.09	3.89
2068	2	6.1			Fill	Fill of cut [2069]	4.53	4.46
2069	2	6.1	2069		Cut	Posthole	4.65	4.4

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
2070	2	3.5	2070		Layer	Demo layer	4.12	3.92
2071	2	3.2			Fill	Fill of cut [2072]	4.89	4.87
2072	2	3.2	2072		Cut	Small pit	4.9	4.78
2073	2	5.2			Fill	Backfill to construction cut [2074]	4.59	
2074	2	5.2	2074		Cut	Construction cut for barrel well [6063]	4.59	4.07
2075	2	3.4	2075		Layer	Sandy silt	5.58	5.15
2076	2	4			Fill	Fill of cut [2077]	5.5	
2077	2	4	2077		Cut	Post pit	5.5	5.15
2078	2	6.1	2078		Layer	Context sheet missing	4.83	4.64
2079	2	3.5	2079		Layer	Demo layer	4.01	3.79
2080	2	3.2	2080		Layer	Silty sand & gravel	5.01	4.7
2081	2	3.3			Fill	Fill of cut [2082]	5.46	
2082	2	3.3	2082		Cut	Post pit	5.46	5.23
2083	2	3.3			Fill	Fill of cut [2084]	5.32	
2084	2	3.3	2084		Cut	Pit	5.31	5.11
2085	2	3.3		27	Fill	Fill of cut [2086]	3.79	
2086	2	3.3	2086	27	Cut	Unknown function	3.79	3.71
2087	2	3.3	2087		Layer	Surface?	3.85	
2088	2	3.3			Fill	Fill of drain [2089]	3.95	
2089	2	3.3	2089		Fill	Degraded timber - drain	3.95	3.76
2090	2	3.4	2090		Layer	Sandy silt	5.28	5.16
2091	2	1	2091		Layer	Silty sand & gravel	4.71	
2092	2	3.1	2092		Cut	E/W ditch?	4.81	4.55
2093	2	5.2			Fill	Fill of cut [2094]	4.59	
2094	2	5.2	2094		Cut	Possible pit	4.57	4.15
2095	2	3.3	2095		Layer	Surface makeup ?	3.75	
2096	2	3.1			Fill	Fill of cut [2092]	4.81	4.76
2097	2	3.3			Fill	Backfill to construction cut [2098]	3.95	3.89
2098	2	3.3	2098		Cut	Construction cut for timber drain [2089]	3.95	3.75
2099	2	3.3			Fill	Fill of cut [2100]	5.4	
2100	2	3.3	2100		Cut	Uncertain function	5.4	5.11
2101	2	3.2	2101		Layer	Dumped deposit - made ground	3.96	3.84
2102	2	3.2	2102		Layer	Dumped deposit - made ground	3.85	3.76
2103	2	5.2	_		Fill	Fill of cut [2104]	4.58	
2104	2	5.2	2104		Cut	Pit	4.6	4.23
2105	2	2	2105	27	Layer	Silty sand	3.91	3.71
2106	2	3.3			Fill	Fill of [2107]	5.41	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
2107	2	3.3	2107		Cut	Pit	5.41	5.16
2108	2	3.3			Fill	Fill of cut [2109]	5.4	
2109	2	3.3	2109		Cut	Pit	5.42	5.17
2112	2	3.3	2112		Layer	Sandy silt	5.43	5.25
2113	2	1	2113		Layer	Silty sand & gravel	4.71	4.53
2114	2	1	2114		Layer	Sand & gravel - colluvial	4.79	4.76
2115	2	5.2	2116		Layer	sandy gravel with frequent gravel - surface?	4.81	4.5
2116	2	1	2116	27	Layer	Redeposited gravel	3.85	3.46
2117	2	3.2	2117		Layer	Sandy silt - possible occupation layer	5	4.97
2118	2	3.2			Fill	Fill of cut [2119]	5.04	
2119	2	3.2	2119		Cut	Possible pit	5.05	4.9
2120	2	3.2			Fill	Fill of cut [2121]	4.99	
2121	2	3.2	2121		Cut	Possible western terminus of E/W ditch	5.08	4.74
2122	2	3.2	2121		Fill	Primary fill of cut [2121]	4.99	7.17
2123	2	2	2123		Fill	Fill of cut [2129]	4.69	4.47
2124	2	1	2124		Layer	Silty sand & gravel	4.46	4.38
2125	2	2			Fill	Fill of cut [2126]	4.73	
2126	2	2	2126		Cut	Uncertain function - possibletree throw?	4.66	4.35
2127	2	5.1	2120		Fill	Fill of cut [2128]	4.5	4.4
2128	2	5.1	2128		Cut	Uncertain function	4.5	4.25
2129	2	2	2129		Cut	E/W linear feature	4.52	4.49
2130	2	3.2			Fill	Fill of cut [2131]	4.86	
2131	2	3.2	2131		Cut	Possible pit	4.86	4.58
2132	2	1	1501		Layer	Sandy silty gravel - fluvial?	4.1	4.02
2133	2	1	1501		Layer	Redeposited sandy gravel - colluvial	4.72	4.24
2134	2	1	1501		Layer	Sandy silt - colluvial?	4.05	3.77
2135	2	1	1501		Layer	Sandy silty gravel - fluvial?	3.63	3.31
2136	2	3.2			Fill	Fill of cut [2137]	4.85	
2137	2	3.2	2137		Cut	Post pit	4.86	4.7
2138	2	3.2			Fill	Fill of cut [2139]	4.85	
2139	2	3.2	2139		Cut	Post pit	4.84	4.57
2140	2	3.2			Fill	Upper fill of cut [2141]	4.26	
2141	2	3.2	2141		Cut	Pit	4.32	4.08
2142	2	3.2	2142		Layer	Silty sand	4.3	4.24
2143	2	3.2			Fill	Basal fill of cut [2141]	4.12	
2144	2	2			Fill	Silty sand & gravel	4.51	
2145	2	2	2145		Cut	Possible hearth	4.51	4.36

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
2146	2	3.2	2146		Layer	Sandy silt	4.88	4.82
2147	2	2			Fill	Fill of cut [2154]	4.5	4.38
2148	2	3.2	2148		Layer	Sandy silt	4.85	4.65
2149	2	3.1			Fill	Fill of cut [2150]	4.53	
2150	2	3.1	2150		Cut	Shallow pit	4.51	4.42
2151	2	2			Fill	Fill of cut [2152]	4.53	
2152	2	2	2152		Cut	Linear cut - unknown function	4.58	4.2
2153	2	2	2153		Layer	Sandy silt with frequent burnt flint	4.79	4.53
2154	2	2	2154		Cut	E/W ditch?	4.37	4.17
2155	2	1	1501		Layer	Sandy silt	3.83	3.62
2156	2	6.2	2156		Fill	Fill of well [2169]	6.28	
2157	2	3.1	2157		Fill	Fill of cut [2158]	4.76	4.73
2158	2	3.1	2158		Cut	E/W ditch	4.85	4.53
2159	2	2			Fill	Fill of cut [2160]	4.51	
2160	2	2	2160		Cut	Possible pit	4.51	4.22
2161	2	5.1			Fill	Backfill to cut [2164]	4.83	
2162	2	5.1			Fill	Degraded wood - fill of cut [2164]	4.83	
2163	2	5.1			Fill	Fill of cut [2164]	4.46	
2164	2	5.1	2164		Cut	Posthole	4.82	4.38
2165	2	5.1			Fill	Fill of cut [2164]	4.55	
2166	2	2	2166		Layer	Silty sand & gravel	4.64	4.42
2167	2	6.2			Fill	Fill of well [2169]	5.53	
2168	2	6.2			Fill	Fill of construction cut [2170]	6.33	
2169	2	6.2	2169		Masonry	Well lining	6.28	
2170	2	6.2	2170		Cut	Construction cut for [2169]	6.33	5.19
2171	2	6.2			Fill	Fill of well [2169]	5.33	
2172	2	1	2172		Layer	Silty sand & gravel	4.37	4.28
2173	2	1	2173		Layer	Brickearth	6.33	6.27
2174	2	1	2174		Layer	Sandy gravel - fluvial?	4.34	4.22
2175	2	6.2			Fill	Upper fill of well [2176]	4.85	
2176	2	6.1	2176		Masonry	Well lining	4.94	4.33
2177	2	6.1			Fill	Backfill to construction cut [2178]	4.82	
2178	2	6.1	2178		Cut	Construction cut for well [2176]	4.84	4.36
2179	2	2	2179		Layer	Sandy layer with burnt flint	4.28	
2180	2	6.2			Fill	Fill of well [2176]	4.61	
2181	2	2	2181		Layer	Silty layer, archaic soil	4.11	4.03
2182	2	6.2			Fill	Fill of well [2176]	4.48	

Context No.	Trench	Phase	Plan	Section	Туре	Description	Highest Level (m OD)	Lowest level (m OD)
2183	2	6.2			Fill	Fill of well [2176]	4.37	•
2184	2	5.1			Fill	Fill of cut [2185]	4.84	
2185	2	5.1	2185		Cut	Posthole?	4.84	4.74
2186	3	5.1	2186		Layer	Dark grey sandy silt dump layer	4.2	
					-	Light grey sandy silt dump		4.00
2187	3	5.1	2187	30	Layer	layer	4.11	4.02
2188	3	3.3	2188		Layer	Dark grey sandy silt layer Dark grey sandy clay silt	4.22	4.01
2189	3	3.4	2189	30	Layer	dump layer Grey brown sandy silt gravel	4.09	3.65
2190	2	1	1501		Layer	- colluvial?		
2191	2	1	1501		Layer	Grey brown silty gravel - colluvial?	6.15	5.19
					-	Silty clay - natural brickearth		
2192	2	1	1501	00	Layer	type deposit	6.24	0.50
2193	3	3.2	2193	30	Layer	Dark grey stoney dump layer Dark grey clay silt dump	3.84	3.56
2194	3	3.2	2194	30	Layer	layer	3.76	3.57
2195	3	3.2	2195	30	Layer	Silty gravel layer	3.37	3.09
2196	3	3.2	2196		Layer	Mixed stoney layer	3.54	3.19
2197	3	2	2197	30	Deposit	Silty clay - possibly filling a channel	2.86	2.81
2198	2	1		29	Layer	Grey gravel - colluvial?	4.88	4.38
2199	2	1		29	Layer	Orange terrace gravel - Natural	4.83	2.81
2200	2	1		29	Fill	Fill of paleo-channel [2212]	4.58	4.28
2201	2	1		29	Fill	Fill of paleo-channel [2212]	4.33	3.98
2202	2	1		29	Fill	Fill of paleo-channel [2212]	3.73	3.58
2203	2	1		29	Fill	Fill of paleo-channel [2212]	3.43	3.38
2204	2	1		29	Fill	Fill of paleo-channel [2212]	4.08	3.58
2205	2	1		29	Fill	Fill of paleo-channel [2212]	4.12	3.18
2206	2	1		29	Layer	Grey clay - natural	4.13	3.98
2207	2	1		29	Layer	Mixed gravel and clay - natural	3.98	3.78
2208	2	1		29	Layer	Grey gravel - natural	3.82	3.68
2209	2	1		29	Layer	Yellow sand - natural	3.43	3.13
2210	3	1	2210	30	Layer	Natural yellow sand and gravel	3.29	2.7
2211	3	1	2211	30	Layer	Orange terrace gravel	3.08	2.64
2212	2	1		29	Cut	Paleo-channel	4.58	3.13

APPENDIX 2: STRUCK FLINT ASSESSMENT

Barry Bishop

Introduction

The archaeological excavations at the above site resulted in the recovery of a medium sized assemblage of struck flint. Each piece has been individually catalogued which includes details of its contextual origins, raw material and condition, and where possible a suggested date of manufacture. This report summarises the information contained in the catalogue and assesses the assemblage's archaeological significance and its potential to contribute to the further understanding of the nature and chronology of activity at the site. Struck flint recovered during earlier investigations immediately to the east of the present excavations has been reported on separately (Bishop 2003; Douglas *et al.* 2011, 9). All metrical descriptions follow the methodology established by Saville (1980).

Quantification

Phase / Feature type	Decortication flake	Core-tablet	Flake	Chip (<15mm)	Unclassifiable flake fragment	Non-prismatic blade	Blade-like flake	Prismatic blade	Bifacially retouched flake	Denticulated flake	Edge modified blade	Piercer	Serrated blade	Scraper - side	Scraper - irregular	Flake core	Core fragment	Shattered cobble fragment	Hammerstone / pounder
1 Natural deposits	1		5		1	1		1	1			1					1		
2 Burnt flint horizon	6	2	9	1	2		1	2			1		1			4	1	2	
2 Palaeosol	1		2			2	3	2						1	1	1	1	1	
3-6 Post- prehistoric	2		20			3	2	6		1	3					2			1
Total	10	2	36	1	3	6	6	11	1	1	4	1	1	1	1	7	3	3	1

Table 1: Quantification of Lithic Material from Tobacco Dock (TBF10)

A total of 99 pieces of struck flint were recovered during the excavations (Table 1). The majority of these came from prehistoric (Phase 2) deposits but just over 40% had been residually deposited within Roman or later contexts. The prehistoric pieces all came from soil or occupations layers that are located on what would have been the edge of the floodplain of the river Thames. Most came from a layer containing substantial quantities of burnt flint, although few of those struck pieces had themselves been

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burnt. No evidence for *in situ* knapping foci was identified and is likely that all of the struck pieces were discarded onto the surface and had been reworked into local soils, the chronological range indicating that this had occurred over a considerable period.

Description

Raw Materials

The assemblage was manufactured from flint that varies considerably in colour and in texture, from fine-grained 'glassy' translucent types to more-opaque and chertier pieces. Where cortex is present, nearly all is smooth-worn or battered and it is clear that the majority of the raw materials used consisted of pebbles and cobbles that had been obtained from alluvial deposits, such as those present in the terrace gravels at the site. The raw materials were relatively small in size, with cores averaging only 63g in weight and with the majority of flakes being less than 50mm in maximum dimension. A few flakes exhibit a thicker, rough cortex that is weathered but has not experienced any extensive alluvial rolling. These fresher nodules may have been present in localised patches within the alluvial terraces and may have been carefully sought out, or they may have been imported to the site from deposits closer to the parent chalk. Although only a few pieces exhibited this kind of cortex, many of these exhibited technological traits consistent with the earlier industries identified at the site (see below).

Condition

The condition of the struck pieces varies considerably, from being very chipped and abraded to still sharp. This range would be consistent with the recovery of the material from both (prehistorically) active soil horizons and as redeposited material from later contexts. Although far from a direct co-relation, it is notable that those pieces from the prehistoric deposits that are likely to have been made during the later prehistoric period tend to be in a better condition that the earlier flintwork, reflecting the considerable variations in time that individual pieces had spent within this environment. Recortication is rare and limited to a small number of blades that may represent an early phase of activity at the site (see below).

Dating, Technology and Typology

As a whole, the struck flint is the result of many different technological reduction techniques. The assemblage is dominated by unretouched flakes and blades or retouched items that individually are not easily dateable on strict typological grounds alone. Nevertheless, considerations of both the technological and typological aspects of the assemblage indicate that it had been manufactured over a considerable period, from at least the Mesolithic and into the latter parts of the Bronze Age.

Mesolithic / Early Neolithic

The earliest material, which forms the largest component and probably accounts for around two-thirds of the assemblage, is the product of a blade-based reduction system that can be broadly dated to the Mesolithic or Early Neolithic periods. No chronologically diagnostic pieces characteristic solely of either period were identified however, and there are no reasons to discount the possibility that they were made over a long period that straddles the transition, as has been demonstrated at many comparable locations along the lower Thames' margins. Pieces belonging to these periods include the prismatic blades, blade-like flakes, core-rejuvenation flakes and most of the retouched implements. There are also a number of flakes that are thin and had been competently struck from well-maintained cores that, although must be assigned a slightly broader date range, would comfortably fit within the same industries as the blades.

Interestingly and in contrast to most of the assemblage, a small group of blades have fully recorticated and although these can also only be broadly dated to the Mesolithic, it is possible that these form a relatively early phase of activity at the site. They include two edge-blunted prismatic blades from Roman pit [771] and quarry [653], the former possibly being a piercer and the latter a cutting tool. There are also two unretouched prismatic blades, one from natural deposit [884] and the other from post-medieval pit [739], that have recorticated, both of which are in a very chipped and worn condition. At least some of the recorticated pieces are notable larger than most of the other blades from the site. The only complete one, the possible piercer from pit [771], measures 70mm long whilst the blade from the natural attains 73mm in length despite being broken.

The remainder of the blade-based pieces are all unrecorticated and generally smaller in size, suggesting they represent a later period of activity during the Mesolithic or Early Neolithic. The only possible core of this period is a narrow flake type with a keeled striking platform from the prehistoric palaeosol, but no true blade-producing cores were identified. At least four of the retouched implements also belong to this period. Three comprise cutting implements; a denticulated blade-like flake from layer [1814] and two prismatic blades from the burnt soil horizon, one with fine retouch and the other with a serrated edge. The remainder is a prismatic blade with retouch forming an awl-like point around its distal end, from the natural deposits in Trench 2. Several other blades have possible light retouch or heavy use-wear but the possibility that this has been caused by post-depositional movement means they cannot be confidently identified as such.

Later Prehistoric

No struck flint that is technologically characteristic of Later Neolithic or Early Bronze Age industries was

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identified although some of the more skilfully struck flakes could potential indicate activity at the site during these periods. Possibly of Later Neolithic date, although their dating remains imprecise, are two well-made scrapers from the palaeosol, one of which appears to have been re-sharpened with much coarser retouch, perhaps during a later period, as could also be the keeled narrow flake core from the same deposits.

The bulk of the remaining material, however, is much more characteristic of later second or first millennia BC industries and may be associated with the Later Bronze Age activity recorded at the site. This material is the product of a much simpler flake-based industry. The flakes vary considerably in shape and size, although they often have been badly struck and tend to be broad and thick with many having wide, markedly obtuse, striking platforms comparable to Martingell's 'squat' flakes (1990; 2003). Most of these retain some cortex on their dorsal faces and it is likely that many of the otherwise undateable decortication flakes also belong to this period.

Of the seven cores recovered from the site, six are likely to belong to this period. Most of these have only been very minimally worked, with a few flakes removed from unprepared cobbles using cortical striking platforms, and abandoned long before exhaustion. One had been more extensively worked, but even this was rather randomly reduced with short series of flakes removed in many directions from unmodified striking platforms. One of the minimally reduced cores, from post-medieval pit [223], has a very battered striking platform indicating it was intended, or possible re-used, as a pounder or hammerstone. One of the cores from the burnt flint horizon may also have been intended as a chopping tool. Other than the seemingly re-used scraper from the palaeosol (see above), the only retouched implement that can be assigned to this period is a bifacially worked cortical flake from the natural deposits that also appears to have been used as a chopping tool.

Discussion

The struck flint assemblage recovered during the present excavations is typologically and technologically comparable to the smaller quantities recovered from the earlier excavations immediately to the east (Bishop 2003). They are both chronologically mixed and indicate prehistoric activity had commenced at Tobacco Dock by the Mesolithic or Early Neolithic periods and with significant further flint-using activity occurring in the later second or first millennium BC. They most probably represent a continuum of the type of flint-using activates as revealed by other excavations conducted along the banks of the Thames and testify to the importance and often quite intensive exploitation of the varied habitats that this marginal riverine zone could offer.

The earlier activity was probably intermittent but long lived and involved some manufacture of blades and other useable flakes but with a notable emphasis on the use of a range of tools, which suggests the site was being used as more than just a transient hunting encampment. The assemblage is consistent

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with those from many other areas along the Lower Thames' margins where numerous relatively small spreads or scatters that may reflect a palimpsest of short-term residencies have been recorded.

Probably around a third of the assemblage may be dated to the later prehistoric period and is likely to contemporary with the other indications of Late Bronze Age activity, including the formation of a 'burnt mound' type feature. It represents the exploitation of locally available raw materials that were opportunistically converted into a range of potentially useable flakes and core-tools. The use to which these were put is not easily discerned, but comparable assemblages were recovered during the excavations at the Royal Docks Community School (MOLA in prep.) and use-wear analysis suggest that these were predominantly used to scrape, cut and pierce hide. At that site large quantities of burnt flint were also recovered and similar combinations of worked flint and burnt flint have also been recorded at other sites further east along the floodplain which, if related, may suggest a flourishing hide working industry located along the edges of the marshes (Bishop 2012).

Significance and Recommendations

The struck flint has been comprehensively catalogued and, as it is chronologically mixed, no further metrical or technological analyses are warranted for the purposes of the archive. The earlier material is of significance in that it has the potential to contribute to further understandings of Mesolithic and Neolithic riverine activity along the Lower Thames. It is therefore recommended that a description of the this material's basic typological make-up and technological attributes, which can largely be gleaned from this report, is prepared and alongside relevant illustrations, included in any published account of the excavations. It may aid interpretation if its densities and distribution are plotted in order to elucidate any spatial patterning to those phases of occupation at the site.

The later prehistoric material is also of significance in that Late Bronze Age flintworking technologies remain poorly understood and the assemblage has considerable added interpretational value in that it appears to be associated with evidence for the use of a 'burnt mound' type feature, the function of which also remain poorly understood. It is therefore recommended that a detail description of this material is compiled alongside consideration of the assemblage's spatial distribution and contextual associations, with a view to identifying its relationship with the burnt flint deposits and its possible uses. Following completion of this work, it is recommended that the findings are written up and, alongside illustrations of the most relevant pieces, presented in any published account of the fieldwork.

Bibliography

Bishop, B.J., 2003. Excavations at Tobacco Dock, The Highway, London Borough of Tower Hamlets. Site Codes CYD 96 and TOC02: Lithic Assessment. Pre-Construct Archaeology Unpublished Report.

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Bishop, B.J., 2012. 'Lithics', in E. Stafford, Landscape and Prehistory of the East London Wetlands: investigations along the A13 DBFO roadscheme, Tower Hamlets, Newham and Barking and Dagenham, 2000-2003. Oxford Archaeology Monograph 17, 172-192.

Douglas, A., Gerrard, J. and Sudds, B., 2011. A Roman Settlement at Bath House at Shadwell: excavations at Tobacco Dock and Babe Ruth Restaurant, The Highway, London. Pre-Construct Archaeology Monograph 12.

Martingell, H., 1990. 'The East Anglian Peculiar? The 'Squat' Flake'. Lithics 11, 40-43.

Martingell, H., 2003. 'Later Prehistoric and Historic Use of Flint in England', in N. Moloney and M.J. Shott (eds.), *Lithic Analysis at the Millennium*. University College London Institute of Archaeology Publications. London, 91-97.

MOLA, in prep., Later Prehistory in the Former Wetlands of East London. MOLA Monograph Series.

Saville, A., 1980. 'On the Measurement of Struck Flakes and Flake Tools'. Lithics 1, 16-20.

APPENDIX 3: BURNT STONE ASSESSMENT

Barry Bishop

Introduction

The excavations at the above site resulted in the recovery of a substantial assemblage of burnt stone that amounts to nearly 45kg. This report quantifies and describes the material, assesses its significance and recommends any further work required for it to achieve its full research potential. Quantities of burnt flint that were recovered during earlier investigations immediately to the east of the present excavations have been reported on separately (Bishop 2003; Douglas *et al.* 2011, 9). A full catalogue detailing its distribution within individual contexts is presented in Table 2.

Methodology

All of the burnt stone recovered during the investigations was examined, counted and weighed by individual context, with notes made of the intensity of burning and the size distribution of the assemblages, including the proportions by weight of fragments equal to or greater than 30mm in maximum diameter.

Quantification and Distribution

Phase	Burnt stone (no.)	Burnt stone (wt:g)	Ave clast size (wt:g)	Burnt stone >30mm (% by total weight)
1 Natural deposits	7	49	7.0	69.4
2 Prehistoric	6,255	33,122	5.3	51.7
3 Roman	2,384	10,874	4.6	63.4
5 and 6 Post- medieval	159	738	4.6	63.8
Total	8,805	44,783	5.1	53.6

Table 1: Quantification of burnt flint by Phase

Nearly 45kg of burnt stone was recovered during the excavations, all of it comprising flint (Table 1). By far the largest quantities came from Phase 2 layer [1318] in Trench 1 and its equivalent layers [1858] and [5153] in Trench 2, which when combined produced a total of 31.4kg. This would indicate that, after

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having been heated in hearths, the burnt flint had been extracted and dumped in their vicinity, this activity occurring along the foreshore at the edge of the alluvial floodplain of the river Thames.

Whilst the Phase 2 features produced almost three-quarters of the burnt stone, Phase 3 Roman features also contained significant quantities. Although it is not impossible that some of this was generated during the Roman period through craft and other activities, the bulk of this material came from a series of consolidation, construction and disturbance layers that almost certainly involve the reworking of prehistoric deposits and the redeposition of their contained burnt stone clasts. However, it is also notable that several Roman period postholes contained reasonable quantities of sometimes large fragments of burnt flint, and it is possible that these were purposefully collected for use as post-packing (see Table 2 for details of individual features). These are still most likely to have originated from Phase 2 activities however.

Description

Virtually all of the burnt stone comprises flint which had been intensively and uniformly heated, causing it to become 'fire-crazed', attain a greyish white colour and become highly fragmented. A few pieces, accounting for less than 1% of the total, comprise burnt quartz fragments. Due to the degree of fragmentation it is not always possible to identify the nature of the flint that had been selected for burning but, where identifiable, original cortex is nearly all worn smooth. The more complete pieces comprise fragments from rounded to sub-rounded pebbles and small cobbles, few of which appear to have exceeded 100mm in diameter. These must have been gathered from alluvial gravel terraces such as underlie the site and which would have been exposed along the river's shore line. The quartz also appears to have been present as rounded pebbles and small cobbles and these also form a small constituent of the gravel terraces.

Discussion and Significance

The quantity of burnt flint recorded here is substantial and appears to form one or more dumped deposits of deliberately collected alluvial cobbles which are possibly associated with a hearth and pits, the latter may have been designed to hold water or have been used for baking. These are all constituent features typical of 'burnt mounds' and very large accumulations of burnt flint associated with similar features have been recorded at many comparable locations along the river margins of the lower Thames. They have been variably dated from the Mesolithic to the Iron Age but the majority appear to belong to the later parts of the Bronze Age. Few are well documented but one of the closest potentially comparable sites is at Phoenix Wharf, located across the river in Bermondsey. This comprised an extensive spread of burnt flint associated with a large pit located on the edge of a palaeo-channel,

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which has been interpreted as a burnt mound feature associated with cooking, probably the roasting of meat (Bowsher 1991). Very similar features have also been recorded further east along the northern margins of the river, including at the Royal Docks Community School. Here a large quantity of burnt flint was found in association with a cooking pit and was also interpreted as a means of roasting meat (MOLA in prep.). However, there is also evidence that hides were being prepared at the site and it is possible that the burnt flint was associated with the preparation of animal skins. In addition to cooking or hide preparation, many other explanations have been forwarded for the production of large quantities of burnt stone, including as the residues from saunas (Barfield and Hodder 1987), beer making (Quinn and Moore 2007), wool processing (Jeffery 1991), corn parching (Cunliffe 1974, 168) and for a wide variety of other craft or industrial purposes (e.g. Barfield and Hodder 1987, 371). Despite many examples having been recorded along the margins of the lower Thames and from across Britain, few have been excavated to the standards achieved here and consequently very little is understood of their precise character and function, or of broader regional variations and the development of this class of monument.

Recommendations

The burnt stone from the site has been examined and catalogued in detail and no further processing or analytical work is required beyond the addition of any outstanding material. Burnt mounds as a feature class are poorly understood and the results as outlined in this report should be expanded with consideration to the stratigraphic record and discussion of other artefact classes. This should be used to provide a detailed account of the form and construction of the burnt mound features, with the aim of attempting a better understanding of their development, functions and possible significance to those who used them. This will require the full integration of the quantification tables with the stratigraphy in order to estimate the original size of the mound and the scale of production and placing this within a discussion of the mound in a regional (Lower Thames) context.

Bibliography

Barfield, L. and Hodder, M., 1987. 'Burnt Mounds as Saunas, and the Prehistory of Bathing'. *Antiquity* 61 (233), 370-379.

Bowsher, J.M.C., 1991. 'A Burnt Mound at Phoenix Wharf, South-East London: A Preliminary Report,' in M.A. Hodder and L.H. Barfield (eds.), *Burnt Mounds and Hot Stone Technology. Papers from the Second International Burnt Mound Conference, Sandwell, 12th-14th October 1990.* Sandwell Metropolitan Borough Council. Sandwell, 11-19.

Cunliffe, B., 1974. Iron Age Communities in Britain. Routledge and Keegan Paul. London.

Jeffery, S., 1991. 'Burnt Mounds, Fulling and Early Textiles', in M.A. Hodder and L.H. Barfield (eds.), Burnt Mounds and Hot Stone Technology: papers from the 2nd International Burnt Mound Conference, Sandwell, 12th-14th October 1990. Sandwell Metropolitan Borough Council. Sandwell, 97-108.

MOLA, in prep. Later Prehistory in the Former Wetlands of East London. MOLA Monograph Series.

Quinn, W. and Moore, D., 2007. 'Ale, Brewing and Fulachta Fiadh'. Archaeology Ireland 21 (3), 8-11.

Context	Ref	Feature	Phase	Quadrant / Square	Burnt stone (no.)	Burnt stone (wt:g)	Ave. clast size (wt:g)	weight bumt stone >30mm	% by weight clasts >30mm	Comments
262	<13>	We206	5.2	1	6	20	3.3	12	60.0	Heavily burnt flint
366	<20>	P367	5.1	1	1	8	8.0	0	0.0	Heavily burnt flint
532	<49>	L532	3.5	1	1	57	57.0	57	100.0	Heavily burnt flint
569		F884	3.2	1	1	56	56.0	56	100.0	Heavily burnt flint
571		F884	3.2	1	1	37	37.0	37	100.0	Heavily burnt flint
664		Qu665	3.2	1	3	45	15.0	45	100.0	Heavily burnt flint
714	<95>	P715	3.6	1	1	7	7.0	7	100.0	Heavily burnt flint
721	<97>	P722	3.6	1	5	45	9.0	34	75.6	Heavily burnt flint
756	<110>	L756	3.1	1	8	40	5.0	22	55.0	Heavily burnt flint
768	<100>	P769	3.6	1	4	34	8.5	29	85.3	Heavily burnt flint
770	<101>	P771	3.6	1	7	58	8.3	54	93.1	Heavily burnt flint
831	<112>	F832	2.0	1	1	6	6.0	0	0.0	Heavily burnt flint
889		Natural	1.0	1	2	19	9.5	19	100.0	Heavily burnt flint
899	<113>	L899	3.6	1	18	83	4.6	31	37.3	Heavily burnt flint
917		P918	3.6	1	1	13	13.0	0	0.0	Heavily burnt flint
941	<114>	D946	6.1	1	102	87	0.9	0	0.0	Heavily burnt flint
956	<115>	L956	3.6	1	15	47	3.1	0	0.0	Heavily burnt flint
963	<119>	L963	3.4	1	199	478	2.4	176	36.8	Heavily burnt flint
967		P968	3.6	1	29	574	19.8	528	92.0	Heavily burnt flint
974	<118>	L974	3.6	1	4	91	22.8	91	100.0	Heavily burnt flint
975		L975	3.5	1	6	173	28.8	167	96.5	Heavily burnt flint
975	<130>	L975	3.5	1	28	131	4.7	71	54.2	Heavily burnt flint
979		P986	3.5	1	6	95	15.8	89	93.7	Heavily burnt flint
985	<123>	L985	3.4	1	16	52	3.3	0	0.0	Heavily burnt flint

		1.4005	0.0			07		0.4		
1005		L1005	3.6	1	4	67	16.8	64	95.5	Heavily burnt flint
1011		D1012	3.3	1	4	25	6.3	0	0.0	Heavily burnt flint
1019	<137>	PH1019	3.3	1	8	18	2.3	0	0.0	Heavily burnt flint
1025	<131>	P1046	3.5	1	39	152	3.9	64	42.1	Heavily burnt flint
1032	<149>	L1032	3.5	1	24	22	0.9	6	27.3	Heavily burnt flint
1076		L1076	3.6	1	6	59	9.8	48	81.4	Heavily burnt flint
1077		P1078	3.3	1	1	21	21.0	21	100.0	Heavily burnt flint
1085		PH1086	3.3	1	16	187	11.7	147	78.6	Heavily burnt flint
1090	<143>	L1090	3.4	1	8	22	2.8	17	77.3	Heavily burnt flint
1093		PH1094	3.3	1	28	267	9.5	192	71.9	Heavily burnt flint
1102		P1103	3.5	1	4	63	15.8	63	100.0	Heavily burnt flint
1104		P1105	3.5	1	17	129	7.6	67	51.9	Heavily burnt flint
1116		PH1117	3.3	1	6	72	12.0	72	100.0	Heavily burnt flint
1120		Dn1125	3.3	1	93	159	1.7	34	21.4	Heavily burnt flint
1132		P1133	3.4	1	1	9	9.0	0	0.0	Heavily burnt flint
1132	<153>	P1133	3.4	1	9	27	3.0	9	33.3	Heavily burnt flint
1156	<160>	F11555	3.5	1	205	388	1.9	167	43.0	Heavily burnt flint
1159	<158>	P1160	3.5	1	32	45	1.4	0	0.0	Heavily burnt flint
1162		We1157	3.5	1	3	100	33.3	100	100.0	Heavily burnt flint
1169	<159>	Ov1161	3.3	1	51	130	2.5	67	51.5	Heavily burnt flint
1182		L1182	3.4	1	2	169	84.5	169	100.0	Heavily burnt flint
1183	<164>	P1179	3.4	1	38	36	0.9	0	0.0	Heavily burnt flint
1184	<165>	P1185	3.5	1	62	67	1.1	0	0.0	Heavily burnt flint
1187		L1187	3.4	1	7	124	17.7	122	98.4	Heavily burnt flint
1216		F1217	3.3	1	4	178	44.5	163	91.6	Heavily burnt flint
1247		PH1248	3.3	1	10	135	13.5	125	92.6	Heavily burnt flint
1258		PH1259	3.3	1	3	26	8.7	21	80.8	Heavily burnt flint
1281		L1281	3.3	1	1	20	20.0	20	100.0	Heavily burnt flint
1286		L1286	3.1	1	11	187	17.0	167	89.3	Heavily burnt flint
1290		PH1291	3.3	1	11	226	20.5	201	88.9	Heavily burnt flint
		Burnt								,
4040		Flint	2.0	4	10	198	40.0	180	00.0	I la avriler bermat fligt
1318	400	Horizon	3.2	1	356	316	19.8	61	90.9	Heavily burnt flint
1334	<199>	L1334		1			0.9		19.3	Heavily burnt flint
1349	<203>	F1350	2.0	1	1886	1244	0.7	254	20.4	Heavily burnt flint
1364	<206>	L1364	3.2	1	244	447	1.8	222	49.7	Heavily burnt flint
1571		P1572	5.1	Tr2	1	13	13.0	13	100.0	Heavily burnt flint
1687		P1687	6.2	Tr2	30	305	10.2	193	63.3	Heavily burnt flint
1690		F1692	6.1	Tr2	1	7	7.0	0	0.0	Heavily burnt flint
1708	.504	Ce1700	6.1	Tr2	2	4	2.0	0	0.0	Heavily burnt flint
1712	<521>	P1713	6.1	Tr2	1	114	114.0	114	100.0	Heavily burnt flint

1720	<523>	P1721	5.2	Tr2	3	15	5.0	0	0.0	Heavily burnt flint
1737	<534>	D1738	3.6	Tr2	4	31	7.8	9	29.0	Heavily burnt flint
1739		P1740	3.6	Tr2	1	21	21.0	21	100.0	Heavily burnt flint
1745	<533>	D1738	3.6	Tr2	12	121	10.1	65	53.7	Heavily burnt flint
1757	<530>	P1764	6.1	Tr2	1	21	21.0	21	100.0	Heavily burnt flint
1760		PH1761	3.3	Tr2	2	7	3.5	27	385.7	Heavily burnt flint
1767		PH1768	3.3	Tr2	4	68	17.0	68	100.0	Heavily burnt flint
1814	<535>	L1814	6.1	Tr2	3	27	9.0	17	63.0	Heavily burnt flint
1846		L1846	3.2	Tr2	6	83	13.8	72	86.7	Heavily burnt flint
1858		Burnt Flint Horizon	2.0	Tr2	3184	22332	7.0	11461	51.3	Heavily burnt flint
1868		L1868	3.4	Tr2	5	57	11.4	54	94.7	Heavily burnt flint
1873		P1877	3.4	Tr2	3	37	12.3	37	100.0	Heavily burnt flint
1888	<540>	PH1890	3.3	Tr2	1	16	16.0	16	100.0	Heavily burnt flint
1896		L1896	3.4	Tr2	12	132	11.0	119	90.2	Heavily burnt flint
1900	<544>	P1901	3.2	Tr2	10	51	5.1	0	0.0	Heavily burnt flint
1909	<546>	P1910	6.2	Tr2	1	11	11.0	11	100.0	Heavily burnt flint
1913		Palaeosol	2.0	Tr2	5	38	7.6	30	78.9	Heavily burnt flint
1920		L1920	3.4	Tr2	28	464	16.6	355	76.5	Heavily burnt flint
1922		PH1923	3.3	Tr2	7	147	21.0	144	98.0	Heavily burnt flint
1937	<551>	L1937	3.3	Tr2	73	518	7.1	259	50.0	Heavily burnt flint
1939	<556>	Palaeosol	2.0	Tr2	24	301	12.5	186	61.8	Heavily burnt flint
1950		L1950	3.3	Tr2	3	34	11.3	11	32.4	Heavily burnt flint
1951		L1951	3.2	Tr2	8	116	14.5	89	76.7	Heavily burnt flint
1953		L1953	5.3	Tr2	1	60	60.0	60	100.0	Heavily burnt flint
1954	<554>	P1956	5.2	Tr2	6	46	7.7	30	65.2	Heavily burnt flint
1965		P1966	3.3	Tr2	5	93	18.6	93	100.0	Heavily burnt flint
1968	<557>	D2002	3.4	Tr2	1	9	9.0	9	100.0	Heavily burnt flint
1990		Palaeosol	2.0	Tr2	1	9	9.0	9	100.0	Moderately burnt flint
1990	<558>	Palaeosol	2.0	Tr2	12	99	8.3	45	45.5	Heavily burnt flint
1998		PH1999	3.3	Tr2	3	62	20.7	44	71.0	Heavily burnt flint
2012		P2013	3.1	Tr2	3	80	26.7	73	91.3	Heavily burnt flint
2020		F2021	3.2	Tr2	3	27	9.0	21	77.8	Heavily burnt flint
2031		L2031	3.3	Tr2	10	184	18.4	131	71.2	Heavily burnt flint
2034		PH2035	3.2	Tr2	2	27	13.5	24	88.9	Heavily burnt flint
2067	<562>	L2067	3.3	Tr2	43	372	8.7	241	64.8	Heavily burnt flint
2075		L2075	3.5	Tr2	12	203	16.9	167	82.3	Heavily burnt flint
2081		PH2082	3.3	Tr2	21	194	9.2	145	74.7	Heavily burnt flint
2090		L2090	3.4	Tr2	3	62	20.7	55	88.7	Heavily burnt flint
2091		Natural	1.0	Tr2	5	30	6.0	15	50.0	Heavily burnt flint

2099		F20100	3.3	Tr2	8	113	14.1	82	72.6	Heavily burnt flint
2108		P2109	3.3	Tr2	6	217	36.2	213	98.2	Heavily burnt flint
2117	<563>	L2117	3.2	Tr2	5	51	10.2	37	72.5	Heavily burnt flint
2136	<565>	P2137	3.2	Tr2	53	75	1.4	0	0.0	Heavily burnt flint
2139	<566>	P2139	3.2	Tr2	105	521	5.0	155	29.8	Heavily burnt flint
2142	<569>	L2142	3.2	Tr2	10	107	10.7	84	78.5	Heavily burnt flint
2146	<567>	L2146	3.2	Tr2	180	336	1.9	56	16.7	Heavily burnt flint
2148	<570>	L2148	3.2	Tr2	58	162	2.8	0	0.0	Heavily burnt flint
2153		Burnt Flint Horizon	2.0	Tr2	739	6348	8.6	3778	59.5	Heavily burnt flint
2153	<572>	Burnt Flint Horizon	2.0	Tr2	393	2547	6.5	666	26.1	Heavily burnt flint
2157	<573>	D2158	3.1	Tr2	13	67	5.2	16	23.9	Heavily burnt flint

Table 2: Burnt Flint Catalogue

APPENDIX 4: PREHISTORIC POTTERY ASSESSMENT

Mike Seager Thomas

Excavations at Tobacco Dock, Shadwell, yielded seven sherds of prehistoric pottery (see Table 1). Four flint-tempered fabric types were distinguishable. These range from fine to medium flint-tempered to coarse flint-tempered. Locally the coarsest of these, CF, could belong to a range of prehistoric dates from the Neolithic to the Late Bronze Age but the fabric suite and the assemblage as a whole is typical of the early post Deverel-Rimbury pottery tradition locally, datable to around 1000 cal BC (importantly for this diagnosis is a lack of a significant quartz sand fraction in the clay matrix). This view is supported by the absence from the assemblage of sherds of more than c.9mm thick. The assemblage as a whole is heavily weathered/ abraded and there is no reason to assume that any of it is in a primary position. For this reason, it has no research potential.

Context	Number of	Fabric	Other	Likely date
	sherds		diagnostics	
1858	1	sparse CF	none	LBA
1905	1	sparse FMF	thin	LBA
1913	1	sparse MCF	thin	LBA
1990	2	MCF, MF	thin	LBA
2115	2	sparse FMF,	thin	LBA
		FMF		
Total	7			
prehistoric				

Key: CF = coarse flint tempered; FMF = fine to medium flint tempered; MCF = medium to coarse flint tempered; CQ = moderate coarse rounded quartz inclusions; MF = medium flint tempered. M/LBA = Middle and Late Bronze Age fabric type; LBA = Late Bronze Age fabric type

Table 1: Prehistoric pottery from Tobacco Dock, Shadwell

APPENDIX 5: ROMAN POTTERY ASSESSMENT

Katie Anderson and Eniko Hudak

Introduction

The TBF10 excavations yielded a large assemblage of Roman pottery, totalling 4,284 sherds, weighing 102.509kg and representing 69.50 EVEs, which was recovered from 373 different contexts, including the topsoil. The pottery was fully quantified and catalogued by Katie Anderson using the standard measures of sherd count, weight, and Estimated Vessel Equivalents (EVEs). The assemblage was recorded using standard Museum of London fabric codes (Symonds 2002) and the data was entered into an MS Access database.

Assemblage Composition

The assemblage comprised small to large sherds, with a relatively high mean weight of 23.9g. Sherds varied from being fairly 'fresh' to heavily abraded, although there is no obvious link between date and condition, specifically, it is not the earliest sherds that are the most abraded.

There is a wide range of both Romano-British and imported fabrics represented in the assemblage, however, generic sandy wares that could not be sourced (SAND, CSGW) represented a high proportion of the assemblage (19.7%/6.5% by count, 15.4%/4.2% by weight). The most common sourced fabric was AHFA (17.6% by count, 21.3% by weight), followed by BB2 and OXWW, which compares well with the general composition of late Roman assemblages in the City as discussed by Symonds and Tomber (1991) and in particular with the published Tobacco Dock sites TOC02 and HGA02 (Gerrard 2011a). The late Roman date of the assemblage is further reinforced by the presence of PORD, MAYEN, and CALC sherds (*cf.* Gerrard 2011b). Fine wares are mainly OXRC imitations of *Terra Sigillata* bowls, and NVCC beakers, which fabrics also appear in City assemblages after AD 200, and become more common after AD 250 (Symonds and Tomber 1991).

The most commonly occurring imported ware by sherd count was amphora, with a total of 102 sherds, weighing 8674g. Within this group there were a number of different fabric types identified, included Spanish Baetican vessels, Gaulish vessels and some North African examples. The amphora fabrics represented are in keeping with the material recovered from TOC02 and HGA02. Other imports included Moselkeramik (MOSL) and Mayen wares. MOSL was well represented, totalling 82 sherds weighing 389g, although this is somewhat skewed by 42 sherds (123g) from a single beaker, recovered from context [1186]. Mayen wares totalled 38 sherds, weighing 1902g and represent the latest dated imports, dating AD 350-400.

Samian sherds were fairly poorly represented, with 51 sherds weighing 872g, from Central and Eastern Gaul. The low percentage of Samian is not unsurprising given that this site appears to have peaked in the later Roman period, by when the supply of Samian had decreased.

Overall chronological analysis of the pottery has only been carried out to a basic level, and will need to be combined with contextual analysis in order to get a more complete understanding of the intensity and nature of activity and deposition at the site. However, the overall date of the assemblage and the presence of certain fabrics indicate that activity at the site increases after AD 200, with AD 250+ representing a probable peak in occupation. The material did not show such strong evidence for post-AD 375 activity as TOC02 and HGA02, however, the presence of Mayen wares and Portchester D wares indicate that the site was still occupied into the later 4th/early 5th century AD.

Sixty-three different vessels were noted as having interior limescale, sooting and/or burnt residues, all of which are indicative of being used in food preparation. A Colchester colour-coated beaker [1273] had partial graffiti on the exterior possibly reading 'SAN', and a Hadham Oxidised ware base sherd from [714] also had possible external graffito. There was also a greyware sherd with post-firing holes [1737], and another with a large lead rivet repair [2066].

A wide variety of vessel forms were identified, although the jars were the most commonly occurring form (see Chart 1). However, bowls, beakers, dishes, and *mortaria* were also well represented and thus demonstrate that this assemblage reflects a variety of activities associated with the storage, preparation and serving of foodstuffs.

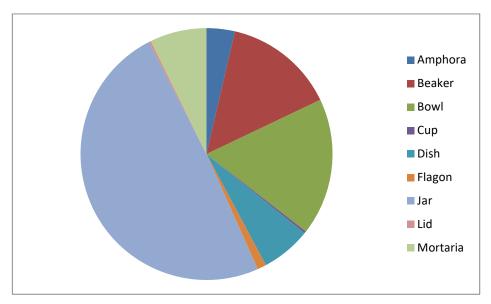


Chart 1: Roman pottery by identified forms

Contextual Analysis

A total of 372 contexts contained Roman pottery. At this stage, only a very basic assessment of the pottery in terms of context has been undertaken. Table 2 shows the quantities of pottery by context as well as the spotdate for each context. The majority of contexts (333 in total) contained small assemblages of pottery (less than 30 sherds), with 33 contexts containing medium sized assemblages (31-100 sherds) and just five large assemblages, comprising more than 100 sherds. The five contexts containing large assemblages have been selected for more in-depth analysis.

Context [194] contained 133 sherds, weighing 2997g, with a relatively high mean weight of 22.5g. This comprised 24 rim sherds and a further 12 base sherds, representing a minimum of 34 different vessels. The pottery is predominantly later Roman in date, with a date of AD 300-400 given for the context. Late Roman vessels included OXRC bowls one of which was a late C75, dating AD 325+ (Young 1977). There were also several NVCC and AHFA vessels, as well as a large sherd from a Mayen lid-seated jar (AD 350-400). There was also a small quantity of residual earlier Roman pottery identified, which included two Verulamium region white ware vessels, dated AD 50-160.

107 sherds of Roman pottery, weighing 2234g, with a mean weight of 20.9g were recovered from context [974]. This context is also late Roman, dating AD 325-400, and included OXRC C75 bowls, BB2 beaded, flanged bows (4M, dated to AD 250-400, Symonds 2002), and a Mayen ware jar. There were also two Alice Holt jars which had limescale on the interior, indicative of being used to hold/boil water. A minimum of 33 different vessels were identified, comprising 22 rims and 11 bases.

Context [1075] contained 123 sherds, weighing 2664g, with a mean weight of 21.7g. This was a further late Roman assemblage, with a date of AD 330-400. Pottery included AHFA, PORD jars, OXRC C51 and C75 bowls. There were also two late Roman grog-tempered jars and three Nene Valley colour-coated bowls. A minimum of 28 vessels were identified, which comprised 22 different rims and six bases.

Context [1745] yielded 109 sherds weighing 2239g, with a mean weight of 20.5g. This was another late Roman assemblage dated to AD 300-400. The most common sourced wares were BBS dishes (5J) and AHFA bowls (4M) and jars, and fine wares were mainly OXRC including a C51 bowl, and EPON and MOSL beakers. Typical 4th-century wares such as PORD were also present. A minimum of 18 vessels were identified.

Context [1186] contained a much smaller assemblage than the other four by weight (802g), minimum number of vessels (11), as well as average sherd size (7.7g), but similar in sherd count (107). This is due to the presence of 42 sherds of a MOSL beaker, taking the context assemblage into the 'large' category (100+ sherds), but only accounting for 15% of the assemblage by weight. This assemblage is also earlier than the other four, dated to AD 200-300. AHFA is still the most common sourced fabric,

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and there are six Samian vessels, as well as Argonne ware sherds, however, the typical 4th-century MAYEN, PORD and CALC are absent from the assemblage.

Recommendations for Further Work

All of the pottery has been fully recorded and therefore needs no further analysis. However, the assemblage as a whole needs to be considered in more detail, particularly in comparison to the published Tobacco Docks assemblages (Gerrard 2011). Although a basic comparison in terms of dates and fabrics has been undertaken in this assessment report, there has been no contextual comparative work. The TBF10 assemblage is sizeable and can contribute greatly to the understanding not only of Late Roman pottery supply, but also consumption and deposition.

There has been little in the way of contextual analysis of the Roman pottery assemblage, which is a key issue and will need to be addressed at a later stage in the assessment. Key groups/features will need to be identified and discussed in more detail. It is also recommended to include a report in the publication.

It is also recommended that the Amphora and possibly the graffiti, and Samian are sent to specialists for a more detailed report.

Bibliography

Gerrard, J., 2011a. 'Roman pottery,' in A. Douglas, J. Gerrard and B. Sudds, *A Roman settlement and bath house at Shadwell. Excavations at Tobacco Dock and Babe Ruth restaurant, The Highway, London*, Pre-Construct Archaeology Monograph 12, 61-86.

Gerrard, J., 2011b. 'New Light on the End of Roman London', The Archaeological Journal 168, 181-194.

Symonds, R., 2002. Recording Roman Pottery: a description of the methodology used at Museum of London Specialist Services (MoLSS) and Museum of London Archaeology Service (MoLAS). Unpublished document available from MOLA.

Symonds, R. and Tomber, R., 1991. 'Late Roman London: an assessment of the ceramic evidence from the City of London', *Transactions of the London and Middlesex Archaeological Society* 42, 59-99.

Young, C., 1977. Oxfordshire Roman Pottery. British Archaeological Reports British Series 43.

Context	ShC	Wt(g)	EVEs
?BAETL	1	68	
?CC	3	55	
AHFA	753	21837	12.16
AHSU	22	292	0.31
AMPH	50	3812	0.92
AMPH?	1	95	
ARGO	40	483	0.32
BAET	26	3346	
BAETL	5	623	
BB1	36	746	0.34
BB2	152	4142	4.83
BBS	95	1959	2.28
BUFF	24	237	
CALC	10	96	0.15
CC	51	825	0.76
CGBL	2	10	0.2
CGBS	1	0	0.1
CGCC	1	4	
CGOF	2	8	
CGOF??	2	13	
COLCC	51	538	2.2
CSAND	3	91	
CSGW	279	4322	2.94
EIFL	35	515	0.74
EPON	18	350	
FLINT	6	263	0.4
FSBUFF	1	6	
FSGW	3	90	
GAUL	16	683	
GAUL?	2	20	
GAUL1	1	27	
GROG	105	3056	1.41
GROGBB	30	494	0.57
HADBB	20	482	1.01
HADOX	57	1158	2.54
HADRS	7	127	
HADRU	22	555	0.69
HORNGW	5	281	
HWC	2	37	
LCWS	1	22	0.12
LNVCW	1	9	0.12
LOMI	3	9	

Context	ShC	Wt(g)	EVEs
LOXI	1	5	
MAYEN	37	1834	2.09
MAYEN?	1	68	0.15
MICA	2	23	
MICABUFF	2	61	
MORT	3	192	
MOSL	82	389	0.4
NFCC	2	8	
NKGW	2	141	0.1
NVCC	286	4264	4.02
NVCC?	1	42	
NVGW	2	70	0.12
NVPA	6	270	0.1
NVWW	1	13	0.12
OXID	55	1402	1.47
OXIDF	33	462	0.19
OXIS	29	458	0.44
OXRC	486	9958	6.9
OXWS	4	122	0.09
OXWW	151	8258	4.05
PARCWW	2	28	
PORD	37	959	0.57
Q100	3	37	
RS	1	2	
SAM	2	44	
SAMCG	19	256	0.34
SAMEG	28	564	0.18
SAMMV	1	5	
SAMSG	1	3	
SAND	845	15803	9.88
SANDGW	1	29	
SHELL	101	2555	2.06
SWANSPOOL	1	24	
TSK	35	735	0.55
VRW	18	310	
WS	10	267	0.18
WW	48	1062	0.39
TOTAL	4284	102509	69.5

Table 1: All Roman pottery by fabric

			Early	Late
Context	ShC	Wt(g)	spotdate	spotdate
0	121	3863	Х	Х
53	2	98	300	400
62	1	5	120	240
88	1	6	200	400
90	2	96	240	400
111	1	7	150	300
125	31	607	240	400
153	5	18	240	400
181	7	136	300	400
184	1	49	120	250
188	2	127	240	400
194	133	2997	300	400
195	1	59	50	300
217	1	23	150	300
220	1	20	330	400
225	1	13	200	400
279	5	58	200	400
289	4	100	270	400
291	4	16	200	400
298	1	19	120	400
309	1	59	100	150
315	1	68	150	300
324	1	64	50	300
334	1	7	300	400
348	2	79	300	400
351	2	18	250	400
356	21	411	330	420
359	88	2527	340	400
361	2	11	250	400
366	4	123	300	400
368	4	61	180	300
372	1	17	150	300
374	19	965	270	400
380	1	50	120	240
382	5	516	240	400
385	34	826	300	400
387	1	38	150	300
390	10	203	200	400
392	9	140	320	400
393	10	265	240	400
399	22	637	300	400

			Early	Late
Context	ShC	Wt(g)	spotdate	spotdate
400	1	10	200	400
407	3	32	200	400
410	13	188	300	400
412	1	14	240	400
414	5	58	240	400
424	5	146	240	400
428	10	253	300	400
434	1	15	200	400
435	2	49	220	400
438	5	113	240	400
440	1	119	200	400
443	6	51	240	400
450	67	1127	240	300
456	25	681	240	400
459	3	150	240	400
469	11	991	240	400
474	2	6	150	300
513	1	4	240	400
514	1	10	180	200
516	20	408	300	400
518	1	50	100	400
521	13	357	200	400
531	1	29	250	400
533	1	54	240	400
534	5	85	200	400
536	3	31	100	400
539	2	12	180	400
541	6	117	240	400
545	3	56	250	400
547	1	16	200	400
549	1	21	200	400
550	15	832	240	400
557	4	141	250	400
562	1	205	250	400
564	1	73	200	400
568	5	117	325	400
570	3	67	250	400
576	13	229	250	400
581	4	112	200	300
590	1	11	pre	Pre
601	1	1	43	400

			F. d.	Lata
Context	ShC	Wt(g)	Early spotdate	Late spotdate
633	1	4	100	400
637	13	306	240	400
640	5	30	150	300
652	2	14	100	400
656	26	398	240	400
662	3	23	250	400
664	2	34	250	400
674	35	521	250	400
675	1	6	200	400
688	1	3	240	400
711	1	21	150	300
714	8	183	240	400
721	4	281	240	400
768	3	30	200	400
770	4	133	240	400
779	13	532	200	300
782	3	81	240	400
792	2	122	150	300
802	1	2	120	250
806	1	8	43	400
815	2	37	240	400
818	1	82	240	400
829	1	106	200	400
835	1	33	150	300
837	1	17	150	300
844	2	25	200	400
873	10	261	300	400
875	14	373	240	400
887	8	88	150	300
893	2	57	200	400
897	8	214	200	300
899	36	867	200	400
900	2	9	240	400
901	1	43	240	400
917	3	113	240	400
922	31	581	240	400
923	5	89	240	400
925	98	1909	300	400
930	23	370	270	400
940	2	90	240	300
944	2	116	270	350

Context	ShC	Wt(g)	Early spotdate	Late spotdate
953	3	14	50	400
956	25	605	330	400
957	2	65	200	400
959	23	545	330	400
962	12	249	250	400
963	15	481	250	400
967	33	268	250	400
974	107	2234	325	400
975	69	2856	270	420
978	3	18	43	400
979	20	319	200	400
980	3	38	240	400
982	1	8	120	400
985	11	154	200	400
989	2	10	240	400
990	40	891	270	400
991	7	324	240	400
992	3	27	200	400
993	11	191	200	400
996	7	60	240	400
999	1	8	240	400
1001	20	523	150	300
1003	22	370	240	400
1005	9	356	250	400
1006	9	100	100	250
1008	15	330	240	400
1009	2	4	100	300
1011	3	157	240	400
1020	1	36	120	400
1025	41	1229	240	400
1029	1	6	200	400
1031	2	9	200	275
1032	56	1110	300	400
1033	11	227	200	400
1034	20	577	300	400
1037	3	44	240	400
1040	2	33	250	400
1042	4	268	150	300
1049	56	1983	240	400
1053	2	23	150	400
1054	1	4	240	400

			Early	Late
Context	ShC	Wt(g)	spotdate	spotdate
1062	7	142	200	400
1064	1	18	18 100	
1066	4	133	240	400
1068	1	46	240	400
1070	8	479	200	400
1071	14	747	200	400
1073	10	243	240	400
1075	123	2664	300	400
1076	5	87	200	300
1077	6	31	200	400
1085	2	22	120	250
1087	83	1503	300	400
1090	33	1486	240	400
1091	14	312	240	400
1101	23	549	240	400
1102	25	1263	240	400
1104	10	351	150	400
1111	39	613	240	400
1115	3	281	270	400
1116	7	148	120	250
1120	6	111	200	400
1126	24	478	200	300
1128	31	970	200	400
1129	2	6	43	400
1131	3	170	200	400
1132	6	155	200	400
1139	14	290	240	400
1145	6	71	200	400
1150	17	384	240	400
1151	23	750	350	400
1152	8	132	200	400
1153	13	164	250	400
1154	73	2571	240	300
1156	7	150	120	300
1159	12	382	240	400
1162	8	132	200	400
1169	3	96	150	300
1170	1	33	200	400
1172	19	524	240	400
1174	8	132	300	400
1175	45	743	200	300

			Early	Late
Context	ShC	Wt(g)	spotdate	spotdate
1178	2	5	50	130
1182	38	779	200	400
1183	4	112	50	250
1184	3	73	300	400
1186	104	802	200	300
1188	6	169	50	250
1190	7	297	200	400
1193	5	52	200	400
1197	20	184	100	250
1198	1	3	200	400
1201	2	147	50	300
1209	39	1994	240	400
1214	2	8	150	400
1216	10	313	350	400
1218	1	33	200	300
1219	14	118	300	400
1227	1	6	200	275
1228	2	35	170	300
1229	2	31	200	400
1232	1	14	150	400
1247	1	15	150	300
1258	5	31	120	250
1260	1	14	150	400
1273	7	201	150	300
1275	1	5	50	300
1277	4	44	150	400
1281	4	220	150	300
1287	1	17	200	400
1288	18	164	250	400
1290	6	57	150	300
1295	24	455	240	400
1298	1	36	43	400
1300	1	7	150	400
1301	1	3	200	400
1304	16	181	250	400
1326	12	100	200	400
1327	12	336	200	400
1334	2	17	200	400
1341	3	19	200	300
1347	12	554	250	400
1353	2	32	200	400

			Early	Late
Context	ShC	Wt(g)	spotdate	spotdate
1356	1	4	200	400
1511	1	38	100	400
1518	1	78	240	400
1523	1	45	100	400
1534	1	247	270	350
1537	1	43	100	400
1539	7	234	100	400
1546	4	47	120	400
1559	1	48	120	400
1584	1	70	250	400
1598	2	34	200	275
1603	1	295	240	400
1620	1	8	200	400
1629	1	57	240	400
1631	2	325	100	400
1639	1	26	200	400
1651	8	233	240	400
1665	9	143	250	400
1681	15	354	250	400
1697	1	25	250	400
1699	8	135	250	400
1702	2	30	100	400
1704	3	117	250	400
1706	1	60	250	400
1737	58	780	200	400
1739	13	395	250	400
1741	21	624	250	400
1742	23	478	240	400
1745	109	2239	300	400
1746	27	515	250	400
1756	32	554	350	400
1757	2	9	100	400
1760	1	72	100	400
1762	31	480	250	400
1765	5	253	250	400
1767	1	15	200	400
1770	11	105	250	400
1772	2	36	150	400
1773	23	318	300	400
1776	7	112	240	400
1780	32	309	300	400

			Early	Late
Context	ShC	Wt(g)	spotdate	spotdate
1781	1	16	150	250
1783	1	16	100	400
1785	17	468	250	400
1787	25	626	350	400
1788	31	619	300	400
1789	55	2249	250	400
1790	6	170	250	400
1798	12	265	250	400
1800	6	116	350	400
1813	30	378	250	400
1814	13	155	250	400
1823	1	122	240	300
1827	14	258	250	400
1830	1	61	250	400
1831	5	62	200	400
1836	1	13	100	400
1838	2	40	250	400
1842	1	3	240	400
1844	1	5	240	400
1846	3	53	240	400
1848	3	27	240	400
1852	5	63	240	400
1856	1	40	100	400
1865	1	20	250	400
1868	17	177	200	300
1875	1	53	240	400
1880	2	6	150	300
1882	5	31	150	400
1893	3	75	100	400
1896	3	66	250	400
1900	16	583	200	400
1917	1	3	200	275
1919	7	84	250	400
1920	7	107	240	300
1921	3	59	150	400
1937	1	8	120	400
1944	1	36	100	400
1950	5	58	240	400
1951	31	998	250	300
1960	2	17	100	400
1962	4	90	250	400

Comtant	OL-O	\A(4())	Early	Late
Context	ShC	Wt(g)	spotdate	spotdate
1970	1	15	240	400
1980	13	367	200	300
1981	38	855	200	300
1982	5	162	100	400
1991	1	27	130	250
1996	3	77	120	300
2031	16	270	250	400
2034	1	2	100	400
2041	3	21	250	400
2044	4	72	240	400
2047	1	29	200	400
2048	1	13	240	400
2051	1	47	200	400
2055	10	393	325	400
2058	2	30	200	400
2060	72	1524	240	400
2066	12	243	250	400
2067	5	128	250	400
2070	60	800	340	400
2075	24	343	250	400
2079	18	326	250	400
2087	4	131	250	400
2088	6	28	250	400
2095	1	84	100	400
2097	1	22	100	400
2102	4	19	240	400
2110	4	85	350	400
2115	1	513	150	300
2117	53	801	240	400
2118	1	182	200	400
2120	1	11	250	400
2136	1	13	240	400
2139	4	185	240	400
2140	4	96	200	400
2142	1	56	250	400
2146	2	15	200	400
2157	1	89	200	400
2187	4	92	200	400
2188	4	108	250	400
2193	1	6	240	400
2194	12	251	340	400

Context	ShC	Wt(g)	Early spotdate	Late spotdate
2195	8	310	250	400
2196	1	57	240	400
2604	11	170	240	400

Table 2: Context spotdates

APPENDIX 6: ROMAN AND EARLY ANGLO-SAXON SMALL FINDS ASSESSMENT

James Gerrard

Introduction

The site produced 169 individual small finds, 24 lead 'rings' and an iron spearhead (discussed at the end of this report). The following report details the recording and assessment of the small finds. It provides a brief discussion of the assemblage and a series of recommendations for publication.

Methodology

The finds have been recorded in an Excel spreadsheet based on the Pre-Construct Archaeology *Roman Small Finds Database*, which was originally developed by the author. A copy of the spreadsheet is held in the archive and a hardcopy print is provided as a table at the end of this report (Table 5). Much of the ironwork is very poorly preserved and it was x-rayed prior to this assessment. Where possible the xrays have been used to determine the identification of severely corroded objects. No other conservation has taken place.

Finds have been identified using standard catalogues (Crummy 1983; Manning 1985) and functional categories have been assigned to each find using the scheme developed by Crummy (1983, v) (Table 1). This scheme is not without its difficulties (Crummy 2007). However, it is widely used and thus useful for inter-site comparisons of assemblages.

Roman Objects

Personal adornments

The excavations produced a small but significant group of personal adornment. Pride of place must go to a copper-alloy crossbow brooch (missing its pin) of Keller's Type 1 (Swift 2000, 13-15) SF 223 [974]. This is an early crossbow brooch form and can be dated to the last decades of the third century or the first decades of the fourth century (c.AD 280-320). Crossbow brooches were worn by agents of the Roman state and those wishing to show loyalty to the empire (Janes 1996; Gerrard 2013). The distribution of this type of object includes military sites but also civilian regions (Collins forthcoming, fig. 2). A potentially related object is what appears to be an incomplete amphora strap end of Simpson's (1976) Type 9 (SF 656 [2146]). These were used on the end of late Roman military or paramilitary belts (for which see Gerrard 2013, 151-153).

Other personal adornment include a small group of late Roman decorated cooper-alloy bracelet fragments (SF 298 [1139], SF 81 [450], SF 498 [1770]) (for instance Crummy 1983, fig. 47) and two Kimmeridge shale bracelet fragments (SF 343 and SF 344, both from [1277]). There are also three fragments from late Roman hairpins. One of these was an undiagnostic swollen shaft (SF 338 [1186]), the other two fragments were heads from hairpins of Crummy's (1983) Type 3 (SF 128 [570], SF 243 [1116]).

The remaining personal adornments include a small group of glass beads. These are all tiny and their recovery is down to the sieving of environmental samples. The beads include two blue glass cylinder beads ([359], [956]) and three green glass cylinder beads (SF 91 [494], [359] and [985]) (Guido 1978, fig. 37, nos. 5 and 10). These are all late Roman types (Swift 2000, 89-116).

Toilet instruments

The only toilet instrument was a fragments from a rather fine green porphyry (K. Hayward pers. comm.) cosmetic palette (SF 301 [1150]). This can be set aside the less exotic example from earlier excavations in Shadwell (Douglas *et al.* 2011, fig. 91).

Household objects

The only household objects were fourteen fragments of quernstones. All of these, bar a single fragment, were of German lava. Details of their contexts can be found in the catalogue.

Objects used in recreation

The only possible recreational object is a small discoid pebble, which may have served as a counter or gaming piece SF 165 [772].

Objects used in transportation

The only object associated with transportation is the poorly preserved head from a spatulate iron linchpin of Manning's (1985) Type 2a. Such objects are not uncommon finds and they demonstrate the presence of wheeled vehicles at the site.

Tools

Tools are under-represented in the assemblage and this is a consequence of the poor state of preservation exhibited by much of the ironwork. SF 322 [1154] is the tip of an iron knife and SF 325 [1182] might be a crude hone.

Fixtures and Fittings

Only three fixtures or fittings were recovered (excluding nails). These were: a T-shaped staple SF 193 [923]; a small length of articulated three S-shaped links forming a piece of chain SF 249 [1075] (these are so fine that their Roman date may be doubted) and a double spiked loop [1920].

There was also a large group of corroded nails. Full details of these are available in the archive.

Agricultural objects

The only 'agricultural' object is an incomplete copper-alloy bell SF 594 [1900]. By convention these are usually seen as animal bells (Crummy 1983, 127) but they may have served as musical instruments and in rituals.

Objects associated with metal working

Like many Roman period sites the current excavations have yielded small quantities of waste that can be associated with metal working. The vast majority of this waste are fragments of lead scrap and sheet. The largest of these SF 163 is discussed in more detail below. Two solidified molten puddles ([975], 754g; [967] 46g) are of interest as direct evidence of metal working. A list of the occurrences of lead waste can be found in Table 2.

Possible fragment from a lead coffin or tank

This object SF 163 [768] is a large rectangular fragment of lead weighing 876.3g. It is approximately 40cm long x 3.7cm wide and 0.9cm thick. The object has been bent into a 'U' shape and then the arms have been bent outwards and back forming, for want of a better descriptive term, an inverted and truncated 'W'. The edges of the object are slightly splayed and this may be due to the way the metal was cut. On the exterior surface there is a narrow (1cm) band of single cable decoration standing in relief. This band is approximately 5mm wide. On the interior surface are a series of seven circular depressions.

In its present form this object is simply a piece of scrap lead and its recovery from a pit stratigraphically associated with the lead 'rings' is noteworthy. However, the band of cable decoration suggests that this object may have begun its life as something else. The obvious candidates are either a lead coffin or a lead tank. Both of these types of objects are known to have been decorated with bands of cabling in relief. The thickness of the piece of lead (approximately 1cm) and the narrowness of the band of cabling (5mm) might favour an interpretation of this as a fragment from a coffin (which might be derived from the mausoleum at LD74/76). There remains an outside possibility that the fragment might be derived from a lead tank (Guy 1981). Further comparison of dimensions may shed some light on the identification of this find and is recommended before publication.

Objects of unknown function

SF 239 [1075] An incomplete copper-alloy 'hook-like' object. The hooked end is broken and the other terminal is decorated with a bead and reel with a transverse groove beneath.

SF 202 [975] is an incomplete small keyhole-shaped piece of copper alloy with an incised line serving as a decorative border. This is probably a mount or other dress accessory.

Given the state of preservation there were many fragmentary or corroded items that cannot be identified. Full details of these objects are contained in the archive and they are listed in Table 5.

Recommendations

The small finds need to be published as a standalone report in any publication. They should be compared with the assemblages recovered from the earlier excavations (Douglas *et al.* 2011).

- A number of objects (listed in the archive should be illustrated)
- The objects appear stable and no conservation is recommended unless the condition of the assemblage deteriorates.

'Early Anglo-Saxon' Objects

<no number> [967] is a poorly preserved and heavily corroded iron object. Examination of the x-ray plate shows that this object is a spearhead with a split socket. The form of the spear makes it most likely to be an example of Swanton's (1974, fig. 4) Type E1, which he dated to the fifth century (I am grateful to Andrew Welton, University of Florida for confirming this identification). Stratigraphically there is nothing at Shadwell to dispute such a date (the spearhead comes from the fill of Phase 3.6 pit [968]. A stratigraphically earlier layer [899] contains a coin of AD 343-348 SF 228, which provides a terminus post guem.

The dating of early Anglo-Saxon spearheads is, of course, problematic. The recent study by Høilund (2013) was more concerned with the sixth and seventh centuries than the fifth and, in any case, our example is too poorly preserved to be subjected to her very sensitive statistical typological scheme. Late Roman spears are also not as well understood as we might wish. In the absence of other evidence, this object is most likely to be of fifth-century date and is, if one wishes to assign an ethnic appellation to it, seemingly an 'Anglo-Saxon' form.

The lead 'rings' (with contributions from Sophie Oldham and Douglas Carr)

Typology and description

The excavations produced 24 lead 'rings' from six individual contexts (Table 1). Of these contexts three - [714], [721] and [770] –produced 21 of the objects. Six broad types or forms could be determined and these have been assigned letter codes as follows:

- Type A: Cast rings, with bevelled, sub-circular cross-sections SF 160 and SF 188.
- Type B: Cast discs with a flat base and a concave depression in the top SF 143, SF 146, SF 155.
- Type C: Bun shaped, flat base and central perforation SF 142.
- Type D: Bun shaped with a flat base and a stepped profile SF 151, SF 158, SF 159, SF 162.
- Type E: Cast discs with a central perforation greater than 20mm SF 149, SF 150, SF 152, SF 167, SF 490, SF 514.
- Type F: Cast discs with a central perforation less than 20mm SF 145, SF 147, SF 153, SF 154, SF 166, SF168, SF 169.

Of these Types B-F appear to have been manufactured quite simply and expediently by pouring molten lead into a crude 'mould'. This mould was probably little more than a depression or small hole in the ground or a tray of sand. The lower side of the object when it was in the mould is often irregular or rough and this surface texture reflects how the object was cast. Due to the irregularity of the upper surface when the object was cast must have served as the 'base' because it is invariably flatter. In the typological scheme above the 'base' is always the flatter side of the object.

Five of the 'rings' had marks or decoration. SF 146 has raised, zig-zagging lines; SF 145 has two sub-rectangular impressions opposite one another on the base; SF 167 has three shallow drilled depressions on its upper surface; SF 514 has six shallow drilled depressions on its base and SF 490 has a pattern of six irregular quadrangular impressions on its base. These marks barely deserve to be described as decoration. In most cases they seem to be derived from someone pushing a piece of wood or the like into the semi-molten metal, perhaps to determine whether it had solidified or not. The drilled impressions are not easy to explain but may have fulfilled a decorative function.

The rings do not look as if they have been subjected to wear. Many imperfections are sharp and clear and in particular the central perforations are with one or two exceptions rough. If the 'rings' had been suspended or stacked on a rod repeatedly one might expect a soft material, such as lead, to exhibit a wear pattern.

The entire group of 24 'rings' weighs 6149.8g with an average weight of 256.24g. The range runs from 170.9 to 370.6g (Figure 1, Tables 3 and 4). The Roman pound (*libra*) weighed between 322g and 329g and 327g is often accepted as a norm. Analysis of Table 3 and Figure 1 demonstrates that it is difficult to correlate the weights of these objects with the *libra* or its divisions based on a 27g ounce (*unciae*). The majority of the 'rings' weigh between 220g and 300g, so between 8 and 11 *uncia*. It is, however, impossible to demonstrate that these objects share a weight standard. 220g to 300g may simply have been a convenient amount to whoever was producing these 'rings'.

Chronology, function and parallels

A group of lead rings like this is, as far as the author is aware, unparalleled from a Romano-British site. Similar types of lead rings are known from early Anglo-Saxon contexts at Mucking (Hamerow 1993, 70-71) and Linford (both in Essex) (Barton 1962) as well as a number of sites in the Greater London area discussed by Cowie and Blackmore (2008, 149). These 'lead rings' have usually been interpreted as loomweights. However, it was noted at Mucking that to use a precious commodity like recycled lead for loomweights, when such items were more typically made from easily available clay, makes little economic sense and, furthermore, the lead rings were much heavier than comparable loomweights (Hamerow 1993, 70).

The lead rings from Tobacco Dock are a little heavier and wider than the Mucking examples and there are some typological differences. They also differ typologically to the examples illustrated from

the London area (Cowie and Blackmore 2008, fig. 139). Nevertheless, the lack of parallels amongst large assemblages of Romano-British weights (for instance Tyrell 2015) and the clear kinship that the Tobacco Dock 'rings' share with early Anglo-Saxon examples means that we must entertain the possibility that these are early post-Roman (fifth century) objects.

The function of these objects is, as we have seen, problematic. Their interpretation as loomweights has been seriously questioned (Hamerow 1993, 70) and other functions must be entertained. It is possible, given the proximity of the site to the Thames, that they served as fishing weights. However, fishing weights could easily be made from rolling scraps of sheet lead and the evidence for late Roman and early medieval fish consumption is sparse. They may also have served as weights, although if they did they do not seem to have conformed to any clearly understandable weight standard. Finally, we may have to consider that these 'rings' are simply a form of ingot (Hamerow 1993, 70).

The stratigraphic position of the Tobacco Dock rings suggests that the majority of them were deposited right at the very 'end' of the Roman period. The excavations at Babe Ruth (HGA02) (Douglas *et al.* 2011) uncovered a substantial late Roman bath house. Such a building would have contained large quantities of lead sheeting and pipework. Very little of this was discovered and it had clearly been robbed out in antiquity. We may have to consider that these 'rings' are a product of this robbing. With the collapse of the Roman 'metal economy' (Fleming 2012) lead would have been a valuable and necessary commodity. The recycling of Roman objects into Anglo-Saxon items was one of the fundamental transformations that material culture underwent during the fifth century (Martin 2015, 142). The fragment of possible lead tank SF 163 (from a context closely related to most of the 'rings') and a large lump of solidified molten lead <no number> [975] are evidence for activities involving lead scrap and it is possible that we should see the 'rings' as further evidence of this type of activity.

Recommendations

- The spear should be cleaned and conserved to clarify its form.
- The rings should be discussed in any publication of the site.
- Every ring and the spear requires illustration and photography.
- Ideally scientific analysis to determine the precise composition of the objects would be helpful.
- These objects are of considerable significance and a note in a major journal (such as *Medieval Archaeology*) might be warranted.

Bibliography

Barton, K., 1962. 'Settlements of the Iron Age and pagan Saxon periods at Linford, Essex'. *Transactions of the Essex Archaeological Historical Society* Third Series, 1, 57-102.

Collins, R., forthcoming. 'Decline, collapse or transformation?' The case for the northern frontier of Britannia', in N. Roymans, S. Heeren, and W. Clerq (eds.), *Social Dynamics in the North-west Frontiers of the Late Roman Empire: Beyond Decline or Transformation*, Amsterdam, University Press.

Crummy, N., 1983. *The Roman Small Finds from excavations in Colchester 1971-9*. Colchester, Colchester Archaeological Report 2.

Crummy, N., 2007. 'Six honest serving men: a basic methodology for the study of small finds', in R. Hingley and S. Willis (eds.), *Roman Finds*. Oxford, Oxbow, 59-66.

Douglas, A., Gerrard, J. and Sudds, B., 2011. *A Roman Settlement and Bath House at Shadwell.* Pre-Construct Archaeology Monograph 12.

Fleming, R., 2012. 'Recycling in Britain after the fall of Rome's metal economy'. *Past and Present* 217(1), 3-45.

Gerrard, J., 2013. The Ruin of Roman Britain. Cambridge, Cambridge University Press.

Guido, M., 1978. *The Glass Beads of the Prehistoric and Roman periods in Britain and Ireland.* Society of Antiquaries Research Report 35.

Guy, C., 1981. 'Roman circular lead tanks in Britain'. Britannia 12, 217-276.

Hamerow, H., 1993. *Excavations at Mucking Volume 2: The Anglo-Saxon Settlement*. English Heritage Archaeological Report 21.

Høilund Neilsen, K., 2013. 'SP Spearheads', in J. Hines and A. Bayliss (eds.), *Anglo-Saxon Graves and Grave Goods of the 6th and 7th Centuries AD: a chronological framework*. Society for Medieval Archaeology Monograph 33, 163-181.

Janes, D., 1996. 'The golden clasp of the late Roman state'. Early Medieval Europe 5(2), 127-153.

Martin, T., 2015. The Cruciform Brooch and Anglo-Saxon England. Woodbridge, Boydell.

Manning, W., 1985. Catalogue of the Romano-British Iron Tools Fittings and Weapons in the British Museum. London, British Museum Press.

Simpson, C., 1976. 'Belt-buckles and strap ends of the later Roman Empire; a preliminary survey of several new groups'. *Britannia* 7, 192-223.

Swanton, M., 1974. *A Corpus of Pagan Anglo-Saxon Spear-Types*. Oxford, British Archaeological Reports British Series 7.

Swift, E., 2000. Regionality in Dress Accessories in the late Roman West. Montagnac, Monographies Instrumentum 11.

Tyrell, R., 2015. 'Lead weights', in M. Atkinson and S. Preston Heybridge, 'A Late Iron Age and Roman Settlement, Excavations at Elms Farm 1993-5'. *Internet Archaeology* 40. http://dx.doi.org/10.11141/ia.40.1.tyrrell8

Category Number	Description			
1	Objects of personal adornment or dress			
2	Toilet, surgical or pharmaceutical instruments			
3	Objects used in the manufacture or working of textiles			
4	Household utensils and furniture			
5	Objects used for recreational purposes			
6	Objects employed in weighing and measuring			
7	Objects used for or associated with written communications			
8	Objects associated with transport			
9	Buildings and services			
10	Tools			
11	Fasteners and Fittings			
12	Objects associated with agriculture, horticulture and animal husbandry			
13	Military equipment			
14	Objects associated with religious beliefs and practices			
15	Objects and waste material associated with metalworking			
16	Objects and waste material associated with horn and bone working			
17	Objects and waste material associated with pottery working			
18	Objects of unknown function			

Table 1: Crummy's (1983, v) functional categories for the analysis of small finds.

SF Number	Context	Object	Material
1387	359	Waste	Pb
80	450	Waste	Pb
1388	494	Sheet	Pb
732	656	Waste	Pb
148	721	Waste	Pb
0	967	Waste	Pb
0	975	Waste	Pb
1389	1075	Waste	Pb
1390	1087	Waste	Pb
1391	1154	Waste	Pb
402	1162	Waste	Pb
336	1209	Waste	Pb
1392	1277	Waste	Pb
0	1741	Waste	Pb
0	1770	Sheet	Pb
0	1776	Waste	Pb
0	1798	Waste	Pb
0	1868	Waste	Pb
0	2039	Waste	Pb
1384	2075	Waste	Pb
652	2088	Sheet	Pb
651	2097	waste	Pb
654	2117	Sheet	Pb

Table 2: The distribution of lead waste.

Context Number	Description	Phase	Number of lead rings
[714]	Fill of cut [715]	3.6	12
[721]	Fill of cut [722]	3.6	5
[770]	Fill of cut [771]	3.6	4
[917]	Fill of cut [918]	3.6	1
[1756]	Made ground	3.5	1
[1789]	Possible surface	3.6	1

Table 3: Contexts producing 'lead rings'.

SF Number	Context	Diameter of top (mm)	Diameter of base (mm)	Diameter of hole at the top (mm)	Diameter of hole at base (mm)	Weight	Туре
142	714	51	51	7	14	257.4	С
143	714	59	60	7	13	225.1	В
144	714	65	66	14	15	197.8	Е
145	714	70	71	21	26	221	F
146	714	62	72	12	16	310	В
153	714	69	70	22	26	351.2	F
154	714	70	71	26	30	191.8	F
155	714	59	59	9	12	235.1	В
158	714	42	51	14	15	235	D
159	714	39	53	13	15	263	D
160	714	58	60	29	30	264.4	Α
162	714	39	49	16	20	242.2	D
147	721	51	53	16	19	296.4	F
149	721	55	56	11	11	170.9	Е
150	721	55	56	14	16	283.6	Е
151	721	41	58	11	13	298.7	D
152	721	59	59	10	10	199.1	Е
166	770	68	72	25	26	345.8	F
167	770	55	56	12	16	171.5	Е
168	770	52	61	18	21	273.8	F
169	770	56	57	19	19	243.7	F
188	917	62	63	35	35	260.7	Α
490	1756	59	62	12	15	370.6	Е
514	1789	62	61	11	11	241	Е

Table 4: Catalogue of the lead rings with weights and dimensions.

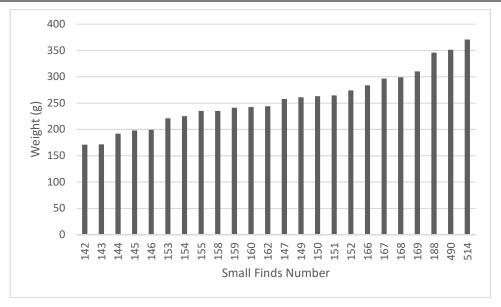


Fig. 1: The weights (g) of each lead 'ring'.

SF	Context			Functional
Number	number	Object	Material	Category
0	133	Nail	Fe	11
0	194	Linchpin	Fe	8
0	194	Nail	Fe	11
0	194	Nail	Fe	11
0	351	Nail	Fe	11
0	359	Obj	Fe	18
0	359	Nails	Fe	11
0	359	Nail	Fe	11
0	359	Obj	Fe	18
0	359	Nail	Fe	11
0	359	Nail	Fe	11
0	390	Nail	Fe	11
0	428	Nail	Fe	11
0	443	Nail	Fe	11
70	444	Binding	Fe	18
67	444	Rod	Fe	18
69	444	Nail	Fe	11
68	448	Nail	Fe	11
0	449	Nail	Fe	11
0	450	Nail	Fe	11
0	450	Nail	Fe	11
0	513	Nail	Fe	11
0	516	Nail	Fe	11
0	532	Nail	Fe	11
0	564	Objs	Fe	18

SF	Context			Functional
Number	number	Object	Material	Category
0	576	Obj	Fe	18
127	576	Nail	Fe	11
43	351	Wire	Pb	18
1387	359	Waste	Pb	15
80	450	Waste	Pb	15
82	450	Sheet	Cu	15
125	576	Shot?	Pb	Not Roman
126	576	Shot?	Pb	Not Roman
1388	494	Sheet	Pb	15
163	768	Tank or coffin frag	Pb	15
201	925	Bar	Pb	18
732	656	Waste	Pb	15
148	721	Waste	Pb	15
231	1025	Obj	Pb	18
0	967	Waste	Pb	15
0	975	Waste	Pb	15
1389	1075	Waste	Pb	15
1390	1087	Waste	Pb	15
401	1150	waste	Cu	15
1391	1154	Waste	Pb	15
402	1162	Waste	Pb	15
336	1209	Waste	Pb	15
1392	1277	Waste	Pb	15
0	1741	Waste	Pb	15
0	1770	Sheet	Pb	15
0	1776	Waste	Pb	15
0	1798	Waste	Pb	15
2020	925	Mount?	Cu	18
0	1868	Waste	Pb	15
223	974	Brooch	Cu	1
0	2039	Waste	Pb	15
296	1032	Bar	Cu	18
721	990	Nails	Cu	11
239	1075	Hook?	Cu	18
276	1087	Binding?	Cu	18
248	1075	Strip	Cu	18
720	975	Sheet	Cu	18
277	1087	Strip	Cu	18
594	1900	Bell	Cu	12
245	1101	Sheet	Cu	18
196	887	Rod	Cu	18
731	516	Strip	Cu	18

SF	Context			Functional
Number	number	Object	Material	Category
298	1139	Bracelet	Cu	1
299	1150	Obj	Cu	18
1384	2075	Waste	Pb	15
350	1277	Sheet	Cu	18
352	1295	Bolts?	Cu	Not Roman
509	1745	Strip	Cu	18
48	359	Wire	Cu	18
81	450	Bracelet	Cu	1
498	1770	Bracelet	Cu	1
751	1773	Obj	Cu	18
752	1846	Objs	Cu	18
652	2088	Sheet	Pb	15
753	1868	Obj	Cu	18
754	1896	Obj	Cu	18
756	1938	Obj	Cu	18
601	1951	Sheet	Cu	18
651	2097	waste	Pb	15
653	2117	Bar	Cu	18
656	2146	Strapend	Cu	1
0	1795	Quern	Stone	4
0	576	Nail	Fe	11
0	599	Nail	Fe	11
0	620	Nail	Fe	11
0	640	Nail	Fe	11
0	644	Nail	Fe	11
0	656	Nail	Fe	11
0	714	Nails	Fe	11
0	887	Nail	Fe	11
193	923	T-staple	Fe	11
0	956	Nail	Fe	11
0	963	Nail	Fe	11
0	1745	Quern	Stone	4
0	1787	Quern	Stone	4
0	1741	Quern	Stone	4
301	1150	Cosmetic pallete	Stone	2
165	772	Counter	Stone	5
0	967	Spear	Fe	13
0	967	Nail	Fe	11
0	974	Obj	Fe	18
0	974	Nail	Fe	11
0	975	Obj	Fe	18
0	985	Nail	Fe	11

SF	Context			Functional
Number	number	Object	Material	Category
0	993	Nail	Fe	11
0	1120	Coal	Stone	not Roman
0	1001	Nail	Fe	11
0	2050	Obj	Nail	11
644	2079	Unworked	Stone	
325	1182	Whetstone	Stone	10
128	570	Hairpin	Bone	1
243	1116	Hairpin	Bone	1
338	1186	Hairpin	Bone	1
197	967	Pin/needle	Bone	18
344	1277	Bracelet	Stone	1
343	1277	Bracelet	Stone	1
233	1049	Point	Bone	18
242	1101	Bead	Glass	1
0	985	Bead	Glass	1
0	359	Bead	Glass	1
0	359	Bead	Glass	1
0	956	Bead	Glass	1
91	494	Bead	Glass	1
0	1032	Obj	Fe	18
0	1040	Nail	Fe	11
0	1049	Nail	Fe	11
0	1052	Nail	Fe	11
0	1071	Nail	Fe	11
0	1075	Obj	Fe	18
249	1075	Chain	Fe	11
0	1075	Nail	Fe	11
0	1075	Nail	Fe	11
0	1087	Nail	Fe	11
0	1090	Obj	Fe	18
0	1139	Nail	Fe	11
322	1154	Knife	Fe	10
0	1162	Nail	Fe	11
0	1175	Sheet	Fe	18
0	1178	Objs	Fe	18
0	1187	Nail	Fe	11
0	1219	Obj	Fe	18
0	1741	Obj	Fe	18
0	1742	Obj	Fe	18
0	1746	Nail	Fe	11
0	1746	Objs	Fe	18
0	1756	Objs	Fe	18

SF	Context			Functional
Number	number	Object	Material	Category
0	1756	Nails	Fe	11
0	1788	Nail	Fe	11
0	1876	Nail	Fe	11
600	1900	Obj	Fe	18
598	1900	Obj	Fe	18
598	1900	Nail	Fe	18
0	1905	Obj	Fe	18
0	1919	Nail	Fe	11
0	1926	Obj	Fe	18
624	2070	Obj	Fe	18
623	2070	Objs	Fe	18
625	2070	Obj	Fe	18
0	2071	Obj	Fe	18
0	2075	Nail	Fe	11
0	2079	Nail	Fe	11
631	2102	Obj	Fe	18
0	2118	Obj	Fe	18
654	2117	Sheet	Pb	15
	1920	Double spiked loop	Fe	11

Table 5: The Small Finds from TBF10

APPENDIX 7: ROMAN COINS ASSESSMENT

James Gerrard

Introduction

Previous excavations at Shadwell have produced large numbers of Roman coins. The excavation of the 'tower' site (LD74/76) yielded 474 coins (Hammerson 2002) and the Babe Ruth Restaurant / Tobacco Dock (HGA02 and TOC02) excavations another 434 coins (Gerrard 2011). The current excavations (TBF10) produced 331 coins and coin like objects that were submitted for assessment.

The coins were recovered by eye, with the aid of on-site metal detecting and also, in some cases, through the sieving of environmental samples. In keeping with all of the coins from Shadwell the state of preservation was atrocious. Many of the coins are poorly preserved and heavily corroded and this is probably a consequence of local ground conditions and a fluctuating water table. Due to this 77 coins were submitted for cleaning and conservation. The results of this exercise were informative. A number of large corroded green lumps were found to be Victorian pennies and smaller 'coins' proved to be buttons and weights. In total 40 of the objects submitted for assessment were not Roman coins.

The 291 Roman coins were recorded in broad accordance with English Heritage guidelines (Brickstock 2004) and the full catalogue is available in the archive as an Access 2000 database. Where identifiable denomination, mint, obverse and reverse legends, mintmarks, date and additional information have been recorded. However, the state of many of the coins precludes full identification. Where possible coins have been assigned to numismatic periods following Reece's (1991) scheme.

Coins of intrinsic or numismatic interest

SF 315 [1154]

Obv: IMP C MAXENTIVS P F AVG REV: FIDES MI-LI-T-VM AVG N

MM: MOSTT

Denomination: *Nummus* Ref: *RIC*VII (Ostia), 45

Date: Late AD 309-October AD 312

Coins of the tetrarchy are relatively rare in Britain and a coin of Maxentius (one of the claimants to the imperial throne in the aftermath of Constantine I's usurpation in Britain) struck at Ostia is certainly an oddity. There are listed on the PAS database 41 coins struck at Ostia and of these only one (NMS-15D7F) is of this type. How this coin came to Shadwell remains something of a mystery, but it is perhaps to be connected with the potential trading connections of the site discussed in an earlier publication (Douglas *et al.* 2011).

The coin can be dated to late AD 309-October AD 312. This date might be refined further.

Discussion

A full description of the coins can be found in the *Access* database that forms part of the site archive. A summary list of the coins by Reece (1991) period as raw values and per mills values can be found in Table 1. A comparison of the per mills values with the coins from the previous excavations can be found in Figure 1.

The lack of coins pre-dating Period 13 is immediately obvious. There are three probably first or second century coins present in the assemblage SF 354, SF 491 and SF 676. These are so badly preserved that they are illegible. Such coins circulated until the early third century and thus they are not necessarily evidence of early Roman activity.

The early to mid third century is typically poorly represented in British coin lists. It is possible that among the many illegible coins there are individual specimens that are of this date. Unless there is other evidence (structural or ceramic) to the contrary, the paucity of third-century coinage before Period 13 should not be taken as an absence of activity.

In common with many British sites coin loss becomes very prominent in the late third century (Periods 13 and 14). Interestingly, there is a reasonably strong showing in Periods 15 and 16 (Tetrarchic and early Constantinian) which is somewhat unusual but paralleled at TOC02 (Gerrard 2011, fig. 73). Periods 17 and 18 see significant coins loss and this is followed, for the first time at Shadwell, by impressive loss in Period 19 (House of Valentinian). The drop in Period 20 is thoroughly normal and is then followed by three coins of the House of Theodosius (Period 21). These *nummi* – two *Victoria Avggg* and one *Salus Reipublicae* – are the latest regular issues of bronze coins to Britain. They join a single Theodosian coin from TOC02.

Overall, the general impression of these coins is that they point to significant and sustained late thirdand fourth-century coin loss and therefore activity. The presence of numbers of coins of the early
fourth century, including the unusual issue from Ostia (above), indicates affinities with the coin list
from TOC02. The peak in Period 19 is, however, a new phenomenon for Shadwell, although such
peaks are well known elsewhere in Britain. The presence of coins of the House of Theodosius is also
noteworthy even if the absolute numbers are low. Late fourth-century coin distributions were
regionally restricted (Walton and Moorhead 2016). The presence of small numbers of these coins
remain an important indicator that activity was continuing at this site until the end of the fourth century
and into the first decades of the fifth century (Walton and Moorhead 2016).

Recommendations

- The coins should be integrated into the stratigraphic analysis of the site.
- A full coin report (including coin list) should be included in any publication.

- The report should compare the coins, using statistical methods, to the other Shadwell sites, sites in the London region and sites nationally.
- It would be useful to have the coin from Ostia fully identified using Drost's (2013) work and photographed.
- All the coins should be retained in the archive.
- The coins appear stable and no further conservation is recommended unless their condition changes.

Date	Reece Period	Number of coins	Per Mills
To 41	I	0	0
41-54	II	0	0
54-69	III	0	0
69-96	IV	0	0
96-117	V	0	0
117-138	VI	0	0
138-161	VII	0	0
161-180	VIII	0	0
180-193	IX	0	0
193-222	Х	0	0
222-238	XI	0	0
238-259	XII	0	0
259-275	XIII	5	28.40909
275-294	XIV	22	125
294-317	XV	9	51.13636
317-330	XVI	14	79.54545
330-348	XVII	45	255.6818
348-364	XVIII	40	227.2727
364-378	XIX	38	215.9091
378-388	XX	0	0
388-402	XXI	3	17.04545
Illegible (excluded		115	-
from per mills)			
Total		291	1000

Table 1: The coins from TBF10 as raw number and per mills values.

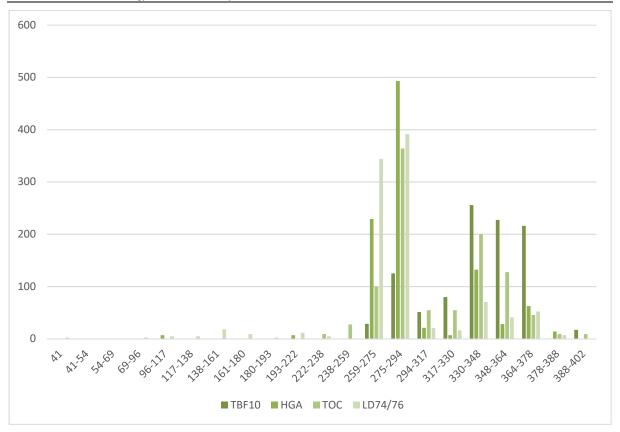


Fig. 1: Reece (1991) histogram showing the coins from the Shadwell sites by per mills values.

Bibliography

Brickstock, R., 2004. *The Production, Analysis and Standardisation of Romano-British Coin Reports*. London, English Heritage.

Drost, V., 2013. Le Monnayage de Maxence. Zurich: Société Suisse de Numismatique.

Gerrard, J., 2011. 'Roman coins', in A. Douglas, J. Gerrard and B. Sudds, *A Roman Settlement and Bath house at Shadwell*. Pre-Construct Archaeology Monograph 12, 86-91.

Hammerson, M., 2002. 'Roman coins', in D. Lakin with F. Seeley, J. Bird, K. Rielly and C. Ainsley, *The Roman Tower at Shadwell, London: a reappraisal.* Museum of London Archaeology Service Archaeology Study Series 8, 53-56.

Reece, R., 1991. Roman Coins from 140 Sites in Britain. Cirencester, Cotswold Studies 4.

Walton, P. and Moorhead, S., 2016. 'Coinage and collapse? The contribution of numismatic data to understanding the end of Roman Britain', in J. Gerrard (ed.), *Roman Pottery in the Fifth Century*. Internet Archaeology 41. http://intarch.ac.uk/journal/issue41/index.html

APPENDIX 8: POST ROMAN POTTERY ASSESSMENT

Chris Jarrett

Introduction

A large sized assemblage of pottery was recovered from the site (156 boxes). The pottery dates from the medieval and post-medieval periods. Very few sherds show evidence for abrasion (0.2% by sherd count) and residual sherds made up 13% by sherd count of the total assemblage and intrusive material is low at 0.9%. The fragmentation of the pottery ranges from sherd material to vessels with complete profiles (956 vessels), although thirteen post-medieval items are intact and approximately a further 129 vessels are fragmentary, but could be reconstructed to be whole. Therefore the assemblage appears to have been deposited under a variety of circumstances that include primary (de facto items: e.g. chamber pots lost while being emptied into cesspits), secondary, which may include some closed groups (Pearce 2002) and tertiary conditions. The pottery was quantified by sherd count and estimated number of vessels (ENV) and selected contexts were weighed (not included here in the assessment). Pottery was recovered from 348 contexts and individual deposits produced small (fewer than 30 sherds) to medium (less than 100 sherds) groups of pottery, while 34 groups of pottery are large in size (over 100 sherds).

All the pottery (14,991 sherds, 7,396 ENV and weighing more than 351.609kg, of which 111 sherds, 99 ENV and 1.977kg are unstratified) was examined macroscopically and microscopically using a binocular microscope (x20), and recorded in an ACCESS database, by fabric, form and decoration. The classification of the pottery types is according to the Museum of London Archaeology (2014). The pottery is discussed by types and its distribution.

The Pottery Types

The quantification of the pottery for each post-Roman archaeological period is as follows:

Medieval: 47 sherds, 39 ENV, 135g

Post-medieval: 14,944 sherds, 7346 ENV, 351.475kg

Medieval pottery

Expansion		Date range	sc	ENV	Forms
Early medieval					
early medieval coarse flint-tempered ware	EMFL COAR	970-1100	1	1	Jar
Essex (Cotter 2000, Pearce et al 1982)					
Essex early medieval grog-tempered ware	EMGRX	1050-1200	1	1	Unidentified
Hedingham-type ware	HEDI	1150-1250	3	3	Jug

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Expansion	Code	Date range	sc	ENV	Forms
Mill Green ware	MG	1270-1350	1	1	Jug
Hertfordshire					
South Hertfordshire-type greyware	SHER	1170-1350	1	1	Rounded jar
South Hertfordshire-type fine greyware	SHER FINE	1170-1350	1	1	Unidentified
London area (Pearce et al 1985: Blackmore and Pearce 2010)					
London-type ware	LOND	1080-1350	5	5	Jar, jug
Shelly-sandy ware	SSW	1140-1220	1	1	Jar
Surrey (Pearce and Vince 1988)					
Cheam whiteware	CHEA	1350-1500	4	4	Jug
Kingston-type ware	KING	1240-1400	1	1	Unidentified (cooking form)
Surrey-Hampshire (Pearce and Vince 1988)					
Coarse Surrey-Hampshire border ware	CBW	1270-1500	27		Bowl, bowl or dish, cooking pot, jug, barrel-shaped jug. unidentified
Coarse Surrey-Hampshire border ware cooking pot with flat-topped rim	CBW FT	1340-1500	1	1	

Table 1: TBF10 medieval pottery types quantified by sherd count (SC) and estimated number of vessels (ENV) and the forms that occur in the different wares.

The small quantity of medieval pottery produced a limited range of forms that typically consists of jugs, cooking pots or jars, while bowls and or dishes were also noted in coarse Surrey-Hampshire border ware (see Table 1).

Post-medieval pottery

Table 2 shows the sources of the post-medieval pottery quantified by sherd count and ENV and demonstrates that the ceramics were derived from a wide range of both domestic and foreign sources. According to ENV quantification, London supplied the majority of the pottery as redwares, tin-glazed wares and delftware, followed by general British sources, Surrey-Hampshire border red and whitewares and China (as porcelains). Imported wares account for a total of 9.9% ENV. The importance of these pottery sources changed over time (see below and Table 13).

Source	sc	% SC	ENV	% ENV
Britain	6381	42.7	2344	31.9
East Anglia	3	*	3	*
Essex	417	2.8	365	5
Hampshire	7	*	7	0.1
London	4623	30.9	2508	34.1
Midlands	256	1.7	177	2.4
Persia	2	*	2	*
Surrey- Hampshire	2058	13.8	1169	15.9
Unknown	62	0.4	30	0.4
Imports				
China	679	4.5	422	5.7
Far East	2	*	2	*

Source	SC	% SC	ENV	% ENV
France	14	0.1	9	0.1
Germany	301	2	228	3.1
Italy	63	0.4	39	0.5
Low Counties	12	0.1	10	0.1
Mediterranean	4	*	4	0.1
Ottoman	3	*	2	*
Portugal	39	0.3	11	0.1
Spain	18	0.1	14	0.2
Sub-total	1135	7.5	741	9.9
Total	14944	100	7346	100

Table 2: TBF10 Sources of post-medieval pottery quantified by sherd count (SC) and estimated number of vessels (ENV). * Less than 0.1%

London area (Nenk and Hughes 1999; Britton 1987; Orton and Pearce 1984; Orton 1988)

Amongst the coarse red earthenwares there is a small quantity of 16th-century wares (PMRE, PMSR/G/Y) indicating small scale activity for that period on the site. One of the main types of pottery in the assemblage is London-area post-medieval redware (PMR) dated from c.1580 and includes a typical range of forms for this pottery type (see Table 3). These are mostly found as domestic shapes, although a small quantity of sugar refining vessels and a white lead making vessel are noted, although these could have come from offsite sources of refuse. Of note are a small number of braziers, the form being noted in other pottery types in the assemblage and could have been employed in working activities by the 17th- and 18th-century residents on the site. There is a good range of tin-glazed earthenwares in the assemblage (see Table 2) and include wasters, notably in the form of biscuit ware, which was almost certainly derived from the nearby Hermitage pothouse (Tyler 1999). Amongst the combed slipwares (STSL) was noted by its distinctive fabric a rounded dish form Isleworth (ISL SLIP).

Pottery type	Code	Date range	SC	ENV	Form
Isleworth combed slipware	ISLE SLIP	1760-1830	1	1	Dish: rounded
London-area post-medieval redware	PMR	1580-1900	1965		Bird pot, bowl: carinated: deep, deep, flared; shallow, medium, deep, including one- and two-handled examples, rounded; shallow, medium, deep, two-handled, bowl or dish, brazier, cauldron, cauldron or pipkin chimney pot, chamber pot, colander: carinated, rounded: two-handled examples, dish: deep, flared, large, rounded, small, rectangular dripping dish, type 1, not flanged, flower pot, jar: bunghole, rounded; two-handled, squat, medium, tall, handled, shouldered, jug: rounded, shouldered, lid: dish-shaped, paint pot, pipkin, porringer, skillet sugar loaf mould, syrup-collecting jar, tripod pipkin, white lead making vessel, unidentified

Pottery type	Code	Date range	SC	ENV	Form
London-area early post-medieval redware	PMRE	1480-1600	30	18	Bowl: two-handled carinated bowl, type 2, flanged/collared rim, Bowl or dish, cauldron or pipkin, jar, jug, unidentified
London-area post-medieval slipped redware	PMSR	1480-1650	1	1	Jug
London-area post-medieval slipped redware with green glaze	PMSRG	1480-1650	35	33	Bowl: carinated, bowl or dish, cauldron or pipkin
London-area post-medieval slipped redware with clear (yellow) glaze	PMSRY	1480-1650	21	19	Bowl or dish, cauldron or pipkin, dish: carinated, jug, unidentified
English tin-glazed ware					
English tin-glazed ware	TGW	1570-1846	623	374	Albarello, bottle: baluster-shaped, bowl, flared, rounded; shallow, medium, deep, flared, punch bowl, bowl or dish, chargers: Britton shape B-D and E, gaming counter, cup: rounded, dish: fluted, rounded, jar: cylindrical, jug, mug: rounded, ointment pot, plate: Britton shapes H, I, J and K, salt, saucer, slop bowl, tea bowl, teapot, vase, unidentified
London tin-glazed ware with blue- or polychrome-painted decoration and external lead glaze (Orton style A)		1570-1650	26	24	Albarello, charger: Britton shape B-D, unidentified
London tin-glazed ware with manganese- mottled glaze (Orton style B)	TGW B	1630-1680	14	12	Rounded mug, unidentified
London biscuit-fired tin-glazed ware	TGW BISC	1570-1846	90	42	Albarello, bowl: flared, rounded; medium, chamber pot, charger: Britton shape B-D, ointment pot, plate: Britton type I, porringer: type C (convex profile with everted rim), saggar, Saucer, unidentified
London tin-glazed ware with plain pale blue glaze	TGW BLUE	1630-1846	242	130	Albarello, bowl: rounded; medium, deep, flared: shallow, bowl or dish, chamber pot. dish: flared, jar: rounded, lid: flanged, ointment pot, plate: Britton type I, porringer: type C, spittoon, unidentified
London tin-glazed ware with plain white glaze (Orton style C)	TGW C	1630-1846	517	204	Albarello, bowl: flared; shallow, medium, deep, rounded: shallow, medium, deep, bowl or dish, chamber pot, candlestick: upright, dish charger: Britton shape B-D, dish: flared, fluted, Jar: squat rounded, jug: rounded, mug: rounded, ointment pot, plate: Britton types I and J, porringer: types A (straight-sided), B (convex profile) and C salt: pedestal, unidentified
London tin-glazed ware with blue- or polychrome-painted decoration and external lead glaze (Orton style D)		1630-1680	421	244	Albarello, bowl: flared, rounded; medium, charger: Britton shape B-D and E, jar: squat rounded, mug: rounded, saucer, unidentified
London tin-glazed ware with 'sgraffito' on dark blue (Orton style E)	TGW E	1570-1615	1	1	Porringer
London tin-glazed ware with 'Chinaman among grasses' decoration (Orton style F)	TGW F	1670-1690	70	28	Bowl: rounded; deep, punch bowl, charger: Britton shape B-D, dish: fluted, rounded, jar: squat rounded, plate: Britton shapes H and J, saucer, unidentified
London tin-glazed ware with 'Lambeth polychrome' decoration (Orton and Pearce style G)		1701-1711	19	12	Bowl: rounded: medium, saucer, tea bowl, unidentified
London tin-glazed ware with pale blue glaze and dark blue decoration (Orton and Pearce style H)		1680-1800	342	191	Albarello, bottle bowl: rounded: shallow, medium, deep, gaming counter, dish: fluted, rounded, flower bowl lid, ointment pot, plate: Britton shape H, I, J and K, octagonal, jar: cylindrical, storage, saucer, tea bowl, urn, vase, unidentified
London late tin-glazed ware	TGW LATE	1745-1846	7	7	Jug, ointment pot
London tin-glazed ware with 'Persian blue' decoration (Orton style M)		1680-1710	6	5	Bowl: rounded, unidentified

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Pottery	type				Code	Date range	SC	ENV	Form
London	tin-glazed	ware	with	sponged	TGW	1700-1760	31	14	fluted bowl, plate: TGW Britton type I, J, K
decoration	on				SPNG				

Table 3: TBF10 London area post-medieval pottery types quantified by sherd count (SC) and estimated number of vessels (ENV) and the forms that occur in the different wares.

Surrey-Hampshire borders (Pearce 1992; 1999)

The range of forms recorded in the Surrey-Hampshire border ware industry (see Table 4) is fairly typical for the London area. However, of note is a deep rounded BORDG bowl with an atypical collared rim (context [1526]), a RBOR brazier (fill [2065]) and in RBORB a largely intact globular jug (context [1648]) and a bottle rim (context [1733]).

Pottery type	Code	Date range	SC	ENV	Forms
Surrey-Hampshire border whiteware	BORD	1550-1700	4	4	Porringer, unidentified
Surrey-Hampshire border whiteware with brown glaze	BORDB	1600-1700	25	24	Bottle, bowl, bowl or dish, rounded bowl, chamber pot: type 2, flat rim, porringer, rounded dish, rounded mug, unidentified
Surrey-Hampshire border brown-glazed whiteware flat-rimmed chamber pot	BORDB CHP2	1650-1750	1	1	Type 2, flat-topped rim
Surrey-Hampshire border whiteware with green glaze	BORDG	1550-1700	221	190	Bowl: carinated; shallow, flared; shallow and deep, rounded; deep, handled, bowl or dish, chafing dish, chamber pot: type 1 (everted rim), dish: flared, rounded, jar, porringer; carinated, stove tile, tripod pipkin: type 1 (internal lid-seated rim), unidentified
Surrey-Hampshire border green-glazed whiteware flat-rimmed chamber pot	BORDG CHP2	1650-1750	48	20	Type 2, flat-topped rim
Surrey-Hampshire border whiteware with olive glaze	BORDO	1550-1700	65	46	Bowl or dish, chamber pot: type 1, dish: flared drinking jug, jar: rounded, porringer: carinated, tripod pipkin: types 1 and 2 (external lid-seated rim), unidentified
Surrey-Hampshire border whiteware with clear (yellow) glaze	BORDY	1550-1700	266	227	Bowl: carinated; medium, deep, flared, handled, rounded; medium, bowl or dish, cauldron, chamber pot: types 1 and 2, colander, dish: flared, rounded Jar: cylindrical, jug: rounded, porringer: carinated, tripod pipkin: types 1 and 2, unidentified
Surrey-Hampshire border whiteware with clear (yellow) glaze and slip-trailed decoration	BORDY SLTR	1550-1700	1	1	Bowl or dish
Early Surrey-Hampshire border whiteware	EBORD	1480-1550	1	1	Unidentified
Surrey-Hampshire border redware	RBOR	1550-1900	1172	523	Bedpan, bowl: one- and two- handled rounded, carinated, flared: shallow, medium, deep, rounded: medium, brazier, chicken feeder, chamber pot: types 1 and 2, colander: carinated, flared; two-handled, dish: carinated, flared, rounded, small dish: with flanged rim, straight-sided, Jar: cylindrical; handled, rounded; squat, medium, tall, lid: collared, flat, paint pot, pipkin, Porringer: carinated, flared, skillet, stool pan, tripod pipkins: types 1 and 2, unidentified
Surrey-Hampshire border redware with slip-trailed decoration	RBOR SLTR	1580-1800	46	33	Bowl, bowl or dish, dish: flared, large, rounded, small
Surrey-Hampshire border redware with brown glaze	RBORB	1580-1800	157	64	Bedpan, bowl: two-handled straight-sided, rounded: shallow, medium, bowl or dish,

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Pottery type	Code	Date range	SC	ENV	Forms
					chamber pot: types 1 and 2, double dish: jar: rounded; medium, jug: rounded, jug: globular, rounded, ladle, pipkin, unidentified
Surrey-Hampshire border redware with green glaze	RBORG	1580-1800	51		Bowl: flared; medium, bowl or dish, brazier chamber pot, bowl, flared, jar: rounded, pipkin, skillet

Table 4: TBF10 Surrey-Hampshire borders post-medieval pottery types quantified by sherd count (SC) and estimated number of vessels (ENV) and the forms that occur in the different wares.

Essex (Nenk and Hughes 1999)

The pottery products from Essex (see Table 5) are present only as domestic wares and mostly in the form of kitchen and table wares, although they also provide a notable source of 17th-century drinking forms. A brazier was also noted in PMFR (context [2062]).

Pottery type	Code	Date range	SC	ENV	Forms:
Metropolitan slipware	METS	1630-1700	48	46	Bowl or dish: Cup, dish: rounded, jar: cylindrical, jug, unidentified
Essex-type post-medieval black-glazed redware	PMBL	1580-1700	70	56	Jar: jug: rounded, mug: cylindrical, rounded, unidentified
Essex-type post-medieval fine redware	PMFR	1580-1700	274	239	: Bowl: rounded, medium, flared, handled, bowl or dish, brazier, cauldron, chamber pot, dish: deep, flared, dripping dish, jar: rounded; squat, jug: lid: dish, mug: rounded porringer, tripod pipkin, unidentified
Essex-type post-medieval fine redware with brown glaze	PMFRB	1580-1700	15	15	Jar, jug: rounded, mug, porringer: rounded, unidentified
Essex-type post-medieval fine redware with green glaze	PMFRG	1580-1700	10	9	bowl: flared, cup, jar, jug, unidentified

Table 5: TBF10 Essex post-medieval pottery types quantified by sherd count (SC) and estimated number of vessels (ENV) and the forms that occur in the different wares.

Non-local wares (Jennings 1981; Draper and Copeland 2002; Lewis 1987; Hildyard 2005)

Pottery type	Code	Date range	SC	ENV	Form
East Anglia					
Speckle-glazed ware	SPEC	1680-1740	3	3	unidentified
Hampshire					
Verwood ware	VERW	1600-1900	7	7	Bottle, bowl or dish, dish: small, jar: rounded, unidentified
Midlands					
Midlands orange ware	MORAN	1400-1820	11	10	Butterpot, unidentified
Staffordshire					
Agate ware	AGAT	1730-1780	11	9	Bowl: rounded; shallow bowl or dish, dish: flared, jar: rounded unidentified
Staffordshire-type black-glazed ware	STBL	1740-1780	2	2	Bowl: rounded; medium, cup
Staffordshire-type coarseware	STCO	1650-1800	1	1	Jar: rounded
Staffordshire-type embossed flatware	STEM	1650-1750	3	3	Dish: rounded
Staffordshire-type mottled brown-glazed ware	STMO	1650-1800	13	12	Bowl: flared, jar: rounded, mug: cylindrical, tankard, unidentified
Staffordshire-type red-slipped black- glazed ware	STRSB	1750-1800	8	3	Caudle cup, unidentified

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Pottery type	Code	Date range	SC	ENV	Form
Staffordshire-type red-slipped ware with sgraffito decoration	STSG	1720-1760	1	1	Capuchine
Staffordshire-type redware	STRE	1600-1800	6		Bottle, bowl, dish: rounded, jug: small rounded

Table 6: TBF10 Non-local pottery types quantified by sherd count (SC) and estimated number of vessels (ENV) and the forms that occur in the different wares.

The non-local wares are represented by a small number of pottery types from East Anglia and Hampshire, although the majority consist of Staffordshire type products with a wide range of functions that mostly provide table wares (see Table 6) and mainly date to the 18th century.

Britain (Lewis 1987; Hildyard 2005)

Pottery type	Code	Date range	SC	ENV	Form
Factory made/Industrial scale wares					
Bone china	BONE	1794-1900	52	31	Cup, egg cup, figurine, Jar: cylindrical, jug, plate: dinner, saucer, tea cup: London, porringer shapes, unidentified
Bone china with lustre decoration	BONE LUST	1794-1900	9	4	Cup, tea cup: London shape, saucer, unidentified
Bone china with under-glaze painted decoration	BONE PNTD	1794-1900	91	25	coffee cup, dish: rectangular, figurine, saucer, tea cup: Bute, London shapes, teapot, unidentified
Bone china with under-glaze blue transfer-printed decoration	BONE TR	1807-1900	5	3	Saucer, tea bowl, tea cup: London shape
Bone china with under-glaze transfer- printed and over-glaze painted decoration		1810-1900	11	6	Saucer, tea cup: London shape
Coloured-glazed refined whiteware	COLGE	1800-1900	5	5	Dish, jug: shouldered, mug: cylindrical plate: dinner
Creamware	CREA	1740-1830	1416	380	Bowl: flared: medium, fluted, rounded; two-handled, shallow, medium, deep, oval, pedestal, toy, chamber pot, cup, dish: flared, oval, rectangular octagonal, rounded, egg cup, jar: cylindrical; squat, medium, tall, rounded; squat, medium, tall, shouldered: squat, medium, jug: barrel-shaped, conical, cream or milk, pear-shaped, rounded; small, squat, lid: flanged, teapot, mug: cylindrical, plate: dinner, large, octagonal, oval, tea sizes and shapes, saucer, sauceboat, slop bowl, tankard, tea bowl, teapot: cylindrical, tureen, tea cup, water closet, unidentified
Creamware with green glaze	CREA GRN	1760-1830	9	9	Plate, teapot, unidentified
Creamware with over-glaze transfer- printed decoration		1760-1830	1	1	Bowl; flared; medium
Creamware with polychrome-painted decoration	CREA PNTD	1760-1800	6	6	Bowl, chamber pot, plate: octagonal, teapot, unidentified
Creamware with slip decoration	CREA SLIP	1775-1830	67	22	Bowl: rounded; medium, pedestal, jar: squat pedestal, jug: barrel-shaped, rounded, mug: cylindrical, plate: dinner, slop bowl, tankard unidentified
Creamware with tortoiseshell glaze	CREA TORT	1740-1770	34	17	Bowl: flared, capuchine, jar, plate: octagonal, saucer: toy, teapot, unidentified
Creamware with under-glaze transfer- printed decoration	CREA UTR	1790-1830	3	2	Plate, tea bowl
Dyed-bodied refined earthenware	DYE	1820-1900	8	2	tea cup: breakfast shape
Lustreware (dark brown earthenware)	LUST	1805-1900	8	4	Goblet: pedestal, jug, teapot lid, vase
Pearlware	PEAR	1770-1840	115	36	Bowl: flared, rounded; medium, pedestal,

Pottery type	Code	Date range	SC	ENV	Form
					chamber pot, Dish: rectangular octagonal, Jar: cylindrical, medium, Jug: barrel- shaped, octagonal: Plate: dessert, dinner sizes, Saucer, tea cup: London shape, unidentified
Pearlware with under-glaze blue- painted decoration	PEAR BW	1770-1820	508	164	Bowl: carinated; medium, rounded; medium, shallow, chamber pot, cup, Dish: oval, rounded, lid: teapot, Plate: dessert, dinner, large, oval, rectangular, tea sizes, saucer sauceboat, tea cup: coffee, London and porringer shapes, unidentified
Pearlware with under-glaze polychrome-painted decoration in 'earth' colours	PEAR ERTH	1790-1820	130	63	Bowl: rounded; shallow, medium, cup, jug: barrel-shaped, rounded, lid: teapot, plate, saucer, slop bowl, tea bowl, tea cup: porringer-shaped, teapot, unidentified
Pearlware with over-glaze transfer- printed decoration	PEAR OTR	1770-1800	2	1	saucer
Pearlware with under-glaze painted decoration	PEAR PNTD	1770-1840	56	23	Bowl: fluted, rounded, jug, plate: dessert, dinner, oval shapes and sizes, saucer, slop bowl tea cup: London and porringer shapes
Pearlware with under-glaze polychrome-painted decoration	PEAR POLY	1790-1820	1	1	Saucer
Pearlware with slip decoration	PEAR SLIP	1775-1840	106	30	bowl: carinated; medium, rounded; medium, coffee cup, jug: barrel-shaped, small rounded, mug: cylindrical; small, plate, tankard, unidentified
Pearlware with transfer-printed decoration	PEAR TR	1770-1840	941	355	Bowl: rounded; shallow, medium, deep, bowl or dish, chamber pot, dish: oval, jar: two-handled cylindrical jug: barrel-shaped, cream or milk, pear-shaped, lid teapot tureen mug: cylindrical plate: dessert, dinner, large, oval, tea, saucer, slop bowl, tankard, tea bowl, tea cup: breakfast, Bute, Etruscan, French, London, porringer, waisted shapes teapot, unidentified
Pearlware with under-glaze blue transfer-printed Chinese-style line- engraved decoration	PEAR TR1	1770-1810	40	23	Bowl: rounded; shallow medium , slop bowl, tea bowl, tea cup: waisted, saucer
Pearlware with under-glaze blue transfer-printed stipple and line decoration	PEAR TR2	1807-1840	7	5	Saucer, slop bowl, tea cup
Pearlware with under-glaze brown or black transfer-printed decoration	PEAR TR3	1810-1840	25	8	Bowl: rounded; shallow, medium, plate: dessert size, saucer, slop bowl, tea cup
Pearlware with under-glaze transfer- printed and over-glaze painted decoration		1810-1840	21	9	Jug, mug :cylindrical; small, plate: dessert size, saucer, tea-cup: London shape
Refined red earthenware	REFR	1740-1800	18	11	Bowl: rounded, medium, cup: flared, lid: flanged, teapot, unidentified
Refined white earthenware	REFW	1805-1900	750	150	Blacking paste pot, bowl: flared: shallow, rounded; shallow, medium, deep, oval, chamber pot, coffee cup, dish: large, oval, rounded, figurine, jar: cylindrical: squat, medium, rounded: squat, jug: barrelshaped, mug: cylindrical; small, ointment pot, plate; dessert, dinner, large, octagonal, oval, soup, tea, toy sizes, saucer, tea bowl, tea cup, unidentified
Refined white earthenware with under- glaze polychrome-painted decoration in 'chrome' colours		1830-1900	94	34	Bowl: rounded; shallow, chamber pot, tea cup: Hamilton flute, London, porringer shapes, jug, plate: dinner, large, octagonal, saucer, slop bowl, unidentified
Refined white earthenware with under- glaze polychrome-painted decoration in 'earth' colours		1805-1820	3	3	Plate, saucer
Refined whiteware with under-glaze painted decoration	REFW PNTD	1805-1900	31	19	Bowl: rounded; shallow, figurine, jug, mug: cylindrical; small, plate: dinner, tea sizes, saucer, tea cup: breakfast and Bute

Pottery type	Code	Date range	SC	ENV	Form
					shapes, unidentified
Refined white earthenware with slip decoration	REFW SLIP	1805-1900	30	12	Bowl: carinated; medium, rounded; medium, jug, plate: dinner size, unidentified
Refined white earthenware with sponged or spattered decoration	REFW SPON	1805-1900	31	12	Bowl: rounded, medium, jug: pear-shaped, small rounded, mug: cylindrical, small, saucer, unidentified
Refined white earthenware with cut-out sponged decoration	REFW SPON1	1830-1900	2	2	Mug; cylindrical, saucer
Refined whiteware with under-glaze transfer-printed decoration	TPW	1780-1900	400	191	Bowl: carinated; medium, rounded; medium, deep, chamber pot, coffee cup, Dish: rectangular, rectangular octagonal, rounded, jug: barrel, octagonal, pear shapes, lid: domed, tureen, mug: cylindrical, plate: dessert, dinner, large, oval, soup, tea sizes, saucer, slop bowl, tea bowl, tea cup: breakfast, London, porringer, waisted shapes, tureen, unidentified
Refined whiteware with under-glaze transfer-printed 'flow blue' decoration	TPW FLOW	1830-1900	69	43	Bowl: carinated, rounded; medium jug: octagonal, plate: dinner size, saucer, tea cup: fluted, porringer, waisted shapes, unidentified
Refined whiteware with under-glaze blue transfer-printed Chinese-style line- engraved decoration	TPW1	1780-1810	3	2	tea bowl
Refined whiteware with under-glaze blue transfer-printed stipple and line decoration		1807-1900	1	1	Wash basin
Refined whiteware with under-glaze brown or black transfer-printed decoration		1810-1900	49	18	Dish: rounded, plate: dessert, saucer, tea cup: porringer, waisted shapes, wash basin
Refined whiteware with under-glaze colour transfer-printed decoration (green, mulberry, grey etc)		1825-1900	37	15	Bowl: rounded; medium, mug: cylindrical, plate: dinner, saucer, tea cup unidentified
Refined whiteware with under-glaze transfer-printed and over-glaze painted decoration		1810-1900	61	20	Bowl: rounded; deep, coffee can, jug, lid: tureen, mug: cylindrical, plate: dessert, dinner, octagonal shapes and sizes, saucer, tea cup: London shape, tureen, unidentified
Non-local earthenwares	1	1			
Blackware	BLACK	1600-1900	58	26	Chamber pot, candlestick: saucer, dish: deep, flared, jug: pear-shaped, unidentified
Slipped redware	PMR SLIP	1800-1900		6	chamber pot, dish, baking dish
Rockingham ware with mottled brown glaze	ROCK	1800-1900	5	4	Lid: teapot, teapot
Staffordshire-type combed slipware	STSL	1660-1870	138	94	Chamber pot, capuchine, Cup: flared dish: oval, rectangular, rounded, jug: conical, mug: cylindrical, rounded, porringer: rounded, saucer, unidentified
Sunderland-type coarseware	SUND	1800-1900	18	13	Bowl: flared, rounded, bowl or dish, chamber pot, handled jar, , unidentified
Sunderland-type coarseware with mottled glaze	SUND MOT	1775-1850	24	15	Bowl: flared; shallow, rounded; medium, dish: rounded
Yellow ware	YELL	1820-1900	148	50	Bowl: carinated; medium, flared: medium, rounded; shallow, medium, deep, bowl or dish, chamber pot, dish: flared, oval, rounded, jug: baluster, rounded, tankard, water closet, unidentified
Yellow ware with slip decoration	YELL SLIP	1820-1900	282	75	Bowl: carinated; medium, flared: rounded; shallow, medium, deep, chamber pot, jar: cylindrical; squat, jug: baluster, pear rounded, lid: domed, mug: cylindrical, water closet, saucer, unidentified

Table 7: TBF10 British (made in several locations) post-medieval pottery types quantified by sherd count (SC) and estimated number of vessels (ENV) and the forms that occur in the different wares.

The British wares (see Table 7) consist of pottery types that were made at a number of different pottery centres in England, Scotland and Wales; although the evidence suggests that it was Staffordshire and The Potteries that supplied London with the majority of these wares. In the assemblage these pottery types largely consist of industrial/factory made finewares: creamware, pearlware and refined white earthenware ('Ironstone' etc.) and decorated using several different methods. These wares produce a wide range of forms for different household functions, although table wares, tea wares and chamber pots are the main items represented. Utilitarian forms were mostly provided by the yellow wares and to a lesser extent the Sunderland-type coarsewares (PMR SLIP, SUND/MOT). The poor quality and the large number of industrial slip ware (e.g. PEAR/REFW SLIP) indicate the presence of low-socio-economic households on the study area.

English Stonewares (Oswald et al. 1982)

Pottery Type	Code	Date range	SC	ENV	Forms
Britain					
English brown salt-glazed stoneware	ENGS	1700-1900	42	31	Bottle: black-leading Brunswick black, cylindrical, ginger beer, spouted ink, bottle or jar, egg cup, lid: flat, unidentified
English stoneware with Bristol glaze	ENGS BRST	1830-1900	19	10	Bottle: cylindrical, bottle or jar, jug
White salt-glazed stoneware	SWSG	1720-1780	249	170	Bowl: flared, rounded; shallow, medium, chamber pot, cup, jar: rounded; squat, shouldered; squat, jug: conical, rounded, lid: teapot, mug: cylindrical, plate: dessert, dinner, oval sizes and shapes, saucer, slop bowl, teapot, tea bowl, tea cup, vase, unidentified
White salt-glazed stoneware with cobalt decoration	SWSG COB	1740-1780	2	2	Chamber pot
White salt-glazed stoneware with scratch blue decoration	SWSG SCRB	1740-1780	16	11	Bowl: rounded; medium, plate saucer tea bowl, teapot unidentified
White salt-glazed stoneware with sprigged decoration	SWSG SPRG	1740-1780	11	6	Bowl: rounded, jug: cream or milk, lid: teapot, teapot, unidentified
Dipped white salt-glazed stoneware	SWSL	1710-1760	50	37	Capuchine, cup: porringer, rounded, mug: cylindrical, rounded, saucer, tankard, unidentified
London					
London stoneware	LONS	1670-1926	160	124	Blacking paste pot, bottle: baluster, bellied, black-leading Brunswick black, cylindrical, flat, bottle or jar, jar: rounded, shouldered: flat, squat, jug: Bartmannen-type, bellied, rounded, mug: cylindrical; small, rounded, saggar, tankard, unidentified
Midlands					
Black basalt ware	BBAS	1770-1900	13	12	Jug; squat, lid; teapot, teapot
Glazed black basalt ware	BBASG	1770-1880	11	3	teapot
Derby stoneware	DERBS	1700-1900	49	32	Bottle; bellied, bowl: rounded; shallow, medium, chamber pot, jar: cylindrical, rounded; two-handled, squat, small, tankard, unidentified
Midlands purple ware	MPUR	1400-1750	31	26	Butterpot, jar: rounded; squat, unidentified

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Pottery Type	Code	Date range	SC	ENV	Forms
Nottingham stoneware	NOTS	1700-1800	33		Bowl: flared, rounded; shallow, medium, cup; rounded, dish: flared, jar: rounded; two-handled, tankard, unidentified
Red stoneware	REST	1730-1780	23	12	Lid: teapot, teapot, unidentified
Red stoneware with engine-turned decoration	REST ENG	1765-1780	1	1	Lid: teapot
Glazed red stoneware	RESTG	1760-1780	9	8	Lid: teapot, teapot, unidentified
Staffordshire-type brown salt-glazed stoneware	STBRS	1690-1730	10	7	Mug: cylindrical; small, tankard, unidentified

Table 8: TBF10 English stoneware types quantified by sherd count (SC) and estimated number of vessels (ENV) and the forms that occur in the different wares.

There is a good range of English stonewares represented in the assemblage (see Table 8). The 18th-century wares (SWSG and SWSL) provide a wide range of pottery functions that are mostly table and tea wares, while STBRS provided drinking forms. The other stonewares, such as ENGS and LONS typically mainly provide containers, e.g. bottles and jars. A small number of saggars represent refuse derived from the nearby Hermitage pothouse (Tyler 1999).

Porcelains (Coysh and Coysh 1992)

Pottery type	Code	Date range	SC	ENV	Form
English porcelain	ENPO	1745-1900	2	2	Mug, unidentified
English porcelain with under-glaze blue- painted decoration	ENPO BW	1745-1830	9	8	Bowl, figurine, jug: small rounded, plate: dinner, octagonal sizes and shape, sauceboat, unidentified
English hard paste porcelain	ENPO HP	1780-1900	6	2	tea cup, saucer
English porcelain with over- or under- glaze polychrome-painted decoration	ENPO PNTD	1745-1900	12	5	Tea cup: Bute shape, saucer
English soft paste porcelain	ENPO SP	1745-1780	12	6	Bowl: rounded; medium, saucer candlestick, mug: barrel-shaped, saucer
English porcelain with under-glaze blue transfer-printed decoration	ENPO UTR	1760-1900	3	3	Bowl: rounded, slop bowl. tea bowl
Isleworth porcelain with under-glaze blue-painted decoration	ENPO ISLE BW	1757-1800	1	1	Bowl; rounded; medium

Table 9: TBF10 English porcelain types quantified by sherd count (SC) and estimated number of vessels (ENV) and the forms that occur in the different wares.

Miscellaneous/unknown sources

Pottery type			Code	Date range	SC	ENV	Forms
Miscellaneous pottery	unsourced	post-medieval	MISC	900-1500	36		Bowl: flared, rounded, flower pot, industrial vessel, jar, cylindrical, shouldered, sugar loaf mould, tripod pipkin, teapot, unidentified
Miscellaneous slipware	unsourced	post-medieval	MISC SLIP	1480-1900	9	3	Dish: rounded, jar: rounded, squat
Miscellaneous whiteware	unsourced	post-medieval	MISC WW	900-1500	3	3	bowl, unidentified
Post-medieval ci	rucible fabric		PMCR	1480-1900	2	2	crucibles

Table 10: TBF10 Miscellaneous post-medieval pottery types quantified by sherd count (SC) and estimated number of vessels (ENV) and the forms that occur in the different wares.

A relatively small quantity of pottery could not be assigned to specific types and represent ceramics that were not frequently traded to London and its environs. Of note is a rare example of a sugar cone mould with the maker's initials 'WR' stamped upside down near the base of the vessel (context [1629]). Additionally of interest is a crude handmade bowl with frequent knife cut notches on the top of the simple rim that was manufactured using a fine sandy brickearth. The item appears to have been used in an industrial process, although no residues are visible to indicate what and the interior is reduced, indicating that the item was subjected to a high temperature that resulted in the fabric becoming friable. The vessel was found in context [10], dated to the start of the early 18th century. Additionally there are two sherds of post-medieval crucibles (PMCR): one rim sherd has an external slaggy deposit (context [401]) while a convex base sherd has an internal weathered possible soda glass lining (context [171]). The possible glass slag crucible may have been derived from a local glass house such as that located to the west of the site located on Dock Street (Humphrey and Shepherd 2008).

Imported pottery (Hurst et al. 1985)

Pottery type	Code	Date range	SC	ENV	Form
China					
Chinese porcelain	CHPO	1580-1900	18	17	Bowl: rounded; shallow, medium, deep, plate, saucer, tea bowl, unidentified
Chinese porcelain, Batavian ware	CHPO BATV	1700-1750	5	3	Tea bowl
Chinese blue and white porcelain	СНРО ВW	1590-1900	338	211	Bowl: rounded; shallow, medium, deep, cup: capuchine, flared, dish: carinated, deep, oval, rectangular, rectangular octagonal, rounded, small, goblet, jar: rounded; two-handled, lid: flat, plate: dinner, large octagonal oval rectangular sizes and shapes, saucer, tea bowl, slop bowl, tankard, vase, unidentified
Chinese Imari porcelain	CHPO IMARI	1680-1900	62	35	Bowl: rounded; medium, deep, dish: flared, rectangular octagonal, Lid: teapot, plate: dinner size, saucer, slop bowl tea bowl, unidentified
Chinese porcelain with famille rose decoration	CHPO ROSE	1720-1800	237	140	Bowl: fluted, rounded; shallow, medium, deep, dish: rounded, plate: dinner size, saucer, slop bowl, tankard, tea bowl, unidentified
Swatow provincial porcelain	CHPO SWAT	1590-1900	8	7	Bowl: rounded, dish, lid: flat
Chinese porcelain with famille verte decoration	CHPO VERTE	1690-1730	11	9	Bowl: fluted, rounded; deep, saucer, tea bowl
Far East					
Martabani jar	MATB	1500-1800	2	2	Jar
Continental Europe					
Continental porcelain	CONP	1710-1900	12	4	Mug: cylindrical, plate, slop bowl
France					
French chafing dish	FRCHAF	1500-1650	1	1	Chafing dish
Unsourced French faience	FTGW	1600-1800	7	2	
Martincamp-type ware type I flask (buff earthenware)	MART1	1480-1550	2	2	Unidentified form in this fabric
Martincamp-type ware type II flask (dark brown stoneware)	MART2	1500-1600	1	1	

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Pottery type	Code	Date range	SC	ENV	Form
Martincamp-type ware type III flask (red earthenware)	MART3	1600-1650	3	3	
Germany					
Frechen stoneware	FREC	1550-1700	181	145	Jug: Bartmannen, rounded, unidentified
unsourced German stoneware	GERST	1480-1900	7	3	Jug: rounded, unidentified
Raeren stoneware	RAER	1480-1610	2	2	Jug, mug; rounded
Werra slipware	WERR	1580-1650	6	6	bowl or dish, dish; rounded
Westerwald stoneware	WEST	1590-1900	65	54	chamber pot, jug: rounded, mug: cylindrical, tankard
Westerwald stoneware biconic panel	WEST BIC	1600-1650	1	1	
Westerwald stoneware chamber pot with flanged rim	WEST CHP2	1740-1760	26	7	
Westerwald stoneware with purple and blue decoration	WEST PURP	1665-1750	13	10	Jug: rounded, mug: rounded, tankard, unidentified
Italy					
Ligurian maiolica	LIGU	1520-1700	26	7	Bowl, dish, plate, tazza
Ligurian berettino maiolica	LIGU BERR	1520-1700	1	1	bowl
Montelupo polychrome maiolica	MLTG	1500-1700	4	4	Dish; rounded, jug, unidentified
north Italian marbled slipware	NIMS	1600-1750	9	8	Dish: rounded, small, bowl or dish, unidentified
north Italian bichrome marbled slipware	NIMS BICR	1600-1750	12	10	Bottle, bowl: rounded; medium, deep, costrel, dish: rounded, unidentified
North Italian polychrome slipware	NIMS POLY	1600-1750	5	4	Bowl: rounded; medium,
North Italian (Pisa) sgraffito redware	NISG	1550-1700	6	5	Bowl or dish, dish: rounded, unidentified
Low Countries					
Dutch tin-glazed ware	DTGW	1512-1800	6	4	Dish: fluted, rounded, unidentified
Dutch red earthenware	DUTR	1300-1650	1	1	Bowl:
Dutch slipped red earthenware	DUTSL	1300-1650	3	3	Bowl: carinated, bowl or dish, dish
North Holland slipware	NHS	1570-1750	2	2	Bowl, unidentified
Mediterranean					
Mediterranean lead-glazed ware	MDLG	1480-1700	1	1	Unidentified
Starred costrel	STAR	1600-1750	3	3	
Middle East					
Kutayha ware	KUTA	1600-1700	3	2	Tea bowl, unidentified
Persian porcelain with blue-painted decoration	PEPO BW	1600-1900	2	2	Bowl
Portugal					
Portuguese faience	POTG	1600-1700	39	11	Bowl: rounded; medium, bowl or dish, jug: rounded, plate, unidentified
Spain			ĺ		·
Spanish green-glazed ware	SPGR	1250-1650	3	3	Jar: cylindrical, unidentified
Spanish unsourced amphora	SPOA	1200-1900	4	4	
Spanish unsourced ware	SPOW	1250-1900	7	3	Jug: rounded, lid, unidentified
Spanish unsourced maiolica	STGW	1480-1700	2	2	Albarello, dish: deep
Late Valencian lustreware	VALL	1480-1600	2	2	Bowl: rounded; shallow, dish

Table 11: TBF10 Imported post-medieval pottery types quantified by sherd count (SC) and estimated number of vessels (ENV) and the forms that occur in the different wares.

There is a very good range of imported pottery recorded in the assemblage (see Table 11) that includes some rare types found in London and reflects the study areas relatively close location near the Thames. The quantity of the pottery from the different imported sources for the whole assemblage is shown in Table 11. Overall, the post-medieval imported pottery consists of 1,135 sherds and 741 ENV, which represents 7.5% and 9.9% respectively of the assemblage.

The small quantity of continental porcelain contains one item dated to the end of the 18th century in the form of a plain cylindrical mug (context [800] and [801]); otherwise the reminder of this ceramic consists of cheap 19th-century items (see Table 11).

The German stonewares (FREC, RAER and WEST) mostly consist of drinking forms and a notable quantity of Frechen stoneware bartmannen were recovered from fill [262] of cut [206] that includes an intact item and others with complete profiles. A small quantity of German earthenware as Werra slipware open forms also occurs.

Pottery from the Low Countries is poorly represented (see Table 11) and includes Dutch redwares and decorated items include North Holland slipware, while the tin-glazed wares are more frequent.

French wares are for London typically poorly represented and occur more so as fragments of Martincamp globular flasks (MART/1/2 and 3), although the rim of a French chafing dish with an applied face (context [1727]) was noted as well as tin-glazed wares (FTGW) as the knob of a lid in a red earthenware fabric (context [1629]) and a squat shouldered jar with '-Vim... ...es 1a/Vierge R. auxou.. ...es 1a-' written on the wall (context [1805]) and represents a container for a food product, such as mustard.

The Portuguese pottery is solely represented by the faience (POTG: Manuel Casimiro 2011), which is on the whole fragmentary and jugs are represented, although usually by the handles. This ware had on the whole stopped being imported into Britain by c.1700, however a very rare occurrence of a mid 18th-century dated plate occurred in context [1777], surviving as large fragments with decoration consisting only of a grey blue debased Chinoiserie border on the rim.

There are a wider range of Spanish imports represented that include green-glazed wares, amphora and amongst the miscellaneous earthenwares are a lid or dish rim (context [279]), while large parts of a jug with incised line decoration on the neck and shoulder occurred in contexts [800] and [801]. Decorated Spanish wares occur as bowls or dishes in Late Valencian lustre ware (context [209] and [211]) and Spanish tin-glazed ware (STGW: context [536]), while the base of an albarello, possibly made in Seville was found in context [211].

A good range of Italian imported wares are also recorded in the assemblage some of which are relatively rare finds in London. North Italian marbled slipware is the most frequent pottery type found in London (Jarrett and Blackmore 2017) and typically occurs as bowls or dishes, although bottle or costrels were noted in contexts [1564] and [1720], while the less frequent sgraffito ware (NISG) was found in a very fragmentary state as bowls or dishes with no indication of the designs represented on the surviving pieces. The Italian tin-glazed wares occur as two types. The first type, Montelupo polychrome maiolica occurs mainly in the form of dishes, decorated with the *foglia verde* style dated to the mid 17th century and recovered from contexts [338] and [849], while the rim of a jug (context [823] has a geometrical design. The second type consists of Ligurian majolica, which is unusually quite well represented, although the berettino ware occurs as a bowl base decorated with a Chinese scroll and Artemisia leaf (context [898]). Only open forms occur in the other Ligurian tin-glazed wares

and mostly dates to the late 17th century and includes a painted in the *caligraffico naturalistico tappizaria* dish with a crown maker's mark of either the Siccardi family of Valente or Savonna (context [782]). Other sherds of vessels decorated in the *tappizaria* or possibly the *istorica* styles were noted in contexts [536], [1550] and [1564]. Additionally of note is the base of a tazza decorated with a design of a cherub or putti and a cornucopia in dark blue on pale blue (context [1759]).

Two pottery types come from a general Mediterranean source. More frequent (see Table 11) are fragments of star costrels (STAR), which includes Seville, Spain as one source for this pottery type (found in contexts [211], [269] and [270]). A single sherd (context [220] of a closed form with an external white slip and a vibrant green glaze is found in Mediterranean lead-glazed ware (MDLG), although the hard, dense orange fabric indicates a North Italian source for this vessel.

Rare London occurrence of Middle Eastern pottery are also noted. From the area of the Ottoman empire there are two vessels represented in Kutayha ware (KUTA), with a small sherd found in deposit [1668] and the notable find of a tea bowl decorated in a polychrome floral scheme (context [1552]). Persian pottery are represented by two sherds of porcelain with blue-painted decoration (PEPO BW) and derived from probable bowl shapes with surviving floral (context [10]) and geometrical (context [111]) designs.

From the Far East are recorded two sherds of Martabani jars (contexts [1556] and [1696]) and these are an indication that the site had maritime connections as the large jars of this pottery type were used to store fresh water on ships.

The Chinese porcelains comprise a relatively large component of the post-medieval assemblage (4.5% sherds/5.7% MNV) and consist of mostly tea and table wares. Only three blue and white decorated bowl sherds are dated to the 17th-century (contexts [324], [348] and [792]) and the majority of the material typically dates to the 18th century when it was widely available and affordable by most households regardless of their socio-economic status. This class of pottery encompasses a wide range of decorative schemes (see Table 11) and includes a small number of provincial Swatow wares (CHPO SWAT) that are usually of an inferior quality compared to that of the majority of the porcelains produced at the Imperial production centre of Jingdezhen. There are a few notable items worthy of comment that include a blue and white goblet (context [1574], a famille rose (CHPO ROSE) decorated late 18th-century plate has a central finely decorated landscape (unstratified). Another finely decorated CHPO ROSE plate is decorated with gilded lines and black enamelling has borders of overlapping circles and a possible armorial shield at the centre (context [1629]). A saucer is of note for being decorated with randomly splashed green, yellow and purple/brown glazes on both internal and external surfaces (contexts [1564] and [1805]).

Distribution and dating

Table 12 shows the contexts containing pottery, the phase they occur in, the size/number of sherds and ENV, the earliest and latest date of the most recent pottery type (Context ED/LD) and a

considered (spot) date for the group. Intrusive pottery was found in Phases 3.1-3.6 dated deposits and contemporaneous post-Roman pottery was recovered from Phases 4-7.2 dated deposits.

Context	Description	Trench	Phase	Siza	SC	ENV	Context	Context	Spot date
	•		6.2				ED	LD	•
4	Fill of cess pit [5]	1	6.2	M S	55 4	35	1830 1740	1900 1830	1840–1900 1740–1780
6	Fill of well [30]	1	_	s S	8	4	1670	1900	
9	Fill of well [41]	1	6.1		_	8			1700–1800
10	Fill of well [41]	4	6.1	M	70	23	1701	1711	1701–1711
13	Fill of cess pit [5]	1	6.2	M	44	29	1770	1840	1770–1800
14	Fill of cess pit [54]	1	6.1	M S	53	34	1770	1840	1770–1800
29	Fill of [59]	1	6.1		1	1	1550	1700	1550–1700
34	Fill of [31]	1	5.2	S	2	2	1680	1800	1680–1800
45	Lower fill of [31]	1	5.2	S	3	3	1680	1800	1680–1800
46	Fill of cess pit [54]	<u> </u>	6.1	S	12	10	1740	1830	1760–1780
53	Backfill of construction cut [64]	1	6.1	S	15	14	1650	1750	1680–1700
57	Backfill of construction cut [56]	1	6.2	S	4	4	1805	1840	1805–1840
58	Fill of cess pit [31]	1	5.2	S	6	4	1630	1846	1630–1680
66	Fill of well [41]	1	6.1	S	17	10	1680	1700	1700–1720
83	Backfill to construction cut [77]	1	5.2	S	2	2	1630	1680	1630–1680
84	Backfill to construction cut [80]	1	6.2	S	3	3	1630	1846	1630–1800
85	Fill of cut [77]	1	5.2	S	1	1	1580	1750	1580–1750
87	Fill of construction cut [32]	1	5.2	S	2	2	1550	1700	1550–1700
89	Posthole	1	6.1	S	3	3	1720	1800	1720–1800
90	Fill of construction cut [64]	1	6.1	М	51	41	1700	1760	1700–1760
98	Fill of culvert [75]	1	6.2	S	10	9	1805	1900	19th century
100	Fill of cut [101]	1	5.1	S	1	1	1600	1700	1600–1700
104	Fill of cut [105]	1	5.1	S	1	1	1580	1900	1580–1900
108	Fill of drain [109]	1	6.1	S	1	1	1580	1700	1580–1700
111	Fill of cut [112]	1	5.2	S	28	24	1630	1680	1630–1680
120	Pit	1	5.1	S	1	1	1480	1900	1480–1900
123	Fill of cut [124]	1	6.1	М	31	30	1720	1800	1720–1800
130	Fill of cut [131]	1	5.2	S	9	8	1580	1700	1645–1700
134	Fill of barrel well	1	5.2	М	35	18	1670	1690	1670–1690
135	Backfill to the construction cut [136]	1	5.2	S	14	12	1630	1846	1630–1680
143	Backfill to construction cut [144]	1	6.1	S	2	2	1770	1840	1770–1840
145	Backfill to cut [149]	1	5.2	S	14	13	1590	1900	1645–1700
146	Backfill to construction cut [147]	1	5.2	S	6	6	1600	1700	1600–1650
148	Primary fill of barrel well	1	5.2	S	6	2	1670	1690	1670–1690
154	Fill of cut [155]	1	6.1	S	1	1	1580	1700	1580–1700
156	top fill of cut [157]	1	5.2	М	38	35	1670	1690	1670–1690
167	Construction cut	1	7.2	S	12	10	1820	1900	1820–1830
171	Fill of cut [157]	1	5.2	S	4	4	1630	1680	1630–1680
173	Fill of cess pit [174]	1	6.1	М	88	31	1680	1800	1700–1720
176	Backfill to construction cut [175]	1	6.1	S	1	1	1580	1900	1580–1900
177	Fill of cut [230]	1	5.2	S	15	13	1670	1923	1670–1700
181	Fill of cut [182]	1	6.1	S	25	25	1660	1870	1660–1680
184	Layer	1	5.2	S	16	15	1630	1700	1645–1680
186	Garden soil?	1	5.2	S	2	2	1550	1700	1550–1700
188	Fill of cut [189]	1	6.1	S	6	6	1630	1700	1630–1700
193	Garden soil?	1	5.2	S	8	8	1630	1846	1630–1680
195	Fill of cut [206]	1	5.2	М	34	23	1630	1680	1645–1680
205	Fill of cut [204]	1	5.2	М		27	1630	1680	1630–1680
209	Backfill to construction cut [210]	1	6.2	S	-	20	1650	1800	1650–1680
211	Fill of cut [206]	1	5.2	M	_	27	1630	1680	1645–1680
216	Fill of cut [316]	1	5.1	S	4	4	1580	1700	1580–1700
∠10	r iii or cut [ə roj	11	J. I	J	4	4	1000	1700	1000-1700

Contoxt	Description	Trench	Phoso	Sizo.	90	ENV	Context	Context	Spot date
	•						ED	LD	•
217	Fill of cut [218]	1	5.1	S	21	19	1630	1680	1630–1680
219	Fill of cut [223]	1	5.2	S	6	6	1600	1700	Mid 17th c
220	Dumped deposit	1	5.2	S	3	3	1580	1900	1580–1650
221	Fill of cut [222]	1	5.1	S		11	1630	1680	1630–1680
241	Fill of cut [240]	1	5.2	S	2	2	1630	1680	1630–1680
244	Fill of cut [247]	1	5.2	S	8	8	1590	1900	1590–1650
245	Fill of cut [251]	1	5.1	S	5	4	1630	1680	1630–1680
248	Fill of cut [263]	1	5.1	S	4	4	1630	1680	1630–1680
252	Fill of barrel well	1	5.2	М	34	17	1665	1750	1665–1680
254	Possible soakaway	1	6.1	S	1	1	1550	1900	1550–1700
256	Fill of cut [307]	1	5.1	S	1	1	1550	1700	1550–1700
257	Fill of cut [258]	1	5.1	S	3	2	1630	1680	1630–1680
259	Fill of cut [260]	1	5.2	М	38	35	1630	1680	1630–1680
262	Fill of cut [206]	1	5.2	М	40	30	1680	1800	1680–1700
266	Fill of cut [267]	1	5.1	S	8	8	1580	1700	1580–1700
269	Garden/horticultural soil	1	5.2	M	30	30	1630	1680	1630–1680
270	Fill of cut [223]	1	5.2	S	23	22	1630	1680	1630–1680
271	Fill of cut [276]	1	5.1	S	3	3	1630	1680	1630–1680
273	Fill of cut [274]	1	5.1	М	46	44	1630	1680	1630–1680
275	Fill of cut [276]	1	5.1	S	1	1	1630	1680	1630–1680
277	Fill of cut [267]	1	5.1	S	10	9	1630	1680	1630–1680
279	Rubbish pit	1	5.2	S	25	19	1630	1680	1630–1680
285	Fill of cut [288]	1	6.1	S	3	3	1550	1700	1580–1700
289	Fill of cut [290]	1	5.2	S	10	10	1630	1700	1630–1700
291	Fill of cut [292]	1	5.1	S	4	4	1630	1680	1630-1650
293	Fill of cut [294]	1	5.1	S	1	1	1580	1700	1580–1700
295	Fill of cut [296]	1	5.1	S	2	2	1630	1680	1630-1680
297	Upper fill of well	1	5.2	S	9	8	1680	1800	1680–1800
298	Fill of cut [299]	1	5.2	S	10	10	1580	1700	1580–1700
300	Fill of cut [301]	1	5.2	S	1	1	1550	1700	1550-1700
302	Fill of cut [303]	1	5.1	S	4	4	1550	1700	1580–1650
304	Fill of cut [305]	1	5.1	S	6	5	1580	1700	1580–1650
308	Primary fill of well [310]	1	5.2	S	24	15	1660	1870	1680–1720
309	Upper fill of cut [325]	1	5.2	S	18	16	1630	1680	1630–1680
313	Fill of cut [314]	1	5.2	S	3	3	1580	1700	1580–1700
	Fill of cut [316]	1	5.1	_	_		1600	1700	1630–1800
317	Fill of cut [318]	1	5.1	S	_	24	1630	1700	1630–1700?
319	Upper fill of cut [321]	1	5.2	S	1	1	1580	1700	1580–1700
320	Fill of cut [321]	1	5.2	S	5	5	1580	1700	1580–1650
324	Fill of cut [325]	1	5.2	М		29	1630	1680	1630–1650
326	Fill of cut [327]	1	5.1	S	2	2	1580	1900	1580–1900
333	Fill of cut [325]	1	5.2	M		- 27	1630	1700	1630–1650
336	Fill of cut [337]	1	6.1	S	1	1	1480	1650	1480–1600
338	Fill of cut [206]	1	5.2	S	-	14	1630	1680	1630–1680
340	Fill of cut [341]	1	5.2	S	6	6	1580	1700	1580–1700
342	Fill of cut [272]	1	5.2	S	19	16	1630	1680	1630–1680
343	Fill of cut [365]	1	5.1	S	2	2	1580	1700	1580–1650
344	Fill of cut [345]	1	5.2	S	2	2	1630	1700	1630–1700
346	Fill of barrel well	1	5.2	M	31	2 18	1665	1750	1665–1680
348	Fill of barrel well	1	5.2	M	67	38	1660	1870	1680–1700
\vdash		1	5.∠ 5.1	S	6		1630		
361	Fill of cut [362]	1			_	6		1680	1630–1650 1630–1650
363	Fill of cut [223]		5.2 5.1	M c	34	32	1630	1680	1630–1650 1580, 1700
366	Fill of cut [367]	1	5.1	S	4	2	1580	1700	1580–1700
369	Layer	1	5.2	S	9	8	1630	1680	1630–1680
373	Fill of cut [223]	1	5.2	M	33	28	1630	1680	1630–1680
377	Fill of well[378]	1	6.2	S	8	7	1820	1900	1820–1900

Context	Description	Trench	Phase	Size	sc	ENV	Context ED	Context LD	Spot date
387	Fill of cut [223]	1	5.2	М	46	42	1630	1680	1630–1700
391	Fill of cut [223]	1	5.2	S	13	12	1630	1680	1630–1650
395	Dumped deposit	1	5.1	S	1	1	1580	1900	1580–1900
396	Fill of cut [223]	1	5.2	S	2	2	1630	1680	1630–1680
397	Fill of cut [223]	1	5.2	S	15	14	1630	1846	1630–1700
398	Fill of cut [223]	1	5.2	S	15	8	1630	1680	1630-1680
401	Fill of cut [223]	1	5.2	М	31	30	1630	1680	1630–1680
402	Layer	1	5.1	S	5	4	1580	1900	1580–1650
411	Fill of cut [413]	1	3.5	S	1	1	1270	1350	1270-1350
417	Fill of cut [418]	1	5.2	S	2	2	1580	1900	1580–1700
423	Fill of cut [441]	1	5.1	S	6	4	1580	1900	1580–1650
424	Fill of cut [441]	1	5.1	S	2	2	1480	1550	1480–1550
426	Fill of cut [425]	1	5.1	S	2	2	1580	1900	1580–1900
427	Fill of cut [442]	1	5.1	S	6	5	1580	1900	1580–1650
430	Fill of cut [431]	1	5.2	S	2	2	1660	1870	1660–1680
434	Fill of cut [441]	1	5.1	S	4	4	1580	1700	1580–1650
435	Fill of cut [441]	1	5.1	S	13	7	1480	1600	1480–1500
439	Fill of cut [441]	1	5.1	S	7	7	1350	1500	1350–1500
443	Fill of cut [445]	1	3.6	S	1	1	1670	1923	0–400?
452	Fill of cut [453]	1	3.5	S	1	1	1270	1500	1270-1500
459	Fill of cut [442]	1	5.1	S	9	9	1550	1700	1550–1700
461	Fill of cut [461]	1	5.2	S	2	2	1630	1680	1630–1680
469	Fill of cut [470]	1	5.1	S	16	4	1480	1600	1480–1500
499	Fill of cut [504]	1	3.3	S	2	2	1550	1700	1550–1700
514	Post packing	1	3.5	S	5	4	1780	1900	Mid 19th century
518	Fill of cut [517]	1	6.1	S	11	10	1680	1800	18th century
533	Fill of barrel [540]	1	5.2	S	6	6	1580	1700	1580–1700
536	Fill of cut [537]	1	6.2	L	157	90	1820	1900	1820–1840
549	Sandy silt	1	3.2	S	4	4	1630	1680	1630–1680
559	Fill of timber structure [560]	1	6.1	S	27	18	1745	1780	1745–1770
574	Fill of tanning pit	1	6.1	S	25	23	1720	1780	1720–1760
581	Fill of Roman well	1	3.3	S	1	1	1770	1840	1770–1840
583	Fill of cut [582]	1	6.1	S	2	2	1580	1700	1580–1700
620	Fill of cut [575]	1	3.5	S	1	1	1250	1650	1580–1650
660	Fill of cut [661]	1	6.1	S	7	6	1710	1760	1710–1760
721	Fill of cut [722]	1	3.6		1	1	1080	1350	1080–1350
757	Fill of cess pit [739]	1	6.2	M	45	23	1830	1900	1840–1900
762	Fill of cess pit [739]	1	6.2	М	30	14	1830	1900	1830–1900
	Made ground	1	6.2	S	7	7	1580	1700	1580–1700
767	Fill of cut [774]	1	6.1	M	41	20	1745	1780	1760–1790
773	Levelling layer	1	6.1	S	3	3	1680	1900	18th c
779	Fill of cut [780]	1	6.1	S	_	17	1720	1780	1720–1760
781	Fill of cut [826]	1	6.1	L	107	66	1740	1780	1740–1770
782	Fill of cut [822]	1	5.2	M	_	27	1770	1690	1670–1690
786	Fill of cut [787]	1	6.2	S		2	1680	1800	18th c
	Fill of cut [793]	1	6.1		_	6	1590	1900	1580–1700
794	Fill of cut [795]	1	6.2	S		10	1830	1900	1830–1900
796	Fill of cut [797]	1	6.2	L	859	_	1830	1900	1810–1830
800	Fill of cut [816]	1	6.2	M		28	1745	1780	1760–1780
801	Fill of cut [816]	1	6.2	L_			1770	1820	1770–1800
802	Fill of cut [803]	1	6.1	S	11	11	1700	1800	18th c
815	Fill of cut [804]	1	6.1	S	11	10	1740	1780	1740–1780
818	Fill of cut [819]	1	5.1	S	7	6	1550	1700	1550–1650
823	Fill of cut [824]	1	6.1	S	8	6	1740	1760	1740–1760
829	Fill of cut [830]	1	6.1	S	4	4	1580	1900	18th century
833	Fill of cut [834]	1	6.2	M	69	60	1780	1900	E 19th c

Context	Description	Trench	Phase	Size	sc	ENV	Context ED	Context LD	Spot date
837	Fill of cut [846]	1	6.1	S	3	3	1580	1900	1700–1720
844	Fill of cut [845]	1	6.1	М	34	26	1740	1770	1740–1770
848	Pit	1	6.1	S	1	1	1612	1650	1620–1650
849	Fill of cut [850]	1	6.1	S	5	4	1630	1650	18th century
854	Fill of cess pit [856]	1	6.2	М	42	24	1830	1900	Mid 19th century
864	Fill of cut [865]	1	6.1	S	6	3	1720	1780	1720–1780
866	Fill of cut [876]	1	6.1	М	45	20	1680	1800	18th century
867	Fill of cut [868]	1	6.1	L		28	1701	1711	1701–1711
869	Fill of cut [870]	1	5.2	S	5	5	1720	1780	1720–1760
875	Layer	1	6.1	S	2	2	1590	1900	18th century
881	Fill of cut [882]	1	6.2	S	6	5	1700	1900	18th/19th century
886	Fill of cut [888]	1	6.1	S	19	9	1690	1730	1690–1730
891	Fill of cut [892]	1	6.1	M	47	27	1740	1770	1740–1770
893	Fill of cut [894]	1	6.1	M	82	47	1745	1830	1760–1780
897	Fill of cut [946]	1	6.1	S	16	16	1710	1880	1710–1760
898	Fill of cut [964]	1	5.2	S	22	19	1700	1900	18th century
899		1	3.6	S	2	2	1570	1846	1570–1700
900	Layer	1	3.6	S	1	1	970	1100	970–1100
	Layer Possible horticultural soil	1	6.1	S	_				
901 921		1	6.2	S M	3 83	3 41	1650 1830	1750 1900	1650–1750
	Bottom fill of cess pit [856]	4							1830–1900
922	Layer, colluvial?	1	5.1	S	13	10	1580	1900	1580–1600
940	Fill of cut [929]	1	5.2	S	3	3	1680	1800	1680–1700
942	Fill of cut [943]	1	5.2	S	2	2	1570	1846	Late 17th–early 18th century
944	Fill of cut [945]	1	5.2	S	5	5	1710	1711	1701–1711
951	Fill of cut [952]	1	5.2	S	19	13	1630	1680	Late 17th–early18th century
984	Layer	1	4	S	2	2	1480	1600	1480–1600
1037	Fill of cut [1048]	1	3.6	S	1	1	1240	1400	1240–1400
1083	Fill of cut [1084]	1	5.2	S	15	14	1630	1846	Mid 17th century
1132	Fill of cut [1133]	1	3.4	S	1	1	1550	1700	1550–1700
1172	Fill of cut [1173]	1	5.1	S	1	1	1550	1700	1550–1700
1502	Fill of cut [1503]	2	6.2	М	80	52	1790	1820	1800–1815
1504	Fill of cut [1504]	2	6.2	S	10	5	1740	1830	1740–1800
1506	Top fill of cess pit [1508]	2	6.1	L	149	46	1720	1780	1720–1760
	Backfill to construction cut [1509]	2	6.1	S	2	2	1612	1650	1612–1650
1510	Fill of well [1511]	2	6.2	М	81	46	1825	1900	1830–1860
1513	Fill of cut [1514]	2	6.2	L	685	252	1810	1900	1810–1820
1515	Second fill of cess pit [1508]	2	6.1	L	239		1720	1780	1720–1740
1516	Fill of cut [1517]	2	6.2	М		43	1800	1900	1815–1835
1518	Fill of cess pit [1520]	2	6.2	L	160		1830	1900	Mid 19th century
1522	Primary fill of cut [1503]	2	6.2	M		25	1790	1820	1790–1820
1523	Fill of cut [1524]	2	6.2		111	_	1830	1820	1830–1850
1526	Top fill of cut [1527]	2	6.2	_	-	23	1740	1830	1780–1800
1528	Fill of cut [1529]	2	6.2	_	130		1805	1900	1805–1820
	Bottom fill of cut [1527]	2	6.2	M	_	24	1807	1840	1807–1820
	Primary fill of cess pit [1529]	2	6.2	i i	278		1830	1900	Mid 19th century
1532	Upper fill of cut [1533]	2	5.2	S	_	8	1630	1846	1630–1650
1534	Backfill to cess pit [1535]	2	6.1	M	-	54	1780	1900	Mid 19th century
1537	Fill of cut [1538]	2	6.2	i	_		1830	1900	1830–1850
1539	Fill of cut [1540]	2	5.2	M		21	1680	1800	1680–1710
1541	Primary fill of cut [1533]	2	5.2	S	9	9	1580	1700	1580–1650
1542	Backfill to cess pit [1543]	2	6.2	ı		160	1830	1900	1860–1900
1542	Cess pit	2	6.2	L M	428 28	24	1805	1900	1805–1900
	·	_	_		_				
1545 1546	Primary fill of cess pit [1535] Backfill to cut [1548]	2	6.1 6.2	M M	90 4	38 4	1680 1790	1800 1820	1700–1720 1790–1820
	• •	2	6.2	M	_	4 39	1807	1840	
1549	Backfill to cess pit [1543]	~	U.Z	ıVΙ	74	აყ	1001	1040	1830–1850

Context	Description	Trench	Phase	Size	sc	ENV	Context ED	Context LD	Spot date
1550	Fill of cut [1551]	2	6.2	L	215	81	1825	1900	1825–1900
1552	Fill of cut [1553]	2	6.2	M	91	66	1830	1900	Mid 19th century
1554	Fill of cut [1555]	2	5.2	М	8	8	1680	1800	1680–1750
1556	Primary fill of cess pit [1543]	2	6.2	L	129	70	1810	1900	1810–1820
1561	Backfill to cess pit [1562]	2	6.1	L	1	1	1550	1900	1550–1900
1564	Fill of cut [1565]	2	5.2	L	177	62	1700	1750	1700–1720
1566	Primary fill of cess pit [1562]	2	5.2	M	39	12	1670	1926	1670–1690
1573	Layer – made ground	2	5.1	S	1	1	1550	1900	1550-1900
1574	Fill of cut [1575]	2	6.2	L	120	49	1805	1900	1805–1820
1580	Fill of cut [1581]	2	6.2	s	1	1	1580	1900	1580–1900
1582	Fill of cut [1583]	2	6.2	М	78	58	1820	1900	1820–1840
1584	Fill of cut [1585]	2	6.2	s	1	1	1830	1900	1830-1900
1586	Fill of cut [1587]	2	6.1	М	59	42	1820	1900	1820–1900
1590	Fill of cut [1591]	2	6.2	m	56	46	1745	1780	1745–1760
1592	Upper fill of cut [1593]	2	6.2	S	2	2	1580	1900	1680–1800
1594	Fill of cut [1595]	2	6.1	m	29	17	1770	1840	1800–1830
1596	Fill of cut [1593]	2	6.2	s	26	14	1820	1900	1820–1900
1597	Lower fill of cut [1593]	2	6.2	s	8	6	1785	1835	1785–1800
1600	Fill of cut [1601]	2	6.2	Ĺ	150		1800	1	1800–1840
1603	Fill of cut [1602]	2	6.2	L	166		1720	1760	1720–1760
1604	Upper fill of cut [1605]	2	5.2	S	1		1580	1900	1580–1900
1613	Lower fill of cut [1605]	2	5.2	S	1	1	1580	1900	1580–1900
1614	Fill of cut [1615]	2	5.1	S	3	3	1590	1900	1590–1700
1616	Fill of cut [1617]	2	6.1	S	4	4	1740	1830	1740–1830
1618	Upper fill of cut [1619]	2	6.2	S	4	4	1805	1900	1805–1800
1629	Fill of cut [1630]	2	6.2	ı	1	-	1820	1300	1820–1840
1629	Fill of cut [1630]	2	6.2	-		232	1820	1900	1820–1840
1631	Fill of cut [1632]	2	6.2	S	15	10	1810	1900	Late 19th c
1631	Fill of cut [1632]	2	6.2	S	1	1	1810	1900	Late 19th century
1633	Fill of cut [1634]	2	6.2	S	30	27	1790	1900	1790–1830
1635	Fill of cut [1636]	2	6.2	s	15	10	1770	1840	1790–1810
1643	Fill of cut [1644]	2	6.2	s	11	9	1770	1840	1800–1835
1645	Backfill of construction cut [1563]	2	5.2	s	1	1	1740	1770	1760–1770
1647	Fill of cut [1646]	2	6.2	s	26	20	1820	1900	1820–1900
1648	Fill of cut [1649]	2	6.2	M	55	33	1775	1830	1775–1800
	Fill of cut 1654]	_	6.2	_			1770	1840	1780–1800
1655	Fill of cut [1556]		5.1	s	1	1	1550	1700	1550–1700
1658	Fill of cut [1659]	2	5.1	s S	5	5	1580	1700	1580–1630
1664	Fill of cut [1666]	2	6.1	о М	39	29	1740	1770	1760–1030
1665	Fill of cut [1666]	2	6.1	ı	131		1740	1770	1760–1770
1674	Fill of cut [1675]	2	6.2	-	112	_	1805	1900	1805–1820
1676	Fill of cut [1677]	2	6.2	_	10	7	1770	1830	1770–1830
1680		2	6.2	S C	3	3	1570	1846	-
	Fill of cut [1679]	2		S	3 4	-		l	18th century
1682	Fill of cut [1683]		7.1	S ı	-	4	1805	1900	1805–1900
1686	Upper fill of cut [1687]	2	6.2		_	138	1810 1630	1900	1810–1830
1687	Rubbish pit	2	6.2	s	8	7	1630	1846	18th century
1688	Fill of cut [1689]	2	6.1	S	8	7	1740	1830	1740–1780
1690	Backfill to construction cut 1692	2	6.1	S		19	1710	1760	Late 18th c
1690	Backfill to construction cut 1692	2	6.1	S	1	1	1710710	1760	Late 18th c
1691	Backfill to construction cut 1692	2	6.1	M	44	39	1805	1900	1805–1900
1692	Construction cut for [1693]	2	6.1	S	3	2	1630	1846	18th century
1696	Primary fill of cut [1687]	2	6.2	L_	-	165	1820	1900	1830–1850
1699	Fill of cut [1701]	2	5.2	S	17	17	1630	1680	1630–1680
1702	Fill of cut [1703]	2	6.2	S	3	3	1580	1900	1580–1700
1704	Fill of cut [1705]	2	7.1	М	38	31	1830	1900	Late 19th century

Context	Description	Trench	Phase	Size	sc	ENV	Context ED	Context LD	Spot date
1706	Missing context sheet			s	3	3	1580	1700	1580–1700
1708	Backfill to masonry structure [1700]	2	6.1	s	2	2	1580	1700	1580–1700
1709	Backfill to masonry structure [1700]	2	6.1	s	1	1	1580	1700	1580–1700
1710	Fill of cut [1715]	2	6.1	М	62	45	1740	1760	1740–1760
1711	Backfill to masonry structure [1700]	2	6.1	s	1	1	1480	1900	1480–1900
1712	Upper fill of cut [1713]	2	6.1	L	178	93	1740	1830	1740–1800
1714	Backfill to masonry structure [1700]	2	6.1	L	1	1	1630	1680	1630–1680
1716	Bottom fill of cut [1713]	2	6.1	М	59	27	1780	1900	Mid 19th century
1720	Upper fill of cut [1721]	2	5.2	М	1	1	1660	1870	1680–1720
1720	Upper fill of cut [1721]	2	5.2	М	89	35	1680	1800	1680–1720
1722	Fill of cut [1723]	2	6.2	s	11	10	1810	1900	Mid 19th c
1724	Floor make-up	2	5.2	s	1	1	1550	1700	1550–1700
1725	Backfill to cellar [1700]/[1678] in order to raise floor	2	5.2	s	2	2	1580	1900	1580–1700
1726	Upper fill of cess pit [1735]	2	6.2	s	9	8	1830	1900	1830–1900
1727	Second fill of cess pit [1735]]	2	6.2	М	1	1	1790	1820	1800–1815
1727	Second fill of cess pit [1735]]	2	6.2	М	33	22	1830	1900	Mid 19th century
1728	Fill of cut [1729]	2	5.1		3	3	1630	1680	1630–1680
1730	Basal fill of cess pit [1735]	2	6.2	М	72	40	1830	1900	Mid 19th century
	Floor make-up	2	5.2	М	1	1	1480	1650	1480–1650
1733	Upper fill of cut [1734]	2	6.1	L	112	51	1710	1760	1710–1720
	Basal fill of cut [1734]	2	6.1	L		45	1680	1800	1680–1700
	Basal fill of cut [1734]	2	6.1	L	2	1	1680	1800	1680–1700
1743	Basal fill of cut [1721]	2	5.2	<u> </u>	9	5	1630	1680	1630– 1680
1747	Upper fill of cut [1748]	2	5.2	S	4	4	1580	1900	1580–1846
1749	Basal fill of cut [1748]	2	5.2	S	2	2	1630	1846	1680–1800
1752	Fill of cut [1753]	2	5.2	S	29	24	1710	1760	1710–1760
1757	Upper fill of cut [1764]	2	6.1			93	1720	1780	1720–1760
1758	Fill of cut [1764]	2	6.1	M	86	45	1740	1760	1740–1760
1759	Fill of cut [1764]	2	6.1	ı	211	77	1740	1760	1740–1760
1763	Fill of cut [1764]	2	6.1	S	5	4	1600	1700	1600–1700
1767	Fill of cut [1768]	2	3.3	M	1	1	1580	1900	1580–1900
1769	Fill of cut [1771]	2	5.2	S	7	7	1660	1800	1660–1700
1774	Fill of cut [1775]	2	5.2	M	19	, 15	1630	1846	1680–1700
1777	Fill of cess pit [1786]	2	6.1	M	90	26	1740	1800	1740–1800
1793	Backfill to construction cut [1794]	2	6.1	S	90 7	6	1580	1700	1580–1700
	Fill of cut [1807]		3.1		_		1805	1900	1805–1830
1814	Layer – made ground	2 2	6.1	s S	1	1	1580	1700	1580–1700
1827	, , , , , , , , , , , , , , , , , , ,	2	5.2		•	8	1590	1900	1590–1700
	Layer Fill of cut [1835]	2		s S	o 1	o 1		1700	
1834 1834	Fill of cut [1835]	2	5.1	s S	2	2	1550 1570		1550–1700 1570, 1700
1842		2	5.1 6.2	s S	2	2	1570 1770	1700	1570–1700
	Fill of cut [1843]				_			1820	1770–1820
1848	Layer – dumped deposit	2	5.1	S		24	1630	1680	1630–1650
1852	Fill of cut [1853]	2	5.1	S	7	7	1630	1700	1830–1700
1856	Fill of cut [1857]	2	5.1	S	3	3	1580	1900	1580–1600
1868	Layer – Roman? Dumped deposit	2	3.4	S	2	2	1580	1700	C.1645–1773
1896	Layer	2	3.4	S	1	1	1120	1220	1120–1220
1925	Fill of cut [1924]	2	5.2	S	3	3	1580	1700	1580–1700
1931	Fill of cut [1932]	2	5.1	S	2	2	1550	1700	1550–1700
1933	Fill of cut [1934]	2	5.1	M		31	1580	1650	1580–1650
1937	Surface layer?	2	3.3	S	1	1	1550	1900	1550–1900
1945	Fill of cut [1946]	2	5.1	S	1	1	1630	1845	1630–1700
1952	Layer – dumped deposit	2	5.1	S	5	5	1580	1900	1580–1700
1953	Layer – surface?	2	5.1	S	1	1	1580	1700	1580–1700
1955	Fill of cut [1957]	2	4	S	6	6	1580	1700	1580–1650
1960	Upper fill of cut [1961]	2	5.1	S	5	2	1580	1700	1580–1700

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Context	Description	Trench	Phase	Size	sc	ENV	Context ED	Context LD	Spot date
2039	Sandy silt	2	3.4	S	1	1	1550	1700	1550–1700
2055	Layer – dumped deposit	2	5.2	S	2	1	1580	1700	1580–1700
2060	Layer – surface/occupation?	2	4	S	1	1	1580	1700	1580–1700
2062	Upper fill of [2063]	2	5.2	S	7	5	1580	1700	1580–1700
2064	Layer – dumped deposit	2	5.2	S	4	4	1580	1800	1580–1700
2065	Basal fill of [2063]	2	5.2	S	8	3	1775	1700	1665–1700
2068	Fill of cut [2069]	2	6.1	S	1	1	1685	1800	1680–1800
2073	Backfill to construction cut [2074]	2	5.2	S	2	2	1550	1700	1550–1700
2078	Context sheet missing	2	6.1	S	2	2	1770	1900	1770–1900
2093	Fill of cut [2094]	2	5.2	S	1	1	1580	1700	1580–1700
2115	Layer – surface?	2	5.2	S	2	2	1550	1700	1550–1700
2117	Possible occupation layer	2	3.2	S	5	5	1690	1730	1690–1730
2127	Fill of cut [2128]	2	5.1	S	2	2	1580	1700	1580–1700
2156	Fill of well [2169]	2	6.2	М	61	41	1830	1900	1830–1850
2167	Fill of well [2169]	2	6.2	L	1	1	1830	1900	1830–1850
2167	Fill of well [2169]	2	6.2	L	538	156	1830	1900	1842–1867
2168	Fill of construction cut [2170]	2	6.2	S	6	6	1740	1830	1740–1830
2171	Fill of well [2169]	2	6.2	L	351	121	1830	1900	1845–1900
2175	Upper fill of well [2176]	2	6.2	S	21	15	1820	1900	1820–1840
2180	Fill of well [2176]	2	6.2	S	7	7	1740	1760	1740–1760
2182	Fill of well [2176]	2	6.2	S	3	2	1830	1900	1830–1900
2183	Fill of well [2176]	2	6.2	М	99	42	1830	1900	1840–1870
2186	Dump layer	3	5.1	S	16	13	1580	1700	1600–1700
2187	Dump layer	3	5.1	S	17	15	1580	1700	1580–1650
2194	Dump layer	3	3.2	S	2	2	1550	1700	1580–1700

Table 12: TBF10 Distribution of the Post-Roman pottery types quantified by sherd count (SC) and estimated number of vessels (ENV).

Phase	Expansion	SC	% SC	ENV	% ENV
4	Medieval	9	0.1	9	0.1
5.1	17th Century (1600–1660/1680)	421	2.9	366	5.1
5.2	Late 17th Century (1660–1720)	1656	11.4	1183	16.6
6.1	18th Century (1720–1780)	3091	21.3	1583	22.3
6.2	Late 18th / Early 19th Century (1780–1840)	9286	64.0	3926	55.2
7.1	Late 19th Century	42	0.3	35	0.5
7.2	Post WW II	12	0.1	10	0.1
Total		14517	100	7112	100

Table 13: TBF10 Quantification of pottery by sherds count (SC) and ENV) for each post-Roman phase

Table 13 shows the quantification of the pottery by phase and demonstrates that very little pottery was in use during the medieval period (Phase 4) reflecting an under developed localised landscape. Subsequently there is a progressive use in the following phases of activity on the site until Phase 6.2 and the late 19th century when the largest volume of pottery was quantified.

					19th			
			tury		6.2 Late 18th / Early Century	tury		
		tury	5.2 -ate 17th Century	6.1 10th Continu	- L	7.1 Late 19th Century	= >	
	4 Medieval	5.1 17th Century	9 17th	_ {	18t et 18t	. 19th	7.2 Post WW II	
Source	4 Mec	5.1 17th	5.2 Late	6.1	6.2 Late Cen	7.1 Late	7.2 Po	Total
Medieval								
Essex		0.5	0.1					3
Hertfordshire		0.5						2
London		0.8		0.1				4
Surrey		0.8						3
Surrey-Hampshire	11.1	4.6						18
Post-medieval								
Britain		0.5	1.6	12.5	51.9	34.3	60.0	2276
East Anglia		0.0			0.1			3
Essex	11.1	19.4	17.7	2.7	0.9			358
Hampshire			0.3	0.1	0.0			6
London	44.4	36.1	42.9	48.9	25.2	42.9	30.0	2427
Midlands		1.6	1.1	3.3	2.5			171
Surrey-Hampshire	11.1	23.5	23.7	22.0	9.5	17.1	10.0	1097
Unknown		0.8	0.3	0.4	0.4	2.9		29
Imports								
China			0.6	6.4	7.6			406
Far East					0.1			2
France		0.8			0.1			8
Germany	22.2	7.4	8.8	2.6	1.1	2.9		219
Italy		0.5	1.9	0.3	0.2			38
Low Countries		1.4		0.3	*			10
Mediterranean			0.3					4
Ottoman					0.1			2
Persia		0.0	0.1	0.1				2
Portugal		0.3	0.4	0.2	0.1			11
Spain		0.3	0.3	0.2	0.2			13
Sub-total	22.2	10.7	12.4	10	9.4	2.9		715
Total	100	100	100	100	100	100	100	7112

Table 14: TBF10 Phased quantification of the pottery sources by % MNV. Less than 0.1%

Table 14 shows that, except for the Surrey-Hampshire border source of pottery, all other medieval wares were residual and found mostly in Phase 5.1 dated deposits. The ceramic profile for the site generally follows that for the rest of London with local wares the main source of pottery from Phase 4 (which contains a 16th-century component) through to Phase 6.2 (late 18th-early 19th century) when British wares became the dominant sources. For an unknown reason (perhaps residual material)

ceramics from a London was also the main pottery source in the subsequent phase (6.3). Surrey-Hampshire border wares were always a main supplier of pottery, firstly as mainly the whiteware and then the redware from c.1700. The fine redware pottery from Essex occurs mostly in Phase 5.1 and noticeably dropped off by Phase 6.1 reflecting elsewhere in London that the fine redware product was either declining or marketing its wares elsewhere. The Midlands source of pottery (essentially Staffordshire-type products) in Phase 6.1 doubled that of the quantity in Phase 6.3 and then started to trail off, although a large quantity of the pottery was surely part of the general British source of pottery. The frequency pattern for imported wares show that they are at their most important in Phase 4 and only as German wares, peak during the post-medieval phases in Phase 5.2 during the late 17th century then drop slightly in proportion in the succeeding phases. However, the majority of the European ceramics would have been residual from Phase 6.1 and reflects that noted elsewhere in London that the Navigation Acts of the late 17th century seriously impeded the importation of Continental pottery and during the 18th century the demand for Chinese porcelains (which peak in Phase 6.2) and to a lesser extent German Westerwald stoneware meant that during the 18th century imported pottery was fourth mains source of pottery.

Significance of the assemblage

The post-Roman pottery assemblage is of significance and although it contains pottery types that are typically found in the London and North East London area, there are ceramics recorded that are rare British finds and of national importance. The medieval pottery is largely residual although the types of pottery recorded are those that are often found in Metropolitan Essex. The post-medieval ceramics are important for demonstrating the activities of a community during the 17th-19th centuries. Of interest are a number of domestic groups of pottery that relate to individual properties. Some of these groups of pottery also contain ceramics that relate to the business the residents of the study area were involved in, such as the occurrence of the 17th-century braziers in different redware fabrics. Also of interest is the group of Frechen stoneware drinking vessels found in fill [262] of the construction cut [206] for a barrel well and the group of pottery almost certainly relates to a mid 17th-century drinking establishment on the site. The large quantity of Surrey-Hampshire red border ware chamber pots or paint pots found in fill [1805] of cut [1807] could very well belong to the refurbishment of a building in the early 19th century.

Previous excavations on the study area have produced assemblages of pottery. The initial evaluation (CYD96) was notable for containing a dish made in late 17th-century polychrome Ligurian calligraphico naturalistico (erroneously assigned to a Low Countries or Portuguese source (Jarrett 1997). A subsequent archaeological excavation (TOC02) produced a large quantity of ceramics with groups of pottery recorded that belonged to individual domestic properties, some of which represented household clearances, while the ceramic contents of some features related to an 18th-century apothecary and an early 19th-century coffee house (Sudds 2004).

Potential of the assemblage

The potential of the assemblage is to date the contexts the pottery occurs in. The assemblage is important for demonstrating on site activities that relate to specific household and how the community on the site changed over time. A number of vessels are important in their own right and add to the corpus of forms and ceramics already recorded for the London area and therefore require illustrating and/or photographing.

Recommendations for further work

A publication report is required on the post-Roman pottery that brings together the assemblages from previous excavations (CYD96 and TOC02). The CYD96 assemblage needs reviewing briefly and the pottery coding used at the time of its assessment requires updating to that used currently (MOLA 2014). It is recommended that as part of the publication report that the groups of pottery are looked at by property. The larger groups of pottery would benefit from being holistically studied alongside other material that it occurs with, such as the clay tobacco pipes, glass and metal ware in order to obtain a comprehensive understanding of the different activities associated with each of the individual finds groups. It is recommended that 36 vessels are illustrated (six of which additionally require photographing) and 14 vessels are photographed (six of which need reconstructing).

Bibliography

Blackmore, L. and Pearce, J., 2010. *Medieval coarsewares of the London area. A dated type-series of London medieval pottery part 5: shelly-sandy ware and the greyware industries.* Museum of London Archaeology Monograph 49.

Britton, F., 1987. London Delftware, Jonathan Horne Publications, London.

Cotter, J.P., 2000. *Post-Roman pottery from excavations in Colchester, 1971-85.* Colchester Archaeological Report 7, Colchester Archaeological Trust Ltd and English Heritage.

Coysh, J. and Coysh, M., 1992. *A Collector's History of English Porcelain*. Antique Collectors' Club, Woodbridge, Suffolk.

Draper, J. and Copland-Griffiths, P., 2002. *Dorset Country Pottery: The Kilns of the Verwood District.* The Crowood Press Ltd, Marlborough.

Hildyard, R., 2005. English Pottery 1620-1840. V & A publications, London.

Humphrey R. and Shepherd, J., 2013. 'From Salt Petre Bank to Dock Street: post-medieval glass manufacture in Tower Hamlets.' *London Archaeologist* 13(10), 255-259.

Hurst, J.G., Neal, D.S. and van Beuningen, H.J.E., 1986. *Pottery produced and traded in North-west Europe, 1350-1650*. Rotterdam Papers IV.

Jarrett, C., 1997. 'An assessment of medieval and post-medieval pottery', in A. Douglas, *An Archaeological evaluation at Coopers Yard, Shadwell, London Borough of Tower Hamlets*. Pre-Construct Archaeology Unpublished Report.

Jarrett, C. and Blackmore, L., 2015, 'Italian pottery in medieval and post-medieval London', *Archeologia Postmedievale* 19, 89-116.

Lewis, G., 1987. A collector's history of English Pottery, Suffolk, Antique Collectors' Club, Woodbridge.

Manuel Casimiro, T., 2011. *Portuguese Faience in England and Ireland*. British Archaeological Reports International Series 2301.

MOLA, 2014. *Medieval and post-medieval pottery codes*. http://www.mola.org.uk/medieval-and-post-medieval-pottery-codes http://www.mola.org.uk/medieval-and-post-medieval-pottery-codes http://www.mola.org.uk/medieval-and-post-medieval-pottery-codes http://www.mola.org.uk/medieval-and-post-medieval-pottery-codes http://www.mola.org.uk/medieval-and-post-medieval-pottery-codes http://www.mola.org.uk/medieval-and-post-medieval-pottery-codes <a href="http://www.mola.org.uk/medieval-and-post-medieval

Nenk, B. and Hughes M., 1999. 'Post-medieval redware pottery of London and Essex', in G. Egan and R.L. Michael, *Old and New Worlds*. Oxbow Books, 235-245.

Orton, C., 1988. 'Post-Roman pottery from Mark Browns Wharf', in P. Hinton (ed.), *Excavations in Southwark, 1973-76, Lambeth 1973-79.* London and Middlesex Archaeological Society and Surrey Archaeological Society Joint Publication 3, 307-348.

Orton, C.R. and Pearce J.E., 1984. 'The pottery', in A. Thompson, F. Grew and J. Schofield. 'Excavations in Aldgate, 1974'. *Post-Medieval Archaeology* 18, 34-68.

Oswald, A., Hildyard, R.J.C. and Hughes, R.G., 1982. English Brown Stoneware 1670-1900. London.

Pearce, J., 1992. Border Wares, Post-Medieval Pottery in London, 1500-1700. Vol. 1, London, HMSO.

Pearce, J., 1999. 'The pottery industry of the Surrey-Hampshire Borders in the 16th and 17th centuries', in G. Egan and R.L. Michael, *Old and New Worlds*. Oxbow Books, 246-263.

Pearce, J., 2000. 'A late 18th-century inn clearance assemblage from Uxbridge, Middlesex'. *Post-Medieval Archaeology* 34, 144-186.

Pearce, J., Vince, A.G. and Jenner, A., 1985. *A dated type-series of London medieval pottery Part Two: London-type ware.* London and Middlesex Archaeological Society Special Paper 6.

Pearce, J. and Vince, A., 1988. A dated type-series of London medieval pottery Part 4: Surrey Whitewares. London and Middlesex Archaeological Society Special Paper 10.

Pearce, J.E., Vince, A.G. and White, R. with Cunningham, C., 1982. 'A dated type-series of London medieval pottery Part One: Mill Green ware'. *Transactions of the London and Middlesex Archaeological Society* 33, 266-298.

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Sudds, B., 2004. 'Post-Roman pottery assessment', in A. Douglas, *Phased Summary and Assessment Document of the Excavations at 130-162 The Highway, London Borough of Tower Hamlets*. Pre-Construct Archaeology Unpublished Report.

Tyler, K., 1999. 'The production of tin-glazed ware on the north bank of the Thames: excavations at the site of the Hermitage Pothouse, Wapping'. *Post-Medieval Archaeology* 33, 127-163.

APPENDIX 9: CLAY TOBACCO PIPE ASSESSMENT

Chris Jarrett

Introduction

A small sized assemblage of clay tobacco pipes was recovered from the archaeological work (nineteen boxes). Most fragments are in a good condition, indicating that they had been deposited soon after breakage or discard; although elements of some groups of clay tobacco pipes contained a quantity of residual material. Clay tobacco pipes occur as mostly small (under 30 fragments) sized groups, although 38 medium (31-100 fragments) and eleven large (over 100 fragments) sized groups also exist.

All of the clay tobacco pipes (6,285 fragments, of which 38 are unstratified) were recorded in a database format and classified by Atkinson and Oswald's (1969) typology (AO); 18th-century examples are by Oswald's (1975) typology and prefixed OS. Non-local bowls were also recorded according to Oswald (1975) and assigned to his regional coding where possible, while the Dutch shape was catalogued according to Atkinson and Oswald (1972) and prefixed AT. The pipes are further coded by decoration and quantified by fragment count and follow the guidelines for recording clay tobacco pipes (Higgins 2017). Where possible the 17th-century stamp dies have been paralleled to those in the London catalogue established by MOLA (n.d.). The tobacco pipes are discussed by their types and distribution. Bowls with decoration and or makers' marks have been assigned small find numbers, which are not presented here, but available in the database. The assemblage is notable for containing large sized groups of pipes, as well as a small number of non-local and imported bowls, which include single Dutch and Ottoman bowls, besides two late 19th-century Continental porcelain shapes.

The clay tobacco pipe types

The clay tobacco pipe assemblage from the site consists of 1,511 bowls, 4,431 stems and 343 mouth parts. The clay tobacco pipe bowls range in date between c.1580 and 1910. The majority of the bowls show evidence for being smoked. The extent of milling of the rim and the degree of burnishing of 17th-century bowls are shown in Tables 1 and 2. The possible pipe makers of the bowls have been omitted from this report (see Oswald 1975), except for some of the master pipe makers who could be readily identified or whose products are frequent in the assemblage.

Bowl type	Date range	Damaged bowls	No milling	A quarter	Half	Three quarters	Full	Total
AO5 S	1580–1610						1	1
AO4	1610–1640		1	1	1		6	9
AO5	1610-1640		4	1		7	10	23

Bowl type	Date range	Damaged bowls	No milling	A quarter	Half	Three quarters	Full	Total
AO6	1610–1640					1	3	4
AO7	1610–1640						1	1
AO9	1640–1660	1	1		1	2	5	10
AO10	1640–1660	10	8	5	3	9	19	54
AO11	1640–1670	1	1				2	6
AO12	1640–1670		1					1
AO13	1660–1680	12	5	5		7	4	34
AO13V	1660–1680			2	1	3		9
AO15	1660–1680	1	1	2	2	9	6	21
AO18	1660–1680	40	2	28	22	36	8	139
AO19	1680–1710				1			3
AO20S	1660–1680		1	5	1	1		8
AO20	1680–1710	6	8	11	2	3		42
AO21	1660–1680		8					11
AO22	1680–1710	27	54	41	9	11	3	219
BR5B	C.1680-1730					1		1
BRST9	1660–1690			1				1
NLOC						1	2	3

Table 1: TBF10: Extent of milling found on 17th-century bowls

Bowl form	Date range	Not determined	Poor	Average	Good	Total
AO5 S	1580–1610				1	1
AO4	1610–1640		1	8		9
AO5	1610-1640		1	12	9	23
AO6	1610–1640		1	3		4
AO7	1610–1640				1	1
AO9	1640–1660		2	6	2	10
AO10	1640-1660		3	34	17	54
AO11	1640–1670			6		6
AO12	1640-1670				1	1
AO13	1660–1680		2	31		34
AO13V	1660–1680			9		9
AO15	1660–1680		1	18	2	21
AO18	1660–1680		2	118	18	139
AO20S	1660–1680			8		8
AO19	1680–1710			1		3
AO20	1680–1710	2		22	17	42
AO21	1680–1710			9		11
AO22	1680–1710		8	158	27	219
	C.1680-1730			1		1
BRST9	1660–1690			1		1
NLOC				3		3

Table 2: TBF10: Quality of burnishing found on 17th-century bowls

c.1580-1610

AO5 S: 1 bowl. A very small bowl of c.1580-1610 dated type and a small version of the later AO5 shape. The base of the heel has a circular relief stamp of a flower or star with a central dot and seven spokes surviving, context [304]

1610-1640

AO4: 9 bowls with a sloping bowl and a rounded profile, most of which were residual and only two were contemporaneous (contexts [273] and [764]). None are maker marked.

AO5: 23 bowls with a flat heel and a rounded profile. Only eleven were contemporaneous and found as mostly single examples in the contexts they occurred in: [145], [309], [377], [401], [764], [1614], [1699], [1933] and [2186], except for two examples found in deposit [387]. Only three of the bowls have marker marks found on the underside of the heels:

Relief oval stamp with a cross and found on a taller version of the bowl shape, context [387].

Incuse heel stamp of a possible sun with six curving 'rays', context [377].

W I: one bowl with the initials in relief and three lines above and below the letters (MOLA die number 100107), context [764].

AO6: 4 bowls with a rounded profile and a spur, most of which were residual, except for the example found in context [85].

AO7: 1 bowl with a rounded front and humped back and a small heel, residual in context [363].

1640-1660

AO9: 10 bowls, of which eight were contemporaneous and found in contexts as mostly single examples: [111], [311], [317] and [1658], except for two examples found each in deposits [289] and [363].

AO10: 54 heeled bowls with a rounded profile, of which 24 are contemporaneous or broadly so and were found in contexts [143], [145], [277], [324], [328], [333], [401], [416], [1571] and [2186], except for two examples each found in deposit [309], [373], three items were each found in deposits [273], [401] and five were noted in context [317]. Seven bowls have makers' stamps all of which are in relief and found on the underside of the heels, unless otherwise stated:

A sub-rounded stamp with a central circle and three evenly spaced points around it, context [289].

A circular stamp with a cross and semi-circles in each quadrant, context [181].

A circular heel stamp with a cross, a possible bird and other symbols, context [111].

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A diamond shaped stamp with a *fleur de lis* in relief, found on the underside of the heel and on the top of the stem, together with three milled lines around the stem before the start of the bowl, context [273].

A heart-shaped stamp with a bead border surrounding three 'trees' and a three armed symbol with additional dots, context [143].

I C: 1 bowl, a feint circular stamp, containing I C and possible mullets, similar to MOLA die number 10012, context [279].

E G: 1 bowl, found as a small circular stamp with a large E and a small G and an uncertain mark above the G, context [416].

1640-1670

AO11: 6 short bowls with a heart-shaped heel, five of which are contemporaneous: [171], [181], [401], [944] and [1933]. The bowl type is usually not maker marked, however a rare example is noted:

G C: 1 bowl with a heart-shaped stamp and surround containing the initials, context [181].

AO12: 1 bowl, contemporaneous and found in context [1714].

1660-1680

AO13: 33 heeled bowls with a rounded profile and the front overhangs, of which 28 bowls are contemporaneous and found in contexts as mostly single examples: [111], [146], [252], [259], [317], [320], [430] and [461], except for two examples were found in deposit [311], three examples were noted in context [195], four examples in context [123] and the greatest quantity of ten bowls occurred in deposit [211].

AO13V: 9 heeled bowls with a pronounced rounded barrel-shaped profile, of which eight were contemporaneous and found in contexts as mostly single examples: [135], [279], [388] and [1827], except for three examples found in deposit [211]. One bowl is maker marked:

A bowl with a biconical profile (possibly non-local) with part of a relief stamp on the underside of the heel consisting of three dots with radiating fronds, context [135].

AO15: 21 rounded, spurred bowls which all appear to be contemporaneous and found in deposits as mostly single examples: contexts [111], [130], [146], [181], [269], [279], [289], [348], [461], [536] and [1708], except for two examples were each found in deposits [195], [211], [262] and [363]. None are maker marked which is typical for the AO15 bowl shape.

AO18: 139 heeled bowls with a straight-sided or slightly barrel-shaped profile. One hundred and twenty-nine of the bowls appear to be contemporaneous or occur in deposits dating to the end of the bowl shapes production period. The majority of the bowls occur singularly in deposits: contexts [15],

[84], [146], [177], [205], [252], [346], [361], [461], [775], [1083], [1532], [1708], [1709], [1724], [1747] and [1752], while two examples were each found in deposits [135], [244], [262], [269], [348], [369] and [5338], three examples were each found in deposits [181] and [338], four bowls were noted in [311], five items in [269], nine bowls in both [123] and [134], while the largest concentrations were noted in deposits [111] and [195] and found as ten and twelve bowls respectively. None of the bowls are maker marked.

AO20S: 8 heed bowls, which are a taller version of the AO13 shape and a shorter version of the AO20 type. Seven bowls are contemporaneous with single examples found in deposits [134], [211] and [1708], while four examples were noted in deposit [338].

1680-1710

AO19: 3 tall spurred bowls with rounded profiles and contemporaneous in deposits [1554], [1709] and [1733].

AO20: 42 tall heeled bowls with rounded profiles, 32 of which are contemporaneous and occur as single examples in contexts [90], [308], [1710], [1733] and [1769], while two examples were each found in deposits [244] and [1774], three examples were noted in context [1345], four and five bowls were present in deposits [782] and [1554] respectively and the largest concentration were present in deposit [348] as eleven items. A number of maker marked examples are recorded and were usually recorded with the initials on the sides of the heel unless otherwise stated:

I ?: 1 bowl, unstratified.

W ?: 1 bowl, context [1550].

N B: 1 bowl with crowns above the initials, context [1545].

T N: 1 bowl, a small stamp on the underside of the heel with 'T N' in relief, context [782].

AO21: 11 heeled bowls with a rounded front and straight back all of which were contemporaneous. Single examples were found in contexts [90], [173], [897], [1710] and [1720], while three examples were each found in deposits [1545] and [1759].

AO22: 219 tall heeled bowls with straight or very slightly rounded sides. Of these bowls, 149 were contemporaneous and often occurred as one or two bowls in contexts, although larger numbers were found in contexts [1720], found as ten examples, [348], eleven items, [782], thirteen bowls, while the largest concentration was recovered from deposit [1564] as 27 bowls. Sixteen bowls are maker marked and have the following marks recorded:

With crowns on the heels and no initials, context [1653].

I ?: 1 bowl, with moulded flowers above the initials, context [1574].

W ?: 1 bowl, contexts [1522].

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A A: 2 bowls, contexts [1648].

E B: 1 nicely burnished bowl with a small circular stamp on the underside of the heel with 'E B' in relief, context [1592].

W B: 1 bowl with crowns above the initials, context [1769].

W I: 1 bowl with a small circular relief stamp on the underside of the heel containing W I and dots above and below the initials, context [1736].

H M: 1 bowl, context [1696].

?B N: 1 bowl, with crowns above the initials, context [1513].

? R: 1 bowl, context [1736].

IT: 1 bowl, context [1712].

? W: 1 bowl, context [1653].

G W: 1 bowl, context [1720].

S W: 1 bowl, context [1736].

1690-1720

AO23: 2 tall spurred bowls with a rounded profile and constricted rim and contemporaneous in contexts [10] and [1653].

1700-1780

AO25 (damaged OS10, OS11 and OS12 bowls that cannot be differentiated between): 11 heeled bowls. Maker marked examples are recorded as:

A ?: 1 bowl, context [1653].

W ?: 1 bowl, with crowns above the initials, context [1757].

W B: 1 bowl, context [1513].

T M: 1 bowl, with crowns above the initials, unstratified.

R (only the family initial survives) with a crown: 1 bowl, context [1757].

1700-1740

AO24 (American export-type): 1 rounded bowl without a heel or spur, residual in context [1686].

OS10: 267 heeled, upright tall bowls with a rounded front and straight back and thick stems, of which 183 bowls were contemporaneous and individual contexts produced between 1-9 bowls, although low

numbers were more likely. However 20 OS10 bowls were noted in context [1545] and 42 examples were found in deposit [1653]. The makers' marks that occurred are recorded as:

With only crowns on each side of the heel: four bowls, contexts [800], [1603], [1653] and [1690].

Crowned flowers on the heel: 2 bowls, contexts [800] and [1545].

A raised dot only on the left side of the heel: 1 bowl, context [1686].

A raised dot on the right side of the heel: 2 bowls, context [1603].

Raised dots on each side of the heel: 4 bowls, single examples were recorded in contexts [1561] and [1590] and two examples were noted in contexts [1545] and [1603.

A fleur de lis above a flower on each side of the heel: 1 bowl, context [1629].

Wreaths or flowers on each side of the heel: 4 bowls, context [1550].

?W only on the left side of the heel and with crowns: 1 bowl, context [13].

I only on the left side of the bowl: 1 bowl.

Illegible initials: 8 bowls and single examples were found in contexts [1534], [1574], [1653] and [1759], while two examples were noted in context [1545].

E ?: 2 bowls, contexts [1653] and [1733].

I ?: 1 bowl, with crowns above the initials, , context [1653].

M ?: 3 bowls, contexts [1561] and [1648], while an example with crowns was noted in context [1648].

W ?: 1 bowl, context [1653].

A A: 1 bowl, context [1648].

N B: 1 bowl, context [1759].

S B: 3 bowls, context [1653].

T B: 2 bowls, contexts [1600] and [1647].

W B: 1 bowl, context [1550].

I C: 2 bowls, contexts [1653] and [1712].

I or T C: 1 bowl, unstratified.

M ?C: 1 bowl, context [1653].

T C: 4 bowls, contexts [844], [1603], [1686] and [1712].

M D: 1 bowl, context [796].

T D: 2 bowls, contexts [1582] and [1590].

? G: 1 bowl, context [762].

E H: 1 bowl, context [1653].

I H: 1 bowl with crowns above the initials, context [1550].

R H: 1 bowl, context [1594].

T H: 2 bowls, context [66] and additionally with crowns above the initials, context [1561].

? I: 1 bowl, context [29].

A I: 1 bowl, with crowns above the initials, context [1721].

? M: 4 bowls, contexts [1653] and [1712].

?C M: 1 bowl, context [1653].

H M: 2 bowls, context [1696].

I M: 7 bowls, single examples found in contexts [1513], [1515], [1534], [1629], [1648] and [1653], besides a single example additionally with crowns above the initials recorded in context [849].

R M: 3 bowls, context [801] and x2 examples context [1653], Richard Manby (1), 1701-1723, St Mary's, Whitechapel (Oswald 1975, 141).

T M: 1 bowl with crowns above the initials, context [1653].

W M: 9 bowls and, single examples were found in contexts [1513] and [1651], while items with additional crowned initials occurred as single examples in contexts [847], [1561], [1635] and [1653], while two examples were found in context [1550]. William Manby (2), 1719-63, working in Green Dragon Alley, Limehouse (Oswald 1975, 142).

?W ?M: 1 bowl, context [1528].

? P: 2 bowls, contexts [1545] and [1686].

M P: 1 bowl, context [1561].

W P: 6 bowls, single examples found in contexts [1545], [1561], [1653] and [1674], while two examples were found in context [1629].

? R: 1 bowl, context [1545].

I R: 8 bowls, single examples were found in contexts [1550] and [1653] and those with additional crowns above the letters were found as single examples in contexts [66] and [1759], while two examples were noted in context [1545].

MR: 1 bowl, unstratified.

P R: 1 bowl, context [259].

W R: 3 bowls, contexts [259], [779] and [1561].

W ?R: 1 bowl, context [1513].

? S: 1 bowl, context [1550].

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I ?S: 1 bowl, with crowns above the initials, context [1515].

A S: 1 bowl, context [1561].

C S: 1 bowl, contexts [1696].

H S: 2 bowls, contexts [1561] and [1759].

I S: 3 bowls, context [1566] and with crowns above the initials, contexts [779] and [1653].

I or T S: 1 bowl, context [1716].

W S: 4 bowls, unstratified, contexts [1534], [1561] and [1653].

IT: 1 bowl, contexts [1523].

I W: 2 bowls, contexts [762] and [1759].

S W: 2 bowls, contexts [536] and [1648].

1730-1760

OS11: 2 heeled, upright tall wide bowls with a rounded front and straight back. One example was found in context [387], while the other is maker marked:

E R: 1 large, heeled bowl with a small circular relief stamp on the back of the bowl containing the initials E R with tobacco pipe leaves above and below the letters, context [1590].

1730-1800

AO26: 1 damaged spurred bowl of either an OS22 or OS23 type.

S ?B: 1 bowl, the S is reversed and a fragment of the back of the bowl has an incuse circular stamp with diagonal notched edges with only a letter S surviving, context [1653].

1730-1780

OS12: 281 upright tall heeled bowls with a rounded front and straight back and thin stems, 256 of which were contemporaneous. Most contexts only produced one or two bowls, although the largest numbers were found in context [801] (fourteen examples) and [1653] (171 items). The maker marked examples consist of:

With only crowns on each side of the heel: three bowls, contexts [1515], [1586] and [1653].

I ?: 3 bowls, x2 plain, x1 with crowns above the initials, all found in context [1653].

Illegible initials: 2 bowls, contexts [1653] and [1712].

?P ?: 1 bowl, context [1653].

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W ?: 1 bowl, context [1653].
HB: 2 bowls, context [796].
I B: 1 bowl, with crowns above the initials, context [1648].
S B: 2 bowls, context [1653].
W B: 1 bowl, with crowns above the initials, context [1653].
W C: 6 bowls, context [800].
H D: 1 bowl, context [1653].
T D: 1 bowl, context [1757].
E E: 1 bowl, context [1552].
S E?: 1 bowl, context [1653].
E? G: 1 bowl, context [1506].
B H: 1 bowl, context [1712].
I H: 1 bowl, context [1653].
II: 2 bowls, context [1653].
W I: 2 bowls, context [1653].
B? I?: 1 bowl, context [1653].
I?H: 1 bowl, context, context [1139].
W ?K: 1 bowl, context [844].
? M: 2 bowls, contexts [1653] and [1667].
H M: 27 bowls, single bowls noted in contexts [270], [1515], [1717] and [1777], while 23 examples
were noted in deposit [1653].
I M: 24 bowls, single examples were found in context [779], [833], [891], [1513], [1653], [1687] and
[1691], while two examples were found in context [844], three items were noted in context [1526] and
deposit [1530] produced eight bowls.
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P M: 1 bowl, x1 context [1727].

T M: 1 bowl, context [1029].

W M: 12 bowls, one example have only the initials, context [1653], while the rest have crowns above the initials; singular occurrences in contexts [1712] and [1777] and nine examples were found in deposit [1653]. William Manby (2), 1719-63, working in Green Dragon Alley (Oswald 1975, 142).

T M?: 1 bowl, context [1653].

E N?: 1 bowl, unstratified.

. R: x 5 bowls, context [1653].

E R: 69 bowls, of which 30 are only initialled (all found in context [1653]), while 39 have a small circular stamp on the back of the bowl containing the initials E R with scrolls or leaves above and below the initials. There are two distinct types of stamp where the letters are either incuse (28 examples in total) or in relief (11 examples in total), although there is more than one die represented in each of the stamp types. Incuse stamps occur as single examples in deposits [1550], [1629] and [1648] although 25 examples occurred in context [1653], while the relief stamps are found as a singular unstratified example and present in context [1647], besides two examples present in context [1550], while seven were noted in deposit [1653]. Additionally there are single bowls where one of the initial are uncertain that are probably the products of this maker: ?E R (context [1515]) and E ?R (context [1653]). Who the E R pipe maker was is not yet documented, although he or she must have been working in the local area as evinced by the large number of pipe bowls recorded on the study area.

T R: 2 bowls, context [801].

W R: 9 bowls, with crowns above the initials, singular examples were found in contexts [1506], [1574], [1653], [1686] and [1712], while two examples each occurred in contexts [1515] and [2175].

W R?: 1 bowl, context [1653].

With only the family name S present: 1 bowl, context [1653].

?F S: 2 bowls, with crown above the initials, context [1653].

H S: 2 bowls, context [1653].

I S: 3 bowls, contexts [781] and [1653] and a single example with crowns above the initials was present in [1506].

M S: 6 bowls, context [1653].

W S: 2 bowls, contexts [1513] and [1674].

H T: 1 bowl, context [1777].

I T: 3 bowls, one plain bowl (context [1653]) and two armorial bowls with the Prince of Wales's feathers made in different moulds (contexts [1550] and [1653].

I W: 2 bowls, contexts [1550] and [1653].

M W: 3 bowls, with crowns above the initials, context [1653].

S W: 3 bowls, x1 bowl context [1526] and with crowns above the initials, contexts [1653] and [1712].

T W: 2 bowls, contexts [1653] and [1757].

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OS22: 7 spurred bowls with a straight back and a more angular front profile, all found in context [1653]. The initialled examples are:

S B: 1 bowl.

WR: 1 bowl.

I S: 1 large bowl with moulded armorial decoration featuring a circular London shield and dragon supporters.

R W: 1 bowl.

1760-1780

OS23: 1 tall spurred bowl with a straight back and a rounded front which is maker marked:

? S: 1 bowl, decorated with the Hanoverian coat of arms and with a tulip on the front of the bowl.

1760-1830

AO27T: 15 tall bowls with a square heel, straight back and rounded front that occur in eight contexts as one or two bowls, except for context [1600] and [1629], which produced four and five bowls respectively. The maker marked examples are:

I B: 2 bowls, contexts [1648] and [1696].

W B: 1 bowl, context [1600].

I F: 5 bowls, two of which are plain (contexts [1600] and [1629]) and another two bowls have vertical fluting of different sizes, one of which has oak leaf borders (context [1600]) and the other has wheat ear borders (context [1629]).

I ?P: 1 bowl, context [1600].

T R: 5 bowls, two of which are plain (contexts [1686] and [1696]), and three have a circular incuse stamp on the back of the bowl with the name 'T/RUS/COE' in a notched border (contexts [801], [1629] and [1667]). Thomas Roscoe (Ruscoe), 1799-1807, Limehouse (Oswald 1975, 144).

T S: 1 bowl, context [1629].

IT: 1 bowl, context [1549).

1770-1845

AO27: 72 short bowls with a square heel, straight back and rounded front. The majority of the contexts that produced this bowl type contained only one or two examples, although deposits [1513],

[1542] and [1696] each produced seven bowls, while eight bowls occurred in context [1686] and nine items were noted in context [796]. The maker marked examples noted are:

With stars or flowers on the sides of the spur: 3 otherwise plain bowls, (contexts [1513], [1516] and [1542]).

? ?: 2 bowls, plain (context [1531]) or with evidence of fluting (context [1510]).

I ?: 1 bowl, context [1537].

? B: 1 bowl, context [1542].

I B: 5 bowls; singular examples were found in contexts [1518] and [1696], while three items were noted in context [1542].

P B: 1 bowl, unstratified.

R B: 1 bowl, context [1629].

T B: 1 bowl, context [14].

J C: 1 bowl, context [1511].

H D: 1 bowl, context [1696].

W D: 1 bowl, context [796].

? E: 1 bowl, with evidence of vertical fluting, context [1510].

I/H E: 1 bowl, unstratified.

I ?E: 1 bowl, context [1531].

? F: 1 bowl, wheat ear borders, with additional grasses only on the front of the bowl, context [2167].

I F: 3 bowls, x2 plain, contexts [1561] and [1696], x 1 with fluting, context [1629].

T F: 1 bowl, with a fox and grapes design, context [2169].

I G: 3 bowls, x2 context [1513], x1 context [1523].

J G?: 1 bowl, context [1531].

I H: 2 bowls, contexts [1542] and [1556].

W H: 1 bowl, context [762].

I M: 1 bowl, context [1696].

B P: 1 bowl, wheat ear with grasses border on the front and back of the bowl, context [1647].

C or G P: 1 bowl, context [1531].

HP: 1 bowl, wheat ear with grasses border on the front and back of the bowl, context [1510].

I P: 2 bowls, unstratified and context [1696].

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J P: 1 bowl, wheat ear with grasses border on the front and back of the bowl, context [1629].

E R: 1 bowl, context [1696].

I R: 2 bowls, contexts [1542] and [1696].

T R: 1 bowl, context [1696].

W R: 4 bowls: one each found in contexts [796], [1513], [1629] and [1686].

? S: 1 bowl, context [1537].

I S: 4 bowls, two bowls each found in context [796] and [1696].

W S: 1 bowl, context [536].

I T: 2 bowls, context [1686].

H W: 7 bowls, plain, x5 context [796], uncertain decoration (context [1513]), with fluting of different sizes (context [1537]).

1820-1860

AO28: 33 tall spurred bowls with a straight back and a rounded front profile. The largest quantity of bowls of this type were found in context [2171] as twelve bowls, while most contexts produced only one or two bowls. The maker marked examples are as follows:

Wreaths or flowers on the side of the heel: 1 bowl, context [2171].

? ?: 1 bowl, context [2167].

? H: 1 bowl, wheat ear with grasses border on the front and back of the bowl, context [1542].

? I: 2 bowl, contexts [1629] and [1542].

J B: 1 bowl, initials on the spur, circular incuse stamp on back of bowl containing 'BUMBY/SHADWELL' in serif letters with a leafy surround (context [1500]. This local pipe maker is as yet undocumented.

W B: 1 bowl, context [2171].

J C: 1 bowl, a leaf border survives on the back of bowl, context [1704].

G? C: 1 bowl, wheat ear borders on the front and back of the bowl, context [2171].

? E: 1 bowl, wheat ear borders, with additional grasses only on the front of the bowl, context [2171].

I E: 3 bowl, x2 wheat ear borders on the front and back of the bowl, context [2171].

I F: 2 bowl, context [1629].

W M: 2 bowl, acorn and oak leaf border, context [2167].

J O: 1 bowl, wheat ear with grasses border on the front and back of the bowl, context [757].

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T P: 1 bowl, context [2167].

I S: 1 bowl, wheat ear borders on the front and back of the bowl, context [2171].

IT: 1 bowl, context [2171].

S T: 1 bowl, context [1542].

W T: 1 bowl, wheat ear borders on the front and back of the bowl, context [757].

I W: 1 bowl, context [1542].

1840-1880

AO28S: 10 spurred short bowls with a straight back and a rounded front profile. Singular examples were found in contexts [1518], [1537] and [1542], while six bowls were noted in deposit [2167]. Six of the bowls are maker marked:

J C: 2 bowls, plain (context [2167]), wheat ear borders on the front and back of the bowl (unstratified).

I F: 1 bowl, wheat ear borders on the front and back of the bowl, context [1542].

J H: 1 bowl, wheat ear borders on the front and back of the bowl, context [2167].

I ?O: 1 bowl, wheat ear with grasses borders on the front and back of the bowl, context [1537].

I R?: 1 bowl, wheat ear with grasses borders on the front and back of the bowl, context [1518].

?M S: 1 bowl, wheat ear borders on the front and back of the bowl, context [2167].

AO29: 45 heeled bowls with a rounded profile and an angled rim. The bowl type usually occurred in only small numbers (between 1-5 bowls) in contexts that it occurred in, except for deposit [2167] that produced nine bowls. The makers' marks consist of:

With a star or flower only on both sides of the heel: 1 bowl, context [854].

With a star or flower only on the right side of the heel and wheat ear borders, with additional grasses only on the front of the bowl: 1 bowl, context [1542].

Illegible initials: 1 bowl, wheat ear borders on the front and back of the bowl, context [2167].

H?: 1 bowl, acorn and oak leaf border on the front of the bowl, oak leaf border on the back of the bowl, context [1542].

S E: 1 bowl, acorn and oak leaf border on the front of the bowl, oak leaf border on the back of the bowl, context [1542].

I F: 3 bowls, x1 plain, context [2175], x1 with leaf border on front and back of the bowl (context [2175]), x1 wheat ear borders, with additional grasses only on the front of the bowl (context [1542]).

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H G: 2 bowls, x1 plain, x1 acorn and oak leaf border on the front of the bowl, oak leaf border on the back of the bowl (context [2167]).

? H: 3 bowls, x2 plain, x1 wheat ear borders on the front and back of the bowl, context [2167].

D H: 1 bowl, acorn and oak leaf borders on the front and back of the bowl, context [2167].

I H: 2 bowls, context [1730].

J H: 1 bowl, wheat ear with grasses border on the front and back of the bowl, context [2167].

J K: 1 bowl, wheat ear borders on the front and back of the bowl, context [2167].

W M: 8 bowls; plain (x1 unstratified, x1 contexts [854], x1 [2171]), acorn and oak leaf border on the front of the bowl (context [1730]), acorn and oak leaf border on the front of the bowl, oak leaf border on the back of the bowl (x1 context [1542], x3 (context [2167]).

F S: 1 bowl, acorn and oak leaf border on the front of the bowl, oak leaf border on the back of the bowl, context [2167].

J S: 1 bowl, a leaf border of a non-specific type, context [2167].

? T: 1 bowl, acorn and oak leaf border on the front of the bowl, oak leaf border on the back of the bowl, context [2167].

L T: 1 bowl, leaf border on the back of bowl, unstratified.

With bend shields on each side of the heel: 1 bowl, context [2167].

1840-1910

AO30: 1 bowl, without a spur or heel and surviving as a base with evidence of a moulded rib decoration, context [1550].

Non-local bowls

Bristol

1660-1690

BRST 9: one bowl of a chinned type, context [259].

Broseley type

c.1680-1730

BR5B, one bowl with a shallow splayed, short tennis racket-type heel and intermittent milling on the rim, context [211].

Non-local

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Context [181] produced two AO10 sized and shaped bowls with a more waisted shape than the norm and with a sloping heel (as found on the AO4 bowl type). These variant shapes probably represent non-local bowls dated c.1640-60. A third mid-late 17th-century dated bowl was recovered from context [536] and has a humped back with a pronounced deep heel.

Imported pipes

Dutch

c.1710

AT20: one heeled bowl with an angled, straight-sided bowl becoming waisted on the lower half. The front of the bowl is missing, although milling survives on the back of the bowl and right on the edge of the rim. The underside of the heel has a small circular relief stamp with what appears to be a T or another motif, context [1733].

Ottoman bowl

An unstratified 18th- or 19th-century Ottoman-type bowl survives mostly as the shank, with a rounded cordon bordered by a line of milling. The sides and bottom of the stem is fluted and seven triangular stamps occur in the apexes of the flutes, while the top of the stem is plain and rounded. The bowl is mostly missing although the surviving base has broad vertical ribs. The item is made in a red clay and may be a Tophane type.

Porcelain bowls

Two Continental porcelain bowls are recorded. The first was found in context [2156] and has a Dutch shape with an angled, rounded bowl with a heel. The front of the bowl has painted enamelled decoration in the form of a female figure in a red dress with a black over dress and a blue head scarf. Her hands are clutched to the area of her throat. The foreground is painted yellow and brown with surrounding it green grassy foliage. The second item was recovered from context [2167] and has an egg-shaped bowl, with a bevelled rim. A small hole at the base of the bowl leads to a U-shaped stem, the base of which resembles a ships stern and a keel formed of two panels, the end of which end in a rounded terminal and a short cylindrical stem occurs above this with a shank, the latter with a copperalloy fitting. Both items date to the mid-late 19th century.

Decorated stems

A number of decorated stems are worthy of comment. A late 17th-early 18th-century dated stem has a milled line around its circumference (context [90]). A probable stem from a Dutch bowl dated to the early 18th century has moulded relief decoration depicting a possible elongated pomegranate and

flowers, together with a dot and line border around the circumference (context [1759]. An 18th-century item is represented by a stem with rouletted decoration consisting of a line with very small ring and dots and pendant motifs and occurs with a separate small circular stamp containing in relief leaves above the name 'WEBB?' (context [1603]). A number of 18th-century pipe makers sharing the family name Webb worked in west London, particularly the Westminster area (Oswald 1975). Two early 19th-century stems with moulded names in relief together with floral decoration are recorded. The first has a name and address consisting of 'WIE?C H E...' and 'PETI COAT LANE' (context [1600]). It is presently not known who this pipe maker was. The second stem has the name and address of 'DITCHBURN' and 'EDWARD ST STEPNEY' (context [1542]). The item was made by William Ditchburn, working at the address on the stem during the period 1821-45 (Oswald 1975, 135). The latest item has an incuse stamp consisting of the name 'W. DAVIS.' reading along the plain stem (context [2165]). The stamp is typical of the 1870s although the pipe maker is not documented in Oswald (1975).

Distribution

The distribution of the clay tobacco pipes is shown in Table 3, which demonstrates the area, trench location, phase, number of fragments, assemblage size, date range of the latest bowl type (context ED and context LD) and a considered deposition date for each context the material occurred in. The clay tobacco pipes were recovered from Phases 5.1-7.2, although a small number of contexts were dated to earlier phases and the material is presumed to be intrusive.

Context	Size	No. of frags	Trench	Phase	Description	Context ED	Context LD	Spot date
4	S	2	1	6.2	Fill of cess pit [5]	1680	1710	1680–1710
6	S	3	1	6.2	Fill of well [30]	1580	1910	1580–1910
9	M	12	1	6.1	Fill of well [41]	1580	1910	1580–1910
10	S	38	1	6.1	Fill of well [41]	1690	1720	1680–1710
13	S	3	1	6.2	Fill of cess pit [5]	1700	1740	1700–1740
14	S	12	1	6.1	Fill of cess pit [54]	1770	1845	1770–1845
15	s	1	1	6.2	Demolition rubble	1660	1680	1660–1680
29	S	1	1	6.1	Fill of [59]	1700	1740	1700–1740
34	S	7	1	5.2	Fill of [31]	1700	1740	1700–1740
45	S	9	1	5.2	Lower fill of [31]	1580	1910	1580–1910
46	S	7	1	6.1	Fill of cess pit [54]	1580	1910	1580–1910
53	s	5	1	6.1	Backfill of construction cut [64]	1680	1710	1680–1710
57	S	5	1	6.2	Backfill of construction cut [56]	1580	1910	1580–1910
58	S	9	1	5.2	Fill of cess pit [31]	1580	1910	1580–1910
66	М	32	1	6.1	Fill of well [41]	1700	1740	1700–1740
84	s	11	1	6.2	Backfill to construction cut [80]	1660	1680	1660–1680
85	S	3	1	5.2	Fill of cut [77]	1610	1640	1610–1640
90	M	42	1	6.1	Fill of construction cut [64]	1700	1740	1700–1740
95	S	5	1	5.2	Fill of [96]	1580	1910	1580–1910
98	S	4	1	6.2	Fill of culvert [75]	1660	1680	1660–1680
108	s	1	1	6.1	Fill of drain [109]	1580	1910	1580–1910
111	М	46	1	5.2	Fill of cut [112]	1660	1680	1660–1680
123	М	40	1	6.1	Fill of cut [124]	1680	1710	c.1680

Context	Sizo	No. of frags	Trench	Dhasa	Description	Context ED	Context I D	Snot date
	M	15	1	5.2	Fill of cut [131]	1660	1680	1660–1680
		29	1	5.2	Fill of barrel well	1680	1710	c. 1680
	s S	12	1	5.2			1680	1660–1680
	s S	3	1	6.1	Backfill to construction cut [144]	1640	1660	1640–1660
		5	1		Backfill to cut [149]	1640	1660	1640–1660
	o M	36	1	5.2	Backfill to construction cut [147]	1660	1680	1660–1680
	S	3	1	5.2 6.1	Fill of cut [155]	1580	1910	1580–1910
	s S			5.2			1910	
	s S	1 4	1		top fill of cut [157] Fill of cut [161]	1580	1910	1580–1910 Mid 17th c
	s S			6.1 7.2		1580		1580–1910
		3	1		Construction cut	1580	1910	
	S S	1	1	5.2	Fill of cut [185]	1580	1910	1580–1910
	_	21	1	5.2	Fill of cut [157]	1640	1670	1640–1670
	_			6.1	Fill of cess pit [174]	1700	1740	1700–1710
	S	1	1		Backfill to construction cut [175]	1580	1910	1580–1910
		24	1		Fill of cut [230]	1660	1680	1660–1680
		29	1	6.1	Fill of cut [182]	1660	1680	1660–1680
_	S	7	1	5.2	Sandy silt - post-med	1580	1910	1580–1910
	S	1		5.2	Garden soil?	1580	1910	1580–1910
	_	2	1		Fill of cut [189]	1580	1910	1580–1910
		5	1	5.2	Garden soil?	1660	1680	1660–1680
		2	1	3.6	Sandy clayey silt	1680	1710	1680–1710
		44	1	5.2	Fill of cut [206]	1660	1680	1660–1680
	S	28	1	5.2	Fill of cut [204]	1680	1710	1680–1710
	S	7	1	6.1	Fill of cut [208]	1580	1910	1580–1910
	S	3	1	6.2	Backfill to construction cut [210]	1580	1910	1580–1910
		64	1	5.2	Fill of cut [206]	1660	1680	c. 1680
	S	1	1	5.1	Fill of cut [316]	1580	1910	1580–1910
	_	6	1	5.1	Fill of cut [218]	1580	1910	Late 19th c
		4	1	5.2	Fill of cut [223]	1580	1910	1580–1910
220	S	1	1	5.2	Dumped deposit	1580	1910	1580–1910
	S	2	1	5.2	Fill of cut [204]	1580	1910	1580–1910
244	M	30	1	5.2	Fill of cut [247]	1680	1710	1680–1710
245	S	1	1	5.1	Fill of cut [251]	1580	1910	1580–1910
246	S	2	1	6.2	Fill of feature [235]	1580	1910	1580–1910
252	М	49	1	5.2	Fill of barrel well	1660	1680	1660–1680
		2	1	5.1	Fill of cut [258]	1580	1910	1580–1910
259	М	44	1	5.2	Fill of cut [260]	1660	1680	1660–1680
262	S	9	1	5.2	Fill of cut [206]	1660	1680	1660–1680
266	S	1	1	5.1	Fill of cut [267]	1580	1910	1580–1910
269	S	16	1	5.2	Garden/horticultural soil	1660	1680	1660–1680
270	S	8	1	5.2	Fill of cut [223]	1730	1780	1730–1780
273	S	23	1	5.1	Fill of cut [274]	1640	1660	1640–1660
275	S	1	1	5.1	Fill of cut [276]	1580	1910	1580–1910
277	S	2	1	5.1	Fill of cut [267]	1640	1660	1640–1660
279	S	10	1	5.2	Rubbish pit	1660	1680	1660–1680
	S	1	1	5.1	Fill of cut [287]	1580	1910	1580–1910
	S	19	1	5.2	Fill of cut [290]	1660	1680	1660–1680
	S	2	1	5.1	Fill of cut [292]	1580	1910	1580–1910
293	S	2	1	5.1	Fill of cut [294]	1580	1910	1580–1910
	S	5	1	5.2	Upper fill of well	1680	1710	1680–1710
	S	10	1	5.2	Fill of cut [299]	1580	1910	1580–1910
	S	1	1	5.2	Fill of cut [301]	1580	1910	1580–1910
		2	1	5.1	Fill of cut [305]	1580	1610	1580–1910
	_	4	1	5.2	Primary fill of well [310]	1680	1710	1680–1710
		4	1	5.2	Upper fill of cut [325]	1610	1640	1610–1640
309	S	4		J.Z				
		9			Backfill to construction cut [312]	1660	1680	1660–1680

Context	Size	No. of frags	Trench	Phase	Description	Context ED	Context I D	Snot date
317	S	26	1	5.1	Fill of cut [318]	1660	1660	c. 1660
319	s	1	1	5.2	Upper fill of cut [321]	1580	1910	1580–1910
320		3	1	5.2	Fill of cut [321]	1660	1680	1660–1680
324	s S	3 11	1	5.2	Fill of cut [325]	1640	1660	1640–1660
	s S					1640		
328		1	1	5.1	Fill of cut [329]		1660	1640–1660
333	S	1	1	5.2	Fill of cut [325]	1640	1660	1640–1660
338	S	25	1	5.2	Fill of cut [206]	1680	1710	c. 1680
340	S	1	1	5.2	Fill of cut [341]	1580	1910	1580–1910
_		21	1	5.2	Fill of cut [272]	1680	1710	1680–1710
346	S	10	1	5.2	Fill of barrel well	1660	1680	1660–1680
348	L	112	1	5.2	Fill of barrel well	1680	1710	1680–1710
361	S	3	1	5.1	Fill of cut [362]	1660	1680	1660–1680
363	_	27	1	5.2	Fill of cut [223]	1660	1680	1660–1680
369	_	5	1	5.2	Clayey silt	1660	1680	1660–1680
373		23	1	5.2	Fill of cut [223]	1640	1660	1640–1660
377	S	4	1	6.2	Fill of well[378]	1640	1660	1640–1660
387	S	14	1	5.2	Fill of cut [223]	1640	1660	1640–1660
401	S	9	1	5.2	Fill of cut [223]	1640	1660	1640–1660
416	S	1	1		VOID	1640	1660	1640–1660
417	s	2	1	5.2	Fill of cut [418]	1660	1680	1660–1680
422	S	1	1	5.1	Fill of cut [442]	1580	1910	1580–1910
430	S	2	1	5.2	Fill of cut [431]	1660	1680	1660–1680
436	S	1	1	5.2	fill of cut [437]	1580	1910	1580–1910
461	S	13	1	5.2	Fill of cut [461]	1660	1680	1660–1680
518	S	3	1	6.1	Fill of cut [517]	1580	1910	1580–1910
533	S	4	1	5.2	Fill of barrel [540]	1660	1680	1660–1680
	M	83	1	6.2	Fill of cut [537]	1760	1845	1680–1745
541	S	5	1	5.2	Fill of barrel [540]	1580	1910	1580–1910
559	S	1	1	6.1	Fill of timber structure [560]	1580	1910	1580–1910
574	S	15	1	6.1	Fill of tanning pit	1580	1910	1580–1910
591	S	1	1	6.1	Backfill to construction cut [561]	1580	1910	1580–1910
660		3	1	6.1	Fill of cut [661]	1580	1910	1580–1910
757		4	1	6.2	Fill of cess pit [739]	1820	1860	1820–1845
762	S	19	1	6.2	Fill of cess pit [739]	1770	1845	1770–1845
764		3	1	6.2	Silty sand - made ground	1610	1640	1610–1640
767	s	1	1		Fill of cut [774]	1580	1910	1580–1910
		2	1		Backfill to construction cut [763]		1680	1660–1680
	s	11	1		Fill of cut [[780]	1730	1780	1730–1740
773 781		8	1	6.1	Fill of cut [826]	1730	1780	1730–1740
		39	1	5.2	Fill of cut [822]	1680	1710	1680–1710
786	S	1	1	6.2	Fill of cut [787]	1580	1910	1580–1910
700 792	s S	1	1		• •	1580	1910	1580–1910
	-	80	1	6.1 6.2	Fill of cut [793] Fill of cut [797]	1780	1845	1790–1820
	-		-				1780	
800	S M	16	1	6.2	Fill of cut [816]	1730		1730–1780 1730–1780
_		48	1	6.2	Fill of cut [816]	1730	1780	
802		8	1	6.1	Fill of cut [803]	1580	1910	17th c
815		4	1	6.1	Fill of cut [804]	1730	1780	1730–1780
823		6	1	6.1	Fill of cut [824]	1700	1740	1700–1740
829	S	1	1	6.1	Fill of cut [830]	1580	1910	1580–1910
833		6	1	6.2	Fill of cut [834]	1730	1780	1730–1780
837		2	1	6.1	Fill of cut [846]	1580	1910	1580–1910
844		11	1	6.1	Fill of cut [845]	1730	1780	1730–1780
847	S	1	1	6.1	Fill of cut [848]	1700	1740	1700–1740
849		5		6.1	Fill of cut [850]	1700	1740	1700–1740
854		14	1	6.2	Fill of cess pit [856]	1840	1880	1840–1880
866		3		6.1	Fill of cut [876]	1580	1910	Mid17th – early 18th
867	S	20	1	6.1	Fill of cut [868]	1700	1740	1700-1740

Context	Size	No. of frags	Trench	Phase	Description	Context ED	Context LD	Spot date
869	s	1	1	5.2	Fill of cut [870]	1580	1910	1580–1910
873	S	3	1	5.2	Fill of cut [874]	1580	1910	1580–1910
875	S	3	1	6.1	Clayey silt	1680	1710	1680–710
886	S	7	1	6.1	Fill of cut [888]	1700	1740	1700–1740
891	S	8	1	6.1	Fill of cut [892]	1730	1780	1730–1780
893	М	38	1	6.1	Fill of cut [894]	1680	1710	1680–1710
897	S	15	1	6.1	Fill of cut [946]	1680	1710	1680–1710
898	s	20	1	5.2	Fill of cut [964]	1700	1740	1700–1710
901	s	3	1	6.1	Possible horticultural soil	1580	1910	1580–1910
921	s	13	1		Bottom fill of cess pit [856]	1840	1880	1840–1860
940	S	1	1	5.2	Fill of cut [929]	1580	1910	1580–1910
942	S	4	1	5.2	Fill of cut [943]	1580	1910	1580–1910
944	S	5	1	5.2	Fill of cut [945]	1640	1670	1640–1670
951	S	9	4	5.2	Fill of cut [952]	1680	1710	
		2	1					1680–1710
1013	S		1	5.2	Fill of cut [1014]	1580	1910	1580–1910
1083	S	17	1	5.2	Fill of cut [1084]	1660	1680	1660–1680
1502	S	28	2	6.2	Fill of cut [[1503]	1730	1780	1730–1780
1504	S	9	2	6.2	Fill of cut [1504]	1580	1910	1730–1910
1506	S	27	2	6.1	Top fill of cess pit [1508]	1730	1780	1730–1780
1510	S	11	2	6.2	Fill of well [1511]	1770	1845	1800–1845
1513	L_	106	2	6.2	Fill of cut [1514]	1770	1845	1800–1845
1515	M	58	2	6.1	Second fill of cess pit [1508]	1730	1780	1730–1780
1516	S	15	2	6.2	Fill of cut [1517]	1770	1845	1770–1845
1518	S	9	2	6.2	Fill of cess pit [1520]	1820	1860	1820–1860
1522	S	5	2	6.2	Primary fill of cut [1503]	1680	1710	1730–1910
1523	M	31	2	6.2	Fill of cut [1524]	1770	1845	1770–1800
1526	S	20	2	6.2	Top fill of cut [1527]	1730	1780	1730–1780
1528	M	72	2	6.2	Fill of cut [1529]	1700	1740	Early 19th c
1530	S	16	2	6.2	Bottom fill of cut [1527]	1730	1780	1730–1780
1531	S	13	2	6.2	Primary fill of cess pit [1529]	1770	1845	1770–1820
1532	S	2	2	5.2	Upper fill of cut [1533]	1660	1680	1660–1680
1534	L	119	2	6.1	Backfill to cess pit [1535]	1700	1740	1700–1740
1537	M	59	2	6.2	Fill of cut [1538]	1820	1845	1820–1845
1539	S	21	2	5.2	Fill of cut [1540]	1680	1710	1680–1710
1541	S	4	2	5.2	Primary fill of cut [1533]	1680	1710	1680–1710
1542	М	84	2	6.2	Backfill to cess pit [1543]	1840	1880	1840-1860
1545	L	156	2	6.1	Primary fill of cess pit [1535]	1700	1740	1700–1740
1547	S	1	2	6.2	E/W wall foundation	1580	1910	1580–1740
1549	S	3	2	6.2	Backfill to cess pit [1543]	1770	1845	1770–1800
1550	L	151	2	6.2	Fill of cut [1551]	1840	1910	1840–1860
1552	M	59	2	6.2	Fill of cut [1553]	1730	1780	1730–1780
1554	S	6	2	5.2	Fill of cut [1555]	1690	1710	1690–1710
1556	S	13	2	6.2	Primary fill of cess pit [1543]	1770	1845	1770–1800
1561	М	84	2	6.1	Backfill to cess pit [1562]	1770	1845	1770-1800
1564	М	43	2	5.2	Fill of cut [1565]	1690	1710	1690–1710
1566	М	59	2	5.2	Primary fill of cess pit [1562]	1680	1710	1680–1710
1571	S	1	2	5.1	Fill of cut [1572]	1610	1640	1610–1640
1573	S	1	2	5.1	Silty sand - made ground	1580	1730	1580–1740
1574	М	34	2	6.2	Fill of cut [1575]	1730	1780	1730–1780
1582	М	82	2	6.2	Fill of cut [1583]	1730	1780	1680–1700/1740
1586	s	3	2	6.1	Fill of cut [1587]	1700	1740	1700–1740
1590	S	19	2	6.2	Fill of cut [1591]	1730	1760	1730–1760
1592	S	1	2	6.2	Upper fill of cut [1593]	1690	1710	1690–1710
1594	S	12	2	6.1	Fill of cut [1595]	1730	1780	1730–1780
1596	S	3	2	6.2	Fill of cut [1593]	1700	1740	1700–1740
1597	s	1	2	6.2	Lower fill of cut [1593]	1700	1780	18th c
1600	S	21	2	6.2	Fill of cut [1601]	1770	1845	1800–1845
			1					

Contoxt	Sizo.	No. of frags	Tranch	Phase	Description	Context ED	Contaxt I D	Snot data
1603	Size M	54	2	6.2	Fill of cut [1602]	1700	1740	1700–1740
					• •		1740	
1604	S	6	2	5.2	Upper fill of cut [1605]	1680		1680–1710
1606	S	2	2	5.1	Fill of cut [1607]	1680	1710	1680–1710
1613	S	1	2	5.2	Lower fill of cut [1605]	1580	1910	1580–1730
1614	S	2	2	5.1	Fill of cut [1615]	1610	1640	1610–1640
1626	S	1	2	5.1	Fill of cut [1660] - post pipe	1580	1910	1580–1730
1629	S	24	2	6.2	Fill of cut [1630]	1820	1860	1820–1860
1633	S	3	2	6.2	Fill of cut [1634]	1730	1780	1730–1780
1635		6	2	6.2	Fill of cut [1636]	1700	1740	1700–1740
1643	S	5	2	6.2	Fill of cut [1644]	1700	1740	1700–1740
1645	S	2	2	5.2	Backfill of construction cut [1563]	1580	1910	1580–17700
1647	S	22	2	6.2	Fill of cut [1646]	1770	1845	1800–1845
1648	M	50	2	6.2	Fill of cut [1649]	1730	1780	1730–1780
1653	L	1158	2	6.2	Fill of cut 1654]	1730	1760	1730–1760
1658	s	2	2	5.1	Fill of cut [1659]	1640	1660	1640–1660
1665	S	3	2	6.1	Fill of cut [1666]	1730	1780	1730–1780
1667	S	3	2	5.2	Fill of cut [1668]	1770	1820	1770–1780
1674	S	5	2	6.2	Fill of cut [1675]	1730	1780	1730–1780
1676	S	22	2	6.2	Fill of cut [1677]	1680	1710	1680–1710
1680	S	1	2	6.2	Fill of cut [1679]	1580	1730	1580–1730
1684	S	3	2	5.2	Fill of cut 1685	1680	1710	1680–1710
1686	L	228	2	6.2	Upper fill of cut [1687]	1770	1845	1830s
1687	S	8	2	6.2	Rubbish pit	1730	1780	1730–1780
1690	s	11	2	6.1	Backfill to construction cut 1692	1700	1740	1700–1740
1691	S	25	2	6.1	Backfill to construction cut 1692	1730	1780	1730–1780
1696	Ĺ	210	2	6.2	Primary fill of cut [1687]	1770	1845	1770–1845
1699	s	9	2	5.2	Fill of cut [1701]	1610	1640	1610–1640
1704	S	4	2	7.1	Fill of cut [1705]	1820	1850	1820–1850
1708	S	20	2	6.1	Backfill to masonry structure [1700]		1710	1660–1680
1709	S	7	2	6.1	Backfill to masonry structure [1700]		1710	1680–1710
		31	2	6.1	Fill of cut [1715]	1700	1740	1700–1740
1711	s	2	2	6.1		1680	1710	1680–1710
1712	_	114	2	6.1	Upper fill of cut [1713]	1730	1780	1730–1780
1714	s	5	2		• •	1640	1670	1640–1670
1716	M	36	2		Bottom fill of cut [1713]	1700	1740	1680–1700/10
1718		2	2		Fill of cut [1719]	1730	1910	1730–1910
		37			Upper fill of cut [1721]		1710	1680–1710
1722		6	2	6.2	Fill of cut [1723]	1730	1910	1730–1910
1724	s S	1	2	5.2	Floor make-up	1660	1680	1660–1680
1724	s S	12		6.2	Upper fill of cess pit [1735]	1730	1910	1730–1910
1727	s S	5		6.2	Second fill of cess pit [1735]	1730	1780	1730–1910
1730		23		6.2		1840	1880	1840–1880
1733	o M	72	2	6.1	Basal fill of cess pit [1735] Upper fill of cut [1734]	1700	1740	1700–1710
1736	M c	62 15	2	6.1	Basal fill of cut [1734]	1700	1740	1700–1710
1743	S	15	2	5.2	Basal fill of cut [1721]	1680	1710	1680–1710
1747		6	2	5.2	Upper fill of cut [1748]	1660	1680	c. 1680
1749	S	1	2	5.2	Basal fill of cut [1748]	1580	1730	1580–1730
1752	S	7	2	5.2	Fill of cut [1753]	1660	1680	c. 1680
1757		119	2	6.1	Upper fill of cut [1764]	1730	1780	1730–1780
1758	S	24	2	6.1	Fill of cut [1764]	1700	1740	1700–1740
_		86	2	6.1	Fill of cut [1764]	1700	1740	1700–1740
1763	S	4		6.1	Fill of cut [1764]	1580	1730	1580–1730
1769	S	4	2	5.2	Fill of cut [1771]	1680	1710	1680–1710
1774		9		5.2	Fill of cut [1775]	1680	1710	1680–1710
	M	35	2	6.1	Fill of cess pit [1786]	1760	1800	1760–1780
1793		3	2		Backfill to construction cut [1794]	1580	1910	1580–1740
1814	S	1	2	6.1	Silty sand - made ground	1580	1730	1730–1910

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Context	Size	No. of frags	Trench	Phase	Description	Context ED	Context LD	Spot date
1827	S	12	2	5.2	Sandy silt	1680	1710	1680–1710
1831	S	2	2	5.1	Fill of cut [1832]	1700	1740	1700–1740
1848	S	11	2	5.1	Clayey silt - dumped deposit	1580	1730	1580–1740
1852	S	5	2	5.1	Fill of cut [1853]	1580	1730	1580–1740
1856	S	2	2	5.1	Fill of cut [1857]	1580	1730	1580–1740
1911	S	1	2	6.1	Fill of cut [1914]	1580	1730	1580–1740
1925	S	1	2	5.2	Fill of cut [1924]	1580	1730	1580–1740
1933	S	20	2	5.1	Fill of cut [1934]	1640	1660	1640–1660
1958	S	1	2	5.1	Fill of cut [1967]	1580	1730	1580–1740
1960	S	1	2	5.1	Upper fill of cut [1961]	1580	1730	1580–1740
2055	S	2	2	5.2	Silty sand - dumped deposit	1580	1730	1580–1740
2062	S	1	2	5.2	Upper fill of [2063]	1580	1730	1580–1740
2064	S	1	2	5.2	Sandy silt - dumped deposit	1580	1730	1580–1740
2110	S	1	2	5.2	1	1580	1730	1580–1740
2139	S	1	2	3.2	Post pit	1580	1730	1730–1910
2156	s	26	2	6.2	Fill of well [2169]	1800	1900	Late 19th c
2167	L	121	2	6.2	Fill of well [2169]	1840	1860	1840-1860
2168	S	2	2	6.2	Fill of construction cut [2170]	1580	1910	1730–1910
2171	M	76	2	6.2	Fill of well [2169]	1840	1880	1840–1880
2174	S	3	2	1	Sandy gravel - fluvial?	1820	1850	1820–1850
2175	S	28	2	6.2	Upper fill of well [2176]	1840	1880	1840–1880
2180	S	3	2	6.2	Fill of well [2176]	1580	1910	1730–1910
2182	S	2	2	6.2	Fill of well [2176]	1840	1880	1840–1880
2183	S	2	2	6.2	Fill of well [2176]	1770	1845	1770–1845
2186	S	17	3	5.1	Dark grey sandy silt dump layer	1640	1660	1640–1660

Table 3. TBF10: distribution of the clay tobacco pipes showing for each context the clay tobacco pipes occurred in the size of the assemblage, number of fragments, Trench location, phase, a description of the context, the date range of the latest bowl type (Context ED and Context LD) and a spot date (context considered date).

Significance of the assemblage

The clay tobacco pipes have significance at a local level. The bowl types present on the site mostly fit within the typology for London and it is presumed that amongst the wide variety of maker marked and decorated bowls there are a large number of local clay tobacco pipe makers represented in the assemblage. These makers include the 17th- and 18th-century Manby family and the unknown mid 18th-century E R maker. A number of 17th-century bowls and their stamps adds to the range of bowls shapes and known die stamps for the London typologies. The assemblage demonstrates a good range of bowls and stamps that can be attributable to the mid 18th-century E R pipe maker and allows for the products of this master pipe maker to be characterised.

Large quantities of clay tobacco pipes recovered from specific features may relate to certain institution or professions, such as drinking establishments (Pearce 2000). Indeed, a relatively large number of Frechen stoneware drinking vessels (used for serving alcoholic drinks) were found in fill [262] of the construction cut [206] for a barrel well [339] and the group of pottery almost certainly relates to a late 17th-century drinking establishment on the site. The fills of this feature ([195], [211], [262], and [338]) produced groups of pipes dated c.1660-80 or c.1680. In total the fills of [206] produced 142 fragments

of clay tobacco pipes, of which bowls accounted for 78 items and included local types, besides the Broseley bowl (BR5B). The high number of clay tobacco pipes in this feature supports the evidence for a late 17th-century drinking establishment in the area of the site where feature [206] was located and helps to define the material culture of such premises. Similarly the very large group of pipes (1158 fragments, of which 236 are bowls) recovered from fill [1653], pit [1654], dated c.1730-60 represents a very atypical large group of pipes and may relate to another drinking establishment located on the site.

The occurrence of two continental porcelain bowls (fills [2156] and [2167], well [2169]) are of interest and may have been the possessions of one or two of the German immigrant's resident on the site from at least c.1881. In that year nineteen German nationals were recorded on the study area and mostly present as family units involved in trades and owning retail businesses (TNA RG11/457/92: 1-6, 17-17).

Assemblages of clay tobacco pipes have been recovered from previous archaeological excavations on the study area. The first evaluation (CYD96) produced a small collection of clay tobacco pipes (119 fragments) with groups of 17th-century material dominating the assemblage (PCA CYD96 data base) and complements that of the TBF10 finds. A subsequent archaeological excavation (TOC02) produced 3015 fragments of clay tobacco pipes with groups of clay tobacco pipes recorded similar to that of the TBF10 assemblage. Clay tobacco pipe finds of note from the TOC02 excavation (Jarrett 2004) include a 19th-century bowl made by Gallon of Southshields, and implies possible coastal activity between London and the North East, while two Ottoman-type pipes, made at Varna, located on the Black sea, were associated with an early 19th-century coffee house (Sudds 2004). Another large assemblage of clay tobacco pipes was also recovered from nearby at Narrow Street (NHU99: Jarrett 2000) which would allow for comparison with the CYD96, TOC02 and TBF10 assemblages.

The assemblages of clay tobacco pipes from all three of the excavations (CYD96, TOC02 and TBF10) give important avenues of investigation into the 17th-19th-century community of households resident on the study area and allows for the identification of drinking establishments, a probable coffee house and possible individuals. The two pipes from Varna complement the TBF10 find of the unstratified probable Tophane pipe from Turkey. Indeed the occurrence of Ottoman pipes on London excavations is extremely rare and the presence of three examples on the study area makes these finds even more unusual. The assemblages also provide an important understanding of the local clay tobacco pipe industry, while the non-local pipes may relate to the sites location close to the Thames and trade associated with the river, besides contact with the Continent, including the Low Countries and further afield, such as the Black Sea and Turkey.

Potential of the collection

The main potential for the tobacco pipes is as an aid to dating the contexts in which they were found and to provide a sequence for them. A number of the pipe bowls merit illustration.

The TBF10 clay tobacco pipe assemblage can be used to help investigate a research question posed in 'A research framework for London Archaeology 2002' (Nixon *et al.* 2002).

The documentary evidence of the inhabitants on the excavation area, their professions and socio-economic status may complement the interpretation of the clay tobacco pipe assemblage. The large group of clay tobacco pipes recovered from feature [602] may have been recovered from a drinking establishment, which is also probably applicable to those pipes found in pit [1654]. This research would meet the L7 FRAMEWORK objective: Establishing how archaeology can contribute to the history of leisure in London, and identifying assemblage characteristics (Nixon *et al.* 2002).

Research aims

A number of research aims can be suggested as avenues of research for the clay tobacco pipe assemblage from TBF10.

- How do the clay tobacco pipes relate to the documentary evidence for the land use of properties on the site?
- How does the clay tobacco pipe assemblage from TBF10 compare to other local sites and what does that inform temporally on the local clay tobacco pipe industry?

Recommendations for further work

A publication report should be written for the clay tobacco pipes incorporating the material from all three of the archaeological sites (CYD96, TOC02, TBF10) excavated on the property of 130-162 The Highway. The assemblages should be related where possible to individual historic properties, activities on the site and if there are correlations to documented activities. Approximately 46 illustrations and a photograph of the Continental bowl from context [2156] are required to supplement the text. Additionally, eleven bowls are required for illustration from the TOC02 excavation. It is also recommended that the CYD96 clay tobacco pipe assemblage is reviewed, as it may contain bowl types that could not be assigned to a type when first catalogued and may now fit better into new London bowl types subsequently identified (Higgins 2004).

Bibliography

Atkinson D. and Oswald. A., 1969. 'London clay tobacco pipes'. *Journal of British Archaeology Association*, 3rd series, Vol. 32, 171-227.

Atkinson D. and Oswald. A., 1972. 'A Brief Guide for the Identification of Dutch Clay Tobacco Pipes Found in England'. *Post-Medieval Archaeology* 6, 175-82.

Higgins, D., 2004. 'The clay tobacco pipes', in G. Keevill, *The Tower of London Moat; archaeological excavations 1995-9*. Oxford Archaeology/Historic Royal Palaces Monograph 1, 241-57.

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Higgins, D., 2017. Guidelines for the Recovery and Processing of Clay Tobacco Pipes from Archaeological Projects.

http://www.pipearchive.co.uk/pdfs/howto/How%20to%20guidelines%20(ver%201_2) %203-9-17.pdf [Accessed 20th September 2017]

Jarrett, C., 2000. 'Clay tobacco pipe assessment', in D. Killock, *An archaeological excavation at 43-53 Narrow Street, Limehouse Basin, London Borough of Tower Hamlets*. Pre-Construct Archaeology Unpublished Report.

Jarrett, C., 2004. 'Clay tobacco pipe assessment', in A. Douglas, *Phased Summary and Assessment Document of the Excavations at 130-162 The Highway, London Borough of Tower Hamlets*. Pre-Construct Archaeology Unpublished Report.

Museum of London Archaeology, n.d. *Clay tobacco pipe makers' marks from London*, <http://webarchive.nationalarchives.gov.uk/20090510221705/http://museumoflondon.org.uk/claypipes/index.asp >>, [Accessed February 9th 2017].

Nixon, T., McAdam, E., Tomber, R. and Swain, H. (eds.), 2002. *A research framework for London Archaeology 2002*. Museum of London.

Oswald, A., 1975. Clay pipes for the Archaeologist. British Archaeological Reports British series 14.

Pearce, J., 2000. 'A late 18th-century inn clearance assemblage from Uxbridge, Middlesex'. *Post-Medieval Archaeology* 34, 144-186.

Sudds, B., 2004. 'Post-Roman pottery assessment', in A. Douglas, *Phased Summary and Assessment Document of the Excavations at 130-162 The Highway, London Borough of Tower Hamlets*. Pre-Construct Archaeology Unpublished Report.

Unpublished document

TNA RG11/457/92

1881 Census, St George in the East, London

APPENDIX 10: GLASS ASSESSMENT

John Shepherd

Introduction

A total of 4,333 items of glass were submitted for identification. The full archive list of these fragments is contained in an excel file called:- Tobacco Dock Glass Archive List.xls

This lists all fragments by:

- a) context
- b) accession number (where applicable)
- c) number of fragments from each bag (sometimes more than one bag per context
- d) fragment colour
- e) fragment description
- f) technique of manufacture
- g) to be catalogued in final publication (Y or N)
- h) to be drawn for final publication (Y or N)

The following assessment briefly examines the overall make up of the assemblage and gives recommendations for future work towards publication, independent of adjacent or previous work on the site.

Assessment

The vast majority of fragments identified are post-medieval in date, coming especially from the 18th or 19th centuries. These included the following:-

Beads - 31 items

Beaker Fragments - 13 fragments

Case bottle - 51 fragments

Flat octagonal - 11 fragments

Cylindrical bottle – 377 fragments

Drinking vessel - 109 fragments

English wine bottle - 655 fragments

Indeterminate - 932 fragments

Pharmaceutical - 398 fragments

Window cylinder – 1,718 fragments

Roman or probably Roman – 38 fragments

Roman

The 38 Roman fragments are extremely fragmentary. They include only diagnostic fragments (Table 1). All the datable fragments belong to the late third or fourth century. Four fragments (three fire-rounded rim fragments and a fragment with a tear-shaped prunt) may be late fourth or early fifth century.

	Nos. of			
Context	frags	Colour	Form	Date
+	1	Natural green- blue	Square-sectioned, prismatic bottle: body	Late 1st to 3rd century
1951	1	Natural green	Beaker; outsplayed. Knocked off rim	Late 3rd or 4th century
568	1	Natural green	Beaker or bowl; fire-rounded, outsplayed rim	Late 3rd or 4th century
656	6	Natural green	Indeterminate vessel fragments; body	Possibly Roman
1025	1	Natural green- blue	Indeterminate vessel fragments; body	Roman?
1150	1	Natural green	Beaker or bowl; fire-rounded, outsplayed rim	Late 3rd or 4th century
1756	1	Natural green- blue	Indeterminate vessel fragments; body	Possibly Roman
1756	1	Natural green	Phial; pushed in base	Possibly Roman
450	1	Natural green	Bottle; square sectioned	Roman?
450	1	Natural green	Bowl; hollow tubular rim	Roman?
475	4	Natural green	Indeterminate vessel fragments; body	Possibly Roman
714	1	Natural blue	Flagon or bottle; part of handle	Late 3rd or 4th century
714	1	Natural green	Vessel; applied prunt/claw;	Roman?
768	1	Natural green	Indeterminate vessel fragments; body	Roman?
770	1	Natural green	Window glass; cylinder	Roman?
1172	1	Opaque blue	Tessera	Roman or post-medieval;
156	1	Natural green	Beaker or bowl; fire-rounded, outsplayed rim	Late 3rd or 4th century
66	3	Natural blue	Window glass; cylinder	Possibly Roman
188	1	Natural green	Window glass; cylinder	Roman?
897	1	Colourless	Indeterminate vessel fragments; body	Possibly Roman
84	1	Colourless	Indeterminate vessel fragments; body	Possibly Roman
1600	6	Natural green	Window glass; cylinder	Possibly Roman

Table 1: Roman or probable Roman fragments

Early-Medieval and Medieval

No fragments of this date were identified. However, the pear-shaped prunt included in the Roman assemblage above may come from a vessel of a type that could be early-Germanic in date.

Late 16th- and 17th-century glass

The overall assemblage contains 37 fragments (Table 2), of which 24 come from a single stemmed drinking vessel. This small assemblage includes four rare opaque white fragments (probably French) and two crizzled lead fragments, closely dateable to 1675 to 1685. Standard English wine bottles are associated with the vessels of late 17th-century date.

	Nos.			
Context	frags	Colour	Form	Date
974	1	Colourless with grey tint	Drinking vessel; ball knop and flute, decorated with vertical ribs and vertically aligned ladder decoration	17th century
148	25	Colourless with grey tint	Drinking vessel; ball knop and flute, decorated with vertical ribs and vertically aligned ladder decoration	Early 17th century
205	1	Colourless with grey tint	Beaker; rigaree foot; chequered spiral decoration	17th century
309	1	Colourless with grey tint	Beaker; rigaree foot	17th century
1545	1	Opaque white	Bowl or flask; opaque white	Late 16th or 17th century
1574	1	Opaque white	Indeterminate vessel fragments; body	Late 16th or 17th century
1603	1	Opaque white	Flask or bowl; pushed in base	Late 16th or 17th century
1653	1	Opaque white	Vessel fragment	Late 16th or 17th century
1733	1	Colourless, crizzled	Drinking vessel, solid base, drawn stem;, lead glass	1675
1759	1	Colourless, crizzled	Drinking vessel; body	1675
1774	1	Colourless	Drinking vessel; base and stem; baluster stem	Late 17th century
2055	1	Colourless	Drinking vessel; baluster stem; lead glass	Late 17th century
+	1	Colourless	Drinking vessel; ribbed ball knop	17th century

Table 2: Late 16th and 17th century vessels

18th to early 20th century

The greater bulk of the glass comes from utilitarian vessels and window glass of the 18th, 19th and early 20th century. The wine and beer bottle is the most prevalent bottle form, as too are

pharmaceutical phials. Individual assemblages are worth describing by function. For example, 19th-century dated groups of glass include that from rubbish pit [797] (fill [796]), which was notable for containing vessels mostly concerned with the storage of alcohol. These consisted of English wine bottles (43 fragments/ approximately 5 vessels) and case bottles (10 fragments/3 vessels), as well as five fragments from a drinking vessel. There are also of note 45 fragments recorded from approximately seven cylindrical bottles. By contrast, fill [801], rubbish pit [816], was distinguished for containing a notable quantity of liquid storage cylindrical bottles (138 fragments/12 vessels) and pharmaceutical bottles (14 fragments/8 MNV). It is recommended that a discard exercise is implemented upon material of this date, prior to deposition in the Museum of London.

Recommendations

A publication report is required on the glass assemblage that incorporates the data from previous excavations on the study area (CYD96 and TOC02: Carter 2004). The CYD96 assemblage needs reviewing briefly. It is recommended that the Roman assemblage and the late 16th to 17th century assemblage are described and published in full. The 18th-20th century dated glass finds can be summarised by vessel shape and function. It is also recommended that the post-medieval glass, regardless of its date, which is associated with large groups of finds recovered from cess and rubbish pits or soakaways, should be looked at holistically with the pottery and clay tobacco pipes it occurs with. These groups of finds should be studied by property. This will determine the functions associated with specific domestic households, shops and other businesses that are documented on the study area. This approach of analysing the glass with the other finds, will help with an understanding of the material culture and the socio-economic status of the community and sections of it that lived and worked on the excavation area.

The following recommendations for illustration for each archaeological period the glass is dated to are:

Roman items requiring illustration: 16 vessel fragments.

Late 16th and 17th century items requiring illustration: 1 near complete vessel profile and 9 vessel fragments.

18th to early 20th century items requiring illustration: Photographs of groups from individual households.

Bibliography

Carter, S., 2004. 'Glass assessmen', in A. Douglas, *Phased Summary and Assessment Document of the Excavations at 130-162 The Highway, London Borough of Tower Hamlets*. Pre-Construct Archaeology Unpublished Report.

APPENDIX 11: BUILDING MATERIAL ASSESSMENT

Kevin Hayward and Amparo Valcarcel

Introduction and Aims

Forty-five crates of ceramic building material, mortar and stone were retained from the excavations at Tobacco Dock, Shadwell, London. This large sized assemblage (5,537 examples 1,616kg) was assessed in order to:

- ldentify (under binocular microscope) the fabric and forms of the Roman, medieval, post-medieval ceramic building material recovered from TBF10.
- ldentify the fabric and form of whole bricks and mortar used in the post-medieval structures from TBF10.
- ldentify the fabric of the unworked and worked stone in order to determine what the material was made of and from where it was coming from.
- ldentify any items of particular stylistic or fabric interest given that a Roman stone altar was recovered from the site.
- Made recommendations for further study.

Methodology

The application of a 1kg mason's hammer and sharp chisel to each example ensured that a small fresh fabric surface was exposed. The fabric was examined at x20 magnification using a long arm stereomicroscope or hand lens (Gowland x10). The appropriate Museum of London building material fabric code is then allocated to each item.

A limited number of masonry samples, consisting of two whole bricks, were also collected as well as the in-situ recording of fabrics and forms from selected groups of post-medieval structures during site visits made during the excavation. Most of all of the surviving masonry contexts were found in the last 3 phases of the site (Phases 5, 6 and 7), however building material was also recovered from layers and dump deposits in Phases 3 and 4, mostly consisting of Roman materials and medieval roof tile and brick fragments.

Reference has been made to the existing studies of the Roman structures from Shadwell (Lakin *et al.* 2002) including the bath house (Douglas *et al.* 2011; Sudds 2011) which show that there were huge quantities of Roman tile and brick as well as stone in their construction. There are also other Roman bath house structures that have been studied recently in London (Rowsome 1999) and Southwark (Yule 2005; Hayward in prep) and these texts have been consulted too. For particular information on Roman tile and brick reference was made to Brodribb (1987), de la Beyodere (2001), Perring (2014)

and Adam (2001). Whilst for the current texts on stone use and type in Roman London reference was made to (Hayward 2009; 2015a; 2015b).

Ceramic Building Material (4,260 examples 1054.40kg)

More than 70% of the assemblage consists of Roman ceramic building material, with much smaller quantities of medieval (6%) and post-medieval (24%) fabrics (Figs. 1 & 2).

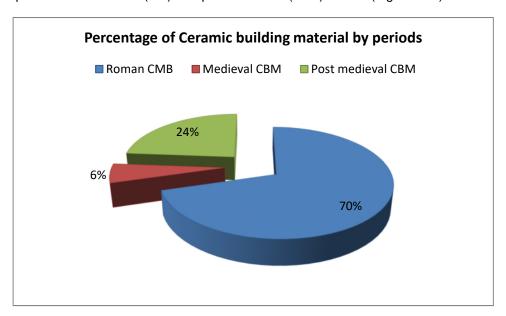


Fig. 1: Building Material percentage by periods excluding stone, daub, mortar and wall plaster

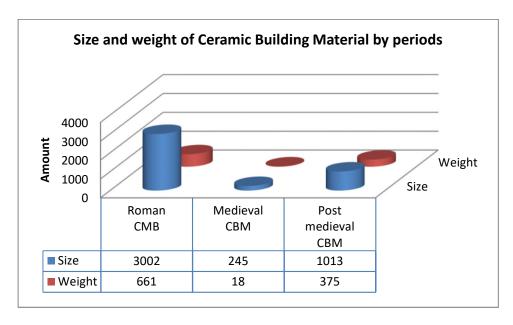


Fig. 2: Size and weight (kg) of Ceramic Building Material by periods excluding stone, daub, mortar and wall plaster

Roman (excluding daub, wall plaster and mortar) 3,002 examples 661.27kg

Condition and distribution

Most of the Roman building material is in a fragmentary condition which would suggest that it has been reused, dumped or both. Furthermore, Roman tile and brick appears in many medieval and post-medieval contexts.

Their condition is generally good. By form, there is a fair proportion of *tegulae* (9%) but less *imbrex* (5%) (Fig. 3). Many of the *tegulae* have a definable flange profile. There is an exceptionally high proportion of brick (41%) and flat tile (32%). A small number of fragments (8.7%) were found to have suffered burning.

High-status bath house materials (e.g. *tegulae mammata*; box flue tiles, *tesserae*, *tubuli*) are present in small quantities (less than 1%), especially combed box flue tile (4%) from [922], [974], [1049], [1186] and [2117]. Some of these materials are burnt (8.18%), indicating use in a thermal building. Most of these burnt materials are from fabric 2815 group. In summary, this is a largely unremarkable broken-up assemblage, probably salvaged from dumps from the nearby Roman bath house, which may in turn have originated from salvaged material from *Londinium*.

Fabric review

The usual groups of Roman fabrics for London are represented (Table 1). As expected the common first century to early second-century red sandy group 2815 dominates (79% by weight) with small quantities of other early fabric group as Radlett group (10% by weight), and Eccles, Sussex and Hampshire silty fabrics (less than 1% by weight).

Early Hertfordshire (Radlett) fabrics (3023 and 3060) were manufactured from the mid first to early or mid second century. The Kent fabrics, 2454 and 3022, were manufactured during the second half of the first century (c.AD 50 to 80). Later Roman fabrics (calcareous, silty and Harrold fabrics) are poorly represented (less than 1%), although there is evidence for a late Roman structure in the area. Even though sandy red fabrics are the most common, the diversity of types and unusual fabrics is a feature of the site.

Three unmatched fabrics were collected, assigned the code 3500. The examples are earthy and seem overfired.

It's difficult to know the original appearance and function of the structures because most of the fragments are reused and in a fragmentary condition.

MOLA fabric group Name	Quantity	Codes	Description
Early London sandy fabric group 2815 (AD 50-160) 79%	2574 examples 573.14kg	2452; 2459a; 3004; 3006;	Fine and coarse local sandy fabric coarse moulding sand
Late London sandy fabric group 2815	296 examples 64.55kg	2459b;2459c	Fine and coarse local sandy fabric coarse moulding sand

MOLA fabric group Name	Quantity	Codes	Description
(AD 120-250) 9%			
Eccles fabric group (AD 50-80) 1%	32 examples 5.48kg	2454; 3022	Fine cream-yellow-pink sandy fabric with occasional rose quartz
Radlett group (AD 50-120) 10%	22 examples 3.17kg	3023; 3060	Black and red iron oxide clay pellets
Early Silty Group (AD 71-120) >1%	10 example 183g	3018; 3074; 3238	Very fine red silt cavernous texture
Late Silty group (AD 180-350) >1%	4 example, 902g.	3012; 3055	Fine red silt cavernous texture
Unknown fabric (AD 50-400) >1%	3 example 1.18 kg	3500; 3500c	Unknown fabric
Hampshire Grog (AD 70-140) >1%	2 examples 517g	3009	Cavernous red sandy texture with red and yellow grog inclusions
Late Calcareous Group (AD 140-350) 1%	38 examples 5.41kg	2453; 2457; 3013; 3026;	Pale cream-yellow-grey calcareous fabric with shell and clay inclusions
Speckled Group (AD 55-350) >0%	1 example 156g	3024	White clay matrix light brown
Late Harrold Fabric (AD 270-350) >0%	6 examples 667g	2456	Shelly inclusions dark grey texture
Early Sussex group (AD 70-140) >0%	10 examples 2.71kg	3054	Scattered "grog" inclusions,

Table 1: Summary of main Roman fabrics from TBF10, their quantity and date

ROMAN FORMS

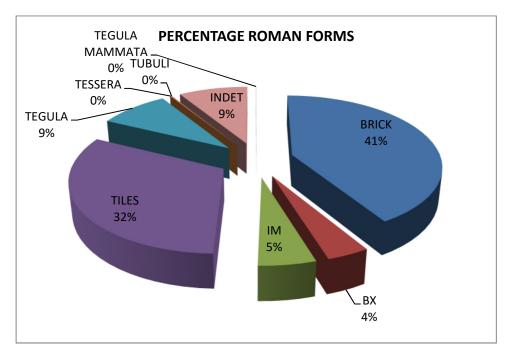


Fig. 3: Roman forms.

Brick (1,233 examples 427.82kg)

All the Roman bricks recovered were found to be in a fragmentary condition. There are contexts with large quantities of incomplete Roman bricks but they are numerous throughout the site mainly in post Roman contexts. The fact that many do not appear to be fresh would suggest that they represent dumped material, possibly from the bath house. Many of the shallower thickness bricks are likely to derive from the smaller *bessalis* and *pedalis* types. Sandy London local fabric 2815 represents 97% of the assemblage, with 2452, 2459a and 3006 fabrics also present.

Just one signatory mark was identified on brick [456], while circular lines, animal and digital are the most common marks.

Tegulae (264 examples 743kg)

The flanged roofing tiles are mainly made of the London early sandy group fabric 2815 (83% by weight), especially fabrics 2452 and 2549a. Other *tegulae* are represented by late sandy group 2459b/c (13% by weight), late calcareous fabrics (2% by weight), while Eccles, silty and Radlett fabric are less common (1%)]. Contexts with a large size of *tegula* are [974] with 12 examples, and [975] [1087] [1154] [1787] and [2117] with 6 examples. All are in a fragmentary condition.

A number size of *tegulae* identified (9%) contain examples of unusual fabrics (3026 and 3074) and flanges as FP26, FP33, FP38 and FP40. The unusual flanges are from late fabrics, except FP36 associated with early sandy 2459a fabric. The common early profiles 1 and 2 are well represented in the 2815 group fabric. Cutaways B and C are the most common. Only 3.8% is burnt.

Part of a *tegula* from [271] is combed. A small group of *tegulae* has different marks: animal marks [456] [1154], semi-circular marks [792] [974], digital marks [1193] and one with a small semi-circular signature [887].

Imbrex (155 examples, 24.55kg)

The London early Roman sandy group 2815 (81.29%) is the most common fabric. The late Roman sandy group 2815 (12.9%), late calcareous (3.87%) and Radlett (1.9%) are less well represented. Eccles and Harrold fabrics are represented with one fragment. A fragment from [1513] was made of an unknown fabric (possibly overheated) preserved an iron nail. It is possible that these curved elements were recycled from an earlier Roman dump in the City where the flat straight sided brick had been salvaged as building rubble.

Box flue tile (116 examples, 22.36kg)

The box flue tile recovered was found in a fragmentary condition. Early Roman sandy group 2815 is by far the most common fabric (77.55%). Late Roman sandy group 2459b (18%) is less

representative, while Radlett and silty groups are in the minority. Sixty-eight per cent of the assemblage is combed, most with parallel lines, while cross [829] [922] [2060], semi-circular [1298] [1746], wavy [2193] and rectangular patterns [1773] are minor. Some of the examples have complex combinations of vertical, horizontal and diagonal combing, often crossed, but also wavy and curvilinear designs. Roller stamped box flue tiles from [427] and [2117] are in fragmentary condition, with a grid pattern. Nine fragments are burnt and many of them preserve mortar.

Undiagnostic tile (948 examples, 105.68kg)

Horizontal elements in the form of small fragments of tile are numerous (32%) and are made of London early sandy fabrics 2452 (33%), 2459a (32%), 3006 (13%), 3004 (3%) the late Roman fabric 2459b (11%); early Roman Eccles, Radlett, silty and late calcareous fabrics form less than 1% of the assemblage. These flat tiles are numerous in post Roman and Roman contexts throughout the site in both Roman and post Roman contexts. A small group of flat tiles (16) have single or concentric semi-circular designs. These marks occur primarily in the local 2815 group, principally in fabrics 2452 and 2459a. Possibly these represent tilemaker marks. Four examples with finger marks were collected from [516] [651] [1075] [1195]. Animal prints represent the most common accidental marks, with animal prints including the paw of a big dog [1031], and at least one belongs to a small sheep [516]. Other marks include hobnail impressions from footwear [2117].

At least 10.5% of the assemblage is burnt. One of the tiles from [714] possibly came from a chimney structure, is roller stamped, made by fabric 2459b, similar to die 77 (Betts, 1997). *Parietalis* tiles from [1216] and [2194] are combed with two prongs present. Probably they came from interior walls to prepare the adhesion of the wall plaster.

Belgian brick / Mud brick (5 examples, 259g)

Five narrow bricks made by an earthy light brown fabric were recovered from context [991] and [2117].

Tesserae (4 examples, 84g)

A small assemblage of *tesserae* is present. *Tesserae* came from [397] [975] and [1295]. Individual cubes are made by different fabrics: 2459a, 2459b and 3018. Of noted is the presence of a *tessera* made from an amphora. It's difficult to explain the low quantities, especially as the thermal building is so close.

Circular or Semi-circular brick (3 examples, 1.01kg)

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Circular or semi-circular bricks came from [1037] and [1737]. They are made of London early sandy fabrics 2459a and 2452. The presence of circular or semi-circular bricks probably indicate the existence of brick columns, used commonly as *pilae*, as part of *suspensura* element in bath houses.

Tubuli (1 example, 82g)

A *tubuli* made of common London sandy fabric 2452 was recovered from [779]. *Tubuli* could be used as internal piping, draining or used as wall-heating.

Tegula Mammata (1 example, 1.03kg)

A *Tegula Mammata* (Type A) made of fabric 2452 was recovered from [1193], and preserved only one *mammae* or lump (Type 4, Brodribb, 1987).

The only Roman structure is summarised below (Table 2).

Context	Structure	Fabric	Form	Phase	Spot date	Spot date with mortar
1031	Oven/hearth	3106;3006;2459a; 2452;2459b;3120	Hassock stone (rub.); Carbonaceous oil shale Kimmeridge oil shale earthy, probably Roman?;early and late Roman sandy bricks and tiles (earliest burnt and abraded)		120-250+	No mortar

Table 2: Roman structure

Medieval (271 examples, 23.51kg)

Roofing Tile (260 examples, 12.88kg)

Very large quantities of medieval roofing tile defined by fabric type, form, glaze and the presence of coarse moulding sand attest to dumping episodes or medieval activity in the area of Shadwell. Furthermore, many of the tiles can be assigned an earlier medieval (12th to 13th century) date on the basis of fabric and form, indicating derivation from the demolition of building(s) of this date.

Bat Tile/ Curved Tile (9 examples, 1.77kg)

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2273 Coarse early sandy and shelly fabric (1135-1220), 3 examples 423g

2587 Iron oxide fabric (1240-1450), 1 example, 131g

This early group is poorly represented [469] [495]. These are the very robust (19-26mm) bat or shoulder tile, dominated by the 12th century coarse sandy fabric 2273. One fragment of iron oxide fabric 2587 was recovered from [286]. Some of the tile described as curved may in fact also belong to this group.

KBSTO5/05 Iron oxide fabric (1100-1450), 1 example, 476g

One example of this rare fabric was collected from [767].

3090 Black iron oxide fabric (1200-1800), 4 examples, 740g

Curved iron oxide fabric was found from [58] [796] and [1174].

Peg tile 251 examples 11.11kg

Fine sandy fabrics 2271; (1180-1800) 146 examples 6kg

Coarse early sandy and shelly fabric 2273 (1135-1220) 5 examples 631g

Local Organic fabric 2274 (1080-1350) 1 examples 48g

Iron Oxide fabrics 2586 (1180-1500) 49 examples 2.85kg; 2587 (1240-1450) 52 examples 2kg

Wealden silty fabrics 3205 (1200-1500) 1 example 11g

Overlapping, flat rectangular peg tiles attached to roofing by two nails (as represented by two nail holes, with both round and square holes) form numerically the most common medieval roofing form. All of the medieval roof tile recovered was fragmentary, and most probably represents either dumped material, or residual demolition material. A large range of fabrics (6) have been identified suggesting derivation from many different buildings. Many are thin, have coarse-moulding sand, glazed or have a fabric that is typical of medieval roofing tile from as early as 1080 (fabric 2274 just one). Indeed 2274 and other early fabrics, 12th century 2271, 2273, 2587, 2586 fabrics constitute 12.88kg (over 95%) of the entire medieval assemblage. These proportions far exceed what would normally be expected from a medieval peg tile assemblage and point to (like the flange and bat tile) derivation from a substantial, probable 12th-13th-century structure.

The dominant fabrics are the finer sandy groups, consisting of the thin-reduced core 2271 (56%) and iron oxide fabrics 2587 (20%) and 2586 (19%). Significant accumulations are represented in [373] [424] [435] [439] [440] and [469]. Splash glaze represents 21% of the medieval peg tiles.

Medieval brick (8 examples, 10.23kg)

3031 (1350-1450) 2 examples 4.69kg

Fairly soft, friable fabric with an even sandy texture bricks were recovered from [50]. One of them was reused with a white lime mortar.

3031nr3042 (1350-1450) 2 examples, 2.92kg

A shallow (40-52mm) late medieval bricks with sunken margins were recovered from [50]. This fabric (a pale cream fine texture with distinct pinkish-red lumps) is typical of the bricks imported into the Essex region from the Low Countries (Ryan 1996).

Other fabrics, 4 examples, 2.61kg

Four examples of unknown fabrics were recovered from [48] and [50]. They are very thin (50mm).

Floor Tile (3 examples 397g)

Only a small group of medieval plain and decorated floor tiles were recovered from dumped deposits. Despite the small number a complete repertoire of 12th to 15th-century floor tile fabrics were identified.

Early Sandy Floor Tile 2273 (1135-1220) 1 example 124g

A 12th century brown-glazed floor tile, in the coarse sandy fabric 2273 was recovered from [620]. Given the high quantity of early dumped medieval peg tile recovered from the site it was inevitable that some floor tile from this period would be recovered.

Late Sandy Floor Tile 2505 (1300-1550) (1 example, 235g)

A very fine sandy fabric 2505 floor tile was recovered from context [792].

Penn tiles (3076) 1330-1390 Penn, Buckinghamshire, 1 example 38g

One fragment of unglazed 14th-century Penn floor tile was present from context [811].

No structures associated with the medieval period were found.

Post-Medieval

A large assemblage of brick was recovered from Phase 5, all of which were found to be from local clays of the red sandy fabric 3033. From Phase 5 the amount of brick fragments recovered increases,

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until the latest phases (6 and 7) of the site, where brick fabrics form the bulk of the ceramic building materials recovered. The earliest bricks with any quantifiable dimensions came from the period 1450/1480 to 1666/1700, but the great majority of brick is dated to the first half of the 18th century or later.

Transitional-Tudor (551 examples, 394.44kg)

Late Medieval-Tudor Brick (203 examples, 115.90kg)

3030 (1400-1660) 1 examples 134g

A loose earthy brown late medieval to early post-medieval brick was recovered from context [764].

Local London sandy red fabrics [1450-1700]

3033; 163 examples, 81.52kg

3039; 4 examples, 5.17kg

3046; 26 examples, 12.71kg

3065; 9 examples, 16.37kg

Four different sandy red brick fabrics were identified; the fine sandy 3033; the mottled sandy 3039; the very sandy red 3046 and fabric 3065 which contains burnt flint. The largest proportion of bricks are shallow (50-60mm), wide (110-121mm) and unfrogged. All were manufactured for city use from local London brick clay between 1450 and 1700. However, the fabric continued to be used outside of the confines of the City of London, where local brickearth was exploited until 1900 (K. Sabel pers. comm.). Some of these bricks are reused and bonded with 18th- and 19th-century mortar.

Peg tile (341 examples 20.7kg)

2276 (1480-1900)

Peg tiles belonging to the very common sandy red fabric 2276, dominate the post-medieval roofing tile assemblage, with large accumulations especially from [411] [435] [893] [1712] [2060] suggesting these tiles were used in the roofing of a building. The greater proportion of tile fragments were unglazed peg tile fragments, although a small number of splash glazed roof tile fragments were recovered.

Floor tile (6 examples, 2.84kg)

Unglazed "Flemish" silty Floor Tiles, 5 examples, 2.60kg

1977 (1450-1800), 1 example, 953g

2850 (1450-1800), 3 examples, 1.41kg

3063E (1450-1600), 1 example, 224g

A small number of unglazed Flemish silty floor tiles were recovered from contexts [326], [449], [461], [796] and [1063].

Local London sandy red fabrics

3046, 1 example, 255g (1450-1700)

A paving brick made of London sandy red fabric was recovered from context [893].

Late Post-Medieval (428 examples, 220.41kg)

A large assemblage of late post-medieval ceramic material building was recovered, especially post Great Fire materials. All these materials reflected the city's expansion and the increase of the population in post-medieval period. Large amounts of residual roof tiles were recovered from the post-medieval deposits, with a similar fabric range as early post-medieval contexts, although there is a large increase in the amount of fragments from fabric 2276. The introduction of pan tiles is also noted by the presence of fabric 2279.

A cluster of tin glazed wall tile dated between the mid 17th and mid 18th centuries were recovered, including some biblical series. A smaller quantities of machine bricks, dated to the mid 19th and 20th centuries were collected. These were bonded with a hard mortar.

One of the most interesting pieces is a chimney made of terracotta, with a rounded Fleur de Lys machine impression, dated to the 19th century. A fragment of light grey vitrified clay from context [309] is probably associated with kiln furniture and dated between 19th and 20th centuries.

The date ranges represented by the fabrics suggest three relatively distinct construction phases at Tobacco Dock, beginning with a non-industrial phase of construction between 17th and 18th century (Phase 5). Another phase of non-industrial construction is noted at the end of the 18th and beginning of the 19th centuries (Phase 6), while other masonry contexts fall into the last phase of development – the late 19th century and the beginning 20th century (Phase 7).

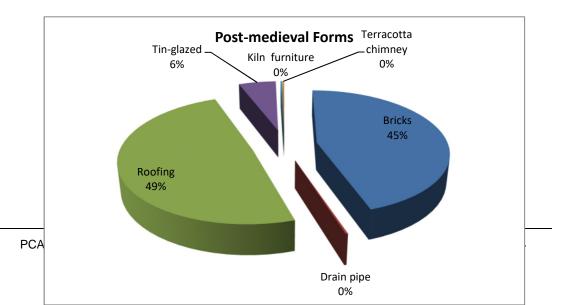


Fig. 4: Percentage post-medieval forms by size.

Bricks

3036, Flemish, cream-yellow hard bricks of uniform colour and texture (1600-1800), (4 examples, 2kg)

Four examples of Flemish paving bricks were recovered from [333] an [891]. One fragment is burnt and a fragment from [891] is complete measuring 150mm x 70mm x 3mm.

Intermediate Great Fire

Maroon 3032nr3033 (1664-1725), (68 examples, 30.49kg)

A large assemblage of a late 17th- to early 18th-century intermediate bricks in fabric 3032nr3033 combining facets of both early post-medieval reds and post Great Fire purples were collected, most of them reused. Seven examples of whole bricks were recovered from structures.

Post Great Fire fabrics (121 examples, 154.70kg)

3032R (1666-1900) Post Great Fire purple clinker rich fabric (94 examples, 121.12kg)

A large group of purple post Great Fire bricks, local post Great Fire red bricks were recovered from the site. The largest proportion of bricks is narrow and unfrogged. Some have sharp arises suggesting possible machine manufacture. Some of these bricks use Victorian mortar types: Roman and Portland. The presence of these bricks shows a phase of redevelopment at the end of 19th century and probably earlier.

3034 Local post Great Fire red brick. (10 examples, 9.16kg)

The largest size of bricks is unfrogged and is bonded with Portland mortar. One example is a paver imitation Flemish brick [893].

3034nr3033 (3 examples, 6. 55kg)

Two bricks are very large (232mm x 105mm x 60mm) and are bonded with T2 mortar.

3035 (1770-1940) Yellow large machine made Medway bricks (5 examples, 9.30kg)

Five examples of 3035 fabric were collected. Three examples are frogged and one of them is bonded with Portland mortar.

3035nr3034 (1 example, 2.80kg)

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Just one example of this fabric was recovered, and was bonded with Roman cement.

3038 (1850-1950), machine pressed brick (8 examples, 5.62kg)

A small assemblage of Fletton bricks was collected, suggesting a late modern occupation. Three examples were bonded with Roman mortar. Two voussoir bricks indicate a brick arch.

The late post-medieval structures are summarised below (Table 3).

Context	Structure	Fabric	Form	Phase	Spot date	Spot date with mortar
3	Cess pit	3032R	Post Great Fire Frogged narrow brick	5	1780-1900	No mortar
5	Cess pit	3032R	Post Great Fire Frogged narrow brick	5	1780-1900	No mortar
8	Drain	3032; 3107M; 3110	Post Great Fire brick Frogged narrow brick; Reigate stone hearth; Portland stone ashlar block	6	1780-1900	1850-1900 (1750-1850)
12		3034; 3032; 3101M	Post Great Fire Frogged Narrow Bricks	7	1780-1900	1840-1900
16	Brick floor	3032nr3033; 3032	Intermediate Unfrogged Post Great Fire brick; Post Great Fire narrow brick	5	1666-1900	1750-1900
19	Wall	2279	Reused unglazed post-medieval pan tile	7	1630-1850+	1800-1950
20	Wall	2279	Reused unglazed post-medieval pan tile	7	1630-1850+	1800-1950
21	Wall	3038	Staffordshire Blue frogged	6t	1890-1950	1800-1950
22	Wall	3038	Staffordshire Blue frogged	6	1890-1950	1800-1950
23	Wall	3038	Staffordshire Blue frogged	6	1890-1950	1800-1950
24	Wall	3038	Staffordshire Blue frogged	6	1890-1950	1800-1950
25	Wall	3038	Staffordshire Blue frogged	6	1890-1950	1800-1950
26	Wall	3038; 3101PM	Whole brick, staffs blue curved, Portland mortar	6	1880-1950	1870-1950
30	Well	3033; 3032	Large wide sandy red brick; Whole unfrogged narrow brick	5	1780-1850+	No mortar
31	Sunken brick structure	3046nr3032; 3101PM	Whole unfrogged narrow brick	5	1780-1900	1780-1900
37	Wall	3038; 3101PM	Staffordshire Blue frogged decorated	6	1890-1950	1830-1950 (1800-1950)
38	Blocking	3035; 3038; 3035; 3101PM	Whole frogged narrow post Great Fire bricks	7	1850-1900	1840-1900
40	Wall	3038, 3101PM	Staffordshire Blue frogged decorated	6	1890-1950	1830-1950 (1800-1950)
41	Well	3039; 3033;	Unfrogged wide early post-medieval	5	1666-1900	1450-1700

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Context	Structure	Fabric	Form	Phase	Spot date	Spot date with mortar
		3032nr3033; 3032R; 3101M	sandy red bricks Whole unfrogged intermediate post Great Fire brick			
48	Floor?	2452, 3116; 3108; 3039; 3065; 3032nr3033; 3032	Early Roman sandy reused bricks; chalk stone; Brown sandstone; silty brick very thin; Whole wide early post-medieval sandy red bricks; Whole intermediate unfrogged post Great Fire narrow brick	5	1666-1725	No mortar
49	Wall	3033; 3033nr3065; 3032; 3101PM	Whole reused unfrogged early post- medieval wide sandy red bricks	5	1600-1900	1840-1900
50	Wall	2452; 3106; 3120; 3031, 3031nr3042; 3032nr3033; 3032; 3135; 3101M	Reused early Roman sandy fabrics with opus sign; unusual ignius rock (pav.); Hassock (rubb.); Reused whole medieval unfrogged wide brick; Whole unfrogged early postmedieval narrow brick; Intermediate unfrogged post Great Fire brick, Granite (cobb.)	5	1700-1900	1830-1950 (1500-1700) (1430-1500) residual mortar
51	Wall	3033; 3032nr3033; 3032; 3101PM	Whole unfrogged post-medieval narrow sandy red brick; Whole unfrogged intermediate post Great Fire	5	1666-1900	1700-1800 (1664-1750)
52	Wall rebuild	3032; 3101PM	Whole unfrogged narrow post Great Fire brick	6	1666-1800+	1750-1850
54	Cess pit	3032	Whole unfrogged post Great Fire narrow brick	5	1750-1850	No mortar
65	Structure - internal	3038; 3101PM	Voussoir brick	6	1880-1950+	1800-1950
75	N/S culvert	3032	Unfrogged and whole unfrogged narrow post Great Fire brick	5	1780-1900	No mortar
78	Single course of brick	3032r	Whole gentle well made frog narrow post Great Fire brick	6	1790-1900	1750-1850
79	Rebuild of wall [114]	3046; 3033nr3034; 3101PM	Whole unfrogged narrow early post- medieval sandy red brick and post Great Fire brick	6	1790-1900	1750-1900
96	Drain?	3033; 3032nr3033; 3101PM	Half unfrogged narrow post- medieval sandy red brick; Whole unfrogged narrow both reused Intermediate post Great Fire bricks, both reused	5	1666-1900+	1750-1900
109	Drain?	3032; 3101PM	Reused unfrogged narrow post Great Fire brick	5	1700-1900+	1750-1900
114	Wall	3105; 3034nr3033; 3101PM	Kentish ragstone (pav.), whole large and narrow unfrogged intermediate post Great Fire bricks	5	1666-1800+	1750-1900
115	Wall	3032R	Whole narrow and large unfrogged	5	1666-1900+	No mortar

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Context	Structure	Fabric	Form	Phase	Spot date	Spot date with mortar
			post intermediate post Great Fire bricks			
116	Wall	3032R; 3101PM	Whole deep frog post Great Fire brick	5	1750-1900+	1870-1900
117	Wall	3032; 3101PM	Whole unfrogged narrow post Great Fire bricks	5	1666-1900+	1750-1900
138	Stone threshold	3108	York stone pav. weathered laminated	6	1800-1900	No mortar
139	Rebuild	3032nr3033; 3035nr3034; 3101PM	Whole unfrogged narrow intermediate post Great Fire(reused and abraded); frogged post Great Fire brick	6	1800-1940	1850-1900
142	Wall	3032; 3034; 3101PM	Whole unfrogged thicker wider brick; Whole unfrogged narrow post Great Fire brick	5	1666-1850+	1780-1900
164	Rebuild	3032; 3101PM	Frogged and unfrogged post Great Fire bricks	5	1750-1900	1870-1900
235	Sunken feature	3032; 3101PM	Whole unfrogged narrow post Great Fire brick	5	1666-1850	1750-1900
265	Brick floor	3032	Unfrogged post-medieval brick	5	1780-1900	No mortar
378	Well	3046; 3034; 3032; 3101PM	Post-medieval sandy red brick; intermediate and post Great Fire brick	5	1666-1900	1750-1900
553	Circular sunken feature	3032	Whole frogged narrow post Great Fire bricks	6	1750-1900	No mortar
738	Wall	3032r; 3101PM	Whole early post Great Fire narrow bricks; Two modern mortar types	5	1700-1900	1830-1900 (1750-1850)
739	Cess pit lining	3065; 3032; 3101PM	Whole reused unfrogged post- medieval sandy red brick; Whole early unfrogged post Great Fire narrow brick	6	1700-1900	1750-1900
1508	Cess pit	3033	Post-medieval whole unfrogged sandy bricks	5	1450-1700	No mortar
1511	Well	3033	Post-medieval sandy red fabric	6	1450-1900	No mortar
1520	Cess pit	3033	Whole unfrogged post-medieval narrow bricks	6	1700-1900	No mortar
1535	Cess pit	2452; 3033; 3032	Reused early Roman sandy brick; Whole unfrogged post-medieval narrow sandy red bricks; Whole unfrogged post Great Fire narrow brick	5	1780-1900	1750-1900
1557	Brick floor	3032	Whole unfrogged narrow post Great Fire brick	5	1780-1900	No mortar
1559	Wall	3032nr3033; 3032	Reused unfrogged intermediate Great Fire brick; Whole unfrogged narrow post Great Fire brick	5	1780-1900	1750-1900
1562	Cess pit	3033	Whole unfrogged narrow sandy red brick	5	1700-1900	No mortar
1678	Cellar wall	3033	Whole unfrogged narrow sandy red	5	1700-1900	No mortar

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Context	Structure	Fabric	Form	Phase	Spot date	Spot date with mortar
			brick			
1693	Wall foundation	3033; 3032	Reused unfrogged post-medieval sandy red brick; Whole frogged and unfrogged post Great Fire bricks	5	1750-1900	1750-1900
1700	Cellar wall	3033	Whole unfrogged narrow sandy red fabric	5	1700-1900	No mortar
1717	Brick floor	3033; 3032	Whole post-med sandy red brick; whole post Great Fire unfrogged brick	5	1666-1900	No mortar
1735	Brick lining to cess pit	3033	Post-medieval sandy red bricks	6	1450-1750	No mortar
1786	Cess pit lining	3033	Whole unfrogged post-medieval sandy red brick	5	1700-1900	No mortar
1797	Brick floor	3033; 3032	Unfrogged narrow post-medieval sandy red brick; Whole unfrogged post Great Fire brick	5	1666-1900	No mortar
2176	Well lining	3046	Unfrogged narrow sandy red brick	6	1700-1900	1750-1900

Table 3: Post-medieval structures

Roofing tile

2279 Pan tile (1630-1850), (210 examples, 33.26kg)

A large assemblage of curved, nibbed roofing tile which came into force only during the mid 17th century was recorded, attesting to extensive later post-medieval red roofing tile development in this area. Pan tiles are numerous throughout the site from contexts. Some of them are burnt and bonded with Victorian mortars.

Floor/Wall tiles

3064W; Local London floor/wall tiles (23 examples, 1.85kg)

Numerous examples of tin-glazed wall and floor were excavated. There are different floor tiles designs dated early 17th to early 20th century. A fragment from [217] is blue glazed with a green flower (Die 83 Betts *et al.* 2010) and fragment from [333] with a fleur de lys (Die 123 Betts *et al.* 2010), are the earliest pieces dated (1615-1650), probably made at the Pickleherring/Rotherhite pothouses. Two Dutch wall tiles from [757] and [796] are the most interesting and show a soldier on horseback in manganese purple dated 1700-1750 (Die 331, Betts *et al.* 2010). The example from [536] had a barred ox head corners and was a biblical scene dated 1740-1760 (Die 363, Betts *et al.* 2010).

Drain pipe

2281 (1700-1950) (1 example, 177g)

A fragment of a drain pipe dated to the late 19th century was found from [2110]. In an archaeological context, the provision of drainage, and in particular the mass production of drainage elements, is an important indicator of the evolution of the urban social situation.

Chimney

Terracotta (1800-1900) (1 example, 552g)

An unstratified terracotta machine pressed chimney had a Fleur de Lys pattern.

Kiln furniture

Unknown fabric (1800-1900) (1 example, 178g)

A fragment of a vitrified light grey clay, come probably from a kiln and collected from [309] dated 1800-1900.

Daub *3102* (543 examples, 21.76kg)

Unworked slightly abraded daub, attesting to the presence of timber framed wattle and daub construction in the vicinity, was identified in small lumps. A small quantity is burnt, and two examples have attached *opus caementicium* [781] [1951].

Wall Plaster (14 examples, 138g)

A small quantity of wall plaster fragments was recovered from contexts [328], [1504], [1566], [1710], [1712], [2157] and [2168]. One of them [328] is red painted and another one is yellowish. The style indicates a late 1st century to middle of 2nd-century AD date. Fragments from [1504] and [1566] are probably post-medieval. The wall plaster is very fragmented and it is impossible to reconstruct the decorative scheme in detail.

Mortar

A summary of mortar types and concrete as well as their period of use from the excavations at TBF10 are given below (Table 4).

Mortar/Concrete Type	Description	Use at TBF10		
T1	Portland mortar. A form of hard cement	Associated with walls [12] [26] [37] [38]		
	(1830-1950)	[40] [49] [50] [738] and drain [8], used		

		to bond post Great Fire fabrics 3034, 3035 and 3038. Associated with fill of sunken structure [35] and fill of a linear cut [426]
T2	Roman mortar. Hydraulic cement or lime, made from burning lumps of marl found in London (1800-1950)	Associated with walls [19] [21] [22] [23] [24] [25] [139] [142], used to bonded fabrics 2279 3032, 3035, 3035nr3034, 3038. Recorded in fills of structure internal [65], cess pit [757] and well [1510].
Т3	Yellowish hard mortar (1750-1900)	Rare, limited to one fragment of post- medieval 3032 brick from a silty sandy gravel layer [887]
T4	Hard grey clinker mortar with fragments of charcoal and glass	Rare post-medieval used in wall [51] and attached to 3033 brick
T5	Hard grey clinker mortar (1750-1900)	Very common mortar recovered from brick floor [16], walls [114] [117], sunken brick structures [31] [235], walls rebuild [52] [79], single course of brick [78], drains [96] [109], well [378], cess pit lining [739] [1535]; and from backfills [53] [209] [215] of construction cuts, floor makeup [172], sandy clayey silt layer [194], dumped deposit [220], fills [278] [303] [309] [328] [398] [792] [815] [886] of cuts, and from fill [842] of an alluvial channel. Used on post-medieval peg tiles (2276, 2279 fabrics) and bricks (3032, 3046nr3032, 3033nr3034, 3032nr3033, 3033, 3034, 3046 and 3065 fabrics).
Т6	White lime mortar (1500-1800)	Rare post-medieval mortar attached to brick 3033 from [891]
T7	Soft mid grey mortar (1450-1700)	Rare post-medieval mortar used to bond 3039 and 3031nr3042 fabrics [41] [50]
T8	Opus signinum: Pink hard Roman cement with inclusions of red Roman brick and tile. Opus caementicium: White or light grey hard Roman cement with inclusions of gravels. (AD 50-400)	Both mortars are difficult to distinguish between them, because they are attached to fragments. Recorded from fills [714] [1189] [1550] [1600] [1739]; different layers [1091] [1851] [1951], dumped deposit [1762] and primary fill [1531] of cess pit. Associated with Roman fabrics in modern and postmedieval contexts [346] [796] [1686] [1920] [2167]. Attached to sandy local fabrics 2452, 2459a and 3006; and to a fragment of daub.

Table 4: List of mortar types identified from the excavation TBF10

The mortar types identified from excavations at TBF10 provide the basis for a chronological subdivision of all of the structures. T1 and T2 mortars were used in the 19th and early 20th century, associated with frogged and sometimes machine bricks. Essentially all the late post-medieval structures and fabrics use the same hard grey clinker mortar (T4). Other mortars (T6 and T7) are very

rare mortars probably associated with early post-medieval structures. Roman mortars, such as *opus signinum* or *opus caementicium*, are difficult to identify, because they are attached to the fragments in small lumps.

Stone (648 examples 527.63kg)

A review of the main rock types, their geological character, source and probable function/ form are summarised below (Table 5). Subdivision according to function is summarised (Fig. 5). A more detailed consideration as to their origin and use of this small assemblage are reviewed below.

MoL fabric code	Description	Geological Type and source	Quantity	Use at TBF10
3105	Fine hard dark grey sandy limestone	Kent ragstone, Lower Cretaceous, Lower Greensand Maidstone District - Kent	249 examples 281.43kg	Common – Construction Rubble from numerous context; ashlar [1049] [1156] [1922] [2156]; paver [114] [656] [849] [1156], hone, [833] roofing slab [1049].
3106	Yellow-green glauconitic sandstone	Hassock stone Lower Cretaceous, Lower Greensand Maidstone District - Kent	118 examples 54.20kg	Construction rubble from many contexts worked stone [1101] slab [1139]
3107a	Fine grained lime low-density glauconitic limestone	Reigate stone – Upper Greensand, Lower Cretaceous Reigate- Mertsham Surrey	5 examples 7kg	Used as a hearth [8] [160] Reigate lime green medieval type
3107b	Fine grained light green low-density glauconitic limestone	Reigate stone – Upper Greensand Roman type	7 examples 4.89kg	Rubble [962] [987] [1049] [1090] Reigate pale green Roman type
3108	Fine banded light brown calcareous sandstone	Lower Cretaceous (Wealden) Kent Post-medieval material is York stone from the Upper Carboniferous of Yorkshire	24 examples 41.37kg	Used as construction rubble [48] [346] [674] [1087] [1090] roofing slabs [536] [922] [974] [975] [1032] [1182][1710] and paving [138] [291] [333] [361] [796] [963] [1704] [1712]
3109	Banded shelly oolitic limestone	Middle Jurassic (Bathonian). South Cotswolds	5 examples 74.04kg	Used as construction rubble [990] [1523], part worked [990] and an altar [1032]
3110	Fine light grey-white oolitic limestone	Portland Stone Upper Jurassic (Portlandian) Isle of Portland, Dorset	2 examples 2.41kg	Used as a block [8] and as paver [1534]
3111a	Moderately hard, but crumbly, coarse sandstone, a ferruginous sandstone	Carstone- doggers and veins in Folkestone Beds of the Lower Greensand (Riddler I)	1 example 100g	Use as construction rubble [962]
3111b	Red/brown ferruginous sandstone	Probably Lower Cretaceous – Lower Greensand Folkestone	23 examples 5.66kg	Used as construction rubble [990] [1032] [1075] [1151] [1209] [1311]

MoL fabric code	Description	Geological Type and source	Quantity	Use at TBF10
		beds Weald Kent		[1711] [1788]
3114	White fine crystalline marble	Various sources (Mediterranean)	16 examples 5kg	Used in post-medieval as paving [+] [536] [796] [893] [1506][[1513] [1550] [1552] [1574] [1647] [1667] and walling?
3115	Blue-green hard fissile slate	Cornish Slate – Devonian Cornwall	4 examples 278g	Used as roofing material [483] [962] [1534], and as written material [796] dated to the first half of the 19th century
3116	Fine powdery white foraminiferal limestone	Chalk Upper Chalk (Upper Cretaceous) Thames Valley	9 examples 9.15kg	Used as construction rubble [48] [651] [1049] [1102] [1128] [1814] [1823] [2079]
3117	Hard dark-grey siliceous cryptocrystalline sandstone	Flint – Upper Cretaceous (Upper Chalk) London Basin	32 examples 4.08kg	Used as construction rubble [257] [651] [1187] [1188] [1209] [1814] [1951] or natural [257]
3118	Vesicular calcareous spring water deposit	Tufa – Holocene (River Thames or tributary)	1 example 217g	Used as construction rubble [1107]
3119	Fine grained, almost oolitic calcarerous Limestone, few fossils, minute pellets formed in quiet water deposition.	Caen Stone-Caen, Normandy.	1 examples 6.8kg	Maybe part of a column ? [2156]
3120a	Fine hard glauconitic sandstone	Lower Greensand (Lower Cretaceous) The Weald Kent	6examples 4.57kg	Used as rubble [792] [1032] [1115] [1742] [1920]
3120b	Fine hard calcareous greensand with flecks of shell and ooids	Bargate stone – Lower Greensand (Lower Cretaceous) Godalming Surrey	7 examples 1.50kg	Used as a rubble for construction [990] [1780]
3120c	Laminated quartz and mica (bisite & muscovite) in a chlorite matrix, surface, more silvery appearance with more mica	Norwegian Rag- Eidsbourg, southern Norway.	1 example 132g	Probably a Whetstone Recovered from [1561]
3120d	Low density grey volcanic rock with inclusions of leucite or Rhenish <i>trass</i> , or a waterproof pozzolanic mortar	Either sourced to Tuffstein Volcanic Tuff – Quaternary Rhineland Mayen-Koblenz district	7 examples 5kg	Used probably as roofing for lowing density/ vault [50] [975] [1047] [1814] [1951]
3120e	Burnt carbonaceous shale	Kimmeridge Shale, Upper Jurassic, Dorset	10 examples 289g	Used as fuel [195] [295] [387] [887] [1031] [1523] [1702]
3120f	Calcerous, flaggy sandstone	Horshamslate- Lower Cretaceous. Wealden,	4 examples 368g	Used as roofing [518] [1209] [2060]

MoL fabric code	Description	Geological Type and source	Quantity	Use at TBF10
		West Sussex		
3120g	Igneous rock (fine- grained)	Basalt Probably Northern England or Scotland	1 example 616g	Used as paving [1510]
3120 h	Hard fine red-brown micaceous sandstone	Brownstone – Lower Devonian (Forest of Dean/ South Wales)	10 examples 3.24kg	Used in roofing slab [359] [1115] [1124] [1838] [1921] [1950] [2070] [2117] [2122]
3121	Brown/red/grey fine grained laminated sandstone	Lower Greensand (Lower Cretaceous) Weald	1 example 361g	Used as paving [975]
3122	Hard yellow-grey calcareous mudstone	Septarian Nodule London Clay Thames basin	9 example 4.37kg	Used as construction rubble [435] [1003] [1102] [2070]
3123	Hard, coarse, dark- greyvesicular basalt lava -with white (leucite) and black inclusions	Neidermendig lavastone Tertiary-Andernach Region, NW Germany	80 examples 2.80kg	Quern fragments [390] [721] [1033] [1087] [1126] [1888] [1893]
3130	Medium to coarse grained sandstone	Millstone Grit Namurian) Upper Carboniferous Yorkshire or South Wales	1 example 0.075kg	Burnt moulded stone (quern?) [990]
3131	Coarse grained quartz and muscovite mica	Pennant sandstone, Upper Carboniferous South Wales	5 examples 2.35kg	Used as construction rubble [1087] and as roofing [838] [1228] [1788] [2194]
3132	Oystrich hard limestone	Jurassic, Forest marble,	6 examples 1.5kg	Using as a roofing [1746][1765] [1780]
3133	Massive, hard, highly fossiliferous, crinoidial limestones	Black carboniferous Limestone-Pennines, Peak District, the Mendips, Bristol and Gloucestershire.	1 example 610g	Used as a rubble from [398]
3135	Fine pink granite	Undetermined source possibly Cornwall, Lake District or Scotland	2 example 3. 416kg	Used as a cobble [50]
3143	Hard coarse sparry shelly oolitic	Barnack stone – Middle Jurassic (Bajocian) Cambridgeshire	2 examples 1.26kg	Found as rubble [975]
3154	Fine light cream calcareous mudstone	White lias – Upper Triassic Somerset – Midlands	1 example 0.069kg	Burnt fragment [886]

Table 5: Character, source, quantity and probable function of the main stone types from TBF10

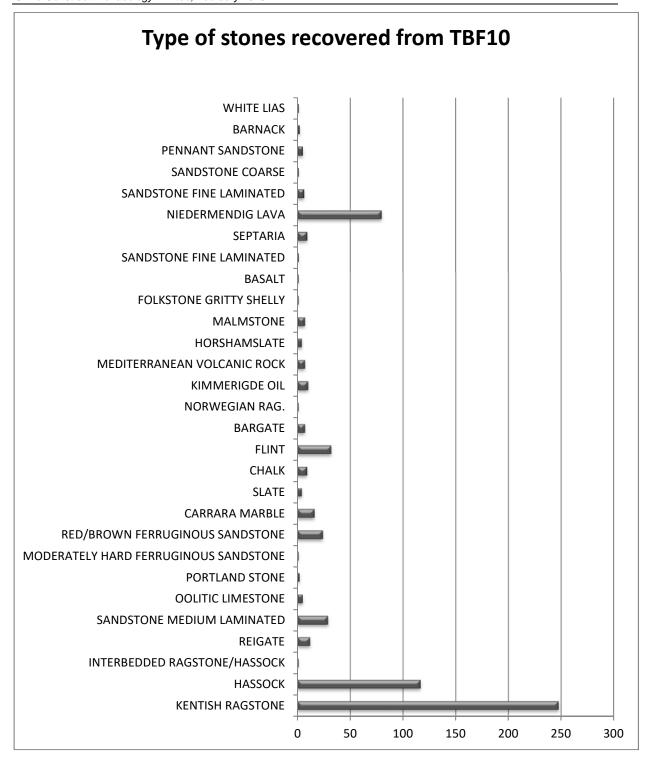


Fig. 5: Types of stone recovered from TBF10 (by size)

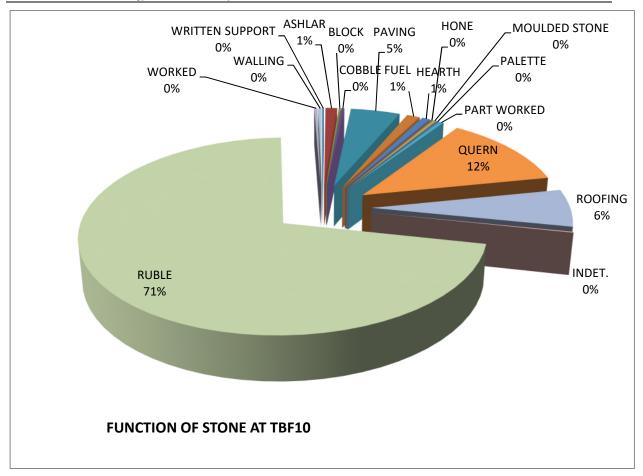


Fig. 6: Pie chart illustrating function of stone at Tobacco Dock TBF10 (by size %)

Summary

An explanation for the wide array of stone material types encountered (29) from TBF10 can be provided not only by the intermixing and wealth of Roman and medieval building materials in the consolidation dumps but also the draw on resources including the acquisition of high status freestone materials for the embellishment of the bath house like the use of Carrara white marble. Some pieces were polished and faced, and appear to be architectural or furniture elements (such as a paver) rather than from sculpture. Two examples are possibly Victorian furniture [1513] and [1647].

Chalk, Hassock and Kentish ragstone probably were used in the foundations and in the walls, using a rubble core of mortared flint, chalk and tile mixed with Kentish ragstone. Chalk, flint, Septaria and Reigate-type stone were also used less frequently as facing stone. Chalk and flint are materials easily available in southern Britain and Septaria is a form of calcareous clay easily found in London. The Kentish ragstone and Hassock stone from the Maidstone area, was transported by boat into London and was very common in Roman masonry construction.

It seems likely that the most of the stone types are Roman. German lavastone quern are abraded and very fragmented or broken from early and late Roman phases. These rock types were the most common quernstone material for Roman London, although the possibility exists that these may be dumped in the Late Bronze Age or Early Iron Age.

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Bargate stone a shelly ragstone material from the Farnham area used in Roman building rubble in Shadwell has been identified from late Roman context [990] and dump levelling layer [1780]. There are also the large quantities of Kentish ragstone and Hassock (332kg) which may have derived from the dismantling of the bath house building.

Fine banded light brown and yellow calcareous sandstone (Yorkstone and Brownstone) were using as paving and roofing in late Roman buildings, although this is a modern paving slab too (1700-1900).

Reigate stone recovered from [8] and [160] was used as a hearth in the late post-medieval phases. Fragments of Reigate as a rubble was collected from late Roman phases. It's probably that Reigate was being used from the first to at least the third century, although some could be recycled. Reigate stone was not used for external architecture after the 15th century due to poor weathering properties.

One example of calcareous tufa was collected from [1107]. This may have been used in the construction of vaults, being a lightweight stone.

Sculptural and Exotic Stone – A petrological and sculptural review from Tobacco Dock.

The Limestone Altar

From a Phase 3.5 (late 4th century) area of made ground [1032], a large (70kg) altar carving was recovered. This had all the standard features you would expect of an altar (the focus is highly weathered), baluster together with moulded rim are present. But any additional detail with regard to decoration and inscription is completely obliterated by intense weathering over a long period of time. All sides are weathered suggesting prolonged permanent exposure either at the front of a temple or as a funerary monument.

It is carved out of a fine banded shelly oolitic limestone (Bath-stone) from the Middle Jurassic (Bathonian) of the Cotswolds, verified by the thin section already taken for research purposes (KH1). This stone type is used in altars elsewhere in London including an altar showing a Hunter God (Apollo Cunomaglus?) (Coombe *et al.* 2015, no. 73) found in the city in 1830. This stone is widely used in funerary monuments and religious sculpture in London and south-east England (Hayward 2009; 2015) and the secondary use of a column base in this stone as a pilae stack in the remodelling of the Tobacco Dock bath house (Sudds 2011, 107) has already been published. Accessibility to these Bath-stone outcrops was possible via the Thames. The use of Bath-stone reached its peak in Roman London during the 2nd century AD with over 60 examples documented (Coombe *et al.* 2015).

The Stone Palette

From the top of a Phase 3.5 (late 4th century) well [1150] SF 301 half of a cosmetic or mixing palette in green Sparta porphyry or Porfido verde antico (Price 2007) was recovered. The rock, a pale limegreen metandesite due to the presence of epidote and chlorite and sourced to the Permian-Carboniferous, outcrops Krokeai, near Sparta, Levetsova, Laconia along the south-east part of the Peloponnese in Greece was widely used throughout the Roman Empire but is only occasionally found in Britain. A second stone mixing palette forming part of possible cosmetic set (Hall 2000, appendix 4), or possible a wall veneer (Betts 2000, 347) from site D, the easternmost plot of the Eastern Cemetery SF 510, just 1km from Shadwell may indicate that this rock was a grave good. Other examples of this lithology infrequently turn up in Southwark (Hayward in prep; Pringle 2009; Crowley 2005) and elsewhere in the City (Pritchard 1986; Bradley and Butler 2008).

Rhineland Volcanic Tuff or Volcanic Trass Mortar

Seven examples (5kg) of a low-density off-yellow-brown vesicular volcanic rock deposit or possible pozzolana tuff mortar may have previously been confused with Tufa (Sudds 2011) from an earlier excavation. It is made of a material not previously identified from London or *Britannia* before. If it is a stone it cannot be calcareous tufa as it contains very small black mineral inclusions within the vesicles and pyroxene under the polarising microscope (Thin Section KH2 already prepared for research) and does not fizz when hydrochloric acid is applied. They turn up in the late Roman Phase 3.5 rubbish pit [1047], made ground [975] and is present in Phase 5 layers [1814], including reused in a 17th-century wall [50] and possible Phase 3.2 burnt remains [1951].

Comparable low density, volcanic tuffs are absent from the British Isles as there has been no geologically recent volcanic activity. Sources of softer low density tuff from the Mediterranean, the products of historically recent and ongoing (e.g. Etna; Vesuvius) volcanic activity or volcanic zones that have only recently, geologically speaking, become dormant (Rome) have provided sources of cut ashlar for the Roman towns in Italy and the imperial capital, e.g. Peperino or Lapis Albanus ¹(Claridge 1998).

However a far more accessible source of low density volcanic tuff and one that was increasingly exploited for ashlar and vaulting in Roman towns along the Rhineland frontier zone in Gallia Belgica (e.g. Limburg, Dreesen and Dusar 2004), Germany Inferior and Superior is Tuffstein. Examples kept by the Geological Institute of Belgium² and sourced to the Quaternary tuffs of Pelenz and Brochtal in the Mayen-Koblenz district³ (Röder 1967; Ruppiene *et al.* 2013) had a comparable texture and colour.

One further possibility is that it is Rhenish trass, or a waterproof pozzolanic mortar containing tuffstein fragments from the Rhine (Elsen 2006). This was used extensively by the Romans in buildings along the Rhine.

¹ Comparison of the Tobacco Dock Tuff with samples of Peperino (Volcanic agglomerate from Monte Capoli, Marino near Rome (Nat Hist Museum Accession Number 67904)) found the latter to be too dark, hard and coarse.

² Comparative example (BF 089) from the Belgium Geological Insitiute examined in hand specimen with a hand lens by this researcher at the Roman Ornamental stone conference at Tongeren April 2016

³ Same district as where the Mayen or Andernach lavastone exploited.

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Fine banded light brown calcareous sandstone fabric 3108 is used in late Roman period (AD 200-400) as roofing slabs, although some fragments are modern paving slabs (1700-1900).

Various fragments of ferruginous sandstone were collected from late Roman context. This stone was used as a roofing slab and as rubble for construction.

There is no definitive evidence that the robbing occurred later than the Roman period, though it is difficult to believe that there was a substantial demand for building stone in the early fifth century, and the robbing might not have taken place until seventh century or later.

Methodology

Two petrological thin sections have already prepared from the assemblage for research purposes from stone samples taken from the Roman altar [1032] KH1 and Rhineland Tuffstein [1047] KH2. These were prepared using the rock preparation facilities at the School of Geography, Archaeology and Environmental Sciences at the University of Reading. The application of a 1kg mason's hammer and sharp chisel to each building material sub-sample ensured that a small fresh fabric surface was exposed. A 20mm long x 15mm thick sample was large enough to undergo thin-section preparation and analysis. Although destructive, this method ensured that the maximum amount of information could be obtained from the smallest possible sample size thus fulfilling the museums and archives sampling policies.

The procedural implications and sample preparation can be referred to in Hayward 2009. However, each sample was additionally embedded in coloured araldite resin (CY1301) which was necessary for two reasons. First, the process of embedding with the addition of a hardener (HY951) strengthened, particularly the soft mortar samples. Second, the addition of a green colouring agent (BW1034) during this process highlighted the pore spaces in the sample enabling the overall porosity to be determined. Staining is a necessary process (Adams and Mackenzie 1998) during the production of the more lime rich thin sections. It picks out the variability in colour between ferroan and non-ferroan calcite as well as dolomite, with the addition of Alizarin Red C and Potassium Hexocynoferrate.

This high resolution petrographic approach enabled, each 30 micron thick slice of stone to be viewed under the polarising microscope at magnifications greater than x 400 (Leica DMLP). Thin sections can help distinguish between different types of calcite grains, minerals, cements and microfossils. Finally, at publication stage a series of photomicrographs of the worked stone types (Leica DFC 320 Digital Camera) will be produced to illustrate the different materials being used at publication

Walling materials

All of the stone walling material relates to the demolition of the foundations and walling core rubble of the bath house. The dominant material is the hard calcareous ragstone and softer Hassock stone

from the Lower Greensand (Hythe Beds) of Maidstone. The large quantities recovered 331kg (365kg), are in keeping with the quantities seen in the mortared walling of the bath house itself (Sudds 2011, 107) and Roman London as a whole shipped by boat down the Medway and up the Thames (Marsden 1967, 39-41; Blagg 1990, 39; Rowsome 2000, 20; Crowley 2005, 90) clearly represent demolition debris from the bath house. Most of this is rubble but there is also ashlar, paving and roofing from Phase 3.5 features [656], [1049], [1101], [1139] and [1156].

Other stone rubble types from these later features [962] and [1090] include a sizeable quantity (14kg) of low density grey-green glauconitic limestone, comparable to examples from the Upper Greensand Leatherhead/Farnham and seen in the foundations and rubble core in the bath house (Sudds 2011, 107) and occasionally elsewhere in Roman London. Smaller components include Ferruginous sandstone from the Lower Greensand beds of the Weald in Phase 3.3 and 3.6 levels [1032] [1075] [1151] [1209] [1311]. Bargate stone a Cretaceous sandstone from the Guildford/Godalming area which contains a high proportion of shell and ooids [990] [1780] had not been seen in the bath house excavations before. There is also septarian nodule, a compact calcareous nodular deposit from the London clay [1102] [2070], chalk and flint from the Upper Cretaceous of the Thames Valley (13kg) [1049] [1187] [1188] [1209] and tufa, a Holocene spring deposit [1107].

Roman paving, coursing and roofing stone

A group of thin, laminated dark green-grey (Horsham slate, Pennant sandstone; Banded laminated sandstone) and red (Brownstone) sandstones from the Weald and South Wales, supplemented by limestone of a possible Jurassic source from southern Britain had been identified in later Roman Phase 3.5 and 3.6 dumps. They may have once been used as paving and roofing stone for the bath house or indeed as possible coursing levels in the ragstone wall core. In the absence of any definable nail holes however it is not possible to determine their function, however it will be necessary to reexamine their petrology in order to ascertain whether or not these are different Wealden fabrics or far more exotic sources such as the Forest of Dean or indeed whether the Chilmark type roofing/paving from [1746] [1765] [1780] is in fact a type of Forest Marble seen in the bath house (Sudds 2011).

Roman Freestone

Freestone, that is a limestone with an open porous texture that enables the rock to be worked or carved in any direction (e.g. Leary 1988), is represented by only a handful of examples. Most is made of a type of banded shelly oolitic limestone from the Middle Jurassic (Bathonian) of the South Cotswold escarpment that is the most common native sculptural and funerary material in Roman London (Hayward 2009; 2016). Aside from the large altar fragment (see above) there are a few broken up examples from [990] and a Phase 3.3 wall [1123]. One other freestone identified and used mainly in later Roman London was the very shelly spar rich oolitic limestone Barnack stone (Middle Jurassic – Bajocian Cambridgeshire). This stone was either used in sarcophagi or monumental

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architecture (Hayward 2015) and chunks were identified in a Phase 3.5 made ground [975]. The White Lias fragment from [886] could be medieval.

Roman Quern

Only small quantities of quern were recovered from the excavations. These are nearly all (2kg) the common Niedermendig lavastone from the Rhineland, the most common quernstone material for London, recovered from contexts [390] [721] [1033] [1087] [1126] [1888] [1893] and a small fragment of millstone grit from South Yorkshire [990].

Hones

Very few hone or whetstones were recovered. A solitary fragment made from Norwegian ragstone from [1561] is almost certainly medieval, whilst a ragstone hone from [1561] may be post-medieval.

Post-medieval Paving and Cobble stones

A large group of White Carrara marble paving slabs (5kg) from post-medieval Phases 5 and 6 almost certainly represent Georgian or Victorian paving or gravestone material rather than recycling of Roman material from the bath house. Granite in a 18th-century wall [50] and a basalt paver from a Phase 6 well infill [1510] almost certainly represent Georgian/Victorian road surface materials from northern and western Britain. It is also likely that a Carboniferous limestone from [398] may have been used for a similar function. Some of the stone paving associated with the Phase 5 and Phase 6 housing [333] [361] [536] [796] [1704] [1710] [1716] is made from York stone from the Carboniferous of Yorkshire, including a large step threshold [138].

Absence of Stone Tessera and Purbeck marble

Two obvious absentees from the Roman assemblage at Tobacco Dock is the complete absence of Purbeck marble paving and/or architectural moulding, coloured marble moulds and stone *tesserae*. Usually the use of Purbeck marble is a feature of opulent early Roman buildings (including bath houses) in Roman London (Hayward in prep.) and Britannia (e.g. Bidwell 1979). So its absence both here and from the bath house itself (where Forest marble seems to have replaced Purbeck marble as a native flooring material) (Sudds 2011) is perhaps an indication of the late Roman character of the bath house building(s) at Tobacco Dock.

The absence of stone *tesserae* is perhaps more an indication of how easily these small cubes of stone are dispersed once the floor has been dismantled.

Significance and Potential of Assemblage

Petrology

With at least 29 different lithotypes identified, most from the Roman sequence, the excavations at Tobacco Dock give some idea of the draw on resources that a wealthy and prestigious late Roman building had in it is construction. This can not only be attributed to the high status items (altar; palette) but perhaps the more mundane constructional elements (tuffstein or tuffstein mortar; a number of different native roofing and paving elements and the variety of materials in the constructional rubble itself). It is in essence a fingerprint of late Roman stone constructional building materials in London and for this reason, some attention needs to be placed on their lithology and geological source

Thin sections and their accompanying photomicrographs of two items had already been produced for research purposes from two items (altar; tuffstein/tuffstein mortar), the results of which can be included at publication stage. The tuffstein, does require further comparative analysis to see whether or not it is in fact a Rhineland hydraulic pozzolanic cement with tuff inclusions. If so this may be a rare example of a Roman waterproof mortar used perhaps as a sealant in the bath house, if not the rock will be new to *Britannia* and provides another example of cross-channel trade in stone perhaps as ballast.

The roofing and paving materials require detailed hand specimen analysis to see whether they are from West Country sources and/or from the Weald. It would be worthwhile examining and comparing the stone types from these examples with retained high status stone and roofing from the earlier excavations (Douglas *et al.* 2012). Table of rock sources and a geological map summarising the breadth of materials should be compiled from both excavations

Phase Summary

The fabric and form of the worked stone, ceramic building material (peg tile; ridge tile floor tile; brick) and mortar retained from the Tobacco Dock excavations (TBF10), forms the basis of a broad chronological subdivision.

Phase 3 Roman features

A large quantity of Roman ceramic building material was recovered from Tobacco Dock amounting more than 661kg. Apart from the materials recorded *in situ* in the oven, all the materials are associated with demolition deposits. The condition of the material is generally good, although most of them are reused, principally the early fabrics. Forms noted in the assessed material, included standard types such as brick (determined by thickness rather than form) and roof tile (both *imbrices* and *tegulae*). To a lesser extent other types were also recovered. These are commonly associated with high status buildings and included *tesserae*, *tubuli* and box flue tile fragments. Apart from the individual *tesserae*, no forms showed complete dimensions.

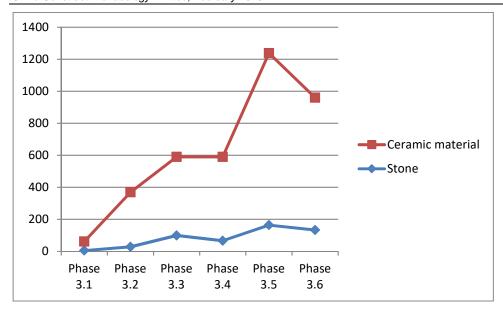


Fig. 7: Comparative phases size ceramic material and stone

Phase 3.1 (Early Roman)

A small assemblage of building material was recovered from this early phase (56 fragments, 6.40kg). The material was collected from the fills of pits, postholes, post pits and from occupation layers Most of the material is in a fragmentary or abraded condition. No structure was found *in situ*.

The London red sandy 2815 group is the most common fabric (13 fragments. 1.95kg), with just one fragment of the early yellow Eccles fabric. Bricks and undiagnostic tiles are the predominant forms, with the exception of an abraded small fragment of *tegula*.

Small and abraded fragments of daub (34 fragments, 941g) shows the presence of a timber framed wattle and daub structure on the oven floor in the vicinity. It is possible however, that these fragments possibly came from prehistoric phases.

Small fragments of Niedermendig lava stone used as querns indicate the grinding of foodstuffs and inorganic materials.

Phase 3.2 (3rd century)

A large quantity of building material was recovered from this phase (341 fragments, 39.74kg). The material was collected from fills of quarry pits, drainage ditches, possible beam slots, pits, postholes, post pits, dumped deposits and a probable beaten floor. Some of these features are associated with Structure 1 and 2. No structure was found *in situ*. The majority of the material is in good condition. Burnt material only represent 10% of the assemblage, with abraded material accounting for 34%, proportions typical of dumped deposits.

The London sandy 2815 group is the predominant fabric (222 fragments. 30.33kg). Occasional examples of Eccles, Radlett, Sussex, calcareous and speckled fabrics are present. Bricks and undiagnostic tiles are again the predominant forms, with the first appearance of *imbrex* and an increase in *tegula* size. The huge quantity of *tegula* and *imbrex* collected suggests that may have been come from a roof collapse.

Box flue tiles are predominantly combed, with just one scored fragment with a grid pattern in the Radlett fabric. These materials probably came from the nearby bath house.

Five fragments of mud brick was recovered from [1798] and [2117]. Dog foot prints were recorded from [2117].

The presence of Kentish ragstone, Hassock and flint rubble would suggest the demolition of a stone masonry wall or may merely represent ballast recovered from *Londinium* (Bird 1996). There is also dumped ferruginous sandstone in the form of roofing or levelling courses. The presence of low density volcanic ashlar (tuffstein) may be indicative of vaulting material.

In all, 32% of the materials from [2117] were burnt, and may have come from the demolition of a building nearby.

The early London sandy group 2815 is still the principal fabric, most of it came from dumped deposits. Late Roman fabrics are in the minority. Box flue tiles and burnt material (12%) could be indicative of dumped hypocaust material, although it is possible that these were truncated in antiquity, or destroyed, or reused during remodelling. Sometimes bricks, tiles or *imbrex* are reused as part of *pilae*. Late calcareous fabrics 2453 and 3013 were found from [1813].

Phase 3.3 (late 3rd century)

A sizeable quantity (491 fragments, 150kg) of building material was recovered from this phase The material comes from the fills of pits, the backfill of a construction cut, drainage ditches, pits, postholes, post pits, dumped deposits and a well. Most of the material is in a good condition. Burnt material represents less than 10% of the assemblage, with 14% abraded.

The London sandy 2815 group is the predominant fabric (72%). Occasional examples of Eccles, Radlett, late silty, calcareous, and (for the first time) Harrold are present. Bricks (35%) and undiagnostic tiles (26%) are again the principal forms. There is a significant increase in stone (25%), especially roofing or levelling course elements. Box flue tile is poorly represented, and a couple of *tesserae* appear for the first time. A mud brick fragment was recovered from [2031].

Phase 3.4 (4th century)

The building material assemblage recovered from this phase (521 fragments, 120kg), remained high. The material was collected from the fills of pits, cuts, stakeholes, several undefined layers and from

dumped deposits. Most is in a good condition. Burnt material account for less than 6% of the assemblage, with abraded fragments accounting for 18%. Most of this material came from dumped deposits, layers and pits.

The London sandy 2815 group is again the predominant fabric (63%). Occasional examples of Eccles, Radlett, early and late silty, calcareous, and late Harrold are present. Undiagnostic tiles (33%) and bricks (29%) are the principal forms again. A circular digital mark was recorded from [410] made of the 2459b fabric.

There is a reduction in the quantity of stone (12%), with most being rubble. Small fragments of German lava quern were recovered from [1126] with a small fragment of Kimmeridge shale from [887]. Box flue tiles represents 4% of the total and all the fragments are made of the early London sandy fabrics, specifically 3006 fabric. The majority of the pieces are combed with parallel lines, although one has a rectangular pattern.

Later Roman roofing or coursing stone is present and made of Brownstone from the Forest of Dean.

Dumped deposit [1868] from Trench 2 may be indicative of the demolition of a Roman building (possible B1). Early tile fabrics are numerous, but the presence of stone roofing and Bargate stone also suggest some late Roman building material.

Phase 3.5 (Late 4th century)

This phase had the largest quantities (1074 fragments, 403.34kg) of Roman material building. This may relate to an increase in building activity or just possibly be dumped material following on from the final occupation of the bath house.

The material was collected from fills of pits and cuts, several layers, dumped deposits and from a well. Most is in a good condition. Burnt material represents 8% of the assemblage, and abraded fragments 11%, mainly from dumped deposits, layers and pits.

London sandy 2815 group is again the predominant fabric (61%). Occasional examples of Eccles, Radlett, silty, calcareous, and late Harrold are present.

Undiagnostic tiles (25%) and bricks (30%) are again the principal forms. Different marks were preserved, especially finger marks and animal prints, although the most important piece is a four lives signature [456] made of 3006 fabric. A similar proportion of stone (15%) to the Phase 3.4 deposit was recorded mostly as rubble. Roofing material is represented by 8.5kg of *imbrices* and 18.8kg of *tegulae*, all made in early London fabrics, except the occasional fragments made of later calcareous fabric.

Box flue tiles represents 1.8% of the size and all the fragments are made of London sandy fabrics group, specifically fabrics 3006 and 2459a. The majority of the pieces have a combed parallel lined design, with the exception of a semi-circular pattern [1746].

Phase 3.6 (Early 5th century)

There was less building material from this phase, which is probably associated with the abandonment of the site (863 fragments, 202.90kg).

The material was collected from the fills of pits and cuts, several layers, from dumped deposits and a well. Most of the material is in a good condition. Burnt material represent 8% of the assemblage, with abraded material accounting for 11%, mainly from dumped deposits, layers and pits.

The London sandy 2815 group is again the predominant fabric (58%). Occasional examples of Eccles, Radlett, silty, and calcareous are present. Bricks (25%) and undiagnostic tiles (22%) are the principal forms again. There was a steady quantity of stone rubble (16%), present, little changed from the previous phase. Box flue tiles accounts for 3% of the assemblage with most of the fragments are made of the early London sandy fabrics, with a few Radlett fabrics. Some fragments of combed box flue tiles and a fragment of a circular brick, possible used in the construction of *pilae*, are of interest. The majority of the pieces are parallel lined combed forms with the exception of a roller stamped box flue tile (die 77) [714]. A few examples have finger marks and animal prints. These were recovered from [451] and [1075], with one made of late calcareous 2457 fabric. A rare circular brick, normally used in *pilae*, was recovered from [1738] made of early London fabric 2452.

The size of *tegula* and *imbrices* decreases considerably in this phase, and all are made of early London fabrics, except occasional calcareous fabrics.

Phase 4. (Medieval)

There is a reduction in the quantity of building material recovered from layers and fill of cuts from Phase 4 (161 fragments, 44.46kg). Because of the intermixing between Roman and medieval ceramic building material, it has proven somewhat difficult to subdivide up the medieval features and deposits assigned to Phase 4 from the more substantial later post-medieval levelling layers immediately above (Phase 5). There was no medieval structure found during the excavation. Most of the material was recovered from the fill of cuts and possible occupation layers. Nevertheless some generalisations can be made. Firstly, in Phase 4 Roman ceramic building material is still prevalent (74%). Next the medieval material that is found is generally made from fabrics 2271 (1180-1800), 2586 (1180-1800), 2587 (1240-1450), 2274 (1060-1300) and 2273 (1135-1220) and forms (peg and bat tile) with a 12th-to early 13th-century feel to it. Daub is still present as small and abraded lumps, some of them burnt. Fabrics 2276 (peg tile) and 2279 (brick) suggest a probably early post-medieval occupation or intrusive material.

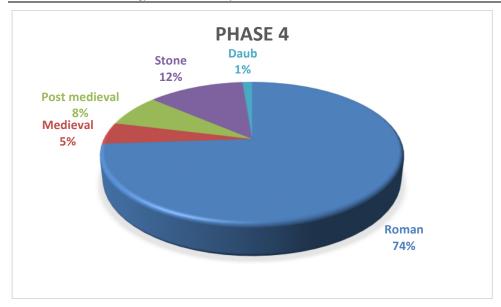


Fig. 8: Percentage of building material from Phase 4, including stone and daub

Phase 5 (Phase 5.1: 17th century- 1600-1660/1680) (Phase 5.2: Late 17th century- 1660-1720)

A very large quantity of material building was recovered from Phase 5 (747 fragments 171.21kg). Some structures were characterised by the use of bricks and stone. Several structures were found as cess pits, brick floors, wells, sunken structures, walls, culvert, drains and cellars.

Phase 5 reclamation deposits have a greater proportion of later medieval fabrics with less Roman fabrics (19.27%). Although there was proportionally less stone (4.41%) than in the previous occupation phases it was noticeable that there were many more different types.

Medieval fabrics are present in low quantities (25.7% by size, 9.34% by weight). By form peg tiles are the most numerous (24.63% by size, 4.59% by weight), made of five different fabrics 2271, 2273, 2274, 2586 and 2587, suggesting the possible existence of different buildings. Some peg tiles preserve splash glazed. It is interesting to note that there were eight medieval bricks in fabrics 3031 and 3031nr3034.

Obviously the post-medieval ceramic building is predominant (46.18% by size and 50.74% by weight). A medium size of early red post-medieval bricks was collected (9.9% by size, 18.7% by weight). Some of them are clearly reused with later mortars. A range of measures was recorded, with length between 213mm and 276mm, 100-121mm in width and 50-70mm in depth. A small size (4% by size, 10.68% by weight) of intermediate Great Fire fabric 3032nr3033 was found in structures and fills. Post Great Fire bricks (some frogged, probably from a rebuilding phase) made of 3032 and 3034 fabrics (3.88% and 10% by weight) are less representative.

A difference in weight between Phase 5.1 (35.34kg) and Phase 5.2 (135.86kg), possibly associated with the increase of bricks production after the Great Fire. Two buildings structures were preserved from Phase 5.2 (PMB 1 and PMB 2).

Post-medieval Building 1 (PMB 1) is located in North Trench 1, and is represented by the construction cut [147] for wall [50] (6.72m x 0.33m x 0.57m). The wall was built reusing Roman and medieval fabrics (3031 and 3031nr3042), intermediate Great Fire bricks and different stone types, including reused granite cobbles, bonded with a white creamy soft mortar. There was some rebuild to the wall represented by the use of yellow fabric brick rendered with Portland type cement (19th century). This wall probably continued further to the east [51], and was built with sandy fabric 3033 and intermediate Great Fire bricks. An internal wall [49] divided the building in two rooms. The wall [49] was built reusing early post-medieval wide sandy red bricks (3033 and 3033nr3065) and rebuilt in the 19th century with Portland mortar rendering. In Room 1, two structures associated with the building were recorded: a sunken masonry feature [96] built reusing sandy red and intermediate post Great Fire brick, and a brick floor [16] and floor makeup [76] made of intermediate and post Great Fire bricks. In Room 2, at the west face of wall [49], there is a layer [172] interpreted as a bedding layer for a floor subsequently removed. The ceramic building recovered was intermediate Great Fire bricks.

Post-medieval Building 2 (PMB 2) was located in the south-east of Trench 2. Contexts [1678] and [1700] represented a cellar masonry walls and context [1717] a brick floor associated with these walls. These walls and floor were built with post-medieval sandy fabric (3033) and post Great Fire bricks (3032).

Phase 6 (Phase 6.1: 18th century-1720-1780) (Phase 6.2: Late 18th/early 19th century-1780-1840)

A large quantities of building material was recovered from Phase 6 (877 fragments, 333.57kg).

Roman ceramic materials represent only 19.27% by size of the assemblage from Phase 6. A brick with rain drops, a tubuli and combed box flue tiles are the most significant fragments.

Bricks represent 61.83% by weight, made from different fabrics (3032, 3032nr3033, 3038, 3033nr3034, 3033, 3046, 3034nr3035, 3065, 3035,). Their importance relates to an increase in demand for bricks after the Great Fire and with the expansion of population in this area of London. Frogged and voussier bricks are more common and are bonded with hard mortars or concrete.

A cluster of different roofing tiles fabrics (2271, 2276, 2586, 2587, 2279 and 3090) and forms (pan 12% and peg 16% tiles) suggests the existence of different roof coverings in the area.

One example of medieval unglazed floor tile made of 2505 was recorded [792]. Floor tiles made of Flemish fabric 3063 were present. There were two tin glazed wall tile fragments, one blue and white, barred ox head corners (1740-1760) and the other with a purple soldier on a horse (1700-1750).

The types and uses of stone recovered (11.46%), from this phase are very different from Phase 5. The availability of paving sandstone, and cobblestones from north and western Britain probably relates to greater ease of access by the railways. Some Carrara marble fragments used as pavers or fireplace surrounds and a probably Caen column were found from [2156].

Two buildings structures were preserved from Phase 6.1 (PMB 3 and PMB 4).

As part of PMB 1 a probable posthole [94] and a brick lined drain [110] were recorded. The drain was constructed with fabric 3032.

The remains of post-medieval Building 3 (PMB 3) were recorded to the west of PMB 1. The wall foundation [114] [180] and wall [127] were built using 3034nr3033 and 3032 bricks. Associated to this building was found a brick floor [265] using the same fabric 3032.

Others structures were found in the North Trench as a well [64], cess pits [54] [175], and a probably tanning pit. The material collected from these structures, fills and backfills shows a reused of early materials mixed with common post-medieval fabrics

A well [2176], and cess pits [1536] [1794] [1509] are some structures that were found from Trench 2. All of them are composed of late post-medieval fabrics mixed with reused Roman and early post-medieval fabrics.

A masonry foundation [1693] from PMB 4 was found in the east of Trench 2, built with unfrogged and frogged post-medieval fabrics (3033; 3032) and bonded with light grey chalky mortar.

In Phase 6.2 a buttress [52] was rebuilt against the wall [127] (the party wall between PMB 1 and PMB 3) using late post-medieval fabric 3032 built with unfrogged dated 1666-1800. A sewer [99] and culvert [75] was added close to the PMB 3 using post Great Fire fabric 3032. The sewer construction altered the wall [114] from PMB 3, using sandy fabrics materials for repairing it. A foundation wall [210] [142], [209]) for a new building (PMB 5) was found to the north-west, and probably represents an internal wall to separate it two rooms. The surviving masonry was composed of late post Great Fire bricks 3032 and 3034. Room 2 preserved an unknown brick (3032 fabric) structure bonded with a crinkly grey mortar.

Cess pits [3] [5], and a drainage system [8] associated with these cess pits were built using mainly frogged 3032 bricks and bonded with a grey sandy mortar. Another possible drain [78] was composed of 3032 frogged bricks reusing Reigate and Portland stones. Wells [86] [535] [378] [377] were built with the same frogged fabrics, and reusing Roman and post-medieval stones.

A foundation [738] associated with a possible building (PMB 6) was found in the South Trench. The masonry was built with unfrogged 3032 fabric, bonded with a light grey mortar.

Cess pits [1520] [1544] were lined with unfrogged narrow 3033 fabric bricks (dated 1700-1900) from Trench 2. A rebuilding [1672] [1547] phase was detected over the walls [1678] and [1700] (see Phase 5.2, PMB 2). The masonry was composed of narrow 3033 bricks. A wall [1559] and floor [1557] were added to masonry [1693] (see Phase 6.1, PMB 4) using in this case 3032 fabric bricks. Wells [2169] and [1511] were built using unfrogged orange 3033 and 3032 bricks.

Phase 7 (Phase 7.1:Late 19th century) (Phase 7.2: Post WWII)

The building material from Phase 7 decreases considerably. A few bricks (3032nr3033, 3034, 3035, 3038), peg (2276) and pan (2279) tiles fragments were collected from this phase (27 fragments, 58.35kg). Bricks represent 39.91% by weight. The bricks are narrow, frogged and bonded with hard Portland mortar, indicating a late 19th-early 20th-century occupation. The surviving masonry was related to structures [12], [19], [20], [26], [38], [65], [138], [139] and [164].

Distribution

Context	Fabric	Form	Size	Date range material	e of	Latest dated material		Spot date	Spot date with mortar
0	3238; 2815; 3004; 3006; 2459a, 2452, 2459b, 2459c; 3018;	Daub, Carrara marble? (pav.); Hassock stone (rub.); Eccles fabric (brick and tegula), early and late Roman sandy fabrics,(brick, tegula, tiles, imbrex), early and late silty fabric (combed box flue tile and tile),opus signinum: unglazed med and post-med peg tile; terracotta machine press chimney	44	1500BC	1900	1800	1900	1800-1900+	50-400 (residual)
3	3032R	Post Great Fire frogged narrow brick	1	1666	1900	1660	1900	1780-1900	1750-1850
4	2279	Unglazed post-medieval pantile	1	1630	1850	1630	1850	1630-1850+	No mortar
5	2279; 3032R	Unglazed post-medieval pan tile: whole unfrogged post Great Fire narrow brick	1	1630	1850	1630	1850	1666-1900	No mortar
8	3032; 3107M; 3110	Post Great Fire brick frogged narrow brick; Reigate stone hearth stone; Portland stone ashlar block	3	1055	1950	1666	1950	1780-1900	1850-1900 (1750-1850)
9	2279	Unglazed post-medieval pan tile	2	1630	1850	1630	1850	1630-1850	No mortar
10	2279	Unglazed post-medieval pan tile	2	1630	1850	1630	1850	1630-1850+	No mortar
12	3034;3032; 3101M	Post Great Fire frogged narrow bricks	2	1666	1900	1666	1900	1780-1900	1840-1900
16	3032nr3033; 3032	Intermediate Unfrogged Post Great Fire brick; post Great Fire narrow brick	3	1664	1900	1666	1900	1666-1900	1750-1900
19	2279	Reused unglazed post- medieval pan tile	1	1630	1850	1630	1850	1630-1850+	1800-1950
20	2279	Reused unglazed post- medieval pan tile	1	1630	1850	1630	1850	1630-1850+	No mortar
21	3038	Staffordshire Blue frogged		1850	1950	1850	1950	1890-1950	1800-1950
22	3038	Staffordshire Blue frogged		1850	1950	1850	1950	1890-1950	1800-1950
24	3038	Staffordshire Blue frogged		1850	1950	1850	1950	1890-1950	1800-1950
25	3038	Staffordshire Blue frogged		1850	1950	1850	1950	1890-1950	1800-1950
26	3038; 3101PM	Whole brick, staffs blue curved Portland mortar	1	1880	1950	1880	1950	1880-1950	1870-1950

Context	Fabric	Form	Size	Date range material	e of	Latest o		Spot date	Spot date with mortar
30	3033; 3032	Large wide sandy red brick; Whole unfrogged narrow brick	3	1450	1900	1780	1900	1780-1850+	No mortar
31	3046nr3032; 3101PM	Whole unfrogged narrow brick	1	1664	1900	1664	1900	1780-1900	1780-1900
34	2276	Unglazed post-medieval peg tile	1	1480	1900	1480	1900	1480-1900	No mortar
35	3038	Staffordshire Blue frogged decorated		1850	1950	1850	1950	1890-1950	1830-1950 (1800-1950)
38	3035; 3038; 3035; 3101PM	Whole frogged narrow post Great Fire bricks	2	1770	1940	1770	1940	1850-1900	1840-1900
37	3038; 3101PM	Staffordshire Blue frogged decorated		1850	1950	1850	1950	1890-1950	1830-1950 (1800-1950)
40	3038; 3101PM	Staffordshire Blue frogged decorated		1850	1950	1850	1950	1890-1950	1830-1950 (1800-1950)
41	3039; 3033; 3032nr3033; 3032R; 3101M	Unfrogged wide early post- medieval sandy red bricks, whole unfrogged intermediate post Great Fire brick	4	1450	1725	1666	1900	1666-1900	1450-1700
48	3039; 3065;	Early Roman sandy reused bricks; chalk stone; brown sandstone; silty brick very thin; whole wide early post- medieval sandy red bricks; whole intermediate unfrogged post Great Fire narrow brick	16	55	1800	55	1800	1666-1725	No mortar
49	3033; 3033nr3065; 3032; 3101PM	Whole reused unfrogged early post-medieval wide sandy red bricks	3	1450	1900	1450	1900	1600-1900	1840-1900
50	2452; 3106; 3120; 3031, 3031nr3042; 3032nr3033; 3135; 3101M	Reused early Roman sandy fabrics with opp. Sign; unusual ignius rock (pav.); Hassock (rubb.); reused whole medieval unfrogged wide brick; whole unfrogged early post-medieval narrow brick, intermediate unfrogged post Great Fire brick, granite (cobb.)	12	55	1900	1700	1900	1700-1900	1830-1950 (1500-1700) (1430-1500) residual mortal
51	3033; 3032nr3033; 3032; 3101PM	Whole unfrogged post- medieval narrow sandy red brick; whole unfrogged intermediate post Great Fire	3	1450	1800	1666	1725	1666-1900	1700-1800 (1664-1750)
52	3032; 3101PM	Whole unfrogged narrow post Great Fire brick	1	1666	1900	1666	1900	1666-1800+	1750-1850
53	3032r	Whole unfrogged post Great Fire brick		1666	1900	1666	1900	1666-1900	1750-1900
54	3032	Whole unfrogged post Great Fire narrow brick	1	1666	1900	1666	1900	1750-1900	1750-1850
58	2586; 3090	Unglazed medieval & post- medieval peg and pan tile	2	1180	1800	1630	1800	1630-1800	No mortar
65	3038; 3101PM	Voussoir brick	1	1880	1950	1880	1950	1880-1950+	1800-1950
66	2279; Unknown fabric	Post-med pan tile; unknown green glazed Victorian floor	2	1630		1800	1900	1800-1900	No mortar

Context	Fabric	Form	Size	Date range material	e of	Latest o		Spot date	Spot date with mortar
		tile fabric							
75	3032	Unfrogged and whole and frogged narrow post Great Fire brick	2	1666	1900	1750	1900	1780-1900	No mortar
78	3032r	Whole well made frogged narrow post Great Fire brick	1	1666	1900	1750	1900	1790-1900	1750-1850
79	3046; 3033nr3034; 3101PM	Whole unfrogged narrow early post-medieval sandy red brick and post Great Fire brick	2	1450	1900	1666	1900	1790-1900	1750-1900
85	2452	Early Roman sandy fabric	1	55	160	55	160	55-160+	No mortar
90	3023, 2452; 2279	Radlett fabric, Early Roman sandy fabrics, (bricks), post- med, pan tile	7	50	1850	1630	1850	1630-1850	No mortar
96	3033; 3032nr3033; 3101PM	Half unfrogged narow post- medieval sandy red brick, whole unfrogged narrow both reused intermediate post Great Fire bricks, both reused	2	1450	1900	1450	1900	1666-1900+	1750-1850
98	3065	Whole unfrogged narrow early post-medieval sandy red brick	1	1450	1900	1450	1900	1700-1900	No mortar
109	3032; 3101PM	Reused unfrogged narrow post Great Fire brick (re-used)	2	1666	1900	1666	1900	1700-1900+	1750-1900
111	2452, 2459a	Early Roman sandy brick and imbrex	2	50	160	50	160	50-160+	No mortar
114	3105; 3034nr3033; 3101PM	Kentish ragstone (pav.), whole large and narrow unfrogged intermediate post fire bricks	3	50	1900	1666	1900	1666-1800+	1750-1900
115	3032R	Whole narrow and large unfrogged post intermediate post Great Fire bricks	2	1666	1900	1666	1900	1666-1900+	No mortar
116	3032R; 3101PM	Whole deep frog post Great Fire brick	1	1666	1900	1666	1900	1750-1900+	1870-1900
117	3032; 3101PM	Whole unfrogged narrow post Great Fire bricks	2	1666	1900	1666	1900	1666-1900+	1750-1900
123	2459c; 2279	Late Roman sandy fabric (imbrex); post-med pan tile	2	140	1850	1630	1850	1630-1850	No mortar
134	2279	Unglazed post-medieval pan tile	1	1630	1850	1630	1850	1630-1850	No mortar
138	3120	York stone pav. weathered laminated	2	50	1950	50	1950	1800-1900	No mortar
139	3032nr3033; 3035nr3034; 3101PM	whole unfrogged narrow intermediate post Great Fire (reused and abraded); frog post Great Fire brick	2	1666	1940	1770	1940	1800-1940	1850-1900
142	3032; 3034; 3101PM	Whole unfrogged thicker wider brick; whole unfrogged narrow post Great Fire brick	4	1666	1900	1666	1900	1666-1850+	1780-1900
146	2452; 3006	Early Roman sandy fabric (brick and <i>imbrex</i>)	2	50	160	55	160	55-160	No mortar
153	2271	Unglazed thin medieval peg tile	1	1180	1800	1180	1800	1180-1500	No mortar
160	3107	Burnt Reigate hearth	4	1050	1900	1050	1900	1500-1900	No mortar

Context	Fabric	Form	Size	Date range material	of	Latest o		Spot date	Spot date with mortar
164	3032; 3101PM	Frogged and unfrogged post Great Fire bricks	2	1666	1900	1666	1900	1750-1900	1870-1900
167	2276; 2279	Unglazed post-medieval peg and pan tiles	5	1480	1900	1630	1900	1630-1900	No mortar
172	3032nr3033; 3101PM	Whole unfrogged narrow intermediate post Great Fire brick	1	1666	1725	1666	1725	1666-1725	1780-1900
176	2276	Unglazed post-medieval peg tile	1	1480	1900	1480	1900	1480-1900	No mortar
181	2452	Early Roman sandy brick	1	55	160	55	160	55-160	No mortar
184	3102; 2276	Daub, unglazed post-medieval peg tile	2	1500BC	1900	1480	1900	1480-1900	No mortar
194	2452; 2459a; 3006; 3033; 3032nr3033, 3038; 3101PM	Abraded early Roman sandy fabric (bricks, tiles, imbrex, tegula), abraded unfrogged post-medieval sandy brick; abraded intermediate post Great Fire brick; machine brick	19	50	1950	1850	1950	1880-1950	1750-1900
195	3120; 2276; 2279	Burnt sandy stone, unglazed post-medieval peg and pan tiles	4	50	1950	1630	1850	1630-1850	No mortar
205	2279; 3064W	Unglazed post-medieval pan tile; white glazed tin	9	1620	1850	1630	1850	1630-1850+	No mortar
209	2276; 2279; 3101PM	Unglazed post-medieval peg and pan tile	2	1480	1900	1630	1850	1630-1900	1750-1900
211	2279	Unglazed post-medieval pan tile	1	1630	1850	1630	1850	1630-1850	No mortar
214	2452	Early Roman sandy burnt brick	1	55	160	55	160	55-160	No mortar
215	3032;3101PM	Whole unfrogged narrow post Great Fire fabric	2	1666	1900	1666	1900	1666-1850+	1750-1900
217	3064W	Blue and green flower on corner tin glazed	1	1618	1800	1618	1800	1618-1650+	No mortar
220	3033; 2279; 3101PM	Abraded post-medieval sandy red brick; unglazed post-medieval pan tile	2	1450	1900	1630	1900	1630-1850	1750-1900
231	2279	Unglazed post-medieval pan tile	1	1630	1850	1630	1850	1630-1850	No mortar
235	3032; 3101PM	Whole unfrogged narrow post Great Fire brick	1	1666	1900	1666	1900	1666-1850	1750-1900
244	3032	Unfrogged post Great Fire brick	1	1666	1900	1666	1900	1666-1900	No mortar
252	2452; 2276; 3046; 2279	Early Roman sandy fabrics(imbrex, burnt brick); reused post-medieval sandy red brick; unglazed post-medieval peg and pan tile	8	55	1900	1480	1900	1630-1900	No mortar
256	2452	Early Roman sandy brick	1	55	160	55	160	55-160+	No mortar
257	3102; 3117; 2271; 2276	Daub; probably natural flintstone (abraded); unglazed post-medieval tiles	5	1500BC	1900	1480	1900	1480-1800+	No mortar

Context	Fabric	Form	Size	Date range material	of	Latest d material		Spot date	Spot date with mortar
259	2271	Brown glazed medieval peg tile	1	1180	1800	1180	1800	1180-1500+	No mortar
262	2276	Unglazed post-medieval peg tile	2	1480	1900	1480	1900	1480-1900	No mortar
265	3032	Unfrogged early post- medieval brick	1	1666	1900	1666	1900	1666-1750	No mortar
270	2279;3032	Unglazed post-medieval pan tile; post Great Fire brick	2	1630	1900	1666	1900	1666-1900	No mortar
271	2459a	Combed early sandy fabric	1	50	160	50	160	50-160	No mortar
273	Unknown fabric, 2587	Unknown floor tile post- medieval fabric; unglazed medieval peg tiles	4	1240	1850	1600	1850	1600-1850+	No mortar
278	2452;3101PM	Early Roman sandy tile and bricks	4	55	160	55	160	55-160	1750-1900
279	2279	Unglazed post-medieval pan tile	1	1630	1850	1630	1850	1630-1850	No mortar
285	2279	Unglazed post-medieval pan tile	1	1630	1850	1630	1850	1630-1850	No mortar
286	2587	Unglazed medieval tile	1	1240	1450	1240	1450	1240-1450	No mortar
287	3102	Daub	1	1500BC	1666	1500B C	1666	1500BC-1666	No mortar
291	3102; 3120; 2271; 2276; 3033; 3032	Daub; floor stone; post- medieval peg tile, abraded post-medieval sandy red brick, post Great Fire brick	19	1500BC	1900	1666	1900	1666-1900	No mortar
293	2276;3038	Unglazed burnt post-medieval peg tile ;machine brick	4	1450	1950	1850	1950	1850-1950	No mortar
295	3120	Burnt Kimmeridge shale	3	1700	1900	1700	1900	1700-1900	No mortar
303?	3032R; 3101PM	Whole unfrogged narrow early post Great Fire brick	3	1666	1900	1666	1900	1666-1850+	1750-1900
309	3105, unknown fabric; 3101PM	Ragstone, vitrified clay kiln furniture	2	50	1900	1800	1900	1800-1900	1750-1900
311	2587;2276	Unglazed medieval and post- medieval peg tiles	4	1240	1900	1480	1900	1480-1900	No mortar
317	2587;2276	Thin Unglazed medieval and post-medieval peg tiles	2	1240	1900	1480	1900	1480-1900	No mortar
324	2452;2279	Early Roman sandy fabric; unglazed post-medieval pan tile	2	50	1850	1630	1900	1630-1900	No mortar
326	2459a; 3063E	Abraded early Roman sandy tile; early Flemish silty post- medieval paver	2	50	1600	1450	1600	1450-1600	No mortar
328	2459a; 3100R; 3033; 2276; 2279; 3032; 3101PM	Early Roman sandy brick; painted Roman wall plaster; early post-medieval abraded sandy red brick; unglazed post-medieval peg and pan tile; intermediate post Great Fire brick	10	50	1900	1666	1900	1666-1900	1750-1900
333	2459b; 3108; 3036;	Late Roman sandy brick; Kilmmeridge (pav.); post-	5	120	1900	1500	1900	1650-1900	No mortar

Context	Fabric	Form		Date range material	e of	Latest dated material		Spot date	Spot date with mortar
	3064w	medieval ducht brick; blue fleur de lis Pickleherring/ Rotherhithe tin glazed							
346	2452; 3101R; 3108; 2279	Early Roman sandy bricks with op. signinum; Yorkstone (rubb.); unglazed postmedieval pan tile	5	55	1900	1630	1900	1630-1900	50-400 (residual)
348	2586; 2276; 3064w	Unglazed medieval and post- medieval peg tile; post- medieval tin glazed	10	1180	1950	1800	1900	1800-1900+	No mortar
350	2452; 2287; 2286; 3033	Early Roman sandy brick; unglazed medieval and post- medieval peg tile; abraded post-medieval sandy red brick	7	55	1900	1450	1900	1450-1900	No mortar
359	2452, 3006, 2459a, 2459b, 3111, 2271	Early and late Roman sandy fabrics (teg, brick, tile, abraded, box flu tile), brown sandstone late Roman roof tile; unglazed post-medieval peg tile (intrusive?)	31	55	1800	1180	1800	1450-1800?	No mortar
361	3120; 2271; 3033; 2279	Sandstone (rub.); medieval peg tile, late post-medieval wide sandy red brick; unglazed post-medieval pan tile	4	50	1900	1630	1900	1630-1900	No mortar
363	3063; 2276; 2279; 3032	Unglazed Flemish silty paver; unglazed post-medieval peg and pan tiles; intermediate post Great Fire burnt brick	9	1450	1900	1666	1900	1666-1900	No mortar
368	3105; 3006; 2452, 2459b; 2587	Reigate stone (rub.); early and late Roman sandy abraded bricks, <i>imbrex</i> and tiles; unglazed medieval peg tile	13	50	1666	50	1666	1240-1450+	No mortar
372	2279	Unglazed post-medieval pan tile	1	1630	1850	1630	1850	1630-1850	No mortar
373	2587; 2276; 2279	Unglazed medieval and post- medieval peg and pan tiles	15	1240	1850	1450	1900	1630-1900	No mortar
374	3006; 2459a; 2452; 2586		6	50	1800	1180	1800	1180-1800?	No mortar
377	2279	Unglazed post-medieval pan tile	1	1630	1850	1630	1850	1630-1850	No mortar
378	3046; 3034; 3032; 3101PM	Post-medieval sandy red brick; intermediate post Great Fire brick	3	1450	1900	1666	1900	1666-1900	1750-1900
380	3004; 2459a	Early Roman sandy tiles	3	50	160	50	160	50-160+	No mortar
382	2452	Early Roman sandy burnt and abraded tile and brick	4	55	160	55	160	55-160+	No mortar
385	2459a; 2452	Early Roman sandy fabrics (tile, burnt brick, combed box flue tile)	3	50	160	55	160	55-160+	No mortar
387	3120; 2271; 2286; 2279; 2276;	Sandstone (rub.), unglazed medieval and post-medieval peg and pan tile	13	50	1900	1480	1900	1480-1900	No mortar

Context	Fabric	Form	Size	Date range material	e of	Latest o		Spot date	Spot date with mortar
390	3123R; 2459a	Niedermendig lava (quern); early Roman sandy brick	8	50	1100	50	1100	50-400+	No mortar
393	2459a	Early Roman sandy imbrex	1	50	160	50	160	50-160+	No mortar
394	2586	Medieval and post-medieval peg tile	4	1180	1800	1180	1800	1450-1800	No mortar
395	2271; 2276	Unglazed medieval and post- medieval peg tiles	9	1180	1900	1480	1900	1480-1900	No mortar
397	3102; 2459a; 2271; 2276	Daub; early Roman sandy abraded bricks and <i>tessera</i> ; medieval and post-medieval peg tiles	7	1500BC	1800	1480	1480	1480-1900	No mortar
398	3120; 2452;2586; 2271; 22587;3033;2276; 2279;3032; 3101PM	Black limestone with fossil marks?; early Roman sandy brick; abraded medieval and post-medieval peg and pan tiles; abraded post-medieval sandy red bricks; abraded narrow early post Great Fire brick.	18	50	1900	1666	1900	1666-1900+	1750-1900
399	2459a;3006;2452	Early Roman sandy bricks and combed box flue tile	5	50	160	50	160	50-160+	No mortar
401	2271;2586;2276; 3032	Medieval and post medieval peg tiles: post Great Fire brick	7	1180	1900	1666	1900	1666-1900	No mortar
402	2586;3033; 2276	Medieval and post-medieval peg tiles; early post-medieval sandy red brick	7	1180	1900	1480	1900	1480-1900	No mortar
405	2276	Unglazed post-medieval peg tiles	4	1480	1900	1480	1900	1480-1900	No mortar
407	3006;2452;2453	Early Roman sandy brick, tegula and box flue tile; late calcareous Roman tile	4	50	300	140	300	140-300+	No mortar
410	2459b	Late Roman sandy tile	1	120	250	120	250	120-250+	No mortar
411	2271;2276	Unglazed medieval and post- medieval peg tile	14	1180	1900	1480	1900	1480-1900	No mortar
414	2452;2271;2586; 2276	Early Roman sandy brick; unglazed medieval and post- medieval peg tiles	12	55	1900	1480	1900	1480-1900	No mortar
416	2276	Unglazed post-medieval peg tiles	4	1480	1900	1480	1900	1480-1900	No mortar
422	2271	Unglazed medieval peg tile	1	1180	1800	1180	1480	1180-1480	No mortar
423	3102;2587;2279	Daub; unglazed medieval and post-medieval peg tiles	7	1500BC	1900	1480	1900	1480-1900	No mortar
424	2271;2586;2587; 2276	Unglazed and glazed medieval and post-medieval peg tiles	26	1180	1900	1480	1900	1480-1900	No mortar
425	3054	Early Roman brick (East Sussex)	1	70	140	70	140	70-140+	No mortar
426	3033;3038; 3101PM	Reused post-medieval sandy red brick; machine brick	2	1450	1950	1850	1950	1850-1950	1750-1900
427	2459b;2271;2586; 2279	Late Roman sandy box flue tile, unglazed and glazed medieval and post-medieval	8	120	1900	1480	1900	1480-1900	No mortar

Context	Fabric	Form	Size	Date rang material	je of	Latest o		Spot date	Spot date with mortar
		peg tiles							
428	2452;2459b	Early and late Roman sandy abraded tiles	2	55	250	120	250	120-250+	No mortar
434	3006;2452	Early Roman sandy brick and imbrex	2	50	160	55	160	55-160+	No mortar
435	2459a;2452;2459 b; 2271;2286;2587; 3033;2276 (glazed)	Early and late Roman sandy tiles and bricks; unglazed and glazed medieval and post- medieval peg tiles, post- medieval sandy red brick	52	50	1900	1480	1900	1480-1900	No mortar
436	2587;3063	Unglazed medieval peg tiles and post-medieval Flemish silty paver	5	1240	1800	1450	1800	1450-1800	No mortar
439	2452;2271	Early Roman sandy imbrex; unglazed medieval peg tiles	18	55	1800	1180	1450	1180-1450+	No mortar
440	2459a; 3006; 2459b; 2274;2271; 3063;2276	Early and late Roman sandy tiles; glazed and unglazed medieval and post-medieval peg tiles; glazed Flemish silty paver	30	50	1900	1480	1900	1480-1900	No mortar
443	2459a;2452	Early Roman sandy burnt brick, tile and <i>imbrex</i>	3	50	160	55	160	55-160+	No mortar
444	3004;2459b	Early and late Roman sandy tegula and tile	2	50	250	120	250	120-250+	No mortar
449	2850	Flemish silty post-medieval floor tile	1	1450	1800	1450	1800	1450-1800	No mortar
450	3023; 3006;2459a; 2452; 2459b;2453	Early and late Roman sandy box flue tile, tegula, imbrex bricks and tiles; abraded late Roman calcareous Radlett brick	12	50	300	140	300	140-300+	No mortar
451	2815;2459a;2454; 2459b; 3106	Early and late Roman sandy bricks; Hassock stone (rub.)	9	50	1666	50	1666	140-300 +	No mortar
452	2815;2452	Early Roman sandy tiles (some burnt)	4	50	160	55	160	55-160	No mortar
454	2271;2587;2276	Unglazed medieval and post- medieval peg tiles	6	1180	1900	1480	1900	1480-1900	No mortar
456	3006;2459b	Early Roman sandy bricks, late Roman sandy <i>tegula</i>	4	50	250	120	250	120-250+	No mortar
459	2271;2276; 2279,	Unglazed and glazed medieval and post-medieval peg and abraded pan tiles	14	1180	1900	1480	1900	1630-1900	No mortar
461	2271;2850;2279	Burnt unglazed medieval and post-medieval peg tile; unglazed post-medieval pan tiles	3	1180	1850	1630	1850	1630-1850	No mortar
464?	2815; 3006; 2459a; 2459b;3026	Early Roman sandy tegulae and tiles; late Roman sandy brick; late calcareous Roman tegula	6	50	300	140	300	140-300+	No mortar
469	2271;2273;2279	Unglazed and glazed medieval and post-medieval peg tiles	27	1180	1900	1480	1900	1480-1900	No mortar

Context	Fabric	Form	Size	Date rang	e of	Latest o		Spot date	Spot date with mortar
172	2271	Abraded unglazed medieval and post-medieval peg tile	3	1180	1800	1180	1900	1180-1900	No mortar
181	3006;2271;2276	Abraded early Roman sandy tile; medieval and post-medieval peg tiles	9	50	1900	1480	1900	1480-1900	No mortar
83	3115;2587;2271	Slate roof tile; unglazed late medieval and post-medieval peg tiles	4	300	1950	1100	1950	1240-1900	No mortar
87	2271;3205	Unglazed medieval and post- medieval peg tiles; unglazed medieval and post-medieval silty peg tile	3	1180	1800	1200	1800	1200-1800	No mortar
94	2459a;2271;2276	Early Roman sandy tile; unglazed medieval and post- medieval peg tile	8	50	1900	1480	1900	1480-1900	No mortar
195	2459a; 2452;2273	Early Roman sandy bricks; medieval shouldered peg tile	4	50	1220	1135	1220	1135-1220	No mortar
500	2276	Unglazed early post-medieval peg tile	1	1480	1900	1480	1900	1480-1900	No mortar
501	2276	Unglazed post-medieval peg tile	3	1480	1900	1480	1900	1480-1900	No mortar
514	2459a; 2452; 2459c;3064W	Early Roman sandy brick; late Roman sandy brick; white glazed post-medieval wall tile	5	50	1800	1620	1800	1620-1900	No mortar
516	3023; 2815;2459a; 2452;2459b	Early Radlett combed box flue tiles; early Roman sandy bricks, tiles and tegula; late Roman sandy imbrex and tile	10	50	250	120	250	120-250+	No mortar
18	3120;3090; 3046; 2276;2279; 3032	Horshamslate roof; unglazed medieval and post-medieval peg and pan tiles; early post- medieval sandy red brick; post Great Fire narrow brick	12	50	1950	1666	1900	1750-1900+	No mortar
531	2459a	Early Roman sandy brick and tegula	2	50	160	50	160	50-160+	No mortar
536	3102;3108; 2459a; 2452,3112r; 2459b; 2286; 2276; 3064W	Daub; Yorkstone roof; early and late sandy Roman tegula, tiles, bricks, Carrara? white marble; unglazed medieval and post-medieval peg tiles; glazed blue and white with barred ox head corners tin glazed	14	1500bc	1900	1480	1900	1760-1900	No mortar
539	2459a	Early Roman sandy tile	1	50	160	50	160	50-160+	No mortar
545	2459a, 3013	Early Roman sandy <i>imbrex</i> ; late calcareous <i>tegula</i>	3	50	350	180	350	180-350+	No mortar
550	2459a;3105	Early Roman sandy brick; Ragstone (rub.)	4	50	1666		1666	50-1666	No mortar
553	3032	Whole frogged narrow post Great Fire bricks	2	1666		1666	1900	1750-1900	No mortar
64	3006	Early Roman sandy bricks	2	50		50	160	50-160+	No mortar
68	3006;2459b	Early Roman sandy tile; late	2	50	250	120	250	120-250+	No mortar

Context	Fabric	Form	Size	Date range material	e of	Latest dated material		Spot date	Spot date with mortar
		Roman sandy brick							
570	2459a;2452;2459 b	Early Roman sandy brick, tile and abraded <i>imbrex</i> ; late Roman sandy tile	5	50	250	120	250	120-250+	No mortar
574	3102, 2586;2276; 2279;3032	Abraded daub; unglazed medieval and post-medieval peg and pan tiles; post Great Fire brick	15	1500bc	1900	1666	1900	1666-1900	No mortar
576	3004	Early Roman sandy tegula	1	50	160	50	160	50-160+	No mortar
581	2452	Early Roman sandy brick and burnt tile	3	55	160	55	160	55-160+	No mortar
583	3102;2459b;3033; 2276	Daub; late Roman sandy tile; post-medieval burnt sandy red brick; unglazed post-medieval peg tile	4	1500bc	1900	1480	1900	1480-1900	No mortar
591	2279	Unglazed post-medieval pan tile	1	1630	1850	1630	1850	1630-1850	No mortar
601	2459a	Early Roman sandy box flue tile	1	50	160	50	160	50-160+	No mortar
614	3105	Kentish ragstone stone (rub.)	2	50	1666	50	1666	50-1666	No mortar
620	3004;2459b;2273	Early and late Roman sandy tegulae and tile; glazed medieval floor tile	4	50	1220	1135	1220	1135-1220	No mortar
633	3102;2452	Daub; early Roman sandy brick	4	1500bc	160	55	160	55-160+	No mortar
637	3102;2815;3006; 2459a;2452; 2459b	Daub; early and late Roman sandy abraded tiles and bricks	15	1500bc	250	120	250	120-250+	No mortar
640	2452	Early Roman sandy brick	1	55	160	55	160	55-160+	No mortar
651	3004;3006;2452; 2459c;2456;3116; 3117	Early Roman sandy abraded tegula, tiles and bricks; late Roman sandy brick; late Roman Harrold tile; flint and chalk (rub.)	14	50	1800	50	1800	270-400+	No mortar
656	2459a;2452;2459 b; 3105;3063	Early and late Roman sandy bricks, tile and tegula (4 abraded); Kentish ragstone paver; post-medieval Kentish ragstone paver	18	50	1900	1450	1900	1450-1800	No mortar
674		Early and late Roman sandy bicks, <i>imbrex</i> and tiles (1 abraded); Hassock stone (rub.); Brown sandstone (rub.)	12	50	1666	50	1666	200-400+	No mortar
714	3102;2815;3006; 2459a;2452;2459 b; 3101M	Daub; early and late Roman sandy burnt combed box flue tile, bricks, <i>tegula</i> and tiles; op. signinum	10	1500bc		120	250	120-250	50-400
721	2452;3123R;3105	Abraded early Roman sandy fabric; Niedermendig lava stone (quern); Kentish ragstone (rub.)	8	50	1666		1666	55-400	No mortar
725	3102	Daub	1	1500bc	1666	1500b c	1666	1500bc-1666	No mortar

Context	Fabric	Form	Size	Date range material	of	Latest d material		Spot date	Spot date with mortar
738	3032r;3101PM	Whole early post Great Fire narrow bricks; two modern mortar types	2	1666	1900	1666	1900	1700-1900	1830-1900 (1750-1850)
739	3065;3032; 3101PM	Whole reused unfrogged post- medieval sandy red brick; whole early unfrogged post Great Fire narrow brick	2	1450	1900	1666	1900	1700-1900	1750-1900
741	2459b	Late Roman sandy tile	1	120	250	120	250	120-250+	No mortar
751	3102	Daub	1	1500bc	1666	1500b c	1666	1500bc-1666	No mortar
757	3064W;3101PM	Unglazed post-medieval pink wall tile; white and purple with soldier and horse tin glazed	6	1700	1950	1800	1950	1800-1950	1800-1950
764	3030;2276	Post-medieval brick; Unglazed post-medieval peg tile	2	1400	1900	1480	1900	1480-1900	No mortar
765	3065	Whole unfrogged post- medieval sandy red bricks	2	1450	1700	1450	1900	1450-1900	No mortar
767	KBSTOE/02;2587	Unglazed late medieval peg tile	2	1180	1800	1180	1800	1240-1450+	No mortar
773	2586	Unglazed medieval and post- medieval peg tile (15mm)	1	1180	1800	1180	1800	1450-1800	No mortar
775	2452	Early Roman sandy brick	4	55	160	55	160	55-160+	No mortar
779	3006;2452;2459b; 2586;2276;2279	Early Roman sandy brick, tile and <i>tubuli</i> ; late Roman sandy tile; unglazed medieval and post-medieval peg and pan tile	13	50	1900	1480	1900	1630-1900	No mortar
781	3102;3105;2459b; 2279;3032nr3033; 3034	Daub; Kentish ragstone (rub.); late Roman combed box flue tile; unglazed post-medieval pan tile; abraded intermediate post Great Fire glazed; burnt and reused post Great Fire brick	10	1500bc	1900	1666	1900	1666-1900	No mortar
782	3006;2452;3034	Early Roman sandy tegulae and tiles; post Great Fire brick	5	50	1900	1666	1900	1666-1900	No mortar
792	3102;2454;2459a; 3006; 2452;2459b; 2459c;2453;2505; 2276;3032;3063; 3120;3101PM	Daub; early Eccles Roman brick; early and late Roman sandy bricks, tegula and tiles; late calcareous tegula; Malmstone (rub.)unglazed late medieval and post-medieval floor tile; post-medieval peg tile; unfrogged wide burnt post Great Fire bricks; abraded and poorly made post-medieval brick;		1500BC	1900	1480	1900	1700-1900	1750-1900
796	2459a; 3006; 2452; 3114r;3101R; 3090 ;2276; 3064w; 2279; 1977; 3108;	Abraded and reused early Roman sandy bricks and tiles; moulded Carrara? Marble; abraded unglazed medieval and post-medieval pan tile; post-medieval peg tile; post medieval Flemish silty paver;	29	50	1900	1700	1900	1800-1900	50-400 (residual)

Context	Fabric	Form	Size	Date range material	e of	Latest dated material		Spot date	Spot date with mortar
	3115	white soldier horseback tin glazed; post-medieval, barred ox-head corner, blue and white tin glazed; Yorkstone paver; written slate							
800	2279; 3064W	Unglazed post-medieval pan tile; white tin glazed; white and blue with two circular lines tin glazed (biblical series)	3	1630	1800	1700	1800	1700-1800	No mortar
802	2459a;2452;2459 b; 2376	Early and late Roman sandy bricks and tiles; unglazed post-medieval peg tile	4	50	1900	1480	1900	1480-1900	No mortar
309	3063;3032	Unglazed post-medieval Flemish silty paver; post Great Fire brick	5	1900	1666	1900	1666	1900	No mortar
811	3076	Abraded medieval Flemish floor tile	1	1350	1390	1350	1390	1350-1390	No mortar
815	3102; 3006; 2459a; 2459b;3033;2279; 2276;3101PM	Daub; abraded early and late Roman sandy bricks, tile and combed box flue tile; reused post-medieval unfrogged narrow sandy red bricks; unglazed post-medieval peg and pan tiles	12	1500BC	1900	1480	1900	1630-1900	1750-1900
818	3046	Post-medieval sandy red brick (sunken margin)		1450		1450	1900	1500-1700+	No mortar
823	2279	Unglazed post-medieval pan tile	2	1630	1850	1630	1850	1630-1850	No mortar
329	2459c	Late Roman sandy combed box flue tile	1	140	250	140	250	140-250+	No mortar
333	3105	Hone Kentish ragstone	1	50	1666	50	1666	50-400+	No mortar
835	2459a	Abraded early Roman sandy tile	1	50	160	50	160	50-160+	No mortar
837	2459a;2452;2459 b; 2271;2276;3033	Early and late Roman sandy box flue tile and bricks; post- medieval peg tiles; unfrogged narrow post-medieval sandy red brick	11	50	1900	1480	1900	1480-1900	No mortar
838	3120	Pennant sandstone floor/wall tile	1	50	1950	50	1950	200-400+	No mortar
842	2587;2279; 3101PM	Unglazed burnt late medieval peg tile; unglazed post-medieval pan tile	2	1240	1850	1630	1850	1630-1850	1750-1900
849	3102;3023;3006; 2459a; 3105;2452; 2459c;2586;	Daub; early Radlett Roman tile: early and late Roman sandy tegula, bricks and tiles; unglazed medieval and post medieval peg tile; Kentish ragstone burnt paver	12	1500BC	1800	1180	1800	1450-1800	No mortar
858	3026;3064w	Late Roman calcareous Roman <i>imbrex</i> ; white and blue circular lines tin glazed	2	140	1800	1700	1800	1700-1800	No mortar

Context	Fabric	Form	Size	Date range material	e of	Latest d material		Spot date	Spot date with mortar
		(biblical series)							
366	2452;2459a;2459 b; 3006;3054;2271; 2276;2279	Early and late Roman sandy fabrics Bricks, tiles and <i>Tegula</i> ; pan tile and Peg tile medieval	10	50	1900	1480	1900	1630-1850	No mortar
369	2276	Unglazed post-medieval peg tiles	2	1480	1900	1480	1900	1480-1900	No mortar
373	3102; 3006;2452; 2459b	Daub; early and late Roman sandy abraded bricks, tile and tegula	6	1500BC	250	120	250	120-250+	No mortar
375	2815;2459a;3024; 2452;2459b	Early and late Roman sandy tegula, tiles and bricks	11	50	350	50	350	120-350+	No mortar
381	3032	Post Great Fire brick	1	1666	1900	1666	1900	1666-1900	No mortar
384	24549a;2452; 2453	Early Roman sandy bricks; late calcareous Roman brick and tegula	6	50	350	140	350	140-350+	No mortar
386	3154;2279; 3032nr3033; 3101PM	Granular limestone (rub.); reused unglazed post- medieval pan tile; unfrogged narrow intermediate post Great Fire	5	50	1850	1630	1850	1664-1850	1750-1900
387	3004;3120;2271; 2279;3032; 3101PM	Early Roman sandy tegula; burnt sandstone floor; unglazed medieval and post medieval peg and pan tile; unfrogged narrow post Great Fire brick	5	50	1900	1666	1900	1780-1900	1750-1900 (yellowish mortar)
389	3102	Abraded daub	5	1500bc	1666	1500b c	1666	50-1666	No mortar
391	3042; 3046;3065; 3034; 2276; 2279; 3036; 3033; 3034nr3033;3032	Dutch paver, Early post medieval sandy red bricks, post-medieval dutch paver Peg Tile and Pan tile post med, intermediate unfrogged post Great Fire brick, unfrogged post Great Fire; frog and narrow post Great Fire brick	13	1400	1900	1666	1900	1666-1800	1500-1800
393	2452;3114r;3046; 2276;3033;3034; 2279;3032		35	55	1900	1666	1900	1780-1900	No mortar
895	3046;3032nr3033	Unfrogged narrow post- medieval sandy red brick; unfrogged narrow intermediate post Great Fire	2	1450	1900	1450	1900	1780-1900	No mortar
399	3102; 3105;3106; 3023;2815;3006; 2459a; 2452; 2459b;2453;	Abraded daub;Kentish ragstone and Hassock(rub.); Early Roman Radlett tile;early Roman sandy tegula, tiles,	107	1500bc	1666	50	1666	140-400+	No mortar

Context	Fabric	Form	Size	Date range material	e of	Latest o		Spot date	Spot date with mortar
	3500	abraded box flue tile and bricks (some burnt); burnt late Roman calcareous bricks; light, brown narrow burnt belgium brick							
900	2452	Early Roman sandy brick	1	55	160	55	160	55-160+	No mortar
901	3102;2452;2279	Daub; early Roman sandy tiles; post-medieval pan tile	5	1500bc	1850	1630	1850	1630-1850	No mortar
917	2452	Early Roman sandy combed half box flue tile	1	55	160	55	160	55-160	No mortar
919	2452	Early Roman sandy tile	1	55	160	55	160	55-160	No mortar
921	3035	Complete unfrogged wide post-medieval bricks	2	1770	1940	1770	1940	1770-1840+	No mortar
922	3108;2452;2459b	Kent sandstone roof tile; abraded early and late Roman sandy brick and box flue tiles	9	50	1500	50	1500	120-250+	No mortar
923	2452	Early Roman sandy brick, tile and tegula	3	55	160	55	160	55-160+	No mortar
925	3006; 2459a;2452	Early Roman sandy tegulae, abraded brick and box flue tile	7	50	160	55	160	55-160	No mortar
930	2459a;2452;2459 b ;2459c	Early and late Roman bricks, tiles and box flue tile	9	50	250	140	250	140-250	No mortar
934	2459a	Abraded early Roman sandy fabric	1	50	160	50	160	50-160	No mortar
935	2271	Medieval and post-medieval peg tile	1	1180	1800	1180	1800	1180-1450	No mortar
941	2459b;3500	Late Roman sandy tiles	30	120	250	120	250	125-250	No mortar
942	2276	Unglazed post-medieval pan tile	1	1480	1900	1480	1900	1480-1900	No mortar
949	2452	Early Roman sandy brick	1	55	160	55	160	55-160	No mortar
953	3102; 3006;2459a; 2452	Daub; early Roman sandy bricks, tiles and box flue tile	8	1500bc	1600	55	1600	55-160	No mortar
956	3023/3060a;2459 a;2459b;2452	Early Radlett Roman <i>imbrex</i> ; Early Roman sandy <i>tegulae</i> and <i>imbrex</i>	6	50	160	50	160	55-160	No mortar
959	3102;3004; 2459a; 2452;2459b;2271	Daub; early Roman sandy tegula, bricks and tiles; medieval and post-medieval peg tiles	11	1500bc	1800	1180	1800	1450-1800?	No mortar
962	3105; 3107;3115; 3120;2459a; 3004; 2452;2459b	Ragstone (rub.); Reigate hearthstone; roof slate; Gritty shelly Folkestone(rub.); early and late Roman sandy <i>tegula</i> , brick;	11	50	1900	200	1900	1700-1900	No mortar
963	3108;3004;3006; 2459a; 2452; 2459b	Yorkstone paver; early and late Roman sandy <i>tegula</i> ,box flue tile, <i>imbrex</i> , and bricks	10	50	1900	50	1900	1700-1900	No mortar
967	3102; 2454; 2815; 2459a;2452;	Daub; early Roman Eccles brick; early Roman sandy tiles, <i>tegula</i> and bricks	19	50	1600	50	1600	55-160	No mortar

Context	Fabric	Form	Size	Date rang	e of	Latest o		Spot date	Spot date with mortar
969	2276	Post-medieval peg tile	1	1480	1900	1480	1900	1480-1900	No mortar
974	2815;2459a;3006; 2452;3238;2459b; 3108	Early Eccles Roman brick; early Roman Radlett <i>imbrex</i> ; early and late Roman sandy bricks, tiles, box flue tile (some burnt); <i>imbrex</i> and <i>tegulae</i> ; early Kentish Roman brick; brownstone roofing slab	64	50	1500		1500	200-400+	No mortar
975	3120; 3105; 3106; 3108; 2815; 3004;3006; 2459a; 2452; 2459b;3121;3143	Volcanic Mediterranean rock; Ragstone, Hassock stone (rub.); brown sandstone burnt roof; abraded early and late Roman sandy tegula, bricks, tiles and imbrex; early Roman Hartfield tessera; laminated micaceous paving; barnack stone	82	50	1666	250	400	250-400	No mortar
76	2459b	Late Roman sandy tile	1	120	250	120	250	120-250	No mortar
78	2459b	Late Roman sandy tegula	1	120	250	120	250	120-250	No mortar
979	2815;2459a; 3105; 2452;3238	Early Roman sandy tile, bricks and <i>imbrex</i> ; Kentish ragstone (rub.); abraded early Roman Kentish brick	8	50	1666	50	1666	71-160+	No mortar
80	2452;2276	Early Roman sandy tile; post- medieval peg tile	2	55	1900	1630	1900	55-400 (1630-1900 residual)	No mortar
982	2459a;2452; 2459b	Early Roman sandy bricks and tiles	5	50	250	120	250	120-250	No mortar
984	3006;2459a	abraded tile	3	50		50	160	50-160	No mortar
987	3105;3107;3023; 2586	Kentish ragstone (rub.); Reigate stone (rub.); abraded early Roman Radlett fabric; unglazed medieval peg tile	8	50	1800	1180	1800	1180-1450+	No mortar
989	3006	Early Roman sandy burnt bricks	2	50	160	50	160	50-160	No mortar
990	2459a; 2815; 3004;3006; 3105; 3106;3108;3111;	Daub, Early and late sandy fabrics, Eccles fabric silty fabric, late calcareous Roman fabric, A large group of Roman type stones including oolitic limestone; abraded Red sandstone, Kentish Ragstone, Hassock stone, Bargate stone Millstone Grit	58	1500bc	1900	50	1900	200-400	No mortar
991	3102;3006;2452; 2459b;	Narrow Belgium bricks Early and late Roman sandy bricks, tiles and <i>imbrex</i> ;	9	50BC	250	120	250	125-250	No mortar
992	2459a	Early Roman sandy tile	1	50	160	50	160	50-160	No mortar
993	2452;2586	Early Roman sandy brick; medieval and post-medieval peg tile (intrusive)?	2	55		1180	1800	55-160 (1180-1800 intrusive?)	No mortar
996	2815;2459b	Early and late Roman sandy bricks and combed box flue	4	50	250	120	250	120-250	No mortar

Context	Fabric	Form	Size	Date range material	e of	Latest o		Spot date	Spot date with mortar
		tile							
1001	2452;2459b	Early and late Roman sandy tile and <i>imbrex</i>	2	55	250	120	250	120-250	No mortar
1003	3102;3122;3105; 2459a;3004;2452; 2459b;2459c	Daub; septarian nodule; Kentish ragstone (rub.); early and late Roman sandy tegula, combed box flue tile, tiles and bricks	23	1500BC	1666	50	1666	140-250+	No mortar
1005	3102;2815;2459a; 3004; 3006; 2452; 2459b	Daub; Early and late Roman sandy <i>tegula</i> , <i>imbrex</i> , tiles and bricks (some burnt and abraded)	24	1500bc	250	120	250	120-250	No mortar
1008	3006;2452;3009; 2459b	Early Roman sandy bricks, tile and combed box flue tile; early Roman Hampshire tile	6	50	250	120	250	120-250	No mortar
1009	2459b	Late Roman sandy tiles	2	120	250	120	250	120-250	No mortar
1011	3105; 2454; 2815; 3006;2452; 2276	Kentish ragstone (rub.); early Roman Eccles fabric; early Roman sandy tile and bricks; unglazed post-medieval peg tile	8	50	1900	1630	1900	1630-1900? Possibly Roman	No mortar
1020	2271	Unglazed medieval peg tile	1	1180	1800	1180	1800	1180-1450?	No mortar
1025	3102; 3105;2815; 3004;3006;2459a; 2452;2459b	Burnt daub; Kentish ragstone (rub.); abraded early Roman sandy <i>imbrex</i> ; <i>tegulae</i> , tiles and bricks	25	1500bc	1666	120	1666	120-250+	No mortar
1029	2459a;2452; 2459b	Early and reused late Roman sandy tiles and bricks	5	50	250	120	250	120-250+	No mortar
1031	3106; 3006;2459a; 3006;2452;2459b; 3120	Hassock stone (rub.); Carbonaceous oil shale Kimmerigde oil shale earthy, probably Roman?;early and late Roman sandy bricks and tiles (earliest burnt and abraded)	17	50	1900	50	1900	120-250+	No mortar
1032	2459a;3004;3006;	Malmstone (rub.); Kentish ragstone (rub.); brown sandstone burnt roof; ferrogineous sandstone (rub.); early Roman Eccles brick; arly and late Roman sandy tegulae, imbrex, tiles and bricks(some burnt); late Roman calcareous tile		50	1900	50	1900	200-400+	No mortar
1033	3102; 3123R; 2815; 2452;3006; 2459a;2452	A huge group of daub; Niedermendig lava stone (quern); a large group of early Roman sandy <i>imbrex</i> , tiles and bricks	113	1500BC	400	50	400	55-400+	No mortar
1034	3105;2454; 2815; 3006;2459a; 2452;2459b	Kentish ragstone (rub.); early Eccles brick; early and late Roman sandy tegulae, bricks, tiles and combed box flue tile (some burnt)	28	50	1666	120	250	120-250	No mortar

Context	Fabric	Form	Size	Date range material	of	Latest da material	ated	Spot date	Spot date with mortar
1037	3006;2459a; 2452; 2459b	Early and late Roman sandy imbrex, tegulae, bricks, tiles and circular brick (pilae?)	13	50	250	120	250	120-250	No mortar
1043?	2452	Early Roman sandy bricks	5	55	160	55	160	55-160	No mortar
1046?	3102	Daub	1	1500BC	1666	1500B C	1666	1500BC-400	No mortar
1047	3120; 3105;3106; 2452; 2453	Mediterranean volcanic rock; Kentish ragstone (rub.); Hassock greensand stone (rub.);early Roman sandy imbrex; abraded late Roman calcareous fabric	27	50	1900	50	1900	140-300+	No mortar
1049	3102;3105; 3107R; 3116;2454;2815; 3006; 2459a; 2452;2459b; 2453	Daub; Kentish ragstone rubble, roof and ashlar; Reigate stone; chalk; Early Roman Eccles tiles; Early and late Roman sandy combed box flue tiles (some burnt, reused and abraded); <i>imbrex</i> , bricks and tiles; late Roman calcareous <i>tegula</i> and <i>imbrex</i>	51	1500bc	1800	50	1800	140-300+	No mortar
1053	3006; 2459b;3063	Early and late Roman sandy tegula, imbrex, tile and bricks, unglazed post-medieval Flemish silty paver (intrusive)	6	50	1800	1450	1800	1600-1800?	No mortar
1054	2459b	Late Roman sandy tile	1	120	250	120	250	120-250	No mortar
1056	3102	Daub	1	1500BC	1666	1500B C	1666	1500BC-400	No mortar
1058	2459a;2459b	Early and late Roman sandy tegula and tiles	3	50	250	120	250	120-250	No mortar
1063?	2452	Early Roman sandy bricks	2	55	160	55	160	55-160	No mortar
1066	2459a;2452	Early Roman sandy tile and imbrex	3	50	160	55	160	55-160	No mortar
1068	2452	Early Roman sandy tegulae and tile	3	55	160	55	160	55-160	No mortar
1070	3105; 2454;3004; 3006; 2459a;2452; 2459b; 2453;3013;	Kentish ragstone (rub.); early Eccles burnt tegula; a huge group early and late Roman sandy tegula, tile, combed box flue tile and bricks(some burnt and abraded); late Roman calcareous brick and tile		50	1666	50	1666	180-350	No mortar
1071	3105;3006;2459a; 2452;2459b	Kentish ragstone (rub.); Early and late Roman sandy brick, imbrex, tegula and tiles	16	50	1666	50	1666	120-250+	No mortar
1073	3004	Early Roman sandy imbrex	1	50	160	50	160	50-160	No mortar
1075		Kentish ragstone (rub.);iron sandstone (rub.); early and late Roman sandy tegulae, imbrex, tiles and bricks(some burnt and abraded); late Roman calcareous tile; unglazed post-medieval burnt Flemish silty tile (intrusive)	46	50	1800	1450	1800	1600-1800?	No mortar

Context	Fabric	Form	Size	Date rang	je of	Latest o		Spot date	Spot date with mortar
1076	3102;3105; 3006; 2452;2459b	Light brown Belgium brick; Kentish ragstone (rub.); early and late Roman sandy imbrex, tile and bricks	8	50bc	1666	50	1666	120-250+	No mortar
1077	2459a;2459c	Early and late Roman sandy imbrex and tile	2	50	250	250	140	140-250	No mortar
1085	2815	Burnt early Roman sandy tile and bricks	6	50	250	50	250	50-160+	No mortar
1087	3131;3105;3123R; 3108; 2815; 2459a;3006;2452; 2459b; 2459c; 2453	Pennant sandstone (rub.); Kentish ragstone (rub.); Niedermendig lava stone (quern); burnt brown sandstone (rub.);early and late Roman sandy tegula, imbrex, tiles and bricks (some abraded); late Roman calcareous tegula	46	50	1900	50	1900	140-400+	No mortar
1090	3106;3107;3108; 2454; 2815;3006; 2459a; 2452;2459b;3012; 2456	Abraded Hassock stone (rub.) Reigate stone (rub.); Brown sandstone; early Roman Eccles bricks; a huge group (some abraded) early Roman sandy tile, bricks (one parietalis), tegulae; late calcareous brick; late Roman Harrold tile;	47	50	1666	50	1666	270-350+	50-400
1101	3105;3106;2815; 2452; 2459b	Kentish ragstone rub.) Worked Hassock-Bargate stone; early and late Roman sandy tegula, tile, bricks (some burnt) and box flue tile	9	50	1666	120	1666	120-250+	No mortar
1102	3105;3106;3116; 3122;3004;2459a; 2452	Kentish ragstone (rub.); Hassock ragstone (rub.) chalk (rub.); septarian nodule; burnt and abraded early Roman sandy bricks and tiles	24	50	400	50	400	55-160+	No mortar
1104	3105;3006;2452; 2459b;3026	Kentish ragstone (rub.); early and late Roman sandy tegula, tiles, imbrex and brick; late Roman calcareous tile	10	50	400	50	400	140-300+	No mortar
105?	2459a;2452; 2459b	Early and late Roman sandy tegula, tile and bricks	7	50	250	120	250	120-250	No mortar
107	3118;2452	Tufa stone (rub.); early Roman sandy brick and tile	3	50	160	55	160	55-160	No mortar
1110	2459a	Early Roman sandy tile	1	50	160	50	160	50-160	No mortar
1111	2815;3004;3006; 2459a;2459b	Early and late Roman sandy bricks and tiles	6	50	250	120	250	120-250	No mortar
1115	3120;3105;2815; 3006;2452; 2459b; 3111	Burnt Malmstone (rub.); Kentish ragstone (rub.); early and late Roman sandy <i>imbrex</i> , bricks and tiles; brown sandstone roof tile	13	50	400	200	400	200-400	No mortar
1116	2452;2276	Early Roman sandy brick; unglazed post-medieval peg	2	55	1900	1480	1900	55-160 (1480-	No mortar

Context	Fabric	Form	Size	Date range material	e of	Latest d materia		Spot date	Spot date with mortar
		tile						1900intrusive?)	
1118	2459a;3006;2452; 2459b	imbrex, combed box flue tile and bricks	4	50	250	120	250	120-250	No mortar
1120	3106;3004;3006; 2452;2459b	Hassock stone (rub.); early and late Roman sandy <i>imbrex</i> , combed box flue tile and bricks	6	50	400	50	400	120-250	No mortar
1124	3105;3106;3006; 2452;2459b;3111	Burnt Kentish ragstone (rub.); Hassock stone (rub.)Early and late Roman sandy tegula and bricks; iron sandstone roof		50	400	190	400	200-400	No mortar
1126	3123R; 3023/3060a;3006; 2459a;2452	Niedermendig lava stone (quern); early Roman Radlett brick; early Roman sandy bricks, tile and combed box flue tile	23	50	400	50	400	55-160+	No mortar
1128	3102;3105;3116; 3004;3006;2459a; 2452;3026	Daub; Kentish ragstone (rub.); abraded Chalk (rub.) Early Roman sandy <i>tegula</i> , tiles and bricks (2 burnt); late Roman calcareous <i>imbrex</i>		1500bc	1800	50	400	140-400+	No mortar
1132	3006;2452	Early Roman sandy tiles (one abraded)	5	50	160	55	160	55-160	No mortar
1135	3006;2459a;2452	Early Roman sandy tegula, tile, abraded combed box flue tile and bricks (1 burnt and abraded)	11	50	160	55	160	55-160	No mortar
1139	3106;2459a;3006; 2452;	Hassock stone (rub.); early Roman sandy combed <i>imbrex</i> , box flue tiles (1 burnt), tiles and bricks	10	50	1666	50	1666	55-160+	No mortar
1145	3106; 2459a;2452; 3033; 2279	Hassock stone (rub.); early Roman sandy tile and combed box flue tile; post-medieval sandy red brick;unglazed post-medieval peg tile	9	50	1900	1450	1900	1630-1900	No mortar
1150	3105;3106;3120; 3006;2459a;2452; 2459b	Kentish ragstone (rub.); Hassock stone (rub.);Palette green volcanic rock; early and late Roman sandy tegulae, abraded tiles, bricks and combed box flue tile;	20	50	1666	50	400	120-400	No mortar
1151	3105;3108; 2815;2459a; 3023/3060a;3004; 3006; 2452	Kentish ragstone (rub.); red sandstone? (rub.); early Roman Radlett brick; early Roman sandy tegula, combed box flue tiles(2 burnt), bricks and tiles	18	50	400	50	400	200-400	No mortar
1152	3006;2452	Early Roman sandy tile and bricks	3	50	160	55	160	55-160	No mortar
1154	2815;2459a,3004;	Kentish ragstone (rub.); early Radlett tile; early and late Roman sandy <i>imbrex</i> ,	55	50	1666	50	1666	140-300+	No mortar

Context	Fabric	Form	Size	Date range material	e of	Latest d material		Spot date	Spot date with mortar
		tegulae, tiles and bricks (9 burnt); late Roman calcareous tile							
156	3105;3106;2459a; 2459b	Two worked sides Kentish ragstone paver; Hassock stone (rub.); early and late Roman sandy box flue tile; imbrex and tegula	5	50	1666	50	1666	120-250+	No mortar
159	3004;2459a;2452; 2459b	Early and late Roman sandy imbrex, brick and tiles	9	50	250	120	250	120-250	No mortar
170	2452	Early Roman sandy imbrex	1	55	160	55	160	55-160	No mortar
172	3102; 2459a;3004; 2452;2459b;2459c	Daub; Early and late Roman sandy <i>tegula</i> ; bricks, <i>imbrex</i> and tiles (2 burnt)	19	1500bc	250	140	250	140-250	No mortar
174	2459a; 3004;2452;	Early Roman sandy <i>tegula</i> , <i>imbrex</i> , bricks and tiles	10	50	160	55	160	55-160	No mortar
175	3102;3023;3006; 2452	Daub; early Roman Radlett <i>imbrex</i> ; early Roman sandy abraded <i>imbrex</i> and tile	8	1500bc	160	55	160	55-160	No mortar
1178	3105	Kentish ragstone (rub.)	1	50	1666	50	1666	50-400	No mortar
180	3105	Kentish ragstone (rub.)	1	50	1666	50	1666	50-400	No mortar
1182	3108;3023;2815; 2459a;3006;2452; 2459b;	Brown sandstone roof; early Roman Radlett tile; early and late Roman sandy tegulae, combed box flue tile, bricks and tiles (4 burnt and 3 abraded)	33	50	1500	50	1500	200-400	No mortar
183	3102;3006;2459a; 2452;	Daub;early Roman sandy tegulae, imbrex, tile and brick	8	1500bc	1666	1500b c	400	55-160+	No mortar
184	2452	Early Roman sandy brick	1	55	160	55	160	55-160	No mortar
1186	3105;2454; 2459a, 3004, 3006, 2452;3026,2459b	Kentish ragstone (rub.); early Roman Eccles brick; early and late Roman sandy fabrics; late Roman calcareous tile	65	50	400	50	400	140-300+	No mortar
187	3117;2459a;3006; 2452	Flint stone (rub); early Roman sandy tegula, bricks and tiles	15	50	400	50	400	55-160+	No mortar
188	3102; 3105;3117; 2459a ;2452:3101M	Daub;Kentish ragstone (rub.); flint stone (rub.);early Roman sandy <i>imbrex</i> and bricks	8	1500bc	400	50	400	55-160+	55-400
193	2454;2459a;3006; 2452;2459b;	Early Roman Eccles tegula; early and late Roman sandy tegulae, imbrex, tiles and bricks	21	50	250	120	250	120-250	No mortar
195	3006;2452	Early Roman sandy <i>imbrex</i> and tiles	4	50	160	55	160	55-160	No mortar
197	2454; 2815;2459a; 3006;2452;	Early Roman Eccles <i>tegula</i> ; early Roman sandy box flue tile, <i>tegula</i> , tiles and bricks (2 abraded)	13	50	160	55	160	55-160	No mortar
198	2459a;3006;2452	Early Roman sandy <i>imbrex</i> , tile and bricks	7	50	160	55	160	55-160	No mortar
201	2459a:3006:2452:	Early and late Roman sandy	13	50	250	120	250	120-250	No mortar

Context	Fabric	Form	Size	Date range material	e of	Latest d material	ated	Spot date	Spot date with mortar
	2459b	imbrex, abraded and burnt tegulae, tiles and bricks							
1205	2459a;2452	Early Roman sandy <i>tegula</i> , brick and tiles	4	50	160	55	160	55-160	No mortar
1206	3105nr3106	Interbedded Kentish Ragstone and Hassock	1	50	1666	50	1666	50-400	No mortar
1209	3102;3120;3105; 3106;3111;2815; 2459a;3006;2452; 2459b	Daub; Horshamslate (rub.) Roof); Kentish ragstone (rub.); Hassock stone (rub.);brown sandy stone (rub.); calcite? (rub.);flint stone (rub.)early and late Roman sandy tegulae, combed box flue tile, tiles, bricks (4 burnt)	57	1500bc	1666	50	400	200-400+	No mortar
1211		Burnt daub; Early and late Roman sandy <i>tegula</i> , combed box flue tile; tiles and bricks; early Sussex brick	19	1500bc	400	1500b c	400	120-250+	No mortar
1214	3006;2452;2459b	Early and late Roman sandy brick	3	50	250	120	250	120-250	No mortar
1216	3106;2452;3006; 2459b; 2459c; 2453;	Hassock stone (rub.); early and late Roman sandy bricks, tiles(5 burnt); late Roman calcareous <i>imbrex</i>	26	50	400	50	400	140-300+	No mortar
1218	2452	Early Roman sandy brick	1	55	160	55	160	55-160	No mortar
1219	2452	Early Roman sandy <i>imbrex</i> and bricks	3	55	160	55	160	55-160	No mortar
1228	3120;2452	Pennant sandstone roof; early Roman sandy <i>tegula</i>	2	50	400	50	400	200-400	No mortar
1229	2452	Early Roman sandy tiles (one burnt)	2	55	160	55	160	55-160	No mortar
1236	2815;2459a	Early Roman sandy tiles (one burnt)	2	50	160	50	160	50-160	No mortar
1247	2459a;2452	Early Roman sandy abraded tile and bricks	5	50	160	55	160	55-160	No mortar
1258	2459b	Late Roman sandy tile	1	120	250	120	250	120-250	No mortar
1260	2459a	Early Roman sandy brick	1	50	160	50	160	50-160	No mortar
1273	2459a;2452	Early Roman sandy bricks	3	50	160	55	160	55-160	No mortar
1277		Early Roman Eccles <i>imbrex</i> ; early and late Roman sandy box flue tile, <i>tegula</i> , bricks and tiles;	23	50	250	140	250	140-250	No mortar
1281	3023/3060a	Early Roman Radlett brick	1	50	120	50	120	50-120	No mortar
1288	3102;3105;2459a; 3006;2452	Daub; Kentish ragstone(rub.); early Roman sandy bricks and tiles	13	1500bc	400	1500b c	400	55-160+	No mortar
1290	2459b	Late Roman sandy fabric	1	120	250	120	250	120-250	No mortar
1295	2815;2459a;3006; 2452,2459b;		8	50	250	120	250	120-250	No mortar
1298	3006;2459b;	early and late Roman tile and combed box flue tile Unknown	3	50	250	120	250	120-250	No mortar

Context	Fabric	Form	Size	Date rangematerial	e of	Latest o		Spot date	Spot date with mortar
		calcareous tegula;							
1300	2459a;3006; 2459b	Early and late Roman sandy tile and combed box flue tile	3	50	250	120	250	120-250	No mortar
1304	2452	Early Roman sandy brick	1	55	160	55	160	55-160	No mortar
1311	3111;2815;2452	Brown sandstone (rub.); early Roman sandy <i>tegula</i> , tile and bricks (3 burnt)	11	50	400	200	400	200-400	No mortar
1319	3006;2452	Early Roman sandy burnt tile and brick	2	50	250	120	250	120-250	No mortar
1325	2459a	Early Roman sandy tile	1	50	160	50	160	50-160	No mortar
1326	2452;2459b	Early and late Roman sandy bricks and tiles	5	55	250	120	250	120-250	No mortar
1327	2459b	Late Roman sandy tiles	1	120	250	120	250	120-250	No mortar
1330	3006;2459b	Early and late Roman sandy tiles and bricks	4	50	250	120	250	120-250	No mortar
1334	2459a;3006	Early Roman sandy fabric	3	50	160	50	160	50-160	No mortar
1347	3006;2459a; 2459b	Early and late Roman sandy bricks and tiles	4	50	250	120	250	120-250	No mortar
1353	2459a	Early Roman sandy imbrex	1	50	160	50	160	50-160	No mortar
1361	2459a;2452	Early Roman sandy <i>tegula</i> , brick and tile	4	50	160	55	160	55-160	No mortar
1374	2452	Early Roman sandy brick	1	55	160	55	160	55-160	No mortar
1376	2452	Early Roman sandy tile and brick	2	55	160	55	160	55-160	No mortar
1502	3046;3032nr3033	Post-med sandy red brick; intermediate Great Fire brick	2	1450	1900	1450	1900	1664-1900	No mortar
1504	3105; 3102;3033; 2276;3100	Kentish ragstone (rub.); abraded daub; abraded post- medieval sandy red fabric; unglazed post-medieval peg tile; white soft wall plaster	35	1500bc	1900	1480	1900	1480-1900	No mortar
1506	3114R; 2276;2279	White Carrara marble? Paver; post-med unglazed peg and pan tiles	48	50	1900	1480	1900	1630-1900	No mortar
1508	3033	Post-med whole unfrogged sandy bricks	2	1450	1700	1450	1700	1450-1700	No mortar
1510	3033;3046;2276; 2279;3032;3035; 3120;3101PM	Reused unfrogged narrow post-medieval sandy red brick; post-medieval unglazed peg and pan tiles; post Great Fire red brick; whole frogged post Great Fire brick; basalt paver	9	1450	1900	1770	1940	1770-1900	1800-1950 (1750-1900)
1511	3033	Post-medieval sandy red fabric	3	1450	1700	1450	1700	1450-1700	No mortar
1513	3102;2459a;3500; 3026; 2276;2279; 3063;3032	Abraded daub; early Roman sandy brick; unknown overheated imbrex; late Roman calcareous tegula; abraded unglazed postmedieval peg and pan tile; post-medieval Flemish silty	20	1500bc	1900	1666	1900	1666-1900	No mortar

Context	Fabric	Form	Size	Date range material	e of	Latest o		Spot date	Spot date with mortar
		paver; post-medieval sandy red brick							
1515	2279	Post-med unglazed pan tiles	5	1630	1850	1630	1850	1630-1850	No mortar
1518	2276;3063	Post med unglazed peg tiles; unglazed Flemish silty tile	6	1450	1900	1480	1900	1480-1900	No mortar
1520	3033	Whole unfrogged post- medieval narrow bricks	2	1450	1900	1450	1900	1700-1900	No mortar
1523	3033;3063	Abraded daub; Oolitic stone (rub.) unglazed post-medieval peg tile; abraded post-medieval sandy red brick; Flemish silty paver; abraded intermediate post Great Fire brick; Kimmerigde oil stone	12	1500bc	1900	1480	1900	1664-1900	No mortar
1526	2279	Post-medieval unglazed pan tile	1	1630	1850	1630	1850	1630-1850	No mortar
1528	2276;3033;2279	Unglazed post-medieval peg and pan tile; abraded post- medieval sandy red brick	5	1450	1900	1630	1900	1630-1900	No mortar
1530	2459a; 3006;3033; 2276;2279	Early Roman sandy brick; post-medieval sandy red brick; post-medieval unglazed peg and pan tiles	8	50	1900	1480	1900	1630-1900	No mortar
1531	3101R	Opus caementicium	1	50	400	50	400	50-400	50-400
1534	3033; 2279;3063; 3032; 3110;3115	Post-medieval red sandy bricks; post-medieval unglazed pan tiles; post Great Fire unfrogged and narrow bricks; Portland paver; slate	25	1450	1900	1780	1900	1780-1900	1750-1900
1535	2452;3033;3032	Reused early Roman sandy brick; whole unfrogged post- medieval narrow sandy red bricks; whole unfrogged post Great Fire narrow brick	4	55	1900	1666	1900	1780-1900	1750-1900
1539	3006;2279	Early Roman sandy tile; post- medieval unglazed pan tiles	4	50	1850	1630	1850	1630-1850	No mortar
1541	2452	Early Roman sandy brick	1	55	160	55	160	55-160	No mortar
1544?	3033	Whole unfrogged post- medieval sandy red narrow bricks	4	1450	1900	1450	1900	1700-1900	No mortar
1545	3033; 2276;2279; 3032	Post-medieval sandy red fabric; Unglazed post- medieval peg and pan tile; whole post Great Fire narrow bricks	7	1450	1900	1770	1900	1770-1900	No mortar
1546	2459a; 2279; 3032R;3101PM	Early Roman sandy fabric; post-med unglazed pan tile; post Great Fire brick; Roman mortar	4	50	1900	1666	1900	1666-1900	1800-1950
1547	3033	Whole unfrogged post- medieval post Great Fire narrow bricks	2	1450	1900	1450	1900	1700-1900	No mortar
1550	3114R;3033;	Opus signinum;white Carrara	16	70	1900	1450	1900	1664-1800	50-400

Context	Fabric	Form	Size	Date range material	e of	Latest o		Spot date	Spot date with mortar
	3032nr3033; 3101R	marble paver: abraded post- medieval sandy red brick; abraded intermediate post Great Fire brick							
1552	3102;3022;3114R; 2276; 3032	Abraded daub; early Roman Eccles fabric; white Carrara marble paver; post-medieval unglazed peg tiles; whole frogged post Great Fire brick	10	1500BC	1900	1666	1900	1750-1900	No mortar
1554	2459a; 2452; 2276; 3032nr3033; 3032R	Early Roman sandy tiles; post- med unglazed peg tiles; abraded intermediate Great Fire brick; reused post Great Fire brick	10	50	1900	1666	1900	1666-1900	No mortar
1556	3033;2279; 3032nr3033; 3101PM	Abraded post-medieval sandy red brick; post-med unglazed pan tile; unfrogged intermediate post Great Fire bricks	7	1450	1900	1664	1900	1664-1900	1750-1900
1557	3032	Whole unfrogged narrow post Great Fire brick	1	1666	1900	1666	1900	1780-1900	No mortar
1559	3032nr3033;3032	Reused unfrogged intermediate Great Fire brick; whole unfrogged narrow post Great Fire brick	2	1664	1900	1666	1900	1780-1900	1750-1900
1561	3120;2279	Norwegian ragstone; post- medieval unglazed pan tile	2	200	1850	1630	1850	1630-1850	No mortar
1562	3033	Whole unfrogged narrow sandy red brick	2	1450	1900	1450	1900	1700-1900	No mortar
1564		Burnt earthy clay; post- medieval sandy red bricks; post-medieval unglazed peg and pan tiles; intermediate Great Fire bricks; post Great Fire bricks	30	50	1900	1666	1900	1666-1900	No mortar
1566	3033;2276;2279; 3032nr3033; 3100PM	Abraded post-medieval sandy red bricks; reused unglazed post-medieval peg and pan tile; intermediate post Great Fire brick	23	1450	1900	1664	1900	1664-1900	1750-1900
1571	2452	Early Roman sandy tile	1	55	160	55	160	55-160+	No mortar
1573	2279;3032nr3033	Post-medieval unglazed burnt pan tile; intermediate Great Fire bricks	5	1630	1850	1630	1850	1664-1850	No mortar
1574	3114R	White Carrara marble paver?	1	70	400	70	400	70-400	No mortar
1578	2279	Post-medieval unglazed pan tile	1	1630	1850	1630	1850	1630-1850	No mortar
1582	3102;2587;3033; 2276;3032nr3033	Abraded daub; unglazed medieval and post-medieval peg tiles; abraded post- medieval sandy red bricks; intermediate post Great Fire brick	15	1500bc	1900	1480	1900	1664-1900	No mortar
1584	3106	Burnt Hassock sandstone	1	50	1666	50	1666	50-1666	No mortar

Context	Fabric	Form (rub.)	Size	Date range of material		Latest dated material		Spot date	Spot date with mortar
1591 Cut? Maybe 1590	2587;3046;2276; 2279;3032R	Medieval unglazed peg tile; post-medieval sandy red fabric; post-medieval unglazed peg and pan tiles; post Great Fire brick	11	1240	1900	1666	1900	1666-1900	No mortar
1597	2276;2279	Post-medieval unglazed peg and pan tiles	2	1480	1900	1480	1900	1630-1900	No mortar
1598	2459a;2452;3033; 2276	Early Roman sandy <i>imbrex</i> , tiles and bricks; post-medieval sandy red brick; post- medieval unglazed pan tiles	10	50	1850	1630	1850	1630-1900	No mortar
1600	2459a;3101R	Early Roman sandy tile; opus signinum	1	50	160	50	160	50-160	50-400
1603	2850;2279; 3032nr3033	Post-medieval burnt Flemish silty paver; post-medieval unglazed peg tiles; intermediate post Great Fire brick	6	1450	1900	1480	1900	1664-1900	No mortar
1620	2815	Early Roman burnt sandy tile	1	50	250	50	250	50-250	No mortar
1624	3033; 2276; 3032nr3033	Abraded post-medieval sandy fabric; post-med unglazed peg tile; abraded intermediate Great Fire bricks	4	1450	1900	1480	1900	1664-1900	No mortar
1629	2279	Post-med unglazed pan tiles	4	1630	1850	1630	1850	1630-1850	No mortar
1631	2459a; 2452	Early Roman combed box flue tile, tegula and brick	3	50	160	55	160	55-160	No mortar
1647	3114PM	Post-med white Carrara marble paver	1	1450	1900	1450	1900	1450-1900	No mortar
1648	3033;2276	Abraded post-medieval sandy red brick; unglazed post-medieval peg tile	3	1450	1900	1480	1900	1480-1900	No mortar
1653	3033;2276	Abraded post-medieval sandy red brick; unglazed post-medieval peg tile	17	1450	1900	1480	1900	1480-1900	No mortar
1658	2459a; 2452; 2271; 2276	Early Roman tegula and tiles; medieval and post-medieval unglazed peg tiles	6	50	1900	1480	1900	1480-1900	No mortar
1661	2271	Medieval and post-medieval unglazed peg tiles	2	1180	1800	1180	1450	1180-1450	No mortar
1676	3033	Whole unfrogged post- medieval sandy red bricks	2	1450	1900	1450	1900	1700-1900	No mortar
1677	3114R	White Carrara marble	1	70	400	70	400	70-400	No mortar
678	3033	Whole unfrogged narrow sandy red brick	1	1450	1900	1450	1900	1700-1900	No mortar
1681	3102; 3105; 2454; 2459a;2452; 2276;2279	Abraded daub; burnt Kentish ragstone; Early Roman Eccles brick; early Roman sandy bricks and tiles; late Roman calcareous burnt brick; postmedieval unglazed pan and peg tiles	25	1500BC	1900	1480	1900	1630-1900?	No mortar
1682	2279;3032		2	1630	1900	1666	1900	1666-1900	1800-1950

Context		Form whole post Great Fire brick	Size	Date range of material		Latest dated material		Spot date	Spot date with mortar
1686	3102; 2276; 3032nr3033; 3101R	Abraded daub; post-medieval unglazed peg tiles; Intermediate post Great Fire brick; opus signinum	7	1500BC	1900	1664	1900	1664-1900	50-400 (residual)
1690	2271;2276	Medieval and post-med unglazed peg tiles	2	1180	1900	1480	1900	1480-1900	No mortar
1693	3033;3032	Reused unfrogged post- medieval sandy red brick; whole frogged and unfrogged post Great Fire bricks	3	1450	1900	1666	1900	1750-1900	1750-1900
1696	3033;2276;3032R	Abraded post-med sandy red brick; post-med unglazed peg tiles; abraded post Great Fire brick	4	1450	1900	1666	1900	1666-1900	No mortar
1700	3033	Whole unfrogged narrow sandy red fabric	2	1450	1900	1450	1900	1700-1900	No mortar
1702	3120	Kimmerigde oil shale	1	1600	1900	1600	1900	1600-1900	No mortar
1704	3105;3108	Kentish ragstone (rub.); Yorstone slab paver	5	50	1900	50	1990	1700-1900	No mortar
1705?	2452	Early Roman sandy brick	1	55	160	55	160	55-160+	No mortar
1710	3108; 3100R; 3033;2276;2279; 3032nr3033	Late Roman brownstone slab; Roman white plaster; abraded post-medieval sandy red brick; post-medieval unglazed peg and pan tiles; intermediate Great Fire brick	14	50	1900	1480	1900	1664-1900	No mortar
1712	3102;3100; 3108; 2271;3033;2276; 2279; 3032nr3033	Daub; wall plaster; moulded Yorkstone; medieval and post-medieval peg and pan tiles; abraded post-medieval sandy red brick; abraded intermediate post Great Fire brick	30	1500bc	1900	1480	1900	1664-1900	No mortar
1717	3033;3032	Whole post-med sandy red brick; whole post Great Fire unfrogged brick	2	1480	1900	1666	1900	1666-1900	No mortar
1720	3102;2276	Abraded daub; post-medieval unglazed peg tile	2	1500BC	1900	1480	1900	1480-1900	No mortar
730	3105;3105	Kentish ragstone and Hassock stone (rub.)	6	50	1666	50	1666	50-1666	No mortar
1732	2459a	Early Roman sandy tile	1	50	160	50	160	50-160+	No mortar
1733	3033;2276	Abraded post-med sandy red brick; post-medieval unglazed peg tile	12	1450	1900	1480	1900	1480-1900	No mortar
1735	3033	Post-medieval sandy red bricks	2	1450	1900	1450	1900	1450-1750	No mortar
1736	2279; 3032nr3033	Post-med unglazed and tiles; intermediate post Great Fire brick	4	1630		1630	1800	1664-1800	No mortar
1737	3102; 2459a; 3004; 3006; 2452;	Abraded daub; early Roman sandy <i>tegulae</i> , <i>imbrex</i> , bricks and tiles	25	1500BC	160	55	160	55-160+	No mortar

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date	Spot date with mortar
	2452nr3006								
1739	2459a	Early Roman sandy tegula	1	50	160	50	160	50-160	50-400
1741	3102;2459a;3006; 2452; 2459b;2456; 3108	Moulded brick; early and late Roman sandy box flue tile; tegulae, bricks and tiles; late Roman Harrold tile; late Roman brownstone roofing slab	47	1500BC	400	200	400	270-400	No mortar
1742		Early and late Roman sandy tegulae, bricks and tiles; early Roman silty brick; Malmstone (rub.)	17	50	400	50	400	120-400	No mortar
1743	2815; 3033;2276	Abraded early Roman sandy fabric; abraded post medieval sandy red brick;Unglazed post-medieval peg tile	5	50	1900	1480	1900	1480-1900	No mortar
1745	3102;2815; 2459a; 3006;2452;2459b; 3026; 3055; 3105; 3106	Abraded daub; early and late Roman tegulae, imbrex, tiles and bricks;late Roman calcareous and silty tiles; Kentish ragstone and Hassock stone (rub.)	113	1500BC	1666	200	400	200-400	No mortar
1746	2459a;3004;3006; 2452;3054;3026; 3105;3106;3129	Early Roman sandy tegulae, combed box flue tile, bricks and tiles; early Roman Sussex? brick; late Roman calcareous brick; Kentish ragstone and Hassock (rub.); sandstone roofing slab	34	50	400	250	400	250-400	No mortar
1750	3106	Burnt Hassock stone (rub.)	49	50	1666	50	1666	50-1666	No mortar
1754	2459a;2452;3105; 3106	Early Roman sandy tile and brick; Kentish ragstone and Hassock stone (rub.)	7	50	1666	55	1666	50-400+	No mortar
1756	2459a;2452;3006; 3023;3026;2456	Early Roman sandy tegula, bricks and tiles; early Radlett imbrex; late Roman calcareous and Harrold bricks	30	50	350	270	350	270-350	No mortar
1757	3033;2276;2279; 3032nr3033	Abraded and burnt post medieval sandy red brick; unglazed post-medieval peg and pan tile; abraded intermediate post Great Fire brick	9	1450	1900	1480	1900	1664-1900	No mortar
1759	3102;2459a;3004; 3006;3033;3046; 2276;2279	Abraded daub; early Roman sandy <i>imbrex</i> and bricks; post-med sandy red bricks; post-med unglazed pan and peg tiles	18	1500BC	1900	1450	1900	1630-1900	No mortar
1760	2459a;3006;2452; 3106	Early Roman sandy tiles and bricks;Hassock stone (rub.)	6	50	1666	55	1666	50-400	No mortar
1762	2453;2459a;3004; 2452	Early Roman sandy <i>tegulae</i> , bricks and tiles; late Roman calcareous <i>tegula</i> and tile	44	50	160	55	160	55-160	50-400
1763	2459a;2452;2459	Early and late Roman sandy	7	50	1900	1480	1900	1480-1900	No mortar

An Archaeological Assessment of Land at the Highway, Wapping Lane, Pennington Street and Chigwell Hill, London E1, London Borough of Tower Hamlets (Parcel 4)

Context	Fabric	Form	Size	Date range material	e of	Latest o		Spot date	Spot date with mortar	
	b; 2276	brick and tile; post-med unglazed peg tiles								
1765	2459a;3006;2452; 2459b;3129	Early and late Roman sandy bricks and tiles; sandstone roofing slab	8	50	400	250	400	250-400	No mortar	
1767	3102;2459a	Abraded daub; early Roman sandy brick	2	1500BC	160	50	160	50-160	No mortar	
1770	2815;2459a;3006; 2452	Early Roman sandy <i>imbrex</i> , <i>tegula</i> , brick and tiles	12	50	160	55	160	55-160	No mortar	
1772	3006	Early Roman sandy brick and box flue tile	2	50	160	50	160	50-160	No mortar	
1773	2815;2459a;3006; 2452	Early Roman sandy <i>imbrex</i> , combed box flue tiles; <i>tegula</i> , bricks and tiles	36	50	160	55	160	55-160	No mortar	
1774	2459a;3105;3106; 3090	Early Roman sandy fabric; Kentish ragstone and Hassock stone; post-medieval pan tile	4	50	1800	1200	1800	1450-1800	No mortar	
1777	3004	Early Roman sandy brick	1	50	160	50	160	50-160	No mortar	
1780	3102;2815;2459a; 3004;3006;2452; 3238; 2459b;2453; 3023a; 3105;3106;3120; 3129;	Abraded daub; early and late Roman sandy tegula, tiles and bricks; early Roman silty tile; late Roman calcareous brick; early Roman Radlett tegula and tile; Kentish ragstone and Hassock stone (rub.); Bargate (rub.); sandstone roofing slab;	87	1500BC	400	250	1666	250-400	No mortar	
1785	2459a;3006;2452; 2459b	Early and late Roman sandy tegula, imbrex, bricks, tiles and combed box flue tiles	19	50	250	120	250	120-250	No mortar	
1786	3033	Whole unfrogged post medieval sandy red brick	2	1450	1900	1450	1900	1700-1900	No mortar	
1787	3102;2815;2459a; 3006;2452;3105	Abraded daub; early Roman sandy <i>tegulae</i> ; bricks and tiles; Kentish ragstone (rub.)	35	1500BC	1666	55	400	55-400	No mortar	
1788		Early and late Roman tegula, combed box flue tiles, bricks and tiles; Kentish ragstone (rub.); ferruginous stone (rub.); Yorkstone roofing/paver slab; Pennant sandstone roofing slab	39	50	1900	50	1900	200-400	No mortar	
1789	2459a;3006;2452; 3105	Early Roman sandy tegula, combed box flue tile and bricks; Kentish ragstone (rub.)	13	50	1666	50	1666	55-400	No mortar	
1790	3102;2459a;2452	Abraded daub; early Roman tegula, brick and tiles	7	1500BC	1666	55	160	55-160	No mortar	
1792	2459a;3105	Early Roman sandy bricks; Kentish ragstone (rub.)	5	50	1666	50	1666	50-400	No mortar	
1795	2459a;2452;3105; 3106	Early Roman sandy tiles and bricks; Kentish ragstone and Hassock stone (rub.)	13	50	1666	55	1666	55-400	No mortar	
1797	3033;3032	Unfrogged narrow post-	2	1450	1900	1666	1900	1666-1900	No mortar	

Context	Fabric	Form	Size	Date range material	e of	Latest d	ated	Spot date	Spot date with mortar
		medieval sandy red brick; whole unfrogged post Great Fire brick							
1798		Burnt moulded brick; early and late Roman combed box flue tile, tile and bricks	15	1500BC	250	120	250	120-250	No mortar
1800	2459a;2452	Early Roman sandy bricks	2	50	160	55	160	55-160	No mortar
1805	2459a;2452	Early Roman sandy bricks	3	50	160	55	160	55-160	No mortar
1811	3106	Burnt Hassock stone (rub.)	4	50	1666	50	1666	50-400+	No mortar
1813	2815;2459a;3006; 2452;2453;3013	Early Roman sandy bricks and tiles; late Roman calcareous tiles	22	50	350	180	350	180-350	No mortar
1814	3102;2815;2452	Abraded daub; early Roman sandy burnt tile	11	1500bc	400	55	160	55-160+	No mortar
1819	2459a	Early Roman sandy tile	1	50	160	50	160	50-160	No mortar
1823	3102;3022;2815; 2459a;2452;3105; 3106;3116	Abraded daub; Eccles tile; early Roman sandy brick and tiles; Kentish ragstone, Hassock stone and chalk (rub.)	13	1500BC	1800	50	1800	55-400	No mortar
1826	3106	Hassock stone (rub.)	1	50	1666	50	1666	50-1666	No mortar
1831	3033	Post-medieval sandy red brick	1	1450	1900	1450	1900	1480-1900	No mortar
1836	2459a;2452	Early Roman sandy bricks	5	50	160	55	160	55-160	No mortar
1838	2459a;2452;3111	Early Roman sandy box flue tile and brick; ferruginous roofing slab	4	50	400	190	400	190-400	No mortar
1842	2459a;3018;2276; 3038	Early Roman sandy tegula; Hartfield fabric; post-medieval unglazed peg tiles; machine brick	5	50	1950	1850	1950	1850-1950	No mortar
1844	3032nr3033	Abraded intermediate great Fire (intrusive?)	1	1664	1725	1664	1725	1664-1725?	No mortar
1846	2815;2459b	Early and late Roman sandy tiles	2	50	250	120	250	120-250	No mortar
1851	3006;3106	Early Roman sandy fabric; Hassock stone (rub.)	2	50	1666	50	1666	50-1666	50-400
1856	2459a;2452	Early Roman sandy tegula and brick	2	50		55	160	55-160	No mortar
1858	2459a	Early Roman sandy tiles	2	50		50	160	50-160	No mortar
1863	2276;3018	Roman silty brick; Post-med unglazed peg tile	2	100	1900	1480	1900	1480-1900	No mortar
1865	2459a	Early Roman sandy tile	1	50		50	160	50-160	No mortar
1868	3102;2815;2459a; 3006;2452;3500	Abraded daub; early Roman sandy <i>tegulae</i> , tiles, bricks and combed box flue tile; burnt clay	30	1500BC	1666	1500B C	1666	55-400	No mortar
1873	3102;2815;2459a; 2452	Abraded daub; early Roman sandy box flue tile and tiles	7	1500BC	1666	1500B C	1666	55-400	No mortar
1888	3102;3123r;2459a	Abraded daub; a huge group of abraded Niedermendig lava stone; early Roman sandy tile	33	1500BC	1666	1500B C	1666	50-400+	No mortar

Context	Fabric	Form	Size	Date range material	e of	Latest d	ated	Spot date	Spot date with mortar
1893	3102;2454;2815; 3123	Abraded small lumps of daub; Eccles fabric; Local sandy Roman fabric; Niedermendig lava stone	38	1500BC	400	50	400	50-400	No mortar
1899	2459a	Abraded early Roman sandy tile	2	50	160	50	160	50-160	No mortar
1900	3102;2459a; 2452	Abraded daub; early Roman sandy combed box flue tile, tile and bricks	6	1500BC	1666	1500B C	1666	55-400	No mortar
1905	2815;2452	Early Roman sandy bricks	8	50	250	50	250	55-250	No mortar
1919	3102;2459a;2279	Abraded daub; early Roman sandy <i>tegula</i> ; post-medieval unglazed pan tile (intrusive)	4	1500BC	1850	1630	1850	1630-1850	No mortar
1920	3102; 2459a; 3006; 2452; 2276;3106; 3120;3101R	A large group of abraded daub; early Roman sandy bricks and tiles; post-edieval unglazed peg tiles (intrusive?); Hassock and Malmstone stones (rub.)	34	1500BC	1900	1480	1900	1480-1900	50-400
1921	3102; 2459a; 2452; 2459b;3105; 3111	Abraded daub; early and late Roman sandy tile and bricks; Kentish ragstone (rub.); ferruginous roofing slab	17	1500BC	1666	50	1666	190-400	No mortar
1922	3105;3106;2459a	Kentish ragstone (rub and asl.); early Roman sandy brick	7	50	1666	50	1666	50-400	No mortar
1926	2452	Early Roman sandy brick	1	55	160	55	160	55-160	No mortar
1931	3102	Abraded daub	1	1500BC	1666	1500B C	1666	1500BC-1666	No mortar
1933	3046;2276;2279	Abraded post-medieval sandy red bricks; post-medieval unglazed pan and peg tiles	8	1450	1900	1480	1900	1630-1900	No mortar
1945	3102	Abraded daub	2	1500BC	1666	1500B C	1666	1500BC-1666	No mortar
1947	2815;2459a;2452	Early and late Roman sandy tiles	3	50	250	50	250	55-250	No mortar
1950	3111	Ferruginous roofing stone	1	190	400	190	400	190-400	No mortar
1951	3102;2454;2459a; 3006;3023;2452; 3105;3106;3117; 3120;3101R	Abraded daub; early Roman Eccles brick; early Roman sandy tegula, imbrex, bricks and tiles; Radlett tegula; Kentish ragstone and Hassock stone (rub.); burnt flint stone (rub.); German volcanic rock; opus signinum/caementicium	48	1500BC	1666	1500B C	1666	55-400	50-400
1952	3102;2271	Abraded daub; medieval unglazed peg tile	3	1500BC	1800	1180	1800	1180-1450	No mortar
1953	2815;2452;2271; 2276	Early and late Roman tiles; medieval and post-medieval unglazed peg tiles	9	50	1900	1480	1900	1480-1900	No mortar
1954	2459a	Early Roman sandy tile	1	50	160	50	160	50-160	No mortar
1955	3102;2815;2459a; 2452;2271	Abraded daub; early and late Roman sandy bricks and tiles;	5	1500BC	1666	1180	1850	1180-1450	No mortar

Context	Fabric	Form	Size	Date range material	of	Latest d	ated	Spot date	Spot date with mortar	
		medieval unglazed peg tile (intrusive?)								
1958	3102;2452;2276; 3046	Abraded daub; early Roman sandy fabric; post-medieval unglazed peg tile; abraded post Great Fire sandy brick	4	1500BC	1900	1450	1900	1450-1900	No mortar	
1960	2276	Post-medieval unglazed peg tile	1	1480	1900	1480	1900	1480-1900	No mortar	
1962	2815	Abraded Roman sandy fabric	1	50	250	50	250	50-250	No mortar	
964	3102	Abraded daub	2	1500BC	1666	1500B C	1666	1500BC-1666	No mortar	
968	2452	Early Roman sandy tile	1	55	160	55	160	55-160	No mortar	
980	2459a	Early Roman sandy tegula	1	50	160	50	160	50-160	No mortar	
981	3102;2459a;3006; 2452	Abraded daub; early Roman sandy imbrex, bricks and tiles	7	1500BC	1666	1500B C	1666	55-400	No mortar	
986	3105	Kentish ragstone (rub.)	2	50	1666	50	1666	50-1666	No mortar	
992	2459a;2452;3120	Early Roman sandy combed box flue tile and bricks; German volcanic rock (rub.)	4	50	400	50	400	50-400	No mortar	
994	3102;2276	Abraded daub; post-medieval glazed peg tile	2	1500BC	1900	1480	1900	1480-1900	No mortar	
2000	3105	Kentish ragstone (rub.)	1	50	1666	50	1666	50-400+	No mortar	
2012	3102;2815	Abraded daub; Roman sandy tile	2	1500BC	1666	1500B C	1666	50-1666	No mortar	
2031	3102;2815;2459a; 3006;2452; 2459b; 3105;3016	Abraded daub; early and late Roman sandy <i>tegulae</i> , bricks and tiles; Hassock and Kentish ragstone	32	1500BC	1666	1500B C	1666	55-400	No mortar	
2034	3004;3054;2452	Early and late Roman sandy tegula, imbrex, bricks and tiles (2 burnt)	10	50	160	55	160	70-160	No mortar	
2041	2452	Early Roman sandy brick	1	55	160	55	160	55-160	No mortar	
047	2459a	Early Roman sandy burnt tile	1	50	160	50	160	50-160	No mortar	
2051	3105;3106	Hassock and Kentish ragstone (rub.)	6	50	1666	50	1666	50-1666	No mortar	
2055	3102;2459a; 2452; 2279,3038;3117	Abraded daub; early Roman sandy combed box flue tile, tegula and brick; post-med unglazed pan tile; machine brick; burnt flint stone	7	1500BC	1950	1850	1950	1850-1950	1800-1950	
2057	2459a	Early Roman sandy tile	1	50	160	50	160	50-160	No mortar	
058	2815;2459a	Roman sandy fabric	2	50	250	50	250	50-250	No mortar	
2060	3102; 2454; 3023; 2815; 3006;2459a; 2452; 3054;3055; 2586;2271;2276; 3105;3120	Abraded daub; Early Eccles tile; Radlett tile; a large group of early Roman sandy tegula, tiles and bricks; early and late Roman silty bricks and tile; medieval and post-medieval unglazed peg tile; Kentish ragstone (rub.); Horshamslate	101	1500BC	1900	1480	1900	1480-1900	No mortar	
2062	2459b;3046;	roofing slab Late Roman sandy tile; post-	9	120	1900	1450	1900	1700-1900	No mortar	

Context	Fabric	Form	Size	Date range material	of	Latest d	ated	Spot date	Spot date with mortar
	2276; 3108; 3120	medieval sandy red bricks; post-medieval unglazed peg tile; Malmstone probably worked; Yorkstone roofing slab							
2064	2454; 3023; 2459a; 2452,	Early Roman Eccles, Radlett and sandy fabrics	12	50	160	55	160	55-160	No mortar
2065	3102	Abraded daub	4	1500BC	1666	1500B C	1666	1500BC-1666	No mortar
2066	3102;2815;2459b	A large group of abraded daub; Early and late Roman sandy bricks	32	1500BC	250	120	250	120-250	No mortar
2070	3102; 2815; 2459a; 3006;2452; 2453; 3105;3106;3111; 3117;3122;3143	A huge group of abraded daub; a large group of early Roman sandy <i>imbrex</i> , <i>tegula</i> , combed box flue tile, bricks, and tiles; late Roman calcareous tile; Kentish ragstone (rub.); early Roman sandy bricks and tiles; a large group of Kentish ragstone (rub.); Hassock stone; ferruginous roofing slab; flint stone (rub.); septarian nodule; Barnack stone (rub.)	102	1500BC	1666		1800	190-400	No mortar
2073	2459a;2452	Early Roman sandy tiles	2	50	160	55	160	55-160	No mortar
2075	2815; 2459a;3004;3006; 2452;2459b	Early and late Roman sandy tegulae, imbrex, combed box flue tile, bricks and tile	25	50	250	120	250	120-250	No mortar
2076	2459a	Early Roman sandy tile	2	50	160	50	160	50-160	No mortar
2079	2459a; 3004;3006; 2452;3105;3106; 3116;3117	Early Roman sandy <i>imbrex</i> , tiles and bricks; Kentish ragstone (rub.); Hassock stone (rub.); chalk and flint (rub.)	23	50	1800	50	1800	55-400	No mortar
2087	2452	Early Roman sandy bricks	2	55	160	55	160	55-160	No mortar
2090	2459a	Early Roman sandy tile	1	50	160	50	160	50-160	No mortar
2093	2452;3046;2276	Early Roman sandy tile; abraded post-medieval sandy red brick; post-medieval unglazed peg tiles	4	55	1900	1480	1900	1480-1900	No mortar
2096	2452	Early Roman sandy brick	1	55	160	55	160	55-160	No mortar
2097	2456	Late Roman Harrold tile?	1	270	350	270	350	270-350	No mortar
2101	2452	Early Roman sandy brick	1	55	160	55	160	55-160	No mortar
2102	2815;2452	Early and late Roman sandy tiles	2	50	250	50	250	55-250	No mortar
2110	3006;2452;2276; 3261	Early Roman sandy brick and tile; post-medieval unglazed peg tile; late post-medieval glazed drain pipe	4	50	1900	1800	1950	1800-1900	No mortar
2112	2459a;3105;3108	Early Roman sandy fabric; burnt Kentish ragstone (rub.);	4	50	1666	50	1666	200-400+	No mortar

Context	Fabric	Form	Size	Date range material	e of	Latest d material	ated	Spot date	Spot date with mortar
		Brownstone roofing slab							
2115	2276	Post-medieval unglazed peg tiles	2	1480	1900	1480	1900	1480-1900	No mortar
2117	2459a; 3004;	Abraded daub; Early Roman Radlett roller stamped box flue tile; a large group of early and late Roman sandy tegulae, imbrex, tiles and bricks; ferruginous roofing slab; Belgian brick?	68	1500BC	400	190	400	190-400	No mortar
2118	2459a;3006	Early Roman sandy tegula, imbrex and tile	3	50	160	50	160	50-160	No mortar
2120	2459a;2452	Early Roman sandy brick and tile	2	50	160	55	160	55-160	No mortar
2122	3111	Ferruginous roofing slab	1	190	400	190	400	190-400	No mortar
2127	2459a	Early Roman sandy tegula	1	50	160	50	160	50-160	No mortar
2136	2815;2459a;3015	Early and late Roman <i>tegula</i> and tile; Kentish Ragstone (rub.)	4	50	1666	50	1666	50-400	No mortar
2139	3006	Early Roman burnt sandy tile	1	50	160	50	160	50-160	No mortar
2140	2459a;2459b	Early and late Roman tegula and tile	2	50	250	120	250	120-250	No mortar
2142	3102	A large group of abraded daub	51	1500BC	1666	1500B C	1666	1500BC-1666	No mortar
2156	3105;3106;3119; 3101	Kentish ragstone worked stone; Hassock stone (rub.); Probably column of Caen stone; earthy mid brown mortar	4	50	1800	1066	1800	1066-1800	1700-1800
2157	2452;3100R	Early Roman sandy tegula and bricks; Roman wall plaster	7	50	400	50	400	55-400	No mortar
2167	3102;2452; 3101R	Abraded daub; early Roman sandy box flue tile; opus signinum/caementicium	2	1500BC	1666	1500B C	1666	55-1666	50-400
2168	3100R; 2276;2279	Roman yellowish wall plaster; post-medieval unglazed pan and peg tiles	6	50	1900	1480	1900	1630-1900	No mortar
2169	3032	Whole unfrogged narrow post Great Fire brick	2	1666	1900	1666	1900	1780-1900	1750-1900
2175	2459a;2452; 2271; 2276;2279	Early Roman sandy imbrex and tiles; medieval and post- medieval unglazed pan and peg tiles	13	50	1900	1480	1900	1630-1900	No mortar
2176	3046	Unfrogged narrow sandy red brick	2	1450	1900	1450	1900	1700-1900	1750-1900
2187	3006;2452;2276	Early Roman sandy tiles; post-medieval unglazed peg tiles	9	50	1900	1480	1900	1480-1900	No mortar
2188	2459a;3006;2452; 2276	Early Roman sandy tegula, bricks and tiles; post-medieval unglazed peg tile	9	50	1900	1480	1900	1480-1900	No mortar
2189	2815;2459a;	Early and late Roman sandy	14	50	1900	1480	1900	1480-1900	No mortar

An Archaeological Assessment of Land at the Highway, Wapping Lane, Pennington Street and Chigwell Hill, London E1, London Borough of Tower Hamlets (Parcel 4)

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Context	Fabric	Form tegulae, bricks and tiles; post- medieval sandy red brick; post-medieval unglazed peg tile	Size	Size Date range material		e of Latest da material		Spot date	Spot date with mortar	
	2452; 2459b; 2276;3046									
2193	2459a;3006;2452; 3105	Early Roman sandy <i>imbrex</i> , combed box flue tile and bricks; Kentish ragstone (rub. and asl.)	13	50	1666	50	1666	55-400+	No mortar	
2194	3006;2452;3054;	A large group of early and late Roman sandy tegula, box flue tile, bricks and tiles; early Roman Sussex brick; late Roman Harrold imbrex; post- medieval unglazed peg tile; burnt Kentish ragstone (rub.); Pennant sandstone roofing slab	74	50	1900	1480	1900	1480-1900	No mortar	
2195	3102; 2549a;3006; 2452	Abraded daub; early Roman sandy bricks, <i>tegulae</i> and tiles	38	1500BC	1666	150BC 0	1666	55-400+	No mortar	
2196	2459a; 2452	Early Roman sandy bricks	4	50	160	55	160	55-160	No mortar	

Recommendations/Potential

The very large quantity of Roman ceramic building material (1050kg) recovered from TBF10 very much reflects extensive late Roman dumping episodes associated with building and remodelling structures related to the settlement and with the final demolition of the 3rd-century bath house at Shadwell. Unlike the adjacent excavation (Douglas *et al.* 2011), there are no masonry structures surviving and therefore the emphasis must be on the composition and form of the dumps themselves.

However, other than using building material as a dating tool, the value of the sizeable assemblage of ceramic building material and stone from Tobacco Dock (TBF10) lies largely with individual items of high status bathing (box flue tiles, *tesserae*, *tubuli* and *pilae*) and the high-status stone materials (altar, palette).

Publication Research

The ceramic items may require further investigation and possible input from a person familiar with the combed designs and unidentifiable fabrics (e.g. Ian Betts) These high status ceramic Roman materials require comparison with the materials from the Babe Ruth restaurant site (Douglas *et al.* 2011).

Publication text

A section will be written concentrating on the types of the late Roman buildings and the bath house dumped materials, considering the reuse and origin of early Roman tile and brick from central London. The following research questionswill be considered:

- How does this relate to the bath house structure?
- What elements of the masonry construction were demolished? What is not present?

A section will be written examining the types of construction materials (brick, mortar, roofing tile, floor tile) used in the residential structures associated with the post-medieval expansion of this part of East London (Shadwell). The following research questionswill be considered:

- Were the bricks being manufactured locally or where they are being supplied from further afield (via the River Thames)?
- Is there much evidence for reuse of earlier medieval and post-medieval construction materials and what does this say about the earlier development of this part of East London?

Publication petrology - Examining the source of the different roof/paving/levelling stone types and comparing them with the assemblage of stone from the earlier excavations. Liaise by means of photography and sending samples through to the Belgic Geological Survey to assess whether the low density material is tuffstein or a tuffstein mortar. Production of a petrological report (with photomicrographs of thin sections already prepared) for the different rock types, table of rock types and map of geological sources for an important late Roman building

Publication illustration/photography

Some of the more ornate items such as decorative box flue tiles, *tubuli*, *tegula mammata*, some signature marks, require photography and illustration at publication.

Publication photographs of altar and palette are required together with the tuffstein or tuffstein mortar. Also one illustration of 1 whetstone is required.

Bibliography

Adam, J.P., 2001. Roman building: Materials and techniques. Routledge, London.

Betts, I., Black, E.W. and Gower, J., 1994. *A corpus of relief-patterned tiles in Roman Britain*. Journal of Roman pottery studies 7, Oxbow books, Oxford.

Betts, I., 2000. 'Ceramic Building Material and Stone', in B. Barber and D. Bowsher, *The eastern cemetery of Roman London, Excavations 1983-1990.* Museum of London Archaeology Service Monograph 4.

Betts, I.M. and Weinstein, R.I., 2010. *Tin-Glazed tiles from London.* Museum of London Archaeology, Dorset Press.

Bidwell, P.T., 1979. The Legionary Bath house and Basilica and Forum at Exeter: with a summary account of the Legionary Fortress. Exeter Archaeological Reports 1. Exeter, Exeter City Council.

Bird, J., Hassall, M. and Sheldon, H. (eds.), 1996. *Interpreting Roman London. Papers in memory of Hugh Chapman*. Oxbow Monograph 58. Oxford, Oxbow.

Brodribb, G., 1987. Roman Brick and Tile. Alan Sutton, Gloucester.

Bradley, T. and Butler, J., 2008. From Temples to Thames Street – 2000 years of Riverside Development: Archaeological excavations at the Salvation Army International Headquarters, 88-101 Queen Victoria Street, City of London. Pre-Construct Archaeology Monograph 7:

Claridge, A., 1998. Rome: An Oxford Archaeological Guide. Oxford, Oxford Archaeological Press.

Coombe, P.C. Grew. F.G. Hayward, K.M.J. and Henig, M., 2015. *Corpus Signorum Imperii Romani. Great Britain 1.10 Roman Sculpture from London and the South-East.* Oxford, Oxford University Press.

Crowley, N., 2005. 'Building Materials', in B. Yule, *A prestigious Roman building complex on the Southwark waterfront, London.* Museum of London Archaeology Service Monograph 23, 90-100.

De La Bedoyere, G., 2001. The Buildings of Roman Britain. Tempus Publishing Stroud.

Dreesen, R. and Dusar, M., 2004. 'Historical building stones in the province of Limburg (NE Belgium): role of petrography in provenance and durability assessment'. *Materials Characterisation* 53, 273-287.

Douglas, A.. Gerrard, J. and Sudds, B., 2011. A Roman settlement and bath house at Shadwell. Excavations at Tobacco Docka and Babe Ruth restaurant, The Highway, London. Pre-Construct Archaeology Monograph 12.

Elsen, J., 2006. 'Microscopy of historic mortars – a review'. *Cement and Concrete Research* 36; 1416-1424.

Hayward, K.M.J., 2009. Roman Quarrying and Stone Supply on the periphery – southern England. A geological study of first century funerary monuments and monumental architecture. British Archaeology Report British Series 500, Archaeopress, Oxford.

Hayward, K.M.J., 2015. 'Types and sources of stone', in P.C. Coombe, F. Grew, K.M.J. Hayward and M. Henig, M., 2015. *Corpus Signorum Imperii Romani. Great Britain 1.10 Roman Sculpture from London and the South-East.* Oxford, Oxford University Press, xxxiv-xliv.

Hayward, K.M.J., 2015. 'Building Materials', in D. Killock, J. Shepherd, J. Gerrard, K.M.J. Hayward, K. Reilly and V. Ridgeway, *Temples and suburbs: Excavations at Tabard Square, Southwark,* Pre-Construct Archaeology Monograph 18, 172-186.

Hayward, K.M.J., in prep. 'The building materials,' in V. Ridgeway, J. Taylor and E. Biddulph, A Bath House, Settlement and Industry on Roman Southwark's North Island: excavations along the route of

Thameslink Borough Viaduct. Thameslink Monograph 1. Oxford Archaeology-Pre-Construct Archaeology.

Henig, M., Coombe, P., Hayward K.M.J., Tomlin, R. & Gerrard, J., 2015. 'Statuary, Sculpture, Inscriptions and Architectural Fragments', in D. Killock, J. Shepherd, J. Gerrard, K.M.J. Hayward, K. Reilly and V. Ridgeway, *Temples and suburbs: Excavations at Tabard Square, Southwark,* Pre-Construct Archaeology Monograph 18, 187-198.

Lakin, D., Seeley, D., Bird, J., Reilly, K. and Ainsley, C., 2002. *The Roman Tower at Shadwell, London: a reappraisal.* Museum of London Archaeology Service Archaeology Study Series 8.

Perring, D., 2014. 'Roman London', in M. Fulford and N. Holbrook (eds.), 2015. *The towns of Roman Britain: the contribution of commercial archaeology since 1990.* Britannia Monograph 27. The Society for the Promotion of Roman Studies, London.

Price, M.T., 2007. Decorative stone: The complete sourcebook. Thames & Hudson, London.

Pringle, S., 2009. 'Building Materials', in C. Cowan, F. Seeley, A. Wardle, A. Westman and L. Wheeler, *Roman Southwark settlement and economy: Excavations in Southwark* 1973-1991. Museum of London Archaeology Monograph 42, 187-205

Pritchard, F.J., 1986. 'Ornamental stonework from Roman London'. Britannia 17, 169-189.

Röder, J., 1967. 'Bibliography – list of publications'. Bonner Jahrbücher 167, 357-362.

Rowsome, P. (1999). The Huggin Hill Baths and bathing in London: Barometer of the town's changing circumstances? In J. DeLaine and D. Johnston (eds.). Roman baths and bathing: Proceedings of the First International Conference on Roman Baths, held at Bath, England, 30 March-4 April 1992. Portsmouth, Rhode Island: Journal of Roman Archaeology Supplementary Series 37, 262-277.

Ruppiene, V., Schüssler, U. and Untervurtzacher, M., 2013. *Auerbach marble quarries in the Odenwald near Hochstädten*. IES Yearbook 2013.

Sudds, B., 2011. 'Building Materials', in A. Douglas, J. Gerrard and B. Sudds, *A Roman settlement and bath house at Shadwell. Excavations at Tobacco Docks and Babe Ruth restaurant, The Highway, London.* Pre-Construct Archaeology Monograph 12, 103-118.

Yule, B., 2005. A prestigious Roman building complex on the Southwark waterfront, London. Museum of London Archaeology Service Monograph 23.

APPENDIX 12: POST ROMAN METAL AND SMALL FINDS ASSESSMENT

Märit Gaimster

The excavations produced a total of around 1000 individual metal and small finds, all of which were assessed for this report. The finds are listed in Table 1, and will be discussed by phase below. With the exception of a handful of medieval finds, and a possible Anglo-Saxon object, all items can be allocated to post-medieval contexts, with over half of the finds from the late 18th to early 19th centuries.

Phase 3.6: Early 5th Century

So far, the only 5th-century metal object is a possible early Anglo-Saxon iron spearhead, recovered from the fill of Phase 3.6 pit [968]. The spearhead is discussed elsewhere in this report (SF 1607; see Gerrard Appendix 6). The only other metal find recovered from this phase is the edge fragment of a thin silver coin. The coin is not Roman, and so must be intrusive here; it may be a late medieval cut farthing (SF 286).

Phase 4: Medieval

Only five metal finds came from Phase 4 contexts. Besides two iron nails and a fragment of lead waste, they comprise a pinned iron hinge (SF 1598) and a possible iron strap hinge (SF 1569).

Phase 5.1: 17th Century (1600-1660/1680)

This phase produced fifty-five metal and small finds, dominated by iron nails (twenty-four items). The majority of the finds came from Trench 1. Dress accessories are represented by small copper-alloy items in the form of a fine dress pin with a globular head formed of twisted wire (SF 53) and two lace-chapes (SF 55 and 755). Both are of a form held in place by both edges folded inwards, characteristic of lace-chapes from the 16th and 17th centuries (Oakley Type 2; Oakley 1979, 263). Frequent finds from the late medieval and early modern periods, these small accessories reflect a fashion of tighter and more fitted clothing that required lacing (Margeson 1993, 22). A considerably larger lace-chape was retrieved from Trench 3 (SF 682); formed by overlapping copper-alloy sheet, this is more unusual and would have had a more decorative function perhaps on a belt or horse harness. Similar long chapes are known from medieval finds in London (cf. Egan and Pritchard 1991, fig. 188; Margeson 1993, fig. 12 no. 122). There is also a fine mount or strap-end of copper-alloy sheet with four minute rivets (SF 86); this is likely to originate from a belt or strap. There were also a few household related objects among the finds, including the fragment of a cast-iron vessel with a pierced lug for suspension (SF 1573), an unusual find before the 18th century, the fragment of a facetted cutlery handle of bone

(SF 1493) and a small copper-alloy casket key with a flat lozenge-shaped bow (SF 58). Similar keys are also known from the late medieval period, suggesting it may be residual or from an old lock (cf. Bailey 1997, 4 and nos. 6, 7, 16, 33, 37 and 44). An iron tethering ring retains its solid looped pin for fixing (SF 1575). A few finds may be indicative of non-ferrous metalworking, in particular a rectangular piece of copper-alloy sheet with cut marks at one end (SF 85) and lengths and pieces of copper-alloy wire (SF 83-84). Trench 3 produced a piece of bone-working waste in the form of a sawn piece of cattle metatarsus that has been worked to a rough point (SF 1534). Coins dating from this phase comprise four royal farthings covering the early 17th century; two were unstratified (SF 1 and 39), while one was residual in a Phase 6.2 context (SF 98). However, a Lennox farthing of James I (1616-1625) was retrieved from Phase 5.1 context [217] (SF 28). At least one copper-alloy jeton, used for calculating sums on a chequer board, was retrieved. The jeton belongs to the most prolific group, the so-called rose-and-orb type that was produced in Nuremberg in the late 16th and 17th centuries (SF 2). Two heavily worn and thin circular copper-alloy flans are also likely jetons (SF 359-60).

Phase 5.2: Late 17th Century (1660-1720)

This phase produced just over 200 individual metal and small finds, with half of the total consisting of iron nails. The majority of these finds came from Trench 1, with only fifty-five objects from Trench 2. A wide range of finds categories are represented, including dress accessories and personal belongings, structural and household items, small-scale industry and objects associated with literacy and book-keeping. Two iron cannon balls are more unusual finds (SF 1596-97); both were retrieved from Trench 2.

Small dress accessories are represented by three copper-alloy buttons (SF 31, 37 and 446), a fourth has traces of textile covering (SF 18). The anchor chape of a two-piece copper-alloy shoe buckle, a form dating from c.1690-1720, was residual in a Phase 6.1 context (SF 749). A partly unravelled chain of fine copper-alloy wire may be the remnants of a wound-wire dress accessory (SF 20; cf. Egan 2005, fig. 41; Forsyth 2013). Copper-alloy dress pins with globular heads formed of twisted wire were also recovered (SF 40 and 1599-1600). Personal accessories are seen in a double-sided comb (SF 19) and a toothbrush (SF 442; Trench 2), both of ivory. The toothbrush, which came from Trench 2, has a handle inscribed with the image of an elephant and the text 'EXTRA FINE'. Toothbrushes were rare before the end of the 18th century, when they were beginning to be mass-produced, so it is perhaps most likely that this object is intrusive in this phase (Mattick 2010, 8). A complete pipeclay haircurler, however, fits well in with this phase (SF 455; cf. Le Cheminant 1982, fig. 1 no. 8).

Household-related finds include some structural fittings and fixtures, in the form of an iron pintle for hanging doors or shutters (SF 1576) and a length of lead water pipe (SF 607; Trench 2). Besides metal vessel fragments, including cast iron (SF 1571) and a possible small rectangular vessel of copper-alloy sheet (SF 1395), household furnishings are predominantly represented by cutlery. This can be seen in three knives (SF 29, 38 and 1572), two of which retain handles or traces of such, and a further three cutlery handles (SF 41, 229 and 725). These are all tang-hafted implements, with

simple handles of wood, bone and ivory. There is also a group of objects associated with literacy and book-keeping, relating to households and small businesses. Notable is a small oval seal matrix with a flat perforated handle for suspension (SF 1399; cf. Hitchcock 2007, 143 nos. 324-26). A finely carved bone implement has a flat tapering blade with a rounded point (SF 1500); a mid-17th-century parallel from Norwich suggest this may be a paper knife or letter opener (Margeson 1993, fig. 38 no. 445). There are also remnants of a possible book clasp (SF 24). From Trench 2 came a lead token (SF 1545) and two possible lead disc weights (SF 1548). The token features a cartwheel design on one side, and a fleur-de-lis on the other. It has parallels in the lead items that were used alongside the numerous copper-alloy farthing, halfpenny and penny tokens produced between c.1648-1673 in response to the lack of official small change at the time (Dickinson 1986, 4-15; cf. Mitchiner and Skinner 1985, pl. 16-21). The Tobacco Dock token, measuring 23mm across, is however considerably larger than the standard tokens of that period. It would fit well with the continuous use of unofficial lead tokens, still occurring into the early 19th century, after the suppression of the 17th-century copper-alloy issues by Charles II in 1692.

The most frequent category of finds from Phase 5.2 contexts is bone-working waste, represented by twenty-eight individual pieces and all from Trench 1 (SF 1508-11, 1514-16, 1518-26). This material consists almost entirely of primary waste, predominantly in the form of sawn-off ends of cattle metatarsals, so there is little indication of what the end products may have been. Prior to the development of synthetic materials, bone formed the raw material for a wide range of household and other objects. There are also two pieces of ivory-working waste, one from Trench 1 (SF 46) and one from Trench 2 (SF 608). Products of elephant ivory became more frequent once direct trade routes for African and Indian ivory were established in the 17th and 18th centuries (MacGregor 2001, 378), with 17th-century items including combs and cutlery handles. At Tower Hill, in the City of London, considerable amounts of ivory-working waste were excavated from 17th-centrury contexts (Hutchinson 1996, 134-41; Whipp 2006, 48-50). Other manufacturing waste was rare, with only three short lengths of copper-alloy wire recorded (SF 50 and 1376). A handful of tools were also recovered. Besides a hone of Norwegian ragstone (SF 441; Trench 2), which could have been used to sharpen knives and drawknives, none of these tools relate directly to the manufacturing waste. A complete iron hammer head represents a type used both by blacksmiths and carpenters (SF 399). An agricultural tool is represented by the complete iron head of a hoe (SF 1574). Two fragmentary iron scissors are likely related to textile work (SF 17 and 1567).

Phase 6.1: 18th Century (1720-1780)

Around 180 individual objects came from Phase 6.1, with the majority consisting of iron nails (110 items). Around 2/3 of the finds are from Trench 2, with the rest from Trench 1. The assemblage is varied but fragmentary, and includes dress accessories and household objects as well as other finds categories. Dress accessories are dominated by numerous fragmentary pins of copper alloy. The majority have small globular heads of wound wire (Caple Type C; SF 729 and 1601-6), the most

common form after c.1700 (Caple 1991, 246), but there is also a pin with a more loosely crimped wound-wire head (Caple Type B; SF 1394) and another with a solid globular head (SF 728). There are three copper-alloy buttons (SF 1558 and 1563), and a possible button in the form of a horn disc (SF 480). A small oval glass setting, facetted in clear blue, originates from a finger ring (SF 461). Fragments of three double-sided combs were recovered, one of bone (SF 1491) and two of ivory (SF 425 and 1506). One of the ivory combs, unusually, is inscribed with the letter 'E' (SF 425). A complete haircurler, of a similar type to the one from Phase 5.2 above, was also recovered (SF 375; cf. Le Cheminant 1982, fig. 1 no. 9).

A handful of household objects and furnishings include the moulded stem of a candlestick (SF 750), three upholstery pins (SF 743 and 1564) and a curtain ring (SF 374), all of copper alloy. Two nearcomplete pipeclay figurines, one possibly portraying James II, still retain some traces of original paint (SF 14 and 173). Cutlery is represented by two tang-hafted knives with wooden handles (SF 722 and 724), the antler handle of a scale-hafted implement (SF 723) and the elliptical bowl of a copper-alloy spoon (SF 401). More unusual are two finds reflecting leisure and play, in the form of two ceramic gaming pieces of tin-glazed ware (SF 1595 and 1610) and a minute dice of bone with simple drilled pits (SF 1497). A further gaming piece of tin-glazed ware is likely residual in Phase 2 (SF 1611). Also two copper-alloy thimbles would reflect household activities (SF 459 and 478). Other tools are represented by two hones, both of Norwegian ragstone (SF 479 and 1581). Unlike the previous phase, very few finds relate to production and manufacture. Besides two cut lengths of copper-alloy wire (SF 100) there was a piece of bone-working waste (SF 1517). Consisting of the sawn-off end of a cattle metatarsus this may be likely to be residual from Phase 5.2. There was also a possible lead disc weight (SF 1547), very similar to the two recovered from the previous phase (SF 1548), and an incomplete iron horseshoe (SF 1577). Three copper-alloy coins are two heavily corroded to enable identification. Two are of a size consistent with halfpennies of George I (SF 400 and 402). A thin and heavily worn silver coin may be a George III fourpence, but will require further identification to confirm this (SF 1544).

Phase 6.2: Late 18th-Early 19th Centuries (1780-1840)

By far the largest assemblage of metal and small finds were retrieved from this phase, with some 550 individual objects recorded. Of these, at least 216 consisted of iron nails. The vast majority of finds came from Trench 2. The assemblage presents a wide range of finds categories, dominated by personal and household related objects with some elements of small-scale industry, particularly bone working.

A number of small dress accessories were recovered, the most numerous in the form of copper-alloy pins (SF 395, 423, 447 and 1556) and buttons. The latter included items of copper alloy (SF 370, 398, 408, 416, 418, 420-21, 426, 437, 453, 476, 677, 737, 740, 746, 1373, 1552, 1554 and 1560), bone (SF 191, 474, 661, 673 and 1498-99), shell (SF 389) and glass (SF 473 and 672). Two bone discs with a central perforation may be stiffeners for cloth-covered buttons (SF 419 and 1505; cf.

Richardson 2013, 90 and fig. 104 <S21>). Another form of composite button has a lathe-turned and dished bone back with four small eyes for fastening and remnants of an embossed copper-alloy facing (SF 444). This type of button is a very common 18th-century form (cf. Noël Hume 1969, fig. 23 type 3). Other dress accessories include a sturdy lace-chape of overlapping copper-alloy sheet (SF 475), two copper-alloy wire fasteners (SF 668 and 155), a small white cylindrical glass bead decorated with dark red stripes (SF 390) and a plain rectangular copper-alloy shoe buckle with the frame drilled for a separate spindle (SF 1553). The shoe buckle was associated with pottery from 1770-1800, a period that eventually saw the decline of this accessory (cf. Whitehead 2003, 103-4). A particularly interesting find is a small group of objects likely from a fob chain, a fashionable dress accessory in the 19th century that was usually attached to a pocket watch. The objects include a complete copper-alloy wax seal pendant set with a rectangular red semi-precious stone, a smaller and incomplete seal fob, a circular glass matrix with engraved lettering and a small copper-alloy watch winder (SF 412). Other dress accessories of the time are reflected in the fragments of an ivory fan (SF 1494). Two bone combs (SF 110 and 1504) and one of ivory (SF 665) were also recovered. Four incomplete pipeclay haircurlers are likely residual here, as wigs had gone out of fashion by the turn of the 19th century (SF 388 and 1592-94).

A small but varied group of household furnishings include a number of curtain or drape rings (SF 373, 378, 440, 456, 463 and 1559), two wall hooks (SF 669 and 741) and three handles (SF 379, 736 and 1557), from doors or drawers, as well as small furniture mounts (SF 427 and 739). All are of copper alloy, as is a hinge from a small box or casket (SF 1561). There is also a small rectangular bone brush with upright lathe-turned handle (SF 439). Before the development of synthetic materials, bone and other skeletal matter formed a universal raw material for a range of decorative and everyday objects. This can be seen in spoons and cutlery, below, but also in some delicately lathe-turned objects from the current excavations. These include three tubular objects, threaded at one or both ends and sometimes with highly intricate decorative details. While their function is as yet unclear, two of the objects may be needle cases or other textile implements (SF 111 and 667). The third, which includes an end disc with a central opening, may be parts of a small telescope or opera glasses (SF 180). Another object with unknown function consists of a small lid or base with an upstanding decorative frieze (SF 449). Decorative items are represented by the remains of five ceramic figurines, all of pearl ware with painted decoration (SF 1584/1585, 1586/1588, 1587, 1589/1590 and 1591). Associated with these household objects is a series of spoons and cutlery. This includes cutlery handles of bone (SF 384, 386, 727, 1492, 1501 and 1530) and ivory (SF 181, 406, 411, 438, 726 and 1546) and spoons of both copper alloy and bone. The latter reflect a range of specialised items, with a bone mustard spoon (SF 157) and tea, salt and dessert spoons of copper alloy. Related to cooking and the kitchen is also a small copper-alloy cup weight (SF 719; cf. Biggs 1995, 17) and a possible iron trivet (SF 1608).

Other categories of finds that are associated with households include toys and other leisure related items. At Tobacco Dock, examples include toy marbles of stone (SF 397 and 457) and ceramic (SF 414). Two lathe-turned stand-up bone objects are likely gaming pieces, perhaps for chess (SF 383).

and 433). Particularly interesting is a small toy cannon of copper alloy (SF 680). Cast in lead and iron as well as copper alloy, toy cannon may have been produced from as early as the late 16th century although the majority have parallels in artillery developments during the 17th to late 18th centuries (Forsyth and Egan 2005, 79-84; cf. Noël Hume 1970, 314). Many toy cannons could be, and clearly had been, fired; this seems to be the case for the Tobacco Dock find which has a sooty residue on the inside of the barrel, which also may have lost its nuzzle through firing. Writing and literacy is represented by a complete and seemingly unused writing slate (SF 674) and two slate pencils (SF 377 and 1503). A simple oyster palette with remains of red pigment was also retrieved (SF 450). Oyster palettes are frequently associated with medieval ecclesiastical contexts (cf. Egan 2007, 456 and fig. 358); these simple containers for holding and mixing pigment would have continued to be used also in the later post-medieval period. Three copper-alloy thimbles (SF 190, 382 and 738) are likely to reflect household-based textile work, as is a pair of iron scissors with narrow oval loops (SF 1566).

Finds associated with small-scale manufacture, as in the earlier Phase 5.2, are dominated by boneworking waste including characteristic and undiagnostic primary waste in the form of sawn-off ends of cattle metatarsals (SF 1512 and 1528). Secondary waste is represented by a short section of ovicaprid bone, split in half and with the remaining end sawn and rabbeted the piece also displays liberal file marks across the outer surface (SF 1532). Significantly, however, there are also six pieces of bone disc- or button-making waste (SF 409 and 1535). Originating from prepared bone plates cut into square sections, each piece would have produced a thin circular disc by way of drilling from both sides with a tubular saw. While panels or strips with multiple perforations of this kind are common from late medieval and early modern contexts, relating to the production of beads and discs for rosaries (cf. Spitzers 1997), a substantial number of similar fragments and drilled sections have been recovered from 18th-century deposits in Bloomsbury (Rielly and Gaimster 2017). The latter, represented by over 80 individual pieces, represented the manufacture of blanks or discs ranging in size from 20-28mm in diameter. The Tobacco Dock waste pieces all have a consistent diameter of 19mm. The end product would have been thin discs, suggesting the best parallel may be the simple perforated bone discs that would have provided backing for cloth-covered buttons. The two discs of this type from the site have a diameter of 18mm and 19mm respectively (SF 419 and 1505, above). Puzzling is a group of seven complete cattle metacarpals, all drilled axially through the proximal end. Similar finds are known from 17th-century contexts; it is not clear whether they represent waste or functional objects (cf. Rielly 2011, 166). A single metacarpus of this form was also recovered from a 17th-century context at Tobacco Dock (SF 1536). Besides bone waste, a single piece of ivory-working waste was also recovered (SF 1490) as was a section of red deer antler with an axial perforation through the sawn base (SF 1507). The latter may have been a blank for an implement handle, which often utilised the natural curved shape of the antler (cf. Hinton 1988 fig. 188 no. 246). Other possible manufacture waste may be copper-alloy wire (SF 49, 396 and 1377). Two small rectangular ceramic blocks (SF 1583) both exhibit signs of scorching, but their function remains unclear. A substantial curved handle, carved from cattle longbone, is likely from a tool of some sort (SF 179). The handle is

decorated with vertical panels and has a rabetted base with a central hole for a through-tang or a plug; the narrow end has a rabbet for a ferrule.

A few finds represent other categories. They include objects relating to firearms, in a single-bullet lead shot (SF 1550), as well as the presence of horses in the form of an iron harness buckle (SF 1570) and an incomplete horseshoe (SF 1568). At least twelve copper-alloy coins were also retrieved, along with a lead token. Many of the coins are heavily corroded and illegible, but the include an unstratified 1834 farthing of William IV (SF 21) and two pennies of Victoria, dating from 1860-1895 (SF 413); a further four coins are also likely of this regent (SF 428, 431, 466 and 1370). A uniface lead token, featuring a six-petal design, reflect the continued use of this medium into the later post-medieval period (SF 1543). Unlike 17th-century issues, which show similarities with the contemporary private issues of copper alloy, later tokens tend to be uniface and with personal initials replaced by stock designs (Mitchiner and Skinner 1985, 138-39).

Phase 7.1: Late 19th Century

Only five finds were recovered from this phase, comprising two iron nails, a slate pencil (SF 467), a minute blue glass bead (SF 470) and a two-piece rivet of copper alloy stamped 'STITCHLESS PATENT' (SF 3). An unstratified small doll's bust of Continental porcelain also dates from the late 19th or early 20th centuries (SF 524).

Significance of the Finds and Recommendations for Further Work

The metal and small finds discussed here provide an insight into local households and activities in the area around Tobacco Dock. While very few finds pre-date the 17th century, the period c.1600-1840 is amply represented by dress accessories and household-related objects, in particular cutlery handles. Among finds from the 17th century (Phase 5.1-5.2), a small personal seal matrix (SF 1399) is of particular interest. A bifacial lead token (SF 1545) provides much-needed data for a finds category that is usually lacking in dateable finds context. There are also coins in the form of a handful of royal farthings, and some evidence for small-scale manufacture of bone products. The 18th-century assemblage (Phase 6.1) includes an ivory comb unusually inscribed with the initial 'E' (SF 425), the moulded stem of a copper-alloy candlestick (SF 750) and leisure objects such as a ceramic gaming piece (SF 1595) and a minute bone dice (SF 1497). The largest assemblage of finds came from Phase 6.2 (1780-1840) and included more unusual finds such as the remnants of a fob chain with several glass and copper-alloy seal matrices and a copper-alloy watch winder (SF 412). Another more unusual find is represented by a copper-alloy toy cannon (SF 680). Several intricately lathe-turned bone objects represent the significance of this material before the development of synthetics, with both decorative and practical items, many of which are not obvious to a modern viewer. This phase also produced evidence of small-scale bone working, including the manufacture of discs or buttons (SF 409 and 1535), as well as another stratified lead token (SF 1543).

Metal and small finds form an integral part of the archaeological data from the site and should be included in any forthcoming publication. This is particularly relevant for the more unusual items discussed above, but also the broader assemblages of dress accessories, household and personal objects. In spite of long-standing research aims, later post-medieval metal and small finds have remained marginal in publications and the large assemblage of finds from Tobacco Dock would be an important contribution to our understanding of the lives of ordinary Londoners in the 18th and 19th centuries. Here, in particular, further identification of the small lathe-turned bone objects is recommended, something that would provide much-needed information of items that are more rarely seen in archaeological publications of this period.

Bibliography

Bailey, G., 1997. Detector Finds 3. Greenlight Publishing.

Biggs, N., 1995. Bullion Weights, An Outline Catalogue. White House Publications

Caple, C., 1991. 'The Detection and Definition of an Industry: The English Medieval and Post Medieval Pin Industry', *Archaeological Journal* 148, 241-55.

Dickinson, M., 1986. Seventeenth-century tokens of the British Isles and their values. Seaby, London.

Egan, G., 2005. Material culture in London in an age of transition. Tudor and Stuart period finds c 1450-c 1700 from excavations at riverside sites in Southwark. Museum of London Archaeology Service Monograph 19.

Egan G., 2007. 'Accessioned finds', in D. Bowsher, T. Dyson, N. Holder and I. Howell, *The London Guildhall: An archaeological history of a neighbourhood from early medieval to modern times*, Part II, Museum of London Archaeology Service Monograph 36, 446-72.

Egan, G. and Pritchard, F., 1991. *Dress Accessories c.1150-c.1450*. Medieval finds from excavations in London 3. HMSO, London.

Forsyth, H., 2013. *The Cheapside hoard: London's lost jewels.* Museum of London exhibition Catalogue

Forsyth, H. and Egan, G., 2005. *Toys, Trifles and Trinkets: Base Metal Miniatures from London 1200–1800.* Museum of London. Unicorn Press, London.

Hinton, P. (ed.), 1988. *Excavations in Southwark 1973-76 and Lambeth 1973-79*, London and Middlesex Archaeological Society/Surrey Archaeological Society Joint Publication 3.

Hitchcock, F. (ed.), 2007. Treasure Annual Report 2004, Department for Culture, Media and Sport.

Hutchinson, M., 1996. 'Edward IV's Bulwark: excavations at Tower Hill, London, 1985'. *Transactions of the London and Middlesex Archaeological Society* 47, 103-44.

Le Cheminant, R., 1982. 'The development of the pipeclay hair curler – a preliminary study', in P. Davey (ed.), *The Archaeology of the Clay Tobacco Pipe VII: More Pipes and Kilns from England.* BAR British Series 100, 345-54.

MacGregor, A., 2001. 'Antler, Bone and Horn', in J. Blair and N. Ramsay (eds), *English Medieval Industries*. London: Hambledon Press, 355-78.

Margeson, S., 1993. The Medieval and Post-Medieval Finds from Norwich Survey Excavations. East Anglian Archaeology 58.

Mattick, B.E., 2010. A guide to bone toothbrushes of the 19th and early 20th centuries. Xlibris Corporation, United States of America.

Mitchiner, M. and Skinner, A., 1985. 'English Tokens c.1425 to 1672'. *The British Numismatic Journal* 54 (1984), 86-163.

Noël Hume, I., 1969. *A Guide to Artifacts of Colonial America*. University of Pennsylvania Press, Philadelphia.

Oakley, G., 1979. 'The copper alloy objects', in J. Williams, *St. Peter's Street, Northampton: Excavations 1973-1976.* Northampton Development Corporation Archaeological Monograph 2, 248-64.

Richardson, B., 2013. 'The burial finds', in M. Henderson, A. Miles and D. Walker, 'He being dead yet speaketh': Excavations at three post-medieval burial grounds in Tower Hamlets, East London, 2004–10. Museum of London Archaeology Monograph 64, 86-98.

Rielly, K., 2011. 'The leather-production industry in Bermondsey: The archaeological evidence', in R. Thomson and Q. Mould (eds.), *Leather tanneries: The archaeological evidence*. Archetype Publications Ltd, Exeter, 157-86.

Rielly, K. and Gaimster, M., 2017. 'Craftworking in 18th-century Bloomsbury', in R. Haslam and V. Ridgeway, *Excavations at the British Museum: An Archaeological and Social History of Bloomsbury*. The British Museum Research Publication 120, 77-80.

Spitzers, T.A., 1997. 'Late Medieval Bone-Bead Production: Socio-economic Aspects on the Basis of Material from Constance, Germany', in G. De Boe and F. Verhaeghe (eds.), Papers of the 'Medieval Europe Brugge 1997' Conference Volume 7, Material Culture in Medieval Europe, Asse-Zellik, 147-54.

Whipp, D., 2006. The medieval postern gate by the Tower of London, Museum of London Archaeology Service Monograph 29.

Whitehead, R., 2003. Buckles 1250-1800. Greenlight Publishing.

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
3.6	1087	286	silver coin; edge fragment only;? intrusive late medieval ?cut farthing	1		further identify	
4	382	1598	iron pinned hinge; incomplete; ht. 30mm;	1			n/a
4	382	bulk	iron nail; heavily corroded and incomplete	1		discard	n/a
4	2060	1569	iron ?strap hinge; tapering fragment only, broken at hinge end at with one nail hole extant; W 23mm; L 60mm+	1			1240-1400
4	2060	bulk	iron nail; heavily corroded and incomplete	1		discard	1240-1400
4	2060	bulk	lead ?waste; fragment only	1			1240-1400
5.1	0	1	copper-alloy coin; Charles I ?Richmond farthing (1625–1634); incomplete	1	1625–1634		
5.1	0	2	copper-alloy jeton; Nuremberg rose- and-orb issue; heavily worn and illegible; diam. 24mm	1	late 16th–early 17th centuries		
5.1	0	39	copper-alloy coin; James I Harington farthing (1613–1616); diam. 12mm	1	1613–1616		
5.1	0	359	copper-alloy ?jeton; illegible on thin flan; diam. 28mm	1		grid sq 115/215	
5.1	0	360	copper-alloy ?jeton; illegible on thin flan; diam. 26mm	1		grid sq 115/215	
5.1	202	bulk	iron nail; heavily corroded fine shaft only	1		discard	n/a
5.1	217	28	copper-alloy coin; James I Lennox farthing (1616–1625)	1	1616–1625		1630-1680

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.1	266	bulk	iron nails; two corroded; one clenched; L 65 and 75mm	2		discard	1580-1700
5.1	271	36	copper-alloy sheet; undiagnostic fragment; W 15mm; L 20mm	1			1630-1680
5.1	271	bulk	iron nail; substantial; heavily corroded and incomplete	1		discard	1630-1680
5.1	273	bulk	iron nails; three heavily corroded and incomplete	3		discard	1630-1680
5.1	277	bulk	iron nail; heavily corroded and incomplete	1			1630-1680
5.1	304	bulk	iron flat-section ring; diam. 20mm	1			1580-1650
5.1	304	bulk	iron nail; heavily corroded and incomplete	1		discard	1580-1650
5.1	315	1386	lead waste; thin strip cut at both ends; W 4mm; L 63mm	1			1630-1800
5.1	317	1493	bone ?cutlery handle for tang-hafted implement; facetted fragment only with opening present; L 35mm+	1			1630-1700
5.1	317	bulk	iron nails; three heavily corroded and incomplete	3		discard	1630-1700
5.1	331	bulk	iron nail; heavily corroded and incomplete	1		discard	n/a
5.1	395	1573	iron vessel; cast edge fragment with horizontal pierced lug; 3mm thick	1		further identify	1580-1900
5.1	395	bulk	iron nail; heavily corroded and incomplete	1		discard	1580-1900

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.1	402	53	copper-alloy pin; Caple Type C; gauge 0.95mm; L 23mm	1			1580-1650
5.1	402	55	copper-alloy lace-chape; Oakley Type 2 with both edges folded inwards; L 25mm	1			1580-1650
5.1	402	bulk	iron nail; heavily corroded and incomplete	1		discard	1580-1650
5.1	423	57	copper-alloy pin/wire; gauge 1.15mm; L 15mm	1			1580-1600
5.1	427	58	copper-alloy casket key; hollow shank end and flat lozenge-shaped bow above broad collar; L 41mm	1	?late medieval		1580-1650
5.1	434	bulk	iron nail; heavily corroded and incomplete	1		discard	1580-1650
5.1	435	bulk	iron nails; two heavily corroded and incomplete	2		discard	1480-1500
5.1	440	bulk	iron bar; square-section and curved; W 15mm; L 110mm	1			Roman only
5.1	459	83	copper-alloy pin/wire; two small fragments; gauge 1.1mm	2			1550-1700
5.1	459	84	copper-alloy wire; cut length; gauge 1.25mm; L 30mm	1			1550-1700
5.1	459	85	copper-alloy ?sheet waste; rectangular with cut mark at one end; 18 x 50mm	1			1550-1700
5.1	459	86	copper-alloy mount/?strap-end; rectangular of double-sided sheet with four minute rivets; 8 x 18mm	1			1550-1700

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.1	469	1575	iron tethering ring on solid looped pin; diam. 55mm; pin L 95mm+	1			1480-1500
5.1	519	bulk	iron nail; heavily corroded and incomplete	1		discard	n/a
5.1	1172	403	lead melting waste; three irregular puddles; L 105–165mm	3			n/a
5.1	1606	bulk	iron nail; substantial with domed head; heavily corroded and incomplete	1		discard	n/a
5.1	1831	1551	lead waste; rectangular-section cut strip; W 12mm; L 37mm	1			n/a
5.1	1852	bulk	iron nail; heavily corroded and incomplete	1		discard	1630-1700
5.1	1856	bulk	iron nails; two heavily corroded and incomplete	2		discard	1580-1600
5.1	1933	755	copper-alloy lace-chape; incomplete Oakley Type 2	1			1580-1650
5.1	1960	bulk	iron ?mount; very heavily corroded curved strap with single nail hole, fixed to second transverse strap; W 20mm; L 60mm	1		further identify	1580-1700
5.1	2186	bulk	iron lump; corroded and undiagnostic; diam. 40mm	1		discard	1580-1700
5.1	2187	681	iron nail; heavily corroded and incomplete	1		discard	1580-1700
5.1	2187	682	copper-alloy lace-chape; long and substantial of overlapping sheet; open end; diam. <i>c</i> 4mm; L 65mm	1			1580-1700

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.2	34	bulk	iron nails; five heavily corroded and incomplete	5		discard	1680-1800
5.2	111	17	iron scissors; incomplete with remnant of fine loop; L 115mm	1			1630-1680
5.2	111	18	copper-alloy button or rivet; incomplete; domed disc with remnants of woven textile cover; diam. 25mm	1		further identify	1630-1680
5.2	111	19	ivory comb; incomplete double-sided single comb; ht. 58mm; W 48mm+	1			1630-1680
5.2	111	20	chain of fine copper-alloy wire; partly unravelled fragment only; L 90mm	1	?wound-wire hair or dress accessory	further identify	1630-1680
5.2	111	1574	iron hoe; complete with circular socket at right-angles to blade; socket diam. (inner) 35mm; blade W 115mm	1			1630-1680
5.2	111	1599	copper-alloy pin; Caple Type C; several minute fragments	1			1630-1680
5.2	134	1376	copper-alloy wire; two short lengths; gauge 1.34mm; L 45 and 55mm	2			1670-1690
5.2	134	1514	bone-working waste; ovicaprid tibia sliced to a rough point at proximal end; L 80mm	1			1670-1690
5.2	134	bulk	iron nails; six heavily corroded fine shaft fragments	6		discard	1670-1690
5.2	135	bulk	iron nails; two heavily corroded and incomplete	2		discard	1630-1680
5.2	145	1515	bone-working waste; cattle metatarsus sawn-off at distal end; L 95mm	1			1645-1700

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.2	146	1509	bone-working waste; four cattle metatarsals sawn-off at distal end; two with signs of wear from ?clamp; L 85– 105mm	4			1600-1650
5.2	148	24	copper-alloy ?book clasp; incomplete; tapering sheet with narrow backplate fixed with two iron rivets; L 32mm+; W 8–15mm	1		further identify	1670-1690
5.2	148	bulk	iron nails; four heavily corroded and incomplete; from sample <10>	4		discard	1670-1690
5.2	156	bulk	iron nails; three heavily corroded and incomplete; from sample <5>	3		discard	1670-1690
5.2	169	1516	bone-working waste; roughly square- section piece of cattle metatarsus; sawn at both ends and worked on three sides; L 80mm	1			n/a
5.2	170	bulk	iron nails; three heavily corroded and incomplete; from sample <6>	3		discard	n/a
5.2	177	bulk	iron nail; heavily corroded and incomplete	1		discard	1670-1700
5.2	184	37	copper-alloy button; complete cast biconvex with integral shank; diam. 10mm; L 16mm	1	cf. Egan 2005, fig. 33 no. 180 for similar date		1645-1680
5.2	184	1518	bone-working waste; section of cattle- size limb bone; sawn at both ends and split in half; facetted and with file marks over all surfaces; L 46mm	1			1645-1680

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.2	184	bulk	iron nails; four heavily corroded and incomplete	4		discard	1645-1680
5.2	193	23	charred splinter of Kimmeridge shale; possibly fuel	1			1630-1680
5.2	195	1510	bone-working waste; five cattle metatarsals sawn-off at distal end; L 50– 105mm	5			1645-1680
5.2	195	bulk	iron nails; at least eight heavily corroded and incomplete; from sample <9>	8		discard	1645-1680
5.2	205	bulk	iron nail; hand wrought with narrow irregular head and shank finished with flat rounded end; L 70mm; ?floor nail	1		further identify	1630-1680
5.2	211	1519	bone-working waste; two sawn-off metatarsals; one proximal end; L 40mm; one highly degraded ?distal end; L 60mm+	2			1645-1680
5.2	219	29	tang-hafted iron knife; incomplete with long solid bolster and remains of wooden handle; blade W 15mm	1	?early 17th century; cf. Moore 2006, 13 lower image		mid-17th century
5.2	241	bulk	iron nail; heavily corroded and incomplete	1		discard	1630-1680
5.2	244	31	copper-alloy ?button; heavily corroded disc; diam. 23mm	1			n/a
5.2	244	bulk	iron nails; two heavily corroded and incomplete	2		discard	n/a

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.2	252	40	copper-alloy pin; incomplete Caple Type C; also fragment of copper-alloy ?lace-chape	1			1665-1680
5.2	252	41	ivory cutlery handle for tang-hafted implement; incomplete; tapering with slightly bulbous end; L 80mm	1			1665-1680
5.2	252	bulk	cast-iron object; curved and slightly tapering with rounded corners; very heavily corroded; W 48–60mm; L 105mm	1		further identify	1665-1680
5.2	259	730	copper-alloy fitting; perforated fragment with remnants of transverse iron pin; L 15mm	1			1630-1680
5.2	259	1520	bone-working waste; cattle metatarsus sawn-off at distal end; L 75mm	1			1630-1680
5.2	259	bulk	iron strap; two connecting pieces; W 20mm; L 210mm+; possibly hinge strap	1			1630-1680
5.2	259	bulk	fine iron strap; incomplete; rectangular- section and curved at one end; W 2mm; L 40mm	1			1630-1680
5.2	259	bulk	iron nails; five heavily corroded and incomplete; from sample <12>	5		discard	1630-1680
5.2	259	bulk	iron nails; four heavily corroded and incomplete	4		discard	1630-1680
5.2	262	bulk	iron nails; three heavily corroded and incomplete; from sample <13>	3	_	discard	1680-1700

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.2	270	bulk	iron nail; heavily corroded and incomplete	1		discard	1630-1680
5.2	279	1521	bone-working waste; cattle metatarsus sawn-off at proximal end; L 35mm	1			1630-1680
5.2	279	bulk	iron nails; six heavily corroded and incomplete	6		discard	1630-1680
5.2	289	1522	bone-working waste; cattle metatarsus sawn-off at proximal end; L 45mm	1			1630-1700
5.2	289	bulk	iron nails; four heavily corroded and incomplete	4		discard	1630-1700
5.2	297	1536	worked bone; cattle metacarpus drilled axially through proximal end; L 210mm	1			1680-1800
5.2	298	bulk	iron nail; heavily corroded and incomplete	1		discard	1580-1700
5.2	308	1385	thin lead disc; fine rectangular nail hole at centre; diam. 50mm; hole L 3mm	1			1680-1720
5.2	308	1395	copper-alloy ?rectangular vessel; incomplete; one straight edge visible on x-ray; 27 x 40mm	1			1680-1720
5.2	308	1600	copper-alloy pin; Caple Type C; gauge 0.85mm; L 24mm	1			1680-1720
5.2	308	bulk	iron ?strap; very heavily corroded and undiagnostic; W 20mm; L 75mm	1		discard	1680-1720
5.2	309	bulk	iron strap; undiagnostic fragment; W 12mm	1		discard	1630-1680

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.2	311	1511	bone-working waste; three cattle metatarsals sawn-off at distal end; L 85– 90mm	3			n/a
5.2	319	bulk	two small domed iron discs; diam. 15mm; ?nail heads	2			1580-1700?
5.2	320	bulk	iron nails; two heavily corroded and incomplete	2			1580-1650
5.2	324	1523	bone-working waste; cattle metatarsals; one splinter sawn-off at distal end; L 115mm; one short section cut at ?proximal end and split in half; two worked edges; L 30mm	2			1630-1650
5.2	324	bulk	iron nails; four heavily corroded and incomplete	4		discard	1630-1650
5.2	333	1524	bone-working waste; cattle metatarsus sawn-off at distal end; L 80mm	1			1630-1650
5.2	333	1571	substantial curved sherd of cast-iron vessel; thickness 3mm; 60 x 80mm	1			1630-1650
5.2	338	38	iron tang-hafted knife with bone handle of carved from ovicaprid metatarsus; incomplete; circular-section handle, tapering with thickened open end, possibly capped with though-tang; handle L 75mm	1			1630-1680
5.2	338	1396	copper-alloy strap; slightly tapering and broken at narrow end; W 7–10mm; L 104mm; 2.3mm thick	1			1630-1680

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.2	338	bulk	iron nail; heavily corroded and incomplete	1		discard	1630-1680
5.2	344	1572	iron knife; complete tang-hafted blade with back curving down to tip; blade L 72mm	1			1630-1700
5.2	346	1525	bone-working waste; two cattle metatarsals sawn-off at proximal end; L 35 and 40mm	2			1665-1680
5.2	346	1526	bone-working waste; cattle metatarsus sawn-off at distal end; L 100mm	1			1665-1680
5.2	348	1576	iron pintle; near complete but heavily corroded; spike L 55mm+; pivot ht. 50mm	1			1680-1700
5.2	348	bulk	iron fittings; three heavily corroded and incomplete; includes possible spade iron with one arm extant, W 90mm+, and undiagnostic bar	3		further identify; bar to discard	1680-1700
5.2	348	bulk	iron nails; three heavily corroded and incomplete	3		discard	1680-1700
5.2	348	bulk	iron vessel; several heavily corroded pieces, some with true straight edges	1		discard	1680-1700
5.2	363	46	ivory-working waste; triangular-section splinter; L 98mm	1			1630-1650
5.2	363	1398	copper-alloy pin; shank only, in two pieces; gauge 1.46mm; L 35mm+	1			1630-1650
5.2	363	1508	bone-working waste; roughly rectangular-section splinter; L 58mm	1			1630-1650

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.2	373	bulk	iron nails; three heavily corroded and incomplete	3		discard	1630-1680
5.2	387	50	copper-alloy wire; short length only; gauge 1.4mm; L 20mm	1			1630-1700
5.2	387	1399	copper-alloy seal matrix; oval with flat perforated handle for suspension; handle with collar at base, widened body with wavy edges and ?now lost knop finial; diam. 18mm; ht. 25mm; remnants of red ?sealing wax on corroded matrix surface	1		clean to identify	1630-1700
5.2	420	56	copper-alloy winged screw; heart- shaped handle; gauge 5mm; L 21mm	1			n/a
5.2	420	bulk	iron strap; incomplete; off-centre nail hole at one end; W 10mm; L 58mm+	1			n/a
5.2	873	bulk	lead melting waste; irregular puddle; L 35mm	1			n/a
5.2	898	1381	copper-alloy linchpin with loop of plain flattened rolled-over sheet; L 61mm	1			1825-1900
5.2	898	bulk	iron nails; three heavily corroded and incomplete	3		discard	1825-1900
5.2	1013	229	bone cutlery handle for tanged implement; incomplete; short and tapering with vertical ribbing; axial hole at end for ?finial; L 57mm	1			n/a

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.2	1539	399	iron hammer head from small hammer; near-complete with face and cross-pane; L 120mm+	1	for blacksmith or carpenter; cf. Goodall 2011, 9 and fig. 2.5 A33		1680-1720
5.2	1539	442	ivory toothbrush; straight handle with oval end and part of trepanned head with four rows of tuft; handle stamped with elephant image and 'extra fine hb'; L 130mm+	1			1680-1720
5.2	1539	742	copper-alloy lump; undiagnostic; diam. 10mm	1		discard	1680-1720
5.2	1539	1596	iron cannon ball; diam. 70mm	1			1680-1720
5.2	1539	1597	iron cannon ball; diam. 85mm	1			1680-1720
5.2	1541	bulk	iron nail; heavily corroded with small domed head; L 85mm	1			1580-1700
5.2	1564	725	ivory cutlery handle for knock-on tang implement; short and tapering with rounded square section and straight end; L 70mm	1			c. 1700-1750
5.2	1564	1500	bone implement; incomplete flat tapering blade with crudely rounded point; one side decorated with oblique slashes along each edge; L 130mm+; W at broken end 22mm; ?paper knife or letter opener	1		further identify	c. 1700-1750

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.2	1564	1567	iron scissors; one heavily corroded and incomplete arm only with narrow oval loop above moulding; L 95mm+	1			c. 1700-1750
5.2	1564	bulk	iron nails; four heavily corroded and incomplete	4		discard	c. 1700-1750
5.2	1566	1548	lead ?weights; two plain discs with bevelled sides; diam. 28 and 30mm; wt. 43 and 61 g	2			1670-1800
5.2	1566	bulk	copper-alloy ?lace-chapes; four heavily corroded pieces; L 13 20mm; from sample <511>	4		further x-ray	1670-1800
5.2	1566	bulk	iron nails; handful heavily corroded fragments; from sample <511>	5		discard	1670-1800
5.2	1566	bulk	iron lump; heavily corroded and undiagnostic; diam. 25mm	1		discard	1670-1800
5.2	1604	441	stone hone; long narrow form of Norwegian ragstone; incomplete and split longitudinally; W 15mm; L 60mm; th. 7mm+	1			1580-1900
5.2	1645	446	copper-alloy livery/blazer button; heavily corroded; diam. 17mm	1			n/a
5.2	1667	455	ceramic pipeclay haircurler; complete Le Cheminant Type 8, ?lathe clamping marks at both ends; L 54mm	1	?object date 1700- 1740	further identify	n/a
5.2	1720	bulk	copper-alloy lace-chape; Oakley Type 2 with both edges folded inwards; fragment only; from sample <523>	1			1680-1720

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.2	1720	bulk	iron nail; heavily corroded and incomplete	1		discard	1680-1720
5.2	1720	bulk	iron nail; heavily corroded and incomplete; from sample <523>	1		discard	1680-1720
5.2	1720	bulk	iron ?object; heavily corroded lump; 20 x 35mm; ?ironworking	1			1680-1720
5.2	1743	1545	lead token; bifacial; cartwheel/radiating spokes // ?fleur de lis; corroded; diam. 23mm	1		clean to identify	1630-1680
5.2	1743	bulk	iron nails; eight heavily corroded and incomplete; from sample <527>	8		discard	1630-1680
5.2	1743	bulk	iron nail; heavily corroded with small round head; L 95mm	1			1630-1680
5.2	1743	bulk	iron lumps; three corroded and undiagnostic	3		discard	1630-1680
5.2	1774	bulk	iron ?mount; heavily corroded curved strap with nail hole at centre; W 20mm; L 25mm+	1		discard	1680-1700
5.2	1827	bulk	iron nails; four heavily corroded and incomplete	4		discard	1550-1700
5.2	1925	bulk	iron nail; heavily corroded and incomplete	1		discard	1580-1700
5.2	2058	607	lead pipe; twisted and incomplete section; diam. c 50mm; L 140mm; th. 6mm	1			n/a
5.2	2062	608	ivory-working waste; triangular-section splinter; L 87mm	1			1805-1900

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
5.2	2064	bulk	iron nail; heavily corroded and incomplete	1		discard	1580-1700
5.2	2110	bulk	lead melting waste; two irregular puddles; L 50 and 70mm	2			n/a
6.1	14	12	bone handle for tanged implement; oval section and obliquely cut end with remains of thin ferrous end plate; hollow interior with remains of iron tang and ?resin filler; L 78mm	1			1770-1800
6.1	29	bulk	iron nail; heavily corroded; L 75mm	1		discard	1550-1700
6.1	46	bulk	iron nails; two heavily corroded; L 60 and 90mm	2		discard	1760-1780
6.1	53	1513	bone-working waste; sawn-off end of cattle metatarsal; highly degraded; L 60mm+	1			1680-1700
6.1	66	14	pipeclay figurine of ?18th-century soldier; traces of red paint on coat; 70mm+near-complete with head missing; ht.	1		further ident	1700-1720
6.1	66	1547	lead ?weight; plain disc with bevelled sides; diam. 28mm; wt. 39 g	1			1700-1720
6.1	66	1595	ceramic gaming piece of plain white tin- glazed ware (TGW C); diam. 26mm; neatly cut/snapped in half	1			1700-1720
6.1	66	bulk	iron nail; fine tack; L 15mm; from sample <2>	1		discard	1700-1720

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.1	90	bulk	iron nails; four heavily corroded and incomplete	4		discard	1700-1760
6.1	123	728	copper-alloy pin with solid cast globular head; incomplete; gauge 2.85mm	1			1720-1800
6.1	123	bulk	iron nail; heavily corroded and incomplete	1		discard	1720-1800
6.1	154	bulk	iron nail; heavily corroded and incomplete	1		discard	1580-1700
6.1	173	729	copper-alloy pins; at least four Caple Type C and several fragments	4			1700-1720
6.1	173	1371	copper-alloy coin; incomplete and heavily corroded	1	coin illegible		1700-1720
6.1	173	1489	pipeclay figurine of ?James II king in plated armour, cape and crown; traces of light red paint on feet and armour; ht. 75mm	1		further ident	1700-1720
6.1	173	1497	minute bone dice; complete with simple drilled pits7 x 7 x 7mm	1	see Geoff Egan, FRG Datasheet 23; interesting that Potter's variant 16 seems to dominate from 16th century onwards		1700-1720
6.1	173	bulk	iron nail; heavily corroded and incomplete	1		discard	1700-1720
6.1	181	1517	bone-working waste; cattle metatarsus sawn-off at distal end; L 90mm	1			1660-1680
6.1	181	bulk	copper-alloy pin; shaft fragment only	1			1660-1680

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.1	181	bulk	iron nails; four heavily corroded and incomplete; from sample <7>	4		discard incomplete nails	1660-1680
6.1	181	bulk	iron nails; one substantial with round head and clenched end, L 230mm; five smaller incomplete and heavily corroded examples	6		discard incomplete nails	1660-1680
6.1	181	bulk	iron mount; incomplete and corroded with two rectangular nail holes; W 13mm; L 70mm+	1			1660-1680
6.1	188	30	copper-alloy ?object; amorphous and undiagnostic lump; L 12mm	1			1630-1700
6.1	207	bulk	iron nails; three heavily corroded and incomplete	3		discard	n/a
6.1	254	bulk	copper-alloy pin; shaft fragment only	1			n/a
6.1	285	1394	copper-alloy pin; incomplete Caple Type B with sturdy shank; gauge 1.8mm; also amorphous and undiagnostic copper- alloy lump; L 35mm	1			1580-1700
6.1	518	bulk	iron nail; heavily corroded and incomplete	1		discard	18th century
6.1	559	1601	copper-alloy pin; very fine Caple Type C; gauge 0.7mm; L 20mm	1			1745-1770
6.1	559	bulk	iron nail; fine tack; L 18mm; from sample <61>	1		discard	1745-1770
6.1	574	100	copper-alloy wire; two cut lengths; gauge 1.1 mm; L 21 and 28mm; undiagnostic	2			1720-1770

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.1	574	1602	copper-alloy pins; two very fine Caple Type C; gauge 0.5 and 0.9mm; L 20 and 27mm	2			1720-1770
6.1	574	bulk	iron wire ring; diam. 14mm	1			1720-1770
6.1	574	bulk	iron tacks; two with small irregular heads; L 15 and 17mm; also two corroded Caple Type C copper-alloy pins	4			1720-1770
6.1	621	bulk	iron nails; two heavily corroded and incomplete	2		discard	n/a
6.1	623	129	copper-alloy ?waste; two lumps of layered, folded sheet; 45 x 45 and 45 x 50mm	2			n/a
6.1	660	bulk	iron nails; two heavily corroded and incomplete	2		discard	1710-1760
6.1	773	1491	bone comb; edge fragment only of standard double-sided single comb; ht. 60mm	1			18th century
6.1	781	bulk	Wooden brush head; degraded fragment with irregular rows of holes for bristles	1		discard	1740-1770
6.1	781	bulk	iron nail; heavily corroded and incomplete	1		discard	1740-1770
6.1	844	1577	iron horseshoe; incomplete and heavily corroded shank only with one rectangular nail hole extant; L 110mm	1			1740-1770
6.1	844	bulk	iron nails; four heavily corroded and incomplete	4		discard	1740-1770

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.1	875	bulk	iron nails; three heavily corroded and incomplete	3		discard	18th century
6.1	901	bulk	iron nails; two heavily corroded and incomplete	2		discard	1650-1750
6.1	941	bulk	iron nail; heavily corroded and incomplete; from sample <114>	1		discard	n/a
6.1	1515	374	copper-alloy flat-section curtain ring; diam. 25mm	1			1720-1760
6.1	1515	735	copper-alloy fitting; incomplete; strap with part of large perforation present; W 18mm; hole diam. 8mm	1			1720-1760
6.1	1515	1506	ivory ?double-sided comb; fragment of side only; ht. 35mm+	1			1720-1760
6.1	1515	1603	copper-alloy pins; Caple Type C; numerous small fragments	1			1720-1760
6.1	1515	bulk	iron nail; heavily corroded and incomplete; from sample <502>	1		discard	1720-1760
6.1	1515	bulk	iron nail; heavily corroded and incomplete	1		discard	1720-1760
6.1	1525	375	Ceramic pipeclay haircurler; complete Le Cheminant Type 9, stamped at both ends with ?crowned IB; L 58mm	1	?object date early 18th century	further identification	n/a
6.1	1534	400	copper-alloy coin; corroded and illegible; diam. 26mm; size consistent with George I halfpenny	1	possible George I halfpenny (1714–27)	_	1760-1780

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.1	1534	401	copper-alloy spoon; heavily corroded and incomplete ?elliptical bowl only; W 40mm+; L 50mm+	1	residual 17th- century object?		1760-1780
6.1	1534	402	copper-alloy coin; corroded and illegible thin disc; diam. 26mm; size consistent with George I halfpenny	1	possible George I halfpenny (1714–27)		1760-1780
6.1	1534	722	iron knife; fragment only; tang-hafted with remains of wooden handle	1			1760-1780
6.1	1534	1581	stone hone; substantial block of Norwegian ragstone; one end shaped to rough point; W 60mm; L 140mm; th.30mm	1			1760-1780
6.1	1534	1610	ceramic gaming piece of dark blue on light blue tin-glazed ware (TGW H); near-complete irregular circular shape; diam. c 26mm	1			1760-1780
6.1	1534	bulk	iron nail; heavily corroded; fine shaft with small circular head; L 75mm	1		discard	1760-1780
6.1	1545	424	copper-alloy ?button; thin and slightly domed disc; corroded and incomplete; diam. 28mm	1			c. 1700-1720
6.1	1545	425	ivory comb; incomplete double-sided single type; one side carved with letter 'E' near side; ht. 55mm; W 83mm+	1			c. 1700-1720
6.1	1545	743	copper-alloy upholstery pin; visible on x-ray only; diam. 12mm; L 7mm	1			c. 1700-1720

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.1	1545	1558	copper-alloy buttons; one livery/blazer, diam. 14mm; one flat biconical with fine wire loop, diam. 12mm	2			c. 1700-1720
6.1	1545	1604	copper-alloy pins; Caple Type C; numerous fragments	1			c. 1700-1720
6.1	1561	723	antler cutlery handle for scale-tang implement; tapering with gently rounded end and two iron rivets for fixing; L 86mm	1			1770-1800
6.1	1561	724	iron tang-hafted knife with wooden handle and copper-alloy ferrule; incomplete; handle thick and tapering; L 70mm+	1			1770-1800
6.1	1561	744	copper-alloy lump; undiagnostic; diam. 25mm	1		discard	1770-1800
6.1	1561	bulk	iron nails; seven substantial; heavily corroded and incomplete	7		discard	1770-1800
6.1	1586	bulk	iron nail; heavily corroded and incomplete	1		discard	1775-1840
6.1	1594	bulk	iron nail; heavily corroded and incomplete	1		discard	1740-1800
6.1	1664	bulk	iron nails; two heavily corroded and incomplete	2		discard	1740-1780
6.1	1665	459	copper-alloy thimble; complete with base rim but corroded; diam. 16mm; ht. 18mm	1			1740-1770

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.1	1665	460	fossil of gastropod; possibly from local chalk; oval 60 x 70mm	1			1740-1770
6.1	1665	461	glass setting; oval facetted in clear blue; W 9mm; L 11mm	1			1740-1770
6.1	1665	bulk	iron nails; five heavily corroded and incomplete	5		discard	1740-1770
6.1	1690	749	copper-alloy anchor chape for two-piece shoe buckle; pin missing; L 19mm	1	c. 1690 1720		?late 18th century
6.1	1690	bulk	iron nails; two heavily corroded and incomplete	2		discard	?late 18th century
6.1	1690	bulk	iron sheet/vessel; thin and heavily corroded fragment; 35 x 40mm	1		discard	?late 18th century
6.1	1691	bulk	iron nails; two heavily corroded and incomplete	2		discard	1775-1800
6.1	1692	bulk	iron nail; heavily corroded and incomplete	1		discard	18th century
6.1	1710	480	horn disc with small central perforation; diam. 30mm; ?button	1		further identify	1740-1760
6.1	1710	bulk	iron nails; three heavily corroded and incomplete	3		discard	1740-1760
6.1	1710	bulk	iron nails; five heavily corroded and incomplete; from sample <522>	5		discard	1740-1760
6.1	1712	1562	copper-alloy rivet; lightly domed head; diam. 7mm; L 10mm	1			1740-1800
6.1	1712	1563	copper-alloy ?button; domed disc; diam. 27mm; from sample <521>	1		further x-ray	1740-1800

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.1	1712	1605	copper-alloy pins; Caple Type C; several fragments; from sample <521>	1			1740-1800
6.1	1712	bulk	iron nails; two heavily corroded and incomplete; from sample <521>	2		discard	1740-1800
6.1	1712	bulk	iron ?vessel; two thin, heavily corroded and undiagnostic fragments	1		discarded	1740-1800
6.1	1712	bulk	iron nails; four heavily corroded and incomplete	4		discard	1740-1800
6.1	1716	bulk	iron nails; five heavily corroded and incomplete; from sample <524>	5		discard	1660-1800
6.1	1733	478	copper-alloy thimble; incomplete and heavily corroded; diam.15mm; ht. 18mm+	1			1660-1680
6.1	1733	bulk	copper-alloy pins; shaft fragments only; from sample <525>	1			1660-1680
6.1	1733	bulk	iron nails; seven heavily corroded and incomplete	7		discard	1660-1680
6.1	1736	479	stone hone; narrow form of Norwegian ragstone; slightly triangular section from use; W 30mm; L 90mm+; th. 13mm	1			1670-1690
6.1	1736	1544	silver coin; thin and heavily worn; diam. 18mm; possibly George III fourpence?	1	?George III fourpence	further identify	1670-1690
6.1	1736	1606	copper-alloy pins; four incomplete Caple Type C; from sample <526>	4			1670-1690
6.1	1736	bulk	iron nails; five heavily corroded and incomplete	5		discard	1670-1690

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.1	1736	bulk	iron nails; three heavily corroded and incomplete; from sample <526>	3		discard	1670-1690
6.1	1736	bulk	iron ?binding; fragment of curved strap; W 15mm; L 125mm+	1			1670-1690
6.1	1757	750	copper-alloy candlestick; moulded stem only; widest diam. 40mm; ht. 140mm	1		further identify	1720-1760
6.1	1757	1564	copper-alloy rivets; one with slightly domed head; diam. 9mm; L 11mm; two heads only; ?upholstery pins; diam. 11mm; from sample <530>	3			1720-1760
6.1	1757	bulk	iron nails; two heavily corroded; L 65 and 130mm	2		discard	1720-1760
6.1	1757	bulk	iron nails; numerous heavily corroded fragments; from sample <530>	5		discard	1720-1760
6.1	1758	bulk	iron nails; two short tacks; L 7mm; from sample <531>	2		discard	late 17th to early 18th centuries
6.1	1759	bulk	copper-alloy ?objects; four corroded fragments; from sample <532>	4		further x-ray	1700-1730
6.1	1759	bulk	iron nail; heavily corroded and incomplete; from sample <532>	1		discard	1700-1730
6.1	1814	bulk	iron ?nails; heavily corroded lump with two nail shafts	2		discard	1580-1700
6.2	0	21	copper-alloy coin; William IV farthing, 1834	1	1834		
6.2	0	1369	copper-alloy farthing; decayed and illegible; diam. 21mm; ?early 19th century	1			

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	4	1370	copper-alloy coin; heavily corroded and illegible; diam. 30mm; ?Victoria penny	1			1840-1900
6.2	6	bulk	copper-alloy pin; Caple Type C; several minute fragments	1			1740-1780
6.2	13	10	copper-alloy object; tongue-shaped and axially curved; highly corroded and unclear on x-ray; L 25mm	1			1770-1800
6.2	15	bulk	iron pin/fitting; incomplete with circular collar at one end; collar diam. 30mm; pin L 130mm+	1			n/a
6.2	209	bulk	iron nail; heavily corroded and incomplete	1		discard	1650-1680
6.2	235	1570	iron harness buckle; rectangular with sheet iron pin; W 50mm; L 45mm	1			n/a
6.2	235	bulk	iron clench bolt; complete but heavily corroded; L 73mm; also undiagnostic strap and long pin	1			n/a
6.2	246	1393	copper-alloy ?object; amorphous and undiagnostic lump; L 30mm	1			n/a
6.2	377	49	substantial copper-alloy pin or wire; two lengths; gauge 3.87mm; L 65 and 130mm	2			1820-1900
6.2	536	98	copper-alloy coin; Charles I rose farthing (1636-1644); incomplete	1	1636–1644; residual from Phase 5.1		1820-1840
6.2	536	1528	bone-working waste; cattle metatarsus sawn-off at proximal end; L 45mm	1			1820-1840

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PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	536	bulk	solid iron strap; heavily corroded and undiagnostic; W 25mm; L 130mm	1		discard	1820-1840
6.2	757	1377	copper-alloy wire; substantial, embedded in lump of concretion; gauge 4.5mm; L 35mm	1			1840-1900
6.2	762	157	bone ?mustard spoon; complete with elongated oval bowl and finely carved handle with pointed drop; L 113mm	1			1830-1900
6.2	764	bulk	iron nail; heavily corroded and incomplete	1		discard	1580-1700
6.2	796	178	copper-alloy fittings; two square-section straps; one with small circular loop at end, other with remains of ?larger loop; W 2mm; L 41 and 45mm	2			1810-1830
6.2	796	179	bone ?tool handle carved from cattle long bone; curved and tapering with vertical carved panels; 30 x 40mm oval rabetted base with central hole; narrow end with rabbet and rectangular opening; L 100mm	1		further identify	1810-1830

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	796	180	bone ?telescope/opera glass; tapering hollow tube with inside threading at both ends; wider end with in-situ, slightly domed disc/eye piece with central threaded opening for further component; two opposing holes in narrow end of tube; diam. 20–25mm; L 45mm	1		further identify	1810-1830
6.2	796	181	ivory cutlery handle for knock-on tang implement; tapering with oval section and straight end; L 85mm+ fe				1810-1830
6.2	796	1373	copper-alloy buttons; two heavily corroded; one blazer/livery type with central perforation, diam. 40mm; one composite with embossed face, diam. 27mm	2		further x-ray	1810-1830
6.2	796	1378	copper-alloy ?object; three undiagnostic corroded lumps	1			1810-1830
6.2	796	1379	copper-alloy ?coin; heavily corroded to ferrous residue	1		further x-ray	1810-1830
6.2	796	1400	copper-alloy fitting; domed with narrow collared edge and central external ?handle of lathe-turned wood, fixed with iron nail./screw; diam. 70mm; ht. 25mm; handle L 38mm	1		further identify	1810-1830

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	796	1537	worked bone; two cattle metacarpals drilled axially through proximal end; L 170 and 185mm	2			1810-1830
6.2	796	bulk	iron nail; heavily corroded and incomplete	1		discard	1810-1830
6.2	796	bulk	iron ?pipe; incomplete with collar and horizontal ?lug; body at angle; diam. 50mm	1			1810-1830
6.2	800	1503	slate pencil; slightly facetted body and sharply cut point; L 60mm+	1			1760-1780
6.2	800	1538	worked bone; cattle metacarpus drilled axially through proximal end; L 175mm+	1			1760-1780
6.2	801	110	bone comb; incomplete standard double-sided single form; ht. 45mm; W 27mm+	1			1770-1800
6.2	801	111	lathe-turned bone tube; decorative collars at both ends with traces of red paint; one end with inside threading, the other open or originally plugged; diam. 10mm; L 73mm; ?needlecase	1		further identify	1770-1800
6.2	801	718	copper-alloy coins; four heavily corroded ?halfpennies	4		further x-ray	1770-1800
6.2	801	719	copper-alloy cup weight, likely of gunmetal; heavily corroded opening diam. 36mm; ht. 23mm; wt. c 70 g	1			1770-1800
6.2	801	1552	copper-alloy blazer/livery buttons; two plain corroded; diam. 24 and 30mm	2			1770-1800

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	801	1553	copper-alloy shoe buckle; incomplete; plain narrow frame drilled for separate spindle; L 40 mm; W <i>c</i> 52mm	1			1770-1800
6.2	801	bulk	iron strap; tapering; heavily corroded and undiagnostic; W 15mm; L 170mm; also corroded iron nail, L 100mm	1		discard	1770-1800
6.2	801	bulk	iron nail; heavily corroded and incomplete	1		discard	1770-1800
6.2	833	1492	bone scale-tang implement handle; curved and highly distorted by corroded iron; L 135mm	1		x-ray	early 19th century
6.2	833	1539	worked bone; cattle metacarpus drilled axially through proximal end; L 175mm+	1			early 19th century
6.2	854	190	copper-alloy thimble; incomplete and heavily corroded; undecorated panel at base and plain unfolded edge; ht. 25mm	1			mid-19th century
6.2	854	191	bone button; dished with four eyes; diam. 18mm	1			mid-19th century
6.2	854	1380	copper-alloy bar; rectangular-section and incomplete; W 4mm; L 50mm; undiagnostic	1			mid-19th century
6.2	881	1540	worked bone; cattle metacarpus drilled axially through proximal end; L 175mm+	1			18th/19th centuries
6.2	881	bulk	iron nail; heavily corroded and incomplete	1		discard	18th/19th centuries
6.2	1502	370	copper-alloy disc button; oval with integral loop; W 13mm; L 16mm	1			early 19th century

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1502	bulk	iron nails; two short tacks; L 22mm; from sample <501>	2		discard	early 19th century
6.2	1502	bulk	iron nails; two heavily corroded and incomplete	2		discard	early 19th century
6.2	1504	1490	ivory-working waste; triangular-section splinter; L 95mm	1			1740-1800
6.2	1504	1530	bone cutlery handle for scale-tang implement; fragment only with one vertical drilled hole for fixing pin	1			1740-1800
6.2	1504	bulk	iron lump; corroded and undiagnostic; 25 x 30mm	1		discard	1740-1800
6.2	1504	bulk	iron nails; at least five heavily corroded and incomplete; from sample <500>	5		discard	1740-1800
6.2	1513	371	flat copper-alloy ring; diam. 30mm	1			1830-1850
6.2	1513	372	copper-alloy ?objects; three heavily corroded lumps incorporating length of wire and fragment of disc or flat ring	3			1830-1850
6.2	1513	373	copper-alloy flat-section curtain ring; diam. 24mm	1			1830-1850
6.2	1513	397	stone toy marble; light yellow painted body decorated with groups of concentric circles in dark red; diam. 19mm	1			1830-1850
6.2	1513	398	copper-alloy button; slightly domed with ?embossed decoration and remnants of wire loop; diam. 14mm	1		_	1830-1850

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1513	408	copper-alloy button; heavily corroded disc; diam. 23mm	1			1830-1850
6.2	1513	414	ceramic toy marble of agate ware; diam. 18mm	1			1830-1850
6.2	1513	419	flat bone disc with central perforation; diam. 19mm; ?backing for cloth-covered button	1		further identify	1830-1850
6.2	1513	420	copper-alloy button; heavily corroded disc with wire loop; diam. 23mm	1			1830-1850
6.2	1513	426	copper-alloy button; heavily corroded disc with wire loop; diam. 22mm	1			1830-1850
6.2	1513	427	copper-alloy furniture mount; thin embossed oval escutcheon with central square perforation; W 25mm; ht. 35mm	1			1830-1850
6.2	1513	428	copper-alloy coin; heavily corroded; diam. 28mm; size consistent with Victoria Young head penny (1838-1860)	1	?1838–1860		1830-1850
6.2	1513	430	copper-alloy ?object; cast square- section bar tapering to point; W 4 x 4mm; L 35mm	1			1830-1850
6.2	1513	431	copper-alloy coin; thin and heavily corroded; diam. 28mm; size consistent with Victoria Young head penny (1838- 1860)	1	?1838–1860		1830-1850

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1513	734	copper-alloy fitting; incomplete; hollow tube protruding from ?circular back plate; tube diam. 10mm; L 15mm+; back plate diam. 30mm	1		further identify	1830-1850
6.2	1513	1535	bone button-making waste; three panel fragments drilled from both sides for discs; hole diam. 19mm	3			1830-1850
6.2	1513	1583	ceramic blocks; two small rectangular 10 x 18 and L 40mm; 12 x 20 and L 50mm; both exhibiting wear on sides and corners, and scorched from heating on one side; use currently unknown	2		further identify	1830-1850
6.2	1513	1584	ceramic figurine of pearl ware with painted decoration; incomplete female figure	1		further identify	1830-1850
6.2	1513	1585	ceramic figurine of pearl ware; part of female head only; possibly part of SF 1584	1		further identify	1830-1850
6.2	1513	bulk	iron nails; three heavily corroded and incomplete; from sample <503>	3		discard	1830-1850
6.2	1513	bulk	iron ?ring; rectangular-section and incomplete; W 7mm; diam. c 120mm	1			1830-1850
6.2	1513	bulk	iron nails; at least twenty-five heavily corroded and incomplete	25		discard	1830-1850
6.2	1516	369	bone peg; short and crudely carved with pointed end and head marked by simple groove; L 33mm; gauge 5mm	1	?Roman residual		1800-1830

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1518	382	copper-alloy thimble; complete but heavily corroded; diam. 10mm; ht. 18mm	1			1830-1850
6.2	1518	383	lathe-turned bone object; slightly barrel shaped with open base and a decorative finial; two opposing holes near base; ht. 27mm; diam. 7mm; ?gaming piece	1		further identify	1830-1850
6.2	1518	384	bone handle for knock-on tang implement; flat and tapering with one side domed to form oval base; plain rounded end; L 85mm	1			1830-1850
6.2	1518	385	Wooden brush head; several heavily degraded fragments with irregular rows of holes for bristles	1		discard	1830-1850
6.2	1518	386	scale-tang knife with bone handle; heavily decayed and corroded; handle decorated with incised parallel oblique lines; handle L 90mm bone + fe	1			1830-1850
6.2	1518	1546	ivory handle for tanged implement; narrow and tapering with oval section and gently rounded end; L 77mm	1			1830-1850
6.2	1518	bulk	iron nails; at least ten heavily corroded and incomplete	10		discard	1830-1850
6.2	1523	376	iron ?vessel; handful of corroded and undiagnostic fragments	1		discard	1770-1820

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1523	736	copper-alloy ?drawer handle; threaded pin with collared knop with transverse opening for drop handle; L 35mm; knop diam. 12mm	1			1770-1820
6.2	1523	737	copper-alloy livery/blazer button; incomplete plain with wire loop; diam. 17mm	1			1770-1820
6.2	1523	bulk	copper-alloy pins; two incomplete Caple Type C	2			1770-1820
6.2	1523	bulk	iron nails; six heavily corroded and incomplete	6		discard	1770-1820
6.2	1523	bulk	iron nails; four heavily corroded and incomplete; from sample <504>	4		discard	1770-1820
6.2	1526	bulk	iron nail; heavily corroded and incomplete	1		discard	1760-1820
6.2	1528	738	copper-alloy thimble; incomplete and heavily corroded; ht. 18mm	1			1770-1820
6.2	1528	bulk	iron vessel; thin and highly corroded curved fragment; 30 x 50mm	1		discard	1770-1820
6.2	1528	bulk	iron nails; nine heavily corroded and incomplete	9		discard	1770-1820
6.2	1528	bulk	iron nails; four heavily corroded and incomplete; from sample <505>	4		discard	1770-1820
6.2	1530	377	slate pencil; narrow oval-section fragment only; W 4mm; L 35mm+	1			1770-1800
6.2	1530	378	copper-alloy flat-section curtain ring; diam. 24mm	1	_		1770-1800

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1530	379	copper-alloy handle; globular with central perforation and hollow stem; L 45mm; diam. 30mm	1			1770-1800
6.2	1530	bulk	iron nail; heavily corroded and incomplete	1		discard	1770-1800
6.2	1530	bulk	iron sheet/vessel; thin and highly corroded fragment; 30 x 45mm	1		discard	1830-1850
6.2	1531	387	Wooden brush head; two heavily degraded fragments with at least six irregular rows of holes for bristles; W 60mm+	1		discard	1830-1850
6.2	1531	388	ceramic pipeclay haircurler; incomplete Le Cheminant Type 12, stamped with initials WB with dot above and below	1	object date <i>c</i> 1750		1830-1850
6.2	1531	389	shell button with four eyes; highly fragmented	1			1830-1850
6.2	1531	390	glass bead; cylindrical w; opaque white with longitudinal magenta stripes; diam. 3mm; L 12mm	1			1830-1850
6.2	1531	395	copper-alloy pin; Caple ?Type B; gauge 0.95mm; L 30mm	1			1830-1850
6.2	1531	396	copper-alloy wire; looped and corroded length; gauge 2mm; L 75mm	1			1830-1850
6.2	1531	418	copper-alloy button; heavily corroded and incomplete; wire loop present; diam. 22mm	1			1830-1850

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1531	739	copper-alloy circular mount/fitting of thin embossed sheet; incomplete; diam. 30mm+; ?from furniture	1			1830-1850
6.2	1531	1498	bone buttons; two dished with four eyes; diam. 13 and 19mm; one disc with central hole; diam. 12mm; ?backing for cloth button	3			1830-1850
6.2	1531	1543	lead token; uniface; traces of ?petal design; partly covered in concretion; diam. 18mm	1		clean to identify	1830-1850
6.2	1531	1550	lead shot; complete single ball; diam. 17mm	1			1830-1850
6.2	1531	1554	copper-alloy livery/blazer button; incomplete plain with wire loop; diam. 18mm	1			1830-1850
6.2	1531	1555	small copper-alloy wire dress fastener; L 12mm	1			1830-1850
6.2	1531	1556	copper-alloy pins; three complete Caple Type C and numerous further fragments; gauge 0.85-1.1mm; L 25-30mm	3			1830-1850
6.2	1531	bulk	iron nails; handful heavily corroded fragments; from sample <506>	5		discard	1830-1850
6.2	1537	409	bone button-making waste; three panel fragments drilled from both sides for discs; hole diam. 19mm	3			1820-1850

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1537	411	ivory cutlery handle for tang-hafted knife; slightly tapering with rounded rectangular section and straight end; L 80mm+	1			1820-1850
6.2	1537	412	small group of objects, likely from fob chain; complete copper-alloy wax seal pendant set with 12 x 21mm rectangular light red ?semi-precious stone; ht 35mm; smaller incomplete copper-alloy ?seal fob; circular glass matrix with engraved lettering; diam. 10mm; copper-alloy watch winder, angular body only with remains of suspension ring; L 30mm; two incomplete oval rings/pendants, one with suspension ring; W 10 12mm	5		further identify	1820-1850
6.2	1537	413	copper-alloy coins; two Victoria Bun head pennies (1860-1895)	2	1860–1895		1820-1850
6.2	1537	740	copper-alloy livery/blazer buttons; two corroded, one complete; diam. 12 and 20mm	2			1820-1850
6.2	1537	741	copper-alloy wall hook with internal iron screw; incomplete with moulded body and small circular plate; diam. 20mm; L 32mm+	1			1820-1850

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1537	1557	copper-alloy escutcheon; embossed and slightly domed with central square opening; diam. 29mm; ?for drawer drop handle	1			1820-1850
6.2	1537	1566	iron scissors; one incomplete arm only with narrow oval loop above moulding; L 95mm+	1			1820-1850
6.2	1537	1592	ceramic pipeclay haircurler; incomplete le Cheminant ?Type 16	1	?object date late 18th century		1820-1850
6.2	1537	1611	ceramic gaming piece of dark blue on light blue tin-glazed ware (TGW H);diam. 22mm	1	18th-century object		1820-1850
6.2	1537	bulk	iron nails; numerous heavily corroded and incomplete	5		discard	1820-1850
6.2	1537	bulk	iron strap; incomplete; W 25mm+; L 110mm+	1		discard	1820-1850
6.2	1538	bulk	iron nails; two heavily corroded and incomplete	2		discard	n/a
6.2	1542	403	copper-alloy ?vessel; two angular pieces of layered copper-alloy sheet; L 40 and 45mm	1			1830-1850
6.2	1542	406	ivory cutlery handle for knock-on tang implement; tapering with rounded rectangular section and straight end; L 95mm	1			1830-1850
6.2	1542	407	copper-alloy sheet; 50 x 50mm	1			1830-1850

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1542	415	copper-alloy pin; incomplete; gauge 1.15mm	1			1830-1850
6.2	1542	416	copper-alloy button; domed with gilding on both sides and wire loop for fixing; diam. 18mm	1			1830-1850
6.2	1542	421	copper-alloy livery/blazer button; diam. 14mm	1			1830-1850
6.2	1542	423	copper-alloy pin; Caple Type C; fragmented	1			1830-1850
6.2	1542	1499	bone button; incomplete; dished with four eyes; diam. 19mm	1			1830-1850
6.2	1542	bulk	iron lump; corroded and undiagnostic; 15 x 30mm	1		discard	1830-1850
6.2	1550	437	copper-alloy button; disc with raised edge on back and remnants of cone for loop; diam. 15mm	1			mid-19th century
6.2	1550	438	ivory cutlery handle for tanged implement; incomplete; tapering ovalsection with flat rabetted end; L 77mm+	1			mid-19th century
6.2	1550	1559	copper-alloy flat-section curtain ring; diam. 26mm	1			mid-19th century
6.2	1550	433	bone object; lathe-turned narrow body that screws into separate circular base; body L 42mm+; base dished with concentric rings; diam. 26mm; ?gaming piece	1		further identify	mid-19th century

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1550	bulk	iron nails; four heavily corroded and incomplete	4		discard	mid-19th century
6.2	1550	bulk	iron nails; at least five heavily corroded and incomplete; from sample <509>	5		discard	mid-19th century
6.2	1552	bulk	copper-alloy rivet with flat head; L 11mm	1			mid-19th century
6.2	1552	bulk	iron nails; at least five heavily corroded and incomplete; from sample <510>	5		discard	mid-19th century
6.2	1552	bulk	iron nail; heavily corroded and incomplete	1		discard	mid-19th century
6.2	1556	1560	copper-alloy button; ?composite globular with rounded cone for wire loop; diam. 11mm	1			1790-1820
6.2	1574	bulk	iron nails; seven heavily corroded and incomplete	7		discard	1770-1820
6.2	1575	439	small composite bone brush; rectangular wire-drawn brush plate with two rows of larger bristle holes, and single row smaller holes along the edges; latheturned back plate cut to size with central threaded hole for handle, decorated by remains of double-line circle at short ends; small upright lathe-turned handle with threading; 20 x 55mm; handle L 32mm+	1			n/a
6.2	1582	bulk	iron nail; heavily corroded and incomplete; from sample <512>	1		discard	1800-1840

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1582	bulk	iron nails; four heavily corroded and incomplete	4		discard	1800-1840
6.2	1584	745	copper-alloy nail; sturdy with narrow rectangular head; L 95mm	1			1830-1900
6.2	1590	bulk	iron nail; heavily corroded and incomplete	1		discard	1720-1760
6.2	1597	1568	iron horseshoe; incomplete and heavily corroded shank only with one rectangular nail hole extant; L 105mm	1			1785-1835
6.2	1597	bulk	iron nail; heavily corroded and incomplete	1		discard	1785-1835
6.2	1600	443	iron fitting; narrow square-section stem with remains of small circular perforation at one end; W 4mm; L 108mm	1			1800-1840
6.2	1600	444	bone back for composite button with embossed copper-alloy front; four small eyes for cat-gut loop; diam. 23mm	1	18th century		1800-1840
6.2	1600	1586	ceramic figurine of pearl ware with painted decoration; incomplete male figure; joins with SF 1588	1		further identification	1800-1840
6.2	1600	bulk	copper-alloy pins; Caple Type C; numerous fragments	1			1800-1840
6.2	1603	440	copper-alloy flat-section curtain ring; diam. 28mm	1			1720-1760
6.2	1603	bulk	copper-alloy pins; Caple Type C; numerous fragments	1			1720-1760

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1603	bulk	iron nails; two heavily corroded and incomplete	2		discard	1720-1760
6.2	1603	bulk	iron nails; handful heavily corroded and incomplete; from sample <513>	5		discard	1720-1760
6.2	1629	447	copper-alloy pins; four Caple Type C; gauge 1.3 1.47mm; L 36 41mm	4			mid-19th century
6.2	1629	449	lathe-turned bone lid or base with upstanding frieze of four decoratively cut shapes, each with a central dot-and-circle; diam. 19mm	1		further identify	mid-19th century
6.2	1629	450	oyster shell palette with liberal remains of red pigment inside	1		further identify	mid-19th century
6.2	1629	453	copper-alloy button; heavily corroded and incomplete disc; diam. 19mm	1			mid-19th century
6.2	1629	454	copper-alloy wire ring; diam. 18mm	1			mid-19th century
6.2	1629	457	stone toy marble; painted greyish black; diam. 17mm	1			mid-19th century
6.2	1629	746	group of heavily corroded copper-alloy objects, including two fine spirals, W 2.5mm, L 13 and 20mm, and a livery/blazer button, diam. 18mm	3			mid-19th century
6.2	1629	747	copper-alloy lump; heavily corroded and undiagnostic; 25 x 45mm	1			mid-19th century
6.2	1629	1512	bone-working waste; cattle metatarsus sawn-off at distal end; L 175mm	1			mid-19th century

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1629	1542	worked bone; two cattle metacarpals drilled axially through proximal end; L 185 and 180mm+	2			mid-19th century
6.2	1629	1587	ceramic figurine of pearl ware with painted decoration; two pieces of male figure in 18th-century style	1	further identify		mid-19th century
6.2	1629	1588	ceramic figurine of pearl ware with painted decoration; two pieces of male figure; joins with SF 1586	1	further identify		mid-19th century
6.2	1629	1608	iron ?trivet fragment; strap with angled rounded foot and angled top; W 15mm; L 115mm; second tapering strap; incomplete with one angled end; L 90mm	1			mid-19th century
6.2	1629	bulk	iron sheet/vessel; three corroded fragments	1		discarded	mid-19th century
6.2	1629	bulk	iron nails; eight heavily corroded and incomplete	8		discard	mid-19th century
6.2	1633	445	bone ?spoon; handle with rounded finial only; L 70mm+	1		further identify	c. 1790-1830
6.2	1635	1593	ceramic pipeclay haircurler; complete Le Cheminant ?Type 4; L 64mm	1	?object date early 18th century	further identify	1770-1830
6.2	1635	bulk	iron ?strap; two heavily corroded and undiagnostic pieces	1		discard	1770-1830
6.2	1647	bulk	iron nail; heavily corroded and incomplete	1		discard	1805-1900

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1648	bulk	copper-alloy pins; several fragments; at least two Caple Type C	2			1775-1830
6.2	1648	bulk	iron nail; heavily corroded and incomplete	1		discard	1775-1830
6.2	1648	bulk	iron nails; four heavily corroded and incomplete; from sample <516>	4		discard	1775-1830
6.2	1653	456	copper-alloy flat-section curtain ring; diam. 23mm	1			1760-1780
6.2	1653	1494	ivory fan; four fragments of handle part with fine copper-alloy rivets	1			1760-1780
6.2	1653	1507	red deer antler; curved section; axial perforation through sawn base; L 90mm+	1			1760-1780
6.2	1653	1532	bone-working waste; short section of ovicaprid long bone, split in half; one end sawn and rabbeted; file marks all over worked surfaces; W 10m; L 30mm+	1			1760-1780
6.2	1653	bulk	copper-alloy pins; Caple Type C; numerous fragments	1			1760-1780
6.2	1653	bulk	iron strap; curved and tapering fragment; W 25mm; L 100mm	1			1760-1780
6.2	1653	bulk	iron nails; five heavily corroded and incomplete	5		discard	1760-1780
6.2	1653	bulk	iron nails; handful heavily corroded fragments; from sample <517>	5		discard	1760-1780
6.2	1674	bulk	iron nails; four heavily corroded and incomplete	4		discard	1805-1820

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1676	463	copper-alloy flat-section curtain ring; diam. 28mm	1			1770-1830
6.2	1676	bulk	iron nails; nine heavily corroded and incomplete	9		discard	1770-1830
6.2	1686	748	copper-alloy ferrule; tapering with circumferential incised lines at both ends and at centre; diam. at wide end 11mm; L 53mm; ?for paint brush or other tool	1			1770-1830
6.2	1686	1501	bone cutlery handle for tanged implement; incomplete; tapering flat-section with rounded end; L 60mm+	1			1770-1830
6.2	1686	1504	bone comb; fragment only of double- sided single piece type	1			1770-1830
6.2	1686	1505	bone disc with small central perforation; diam. 18mm; ?backing for cloth button	1			1770-1830
6.2	1686	1561	copper-alloy pinned hinge for small box or casket; incomplete; curved openwork body with two small rivet holes below pin and one at apex; retains iron pin; W 18mm; L 30mm	1			18th century
6.2	1686	1594	ceramic pipeclay haircurler; incomplete Le Cheminant ?Type 9, stamped ?WB at end	1		further identify	18th century
6.2	1686	bulk	copper-alloy wire; very fine; gauge 0.56mm; L 32mm	1			1770-1830

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1686	bulk	copper-alloy pin; incomplete Caple Type C; from sample <519>	1			1770-1830
6.2	1686	bulk	iron nail; small round head; heavily corroded; L 150mm	1		discard	1770-1830
6.2	1686	bulk	iron nails; four heavily corroded and incomplete; from sample <519>	4		discard	1770-1830
6.2	1696	465	copper-alloy pin; shank only; gauge 1.3mm	1			1830-1850
6.2	1696	466	copper-alloy coin; thin and heavily corroded; diam. 21mm; ?Victoria Young Head farthing (1838-1860)	1	?1838–1860		1830-1850
6.2	1696	726	ivory cutlery handle for knock-on tang implement; slightly tapering with rounded triangular section and gently rounded end; L 90mm	1			1830-1850
6.2	1696	bulk	copper-alloy pins; three incomplete Caple Type C; from sample <520>	3			1830-1850
6.2	1696	bulk	iron ?mount; heavily corroded and undiagnostic fragment with possible nail hole; W 30mm; L 75mm	1		discard	1830-1850
6.2	1696	bulk	iron nails; five heavily corroded and incomplete	5		discard	1830-1850
6.2	1696	bulk	iron nails; twenty-two heavily corroded and incomplete	22		discard	1830-1850
6.2	1702	bulk	iron ?vessel; heavily corroded curved fragment only; 30 x 40mm	1		discarded	1580-1700

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	1722	bulk	iron nail; heavily corroded and incomplete	1		discard	mid-19th century
6.2	1727	473	glass button; opaque white; dished with four eyes; diam. 10mm	1			mid-19th century
6.2	1727	bulk	iron nails; two heavily corroded and incomplete	2		discard	mid-19th century
6.2	1730	474	bone button; dished with four eyes; diam. 15mm	1			mid-19th century
6.2	1730	475	copper-alloy lace-chape; sturdy of overlapping sheet with folded end; diam. 8mm; L 25mm	1			mid-19th century
6.2	1730	476	copper-alloy buttons; one dished suspender type with four eyes, diam. 14mm; one small ?composite, doughnut-shaped with ?lost setting, diam. 9mm	2			mid-19th century
6.2	1730	bulk	iron nails; two heavily corroded and incomplete	2		discard	mid-19th century
6.2	1842	bulk	iron nails; two heavily corroded and incomplete	2		discard	1770-1820
6.2	2156	661	bone button; dished with four eyes; oval shape 15 x 18mm	1			1820-1900
6.2	2156	663	slightly oval lead disc; one pierced hole near edge for ?suspension; diam. 30mm	1			1820-1900
6.2	2156	664	copper-alloy dessert spoon with fiddle handle; L 149mm	1			1820-1900

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	2156	665	ivory comb; incomplete double-sided single comb; ht. 45mm; W 65mm+; both sides with fine teeth	1			1820-1900
6.2	2156	672	glass button; opaque white; dished with four eyes; diam. 10mm	1			1820-1900
6.2	2156	727	naturally curved bone handle for through-tang implement; possibly from animal ?tooth; L 60mm	1		further identify	1820-1900
6.2	2156	757	copper-alloy lump; heavily corroded and undiagnostic; 30 x 55mm	1		discard	1820-1900
6.2	2156	1591	ceramic figurine of pearl ware with painted decoration; fragment only; joins with SF 1589	1			1820-1900
6.2	2156	bulk	iron nails; two heavily corroded and incomplete	2		discard	1820-1900
6.2	2167	667	intricately lathe-turned object; incomplete; tubular body with threading at both ends; one end straight with broad collar; other end flared and collar with square indentations; two threaded lids present, one with separate latheturned finial; body L 43mm; diam. 25mm; finial L 40mm	1		further identify	1830-1900
6.2	2167	668	copper-alloy narrow oval buckle or fastener of sturdy wire; gauge 2.97mm; W 13mm; L 45mm	1			1830-1900

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	2167	669	copper-alloy wall hook with internal iron screw; fine open vertical loop on short neck; diam. 23mm; L 30mm	1			1830-1900
6.2	2167	670	copper-alloy tea spoon with fiddle handle; complete but in three pieces; L 135mm	1			1830-1900
6.2	2167	673	bone button; dished with four eyes; diam. 18mm	1			1830-1900
6.2	2167	1589	ceramic figurine of pearl ware with painted decoration; incomplete female figurine; joins with SF1591	1			1830-1900
6.2	2167	1590	ceramic figurine of pearl ware with painted decoration; incomplete figurine of ?two women holding babies	1		further identify	1830-1900
6.2	2167	bulk	copper-alloy ferrule; diam. 10mm; L 45mm+; possibly from parasol; heavily corroded straps, one with leaf-shaped terminal; W 12mm; L 55mm	1			1830-1900
6.2	2167	bulk	small tapering square-section iron strap; fragment only; W 2.5mm	1		discard	1830-1900
6.2	2167	bulk	iron nails; eleven heavily corroded and incomplete	11		discard	1830-1900
6.2	2167	bulk	stone hone; substantial long form of Norwegian ragstone; oval section; W 40mm; L 175mm; th. 25-30mm	1			1830-1900
6.2	2168	bulk	iron sheet/vessel; several thin. Corroded and undiagnostic fragments	1		discard	1760-1830

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	2171	658	copper-alloy salt spoon with fiddle handle; incomplete; L 80mm plus	1			1830-1900
6.2	2171	659	Wooden brush head; incomplete and heavily degraded; rectangular with six irregular rows of holes for bristles; W 60mm; L 165mm+	1		discard	1830-1900
6.2	2171	758	copper-alloy object; ornamental fragment of sheet and wire; 8 x 25mm	1			1830-1900
6.2	2171	1549	lead ?weight; rough disc with raised edges bevelled from both sides; diam. 46mm; wt. 130g	1			1830-1900
6.2	2171	1565	copper-alloy buttons; heavily corroded, including one suspender button with four eyes, diam. 16mm; from sample <574>	1		further x-ray	1830-1900
6.2	2171	bulk	copper-alloy pins two incomplete Caple Type C; from sample ,574>	2			1830-1900
6.2	2171	bulk	copper-alloy wire objects including small oval frame, 9 x 11mm, and looped pin, diam. 4mm; from sample <574>	2			
6.2	2175	bulk	iron nails; two heavily corroded and incomplete	2		discard	1820-1840
6.2	2182	674	writing slate; complete with remnants of wooden frame; no traces of use; W 95mm; L 135mm	1			1830-1900
6.2	2182	677	copper-alloy livery/blazer button; heavily corroded; diam. 18mm	1			1830-1900

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
6.2	2183	680	copper-alloy toy cannon; ridged cascabel and mushroom-shaped button; small vent hole and tapering barrel towards narrow bore; ?possibly missing muzzle; no traces of trunnions or lugs for fixing to carriage; L 44mm; bore diam. 4mm; sooty residue from inside	1	cf. Forsyth and Egan 2005, 79–84; also Paynes Wharf for same period		1830-1900
7.1	0	3	front part of copper-alloy two-piece rivet with stamped edge; 'STITCHLESS PATENT'; diam. 16mm	1	1875+		
7.1	1704	467	slate pencil; tapering facetted working end with blunt and worn point; W 4 mm; L 33mm+	1			late 19th century
7.1	1704	470	glass bead; minute barrel-shaped in opaque blue; diam. 2mm; ht. 1.5mm	1			late 19th century
7.1	1704	bulk	iron nails; two heavily corroded and incomplete	2		discard	late 19th century
7.2	0	4	copper-alloy coin; George V halfpenny, 19??	1			
7.2	167	1383	lead window came; two finely reeded fragments; W 6mm	2			1820-1830
8.1	886	bulk	iron nail; heavily corroded and incomplete	1		discard	1690-1730
8.1	891	bulk	iron nails; two heavily corroded and incomplete	2		discard	1740-1770
8.1	891	bulk	iron straps; several corroded and undiagnostic pieces; W 23mm	2		discard	1740-1770

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
8.1	893	bulk	iron nail; heavily corroded and incomplete	1		discard	1760-1780
8.1	897	bulk	iron nail; heavily corroded and incomplete	1		discard	1710-1760
3.3	1844	524	?Continental porcelain doll's bust; complete with short black curly head and rosy cheeks; ht. 30mm	1	intrusive in Roman context; date 19th– early 20th centuries	further identification	Roman
	2187	1534	bone-working waste; splinter of cattle metatarsus, from near distal end; sawn across proximate end and worked from sides to rough point; L 80mm	1	no phasing or trench for this context?		1580-1700
u/d	543	99	copper-alloy slip-knot ring; complete but in two pieces; diam. 25mm	1	unphased		n/a
	0	6	machine-cut small column of Cornish Serpentite stone; incomplete; diam. 19mm; L 75mm+; ?architectural decoration, perhaps from fireplace	1		further identify	
	0	7	flat bone disc with central hole; polished from use; diam. 28mm; hole diam. 8mm; th. 1.5mm; ?part of syringe	1			
	0	8	bone-working waste; incomplete ring sawn from longbone; W 6mm; diam. 26mm	1			
	0	11	bone cutlery handle for scale-tang implement; plain and tapering D-section scaled with three off-centre iron rivets; obliquely cut end; L 82mm	1			

PHASE	CONTEXT	SF NO	DESCRIPTION	NO. OBJECTS	COMMENTS	RECOMMENDATIONS	POT DATE
	0	22	shell button with remnants of copper- alloy fastening loop; diam. 17mm	1			
	0	25	ceramic toy marble; traces of red marbled paint; diam. 17mm	1			
	0	27	copper-alloy pin or fitting; incomplete; sturdy shank with globular junction; remains of second shank at right-angles; L 27mm+	1			
	0	341	copper-alloy coin; incomplete and illegible	1			
	0	358	copper-alloy rivet; large domed head; diam. 24mm; shank L 20mm	1	from chest or furniture?		
	0	507	bone handle; incomplete tapering scale; rounded finial with hole for suspension and remnants of two rivet holes close to one edge only; incised decoration of two sets of parallel vertical lines with hatching between; 25mm; L 90mm+	1	gr.sq: 125/200		
	0	508	glass bead; globular in opaque bluish green; diam. 8mm; ht. 8mm	1	gr.sq: 130/220		
	0	733	copper-alloy ?candlestick; incomplete; hollow body with small flared base; inside threading at narrow end; base diam. 28mm; ht. 45mm	1		further identify	
	0	1502	glass bead; opaque blueish green; oval/winged; L 4mm; W 7mm	1			

APPENDIX 13: TIMBER ASSESSMENT

Damian Goodburn

Introduction

Site Location and Waterlogging

The site lies a little east of the historic core of London on the edge of the flood plain of the Thames estuary. Archaeological work on adjacent land (Douglas *et al.* 2011) has shown that the area lay just behind the late Roman waterfront at a time when high spring tide levels had dropped to around 0m OD. However, the land was low enough that parts of the archaeological sequence were waterlogged preserving the timber discussed here.

Terms of reference

This report is intended to summarise the nature and range of woodwork found and make some initial comments on the woodworking details such as materials used, evidence of reuse, toolmarks, suitability for dating etc. The stratigraphic and topographic details are covered in the main site assessment report (see above). Only the material surviving as fairly solid woodwork rather than peaty stains in the soil is considered here.

Methodology

This writer was asked for on-site advice on the interpretation, recording, and sampling of the Roman timber structure found. The post-medieval timber structure was not examined on-site by this writer but a large sample of timbers from it were examined and their recording finished off-site. All relevant site records were also consulted. Following the basic site recording of 1:20 plans, 1:10 elevations, *proforma* 'Timber Sheets' were filled out with sketches of the items on the reverse. In addition a representative sample of timbers were drawn to scale on gridded film, by the site team and this writer. Rough notes and sketches were also made by this writer during the site visit. All the various records are drawn on here, and in total are broadly commensurate with the procedures laid out in the Museum of London manual and the English Heritage guidelines on Waterlogged Wood (2nd edition).

General range of timber and roundwood structures found at the site recently

This phase of excavation on the site revealed a moderately crude timber lined well structure of Roman date, Str [1157] with some associated stakes. Other woodwork revealed included a very truncated wattlework structure Str [1002] and a post-medieval timber lined pit possibly used for tanning Str [561].

Quantification of the woodwork found

The total number of Roman solid timber or round wood structures found 30

The total number of Roman timbers drawn to scale 27

The total number of post-medieval timbers attributed numbers 17

Total number of timbers examined by this writer for detailed recording 15

Total number of post-medieval timbers drawn to scale 4

Total number of species ID samples taken none

The comparative evidence for Roman, and post-medieval woodworking in the London region

Space does not permit a description of the size and range of comparative archaeological evidence for the Roman and post-medieval woodwork found recently at Tobacco Dock. Suffice it to say that the evidence for Roman period woodworking systematically recorded by teams from the Museum of London and more recently Pre-Construct Archaeology is comparatively large (see select reading listed at the end of this report for some key works). Very recently studies of material from the London hinterland and other areas of Roman Britain such as Carlisle, have deepened and broadened our understanding of the variation found in the period's woodwork. This has allowed us to distinguish some woodwork as low status, 'rustic work' or more typical of 'native' or 'barbarian' traditions than official Roman work. Indeed, the late Roman period published timber well lining found on earlier PCA excavations at Tobacco Dock is a fine example of very crude rustic work using roundwood, cleft timber, and non-durable beech logs alongside more regular boards (Goodburn 2011).

Recent archaeological work in the suburbs, East End flood plain zone and the tanneries area of Bermondsey has also provided much comparative data on materials and techniques for timber lined pits of the post-medieval period. Typically these types of structure have been found to contain many second hand timbers (e.g. Elsden 2001).

The key woodworking features of the Roman timber well lining and associated timbers Str. [1157]

The remains of a timber lined well, externally c.1.20m square was found and dated by associated finds to the Roman period, Str [1157]. The essence of the structure was of assorted planks set on edge retained by small stakes near the corners which survived up to four courses high on the west side. All the timbers were of oak. By the standards of the carpentry of the vast majority of Roman timber lined wells from the City and Southwark the structure was relatively crude or 'rustic' with the planking varying greatly in thickness between c.80 to 40mm, and width from 210mm-290mm.

The lower two courses had cut outs on their edges at the corners but also elsewhere along the edges such as plank [1222] which had a wide rectangular recess made as if to accommodate a timber passing the plank at 90 degrees in the manner of a floor board and a stud or post in a timber building. It may have been that the planking was largely reused floor boarding. Some other sheathing elements such as beam like timber [1205] from the south side had relict nails and a semi-circular wear hollow on one face.

Most of the planks were rather eroded when found with few tool marks, however their proportions suggest that they were made by sawing modest sized hewn baulks of oak into two or three slabs. This method of preparing planks is known from other wells and structures, most commonly in the later Roman period. In the lower courses some effort had been made to interlock the corners of the sheathing planks, by alternately cutting away the lower edges at the ends But no fastenings were used and the workmanship was slack.

The retaining stakes, such as [1269] were quite different to the sheathing being made by cleaving radially and trimming with an axe from ¼ to 1/8th sections. Some of these survived just over 1.5m long. During the site visit it could be seen that sapwood had been left on some of the edges and they seemed freshly made. Some of the stakes lay a little distance from the well lining timbers such as [1246] and these may have been used to support a light roof or fence around the well head.

All the materials and working methods would not be out of place in a relatively low status Roman period context.

The key woodworking features of the post-medieval timber pit lining Str. [561]

The remains of another timber-lined pit 1.5m N-S by over 3m E-W was also found. This was dated by associated finds to the post-medieval period. It comprised eight driven stakes that retained planking on edge, with two thickness of planking at the west end. The plank sheathing survived two courses high and was secured by a mix of iron nails and soil backfill.

Fragments of lifted planking

The planks examined off-site were of hand sawn softwood, apparently pine, e.g. plank [597] which was 220mm wide by 30mm thick. Relict iron nails along one edge showed that it was second hand and may have been used as floor boarding first.

The fragments of lifted uprights

The lifted uprights were found to be very varied some made of pine off-cuts split out of sawn slabs, e.g. [593], and pointed with axes whilst others were clearly reused oak timbers of nautical origin. Fragments of upright [573] were lifted and found to have contained a broken oak ship treenail and two

An Archaeological Assessment of Land at the Highway, Wapping Lane, Pennington Street and Chigwell Hill, London E1, London Borough of Tower Hamlets (Parcel 4)

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iron nail shanks. But the most interesting was timber [592] which was part of a clinker vessel floor timber (below and see record drawing). This mix of materials is well known from the tanning pits of post-medieval Bermondsey. None of the fresher looking oak elements had more than 45 annual rings so tree ring samples were not taken.

A reused clinker vessel floor timber, upright [592] in pit lining Str [561]

Timber [592] had eroded surfaces but appeared to have been hewn from a whole, small, rather knotty oak log. The lifted timber seen off-site was 0.73m long by 110mm wide ('sided') and 100mm thick ('moulded'). Although it had been trimmed for reuse one face had several step-like cut outs which are typical of the 'joggles' cut to fit the partially overlapping planking of a clinker built boat hull. The same face also had a narrow rectangular cut out or 'limber hole' usually made in the lower framing ('floors' or 'wrongs') to allow bilge water to move freely. The joggled face had also been pierced by several square spike holes and one bolt or small treenail hole. The size and finish of the timber, with some wane left on, suggests an origin in a small barge or medium sized fishing boat. The shape suggests the boat was relatively flat bottomed. From a technological point of view the replacement of treenails with iron spikes marks a step towards recent practice replacing medieval style oak treenails used to fasten in framing. It is likely that the timber was originally made in the late 17th to 18th centuries.

The truncated wattlework structure Str [1002]

Small fragments of compressed and decayed roundwood were also lifted from a linear wattle work feature Str [1002]. Only three pieces were recognisable, too few for a meaningful wood Species and age study. The two larger pieces were 30mm diameter and probably stakes, one had a point made of two adjacent facets. A smaller section was only 10mm in diameter and was probably a weaver. It is likely that the structure was a fence.

An assessment of the importance of the material recorded.

This relatively small assemblage of Roman waterlogged worked wood is of regional and local importance as part of the evidence for activities at an important Roman satellite settlement to the earlier port of London. It also adds to the corpus of less formal woodwork from the hinterland. The post-medieval timber structure is of local importance for the story of the use of the site whilst the reused clinker vessel floor timber is of some wider importance. The reused floor timber section, demonstrates technological changes in post-medieval boat building for which we currently have very little well recorded evidence.

The potential for further study of the woodwork recorded

An Archaeological Assessment of Land at the Highway, Wapping Lane, Pennington Street and Chigwell Hill, London E1, London Borough of Tower Hamlets (Parcel 4)

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Following the finalisation of the site phasing, in due course, the material warrants some targeted further work. The Roman period woodwork warrants brief updated summary publication with clear illustration, and some comparison with other well linings. The same would apply to the post-medieval pit lining, with the addition of a brief discussion of the evidence of changes in boat building technology exemplified in the reused frame timber.

Suggested further work towards analysis and summary publication in due course.

An updated fully referenced version of the summary presented here with c.5 explanatory draft diagrams could be produced.

Acknowledgements

Thanks are due to A. Douglas of PCA for a site tour during the first visit and preparing copies of the records needed to complete the recording and report writing.

Bibliography

Brigham, T., Goodburn, D., Tyers, I. and Dillon, J., 1995. 'A Roman Timber Building on the Southwark Waterfron'. *Archaeological Journal* 152, 1-72.

Brunning, R., 1996. Guidelines on Waterlogged Wood. English Heritage.

Douglas, A., Gerrard, J. and Sudds, B., 2011. A Roman settlement and bath house at Shadwell: Excavations at Tobacco Dock and Babe Ruth restaurant, The Highway, London. Pre-Construct Archaeology Monograph 12.

Elsden, N., 2001. 'Excavations at 36-40 Tanner St and 159-161 Tower Bridge Road, Bermondsey', *London Archaeologist* 9(10), 275-282.

Goodburn, D., 2011. 'Timber', in A. Douglas, J. Gerrard and B. Sudds, *A Roman settlement and bath house at Shadwell: Excavations at Tobacco Dock and Babe Ruth restaurant, The Highway, London.* Pre-Construct Archaeology Monograph 12, 124-129.

Heard, K., and Goodburn, D., 2003. *Investigating the maritime history of Rotherhithe*. Museum of London Archaeology Service Archaeology Studies Series 11.

Wilmott, T., 1982. 'Excavations at Queen Street City of London, 1953 and 1960, and Roman timber lined wells in London'. *Transactions of the London and Middlesex Archaeological Society* 33, 1-78.

APPENDIX 14: ANIMAL BONE ASSESSMENT

Kevin Rielly

Introduction

The site is located in the western half of a parcel of land bordered by The Highway to the north, Chigwell Hill to the west, Wapping Lane to the east and Pennington Street to the south. The eastern half of this area contained a previous PCA excavation (TOC02), this coinciding with another extensive PCA incursion on the eastern side of Wapping Lane at the former site of the Babe Ruth restaurant (HGA02). To complete the previous excavation history of this immediate area, there were another two sites along the Highway just east of HGA02, namely LD74 and LD76. The Roman levels and finds from the latter sites as well as from HGA02 and TOC02 were published in Lakin *et al.* (2002) and Douglas *et al.* (2011) respectively, while the complete assessment of HGA02 and TOC02, including the Roman and post-Roman levels can be found in Douglas (2004).

Following the previous excavations, the present site featured a series of Roman levels generally dated to the 3rd and 4th centuries AD followed by a lengthy hiatus, eventually reoccupied from the 16th century. This report will essentially present the evidence from the latest archaeological activity but will include relevant details from the previous excavations when discussing the local importance of the faunal assemblage, this providing the basis for any recommendations regarding further study of this material. These deliberations will make use of Rielly and Ainsley (2002) as well as Armitage (2004a; 2004b; 2011).

The site assemblage was mainly recovered by hand, however, this was augmented by bones separated from the residues of a large number of bulk samples, these taken from a wide selection of features and deposits across the occupation sequence. The fish bones taken from these samples (and indeed those separated from the hand retrieved collections) were all identified by Philip Armitage and will be dealt with separately (see Armitage, Appendix 15).

Methodology

The bone was recorded to species/taxonomic category where possible and to size class in the case of unidentifiable bones such as ribs, fragments of longbone shaft and the majority of vertebra fragments. Recording follows the established techniques whereby details of the element, species, bone portion, state of fusion, wear of the dentition, anatomical measurements and taphonomic including natural and anthropogenic modifications to the bone were registered. The sample collections were washed through a modified Siraf tank using a 1mm mesh and the subsequent residues were air dried and sorted.

Description of faunal assemblage

The site provided a grand total of 14,497 hand collected animal bones with an additional 11,450 taken from the samples (excluding the fish bones). These bones have been assigned to their respective phases and will be described below according to general occupation periods, essentially dated to the prehistoric era (Phase 2) followed by the Roman (Phase 3), medieval (Phase 4), early and late post-medieval (Phases 5 and 6) and modern (Phase 7). In general, the dating of the various bone bearing deposits is good, the vast majority datable within 100 years and the remainder within a maximum of 200 years (here excluding the earliest levels). The final part of this description section refers to the unstratified collection, in fact just one bone, the importance of this item overriding any considerations concerning dating issues.

Throughout these phases the bones tend towards a good level of preservation (see Table 1), here referring to surface condition where moderate equals 25-50% surface removal/abrasion, this increasing to greater than 50% indicating 'poor' preservation although also including limb bones with marked abrasion at one or both articular ends). However, there are exceptions, here including Phases 3.1, 3.3 and 7.1. The first is perhaps untrustworthy as the collection is rather small, while the other two collections may indicate a greater propensity for poor burial (leaving bones on the surface or else allowing for the exposure of bone collections through redeposition). The level of fragmentation is also relatively minimal, although again there are exceptions, these probably indicative of some industrial process rather than post depositional damage (see below).

It was also observed that gnawed bones, while frequent, provided no more than 3% of any individual phase assemblage. This would also suggest that the vast majority of the bones making up these collections were suitably buried soon after deposition. An interesting aspect of the gnawing evidence is that rodent gnawing is clearly better represented amongst the later phases, i.e. from Phase 5.2. Indeed such damage is generally found on bones dated to the latter part of the post-medieval era, as for example from late 18th- and 19th-century deposits in London at 57 Broadway, Newham (Rielly 2014a) and from two sites at Westminster Abbey (Rielly 2014b; 2016). It can perhaps be conjectured that the date of such activity may coincide with the introduction and spread of the brown rat, dating from the 1720s and widespread in Britain by the 1750s (after Yalden 1999, 183). This animal is certainly more renowned for its gnawing ability (here referring to building damage) compared to its smaller cousin, the black rat (see Lawrence and Brown 1974, 103). The absence of rodent gnawing or indeed any gnawing in the very latest deposits (Phase 7) is probably related, as previously stated, to either the small quantity of bones or the efficiency of waste deposition.

The following descriptions will refer to features in terms of their position within the two main trenches, i.e. Trenches 1 and 2, the former 'L' shaped covering the northern half of the site and part of the south-west corner, this 'extension' labelled as Trench 1(S) and the northern part as Trench 1(N); and Trench 2 covering most of the southern half.

Prehistoric - Bronze Age (Phase 2)

The pre-Roman collection is rather small (see Tables 3, 4 and 5) consisting of a few fragments recovered from two deposits [1327] and [1858], both also containing burnt and cracked flints, located in the southern and south-eastern parts of the site respectively. The hand collected bones, from [1327] comprised a cattle- and sheep-size fragment while the sampled deposit [1858] supplied a small rodent tibia (probably mouse or vole).

Early Roman (Phase 3.1)

This phase provided a minor collection of hand recovered bones arising from a variety of feature types (see Table 3). These few bones include a cattle radius and calcaneus as well as a sheep/goat metacarpus. The sieved collection is somewhat larger, this essentially taken from a single sample recovered from the E-W ditch [2158] located in the south-east corner of Trench 2. These bones clearly represent the partial remains of a well fragmented and poorly preserved equid skeleton, the cattle-size pieces probably part of the same articulation (Table 5). This is an adult medium-sized pony with fully fused limb bone articular ends and an approximate age, based on the heights of various maxillary teeth (after Levine 1982), of 11 years.

3rd century (Phase 3.2)

Deposits dating to this phase provided a somewhat larger collection of bones (hand recovered and sieved), these almost entirely taken from Trench 1 (S) and the south-western and south-eastern parts of Trench 2. The bones were retrieved from an extensive E-W ditch and associated dump deposits as well as from a few other cut features. Cattle and cattle-size bones form the principal components of these collections. While cattle is clearly the best represented amongst the major domesticates (and see Table 4), it is of interest that the sieved bones show a notable proportion of sheep-sized fragments (Table 5). This would perhaps suggest that the smaller domesticates may be better represented than is indicated by the hand recovered material. A single chicken bone, from a sample, provided minor evidence for the exploitation of other food species.

3rd/4th centuries (Phase 3.3)

The bones from this phase, amounting to a moderately sized assemblage, were principally recovered from various dumps and features associated with a clay and timber building (Building 1). This was located to the south-west, i.e. in Trench 1(S) and just into Trench 2. In addition a notable proportion of the sample assemblage (31 out of 99 bones) was retrieved from the fills of well [565], this in the north-western part of the site. It is notable, as with the previous phase, that the great majority of the sieved bones are unidentifiable to species, although as before there is a greater proportion of sheep-

compared to cattle-sized fragments. In the hand collected component, there is again a predominance of cattle and cattle-size bones, the former, in both of these phases, represented by a wide array of skeletal parts. This signifies the deposition of processing as well as food waste. Butchery cuts were seen on a number of the cattle and cattle-size bones, reminiscent concerning butchery utensil and 'type' of the heavy butchery demonstrated by numerous Roman collections from the City and Southwark. It is notable however that the proportion of bones with such butchery marks is somewhat smaller than demonstrated at these other sites (see Conclusions).

4th century (Phases 3.4-5)

Phases 3.4 and 3.5 witnessed the demolition/disuse and then construction of a series of buildings, all approximately in the footprint of Building 1 – thus Building 2 in Phase 3.4 and Building 3 in Phase 3.5. The bone collections were predominantly from layers associated with the demise and then use of these structures, i.e. located in Trench 1(S) in the SW corner of the site, with the remainder of these phase assemblages largely provided by dumps and cut features towards the south-east - in Trench 2. In addition a notable proportion of the Phase 3.5 sieved collections were recovered from several pits situated alongside the north-western perimeter of Trench 1(N), in particular from pit [413].

The hand collected assemblage, following the previous phases, is largely composed of cattle bones (Table 4 and the percentage values shown in Table 6) with sheep/goat slightly better represented than pig. There is again a wide distribution of body parts amongst the cattle collections, although with some notable exceptions (see below). The proportion of butchered cattle bones in Phase 3.4 follows the previous evidence from Phase 3.3 (about 10% with cut marks), rising to over 20% in Phase 3.5 and thus comparable to the City and Southwark proportions referred to in the Phase 3.3 description.

There are three deposits with assemblages differing from the 'normal' mix of skeletal parts. These include the bones from the fill of well [1157] dated to Phase 3.5 comprising a large proportion of cattle head and foot parts. While not exclusively composed of such parts (see Table 7), it can perhaps be proposed that this collection is mainly derived from a local butcher's shop/market. Notably, the exclusion of this collection from the major domesticate totals reduces the percentage of cattle while increasing those of sheep/goat and pig (see Table 6). Then there are the bones from pit [413], also in Phase 3.5, provided 909 fragments (all cattle and cattle-size) from a single sample, composed of 109 identifiable and 800 unidentifiable pieces. 500 of the latter component where calcined, mainly limb bone but with some mandibular fragments, while the identifiable portion was entirely composed of skull fragments, phalanges and sesamoids. It could be proposed that this collection may have derived from two sources – the head and feet from a butcher's establishment and the burnt bones from a glue manufacturer. The latter process would have required that the bones be well fragmented prior to their immersion and then boiling in water, the level of burning perhaps suggestive of hearth sweepings. A similar collection, although somewhat smaller, was found in the fill [1132] of pit [1133] dated to Phase 3.4, comprising a total of 37 cattle-size bones by hand collection and 38 sieved, all well fragmented

There are relatively few other food species amongst the Roman levels (here including Phase 3.6) and the later phases, although better represented, are no exception. These species now include some poultry (chicken) as well as a variety of game species with deer and rabbit (see below), as well as teal and snipe. It can be assumed that game and perhaps deer in particular offers some evidence for high status (following Cool 2006, 114 and see Rielly 2005, 166-7). However, only one out of the two collections with deer bones can be interpreted as food waste and therefore evidence for 'affluence'. A total of 4 red deer fragments, two radii and 2 metatarsals, possibly from the same adult individual, were recovered from the Phase 3.6 fill [1745] of ditch [1738]. This contrasts with the red deer antler piece derived from the Phase 3.4 fill [1126] from pit [1127] which clearly represents working rather than food waste.

The rabbit bone, a skull fragment complete with maxillary teeth rows, from layer [1938] dated to Phase 3.5 deserves some attention. This relates to the evidence concerning the introduction of this species to Britain during the Roman era (as provided by Sykes and Curl 2010, 120-1). While it is conceivable that this bone may offer further proof of Roman introduction, the nature of the deposit (a layer) as well as its location in the stratigraphic sequence (just below deposits dating from at least the late medieval era) would perhaps suggest it originated from some overlying and much later deposit.

Finally, amongst the non food species, both phases provided a small number of equid and dog remains. The latter are essentially taken form adult individuals with the exception of the juvenile ulna from Phase 3.4. A complete dog humerus was found in the Phase 3.5 fill of well [1157], this representing an adult individual with a shoulder height of 543.5mm (after Harcourt 1974).

Late 4th to early 5th century (Phase 3.6)

The final stage of the Roman occupation is demonstrated by a number of pits and, in particular, by a series of dump deposits principally located in the north-western and south-western (including demolition debris associated with Building 3) parts of the site. Bones were particularly concentrated within the latter area, although with some notable quantities taken from samples derived from pitfill and dump deposits located in the northern area - Trench 1(N). These collections again follow the Roman pattern regarding cattle predominance, as well as a general spread of skeletal parts although again with a notable exception. This refers to the large quantity of bones (hand collected and sieved) from the dump deposit [974] located to the south-west. The two recovery methods provided total counts of 635 and 588 bones respectively, the hand collected component principally consisting of 246 cattle and 388 cattle-size pieces, while the sieved assemblage was essentially composed of heavily fragmented limb bone pieces. The cattle bones are mixed but there is clearly a predominance of head and foot parts (Table 7). It can be conjectured that the latter represent butchers waste, although the highly fragmented limb bone pieces could be taken from a glue manufacturer. This 'specialist' collection was removed from the domesticate totals, resulting in a reduction in cattle and, unusually, a slightly better representation of pig compared to sheep/goat. While there appears to be no change with the previous 4th-century abundance of these domesticates, there may well be a subtle difference

in the level of organisation concerning redistribution. Though there is again evidence for butchers and 'specialist' waste, as mentioned above, there is a decrease in the quantity of cattle bones with butchery marks (down to 14%).

Concerning the other species represented, the deer bones have already been described (see Phase 3.4-5) with probable evidence for high status, while there is a continuation of various non-food species, specifically equid and dog.

A small number of bones were placed within a general Phase 3 category. These were retrieved from layers [2188] (1 bone), [2194] and [2195], the first and the last dated between AD 250-400 and the second to AD 340-400. From this evidence they are most likely to fit into Phase 3.6. The combined bone collection features an array of major domesticates (see Table 4).

Late medieval – late 14th to 15th centuries (Phase 4)

A small number of medieval features were recognised, with the majority of the bones (hand collected) derived from pit [1035] (38 fragments), this rather poorly dated, the identifiable pottery restricted to the Roman period. In combination, the medieval assemblage provided an array of domesticates (see Table 9). Cattle bones (including the cattle-size component) are clearly dominant, this collection including a mix of skeletal parts.

Late 16th to 18th centuries (Phase 5)

This phase has been divided into two sub-phases, initially including an array of 17th-century pits (31 in total), essentially located in Trench 1(N) (Phase 5.1). These were followed by a far more diverse range of features dated to the late 17th through to the early 18th centuries located behind properties fronting on to the Highway to the north, Chigwell Hill to the west and Pennington Street to the south (Phase 5.2). The bones from this phase were predominantly derived from pits, including cess pits, although also from wells and to a somewhat lesser extent from ditches/drains, construction features and various layers (see Table 8). While the bone bearing deposits were more widespread in this phase there was a clear bias towards features located in Trench 1 (N and S).

The great majority of the Phase 5.1 bones were recovered from just 6 of the aforementioned pits, each hand collected assemblage consisting of cattle bones showing a notable bias towards head and foot parts, with two of these collections showing a similar bias regarding both the cattle and sheep/goat components (see Tables 7 and 11). All 6 pits were located in Trench 1(N), either in the north-western central part ([367], [307] and [362]) or towards the north-east ([316], [441] and [470]).

Principal amongst these particular collections were those retrieved from [367] (2278 bones) and also from the adjacent pits [441] (2,683 bones) and [470] (206 bones), providing 2,278, 2,683 and 206 of the hand collected bones (a total of 5,167) out of a phase total of 5,610 fragments. Notably, the two largest collections represent only a portion of that originally observed. A collection policy was

instigated due to their homogeneity, with recovery limited to about 20% of each assemblage. Most of the cattle bones in these pits consisted of a large proportion of skull pieces (without horncores) as well as concentrations of toothrows, in combination with foot parts, these almost entirely composed of phalanges. This bias is also shown by the cattle-size fraction, this essentially composed of skull pieces, a total of 1,094 pieces (see Table 9) mainly derived from pits [441] (180 fragments) and [367] (794 bones). In addition and not surprisingly, the sieved collections provide similar evidence, the sieved component essentially derived from pits [441], [470], [367] and [307] with a combined total of 5,086 bones. Again there is a wealth of cattle and cattle-sized skull pieces, although also with some long bone fragments. These collections do however differ from their equivalent hand collected components in that there are notable proportions of burnt fragments, up to about 75%, encompassing a mixed level of burning with the majority black and white but with some totally calcined.

The cattle skeletal representations from each of these collections can be interpreted as modified butchers waste with an inclusion of probable glue manufacturing detritus. The head and foot parts contain the least amounts of meat and would be separated at the abattoir or butchers. A portion of the skull including the horns may well have been transferred with the hide to the tanner (here following Serjeantson 1989). Certain parts would then have been redistributed - horns to the hornworker, metapodials to the bone workers and phalanges to the glue maker, the remainder either thrown away or perhaps sent on to be crushed and used for fertilizer. The description given of these collections suggest that some of these redistribution stages had taken place – as shown by the lack of horncores and metapodials. However, the good representation of skulls and mandibles contrasts with the basic division related to the tanning redistribution pattern. In addition almost all the phalanges in these collections are intact, which is perhaps unusual for glue making waste where a greater proportion of fragmentation would be expected. In essence these collections resemble butchers waste, albeit with two components removed, the horns and the metapodials, presumably to the aforementioned craft establishments. This evidence would appear to contrast with the more fragmentary parts of these collections, in particular those which have been burnt. The burnt limb bone fragments can undoubtedly be linked with glue making but it would not be common practice to use skull pieces in this extraction process.

The 'specialist' sheep/goat collections from [441] and [367] are essentially composed of head parts, especially mandibles (see Table 11). These probably represent butchers waste, therefore following the conclusions drawn for the interpretation of the associated cattle bones. Again, it can be assumed that certain parts will have been redistributed.

Now referring to the major domesticate abundance pattern, it can be seen that cattle is by far the best represented treating this assemblage as a single unit. While still dominant, the proportion of cattle clearly suffers a major decrease following the removal of those deposits with 'craft' waste collections (see Table 6), going from a cattle to sheep ratio of about 15:1 down to 2:1. The latter pattern is rather unusual for early post-medieval London, where sheep tends towards parity or is even more abundant than cattle (see Conclusions). However, this may relate to a general spread of head and feet parts

amongst the other pit collections (comprising 65% of the remaining cattle bones). This bias is perhaps also shown by the rather narrow species diversity, with each of the additional animals/birds poorly represented. Pig is particularly under represented, while the other food species are limited to minor quantities of poultry (chicken) and game (fallow deer and rabbit). Otherwise there are a few cat bones from various deposits and a concentration of dog bones from pit [441], this probably representing the remains of a large adult, possibly also encompassing the small mammal fragments. One of the bones making up this skeleton, a radius, displayed a series of transverse knife cuts on the anterior shaft close to the proximal end. From this it can be supposed that a portion of this animal had been defleshed no doubt following at least the early stages of the butchery process – skinning and possibly dismemberment.

The increasing development of the site (Phase 5.2) witnessed a continuation of similar craft activities but with a greater admixture of domestic food waste. There are again features with cattle and sheep/goat head and/or foot part collections (Tables 7 and 11), both represented in pit [1565], this located in Trench 2, with the other examples, pit [945] and barrel well [540] at the western perimetres of Trench 1(S) and 1(N) respectively. Each of these is on a smaller scale in comparison to most of the 'craft' deposits dated to Phase 5.1. They also offer subtle distinctions, with the cattle and sheep/goat collections in [1565] mainly composed of skull pieces, while the sheep/goat bones from [540] are almost all metapodials. The cattle skull component is again without horncores and is therefore more likely to represent butchers waste. The plethora of sheep/goat foot bones from [540] on the other hand resembles tanning or rather tawing waste (after similar evidence seen at tanning sites in Bermondsey, see Rielly 2011, 161). Notably, this site has produced structural evidence for tanning in the form of a tanpit [561] located in the south-western part of Trench 1(N), not far from [540], however, dated to Phase 6.1 (see below).

There is only a minor change to the domesticate abundance pattern following the removal of these few and only moderately sized 'craft' waste collections (as seen in Table 6). This reveals a relatively similar proportion of cattle and sheep/goat with a notable increase in pig abundance compared to the previous phase. An increase in sheep/goat as already been referred to as an early post-medieval trait (see above). Other such traits, which are also demonstrated within these collections include a notable proportion of young calves, most probably veal cuts (after Albarella 1997, 22), as well as the presence of larger stock (see Thomas et al. 2013). Notably larger cattle as well as some pigs were observed within the Phase 5.1 collections while Phase 5.2 provided larger versions of all three major domesticates, as quantified in Table 12. This same table also illustrates the presence of two sawn bones from Phase 5.2 deposits. This instrument was essentially used for craft purposes, its use as a butcher's tool generally not apparent before the latter part of the 18th century (see Albarella 2003, 74 and Rielly in prep a). The sawn items quantified in Table 12 are all likely to represent butchered bones, although there is the possibility that some craft based sawing may have been misinterpreted as butchery. There are a greater proportion of sawn bones from Phase 6.2, dating from the late 18th century, which obviously corresponds to the aforementioned introduction of this tool for butchery purposes.

A final point concerning the major domesticates was the recovery of cattle metatarsals with severely abraded distal ends, these recovered from two adjacent Phase 5.2 linear features - [145] and [146], being part of a building at the central northern perimeter of Trench 1(N). While there are only three such bones (2 from [146] and 1 from [145]), their proximity and indeed their contemporaneity could suggest they derive from the same feature. Such damage has been seen elsewhere with respect to metapodials used in knuckle-bone floors, as for example at Tyers Gate, Bermondsey (Divers *et al.* 2002), using sheep metapodials and dating to the 18th century. It is conceivable that these few bones represent the remains of a dismantled floor, previously located perhaps within one of the nearby buildings.

This phase witnessed a somewhat greater usage as well as a greater diversity of other food species (Tables 9 and 10), notably with more poultry and small game, now including goose and mallard, as well as hare and teal respectively. There was also a single whale bone, taken from the fill [333] of pit [325]. It unfortunately could not be identified to skeletal part let alone species but may well belong to a cetacean at least the size of a longfin pilot whale. There are no marks on the bone to suggest how it was utilized but it could presumably represent food waste.

A major part of the non-food waste comprise the remains of at least four adult equid skeletons from pit [223] and another two from pit [325], these in the central and north-western parts of Trench 1(N) respectively. No mention was made of the level of articulation of these bone groups during the excavation, however, there are certainly paired elements within the former collection, while the latter provided evidence for at least a partial articulation (comprising most of the bones of a right lower hindlimb). In addition, there was clearly some deliberate disarticulation, as shown by the presence of 5 bones with butchery marks within the [325] equid assemblage. These include a skull, mandible, sacrum and femur, the type of butchery suggestive of dismemberment/jointing and defleshing. It is probable that both collections derived from a local knacker's yard, the perceived disarticulation and the butchery suggestive of some post-mortem usage prior to their eventual burial. The non-food waste also included some dog bones and a concentration of cat bones, the majority taken from well [272] at the eastern end of Trench 1(N) (including hand collected and sieved bones with 20 and 16 fragments respectively) representing at least two animals, an adult and a sub-adult.

Late post-medieval – 18th to early 19th century (Phase 6)

Further occupation in the areas behind the street housing provided another series of cut features, several with moderate to large collections of animal bones. This phase is also subdivided, into Phases 6.1 (18th century) and 6.2 (late 18th to early 19th centuries), each providing notable assemblages largely removed from pits, cesspits and wells (see Table 8). In contrast to the previous phase, however, it is those features in the southern part of the site, Trench 1(S) and in particular Trench 2, which provided the great majority of the bones. Notable collections from the south-eastern features include the 178 bones from pit [1630] and 141 and 202 from cess pits [1514] and [1543] respectively, all dated to Phase 6.2.

The major domesticates are now dominated by sheep/goat with again a rise in the relative abundance of pig as seen in both the Phase 6.1 and 6.2 collections (Table 6). There are further instances of deposits with 'specialist' waste but unlike the previous phases, the quantities are insufficient to unduly alter the major domesticate abundance pattern. These include single small collections of sheep/goat head and foot parts in each sub-phase (Table 11). Such small collections could be interpreted as redeposited from larger collections within underlying deposits. This may indeed be the case with the contents of pit [834], however, the larger collection from pit [845] appears to be a relatively discrete 'craft' assemblage indicative of an in situ status. The high proportion of sheep/goat metapodials clearly suggests, as with the previous Phase 5.2 collection, that it probably derives from a local tawyard. Notably, the previously mentioned tanpit [561] is located in the southern part of Trench 1(N), some 10 metres to the north of pit [845]. Its size at about 1.5m by upwards of 1.6m (truncated) would have been appropriate for sheep skins and possibly also for cattle hides (Rielly 2011, 160).

There is a continuing though subtle increase in the use of other food species with a notably greater abundance of poultry and small game, in particular by Phase 6.2. Some of the rabbits identified as game were quite large, though not as large as hares. These could conceivably represent domestic varieties, while certain pathological specimens may suggest that a portion of the smaller rabbits could also be domestic. This is perhaps shown by a pair of tibias amongst a variety of other parts from cess pit [1735] (Phase 6.2), both with a notable bend in the shaft close to the distal end. These may conceivably represent a congenital trait perhaps related to in-breeding. In addition another possibly congenital trait was shown by an unusual pathology, again shown by an adult individual, where the distal radius/ulna, carpals and proximal metacarpals had fused together (from pit [1630] Phase 6.2). While this could also represent a reaction to some form of trauma, it follows that this deformity would have been deleterious to the survival of this animal in the wild, clearly suggestive therefore of a domestic animal. A rather similarly fused rabbit carpal joint was found in a 19th-century deposit (a grave fill) at Elephant and Castle (Rielly in prep b).

The poultry collection now includes turkey, here represented by one bone in Phase 6.1 and two in Phase 6.2. These were found in three different pits, each of the fills dating to the late 18th/early 19th century, a period when this large fowl had become firmly established as the principal feasting/celebratory bird. Indeed even by the later 17th century the demand for these birds in London led to great numbers being brought to the city from as far away a Cambridgeshire, Suffolk and Norfolk (Wilson 1973, 130).

Of particular interest within the chicken assemblage is a tarsometatarsus from the fill [893] in pit [894] (Phase 6.1) where the spur has been sawn through about 1/3 along its length. A similarly sawn spurred tarsometatarsus was found within a contemporary deposit, i.e. mid to late 18th century, at Bermondsey Abbey and another from a mid 18th-century level at the Greyfriars site in Oxford (Rielly in prep; Wilson 1984, 267). It can be assumed that these offer evidence for cock-fighting (following West 1982, 260) where the removal of the spur is essentially undertaken to provide 'a level playing field'. The cockerels would then fight with artificial spurs attached to their legs, presumably each of a

similar design and size (ibid). Table 12 highlighting this sawn chicken bone also refers to some 'large' chickens and geese dating to Phases 6.1 and 6.2. These could conceivably represent either large domestic varieties or perhaps capons, referring to the chickens.

The single turtle bone can perhaps be included amongst the food waste. This is a costal or pleural bone, representing a section of the carapace, recovered from the fill [1510] of well [1511] (Phase 6.2). It hasn't yet been identified to species, although it is most likely to be green turtle, here comparing other post-medieval turtle finds as at Leadenhall Buildings (Armitage and McCarthy 1980) and the Royal Navy Victualling Yard, East Smithfield (West 1995, 33) dating to the late 18th/early 19th centuries and generally to the later post-medieval era respectively. There was an important trade in live green turtles to London from the West Indies throughout the 18th and into the 19th centuries, essentially catering for the more affluent members of London society as typified by the use of Turtle soup as a centre piece of the Lord Mayor's banquet (Armitage and McCarthy 1980, 13). It could perhaps be envisaged that such a prestigious food item is an unlikely find in this part of 18th/19thcentury London. There are no butchery cuts, which could suggest if indeed it was eaten, although their absence does not necessarily imply it was something other than food waste. An alternative explanation for its presence is that it represents craft waste, i.e. the use of the accompanying keratinous skutes, these covering the bony part of the carapace, also known as 'tortoiseshell'. It was more common to use hawksbill rather than green turtle 'tortoiseshell' for craft purposes. Obviously identification to species will help to clarify the local history of this item.

A notable collection was recovered from the cess pit [1508] (Phase 6.1), this providing 146 cat bones by hand collection and 17 from the sample compared to totals of 4 and 2 dog bones. The former total would appear to be made up of at least 6 cats - 3 juveniles (including one young kitten) and 3 adults, and 2 dogs, both puppies, one very young.

The deposition of dogs and cats continued into this phase, with notable quantities of the latter from the cess pit [1508] (Phase 6.1), this providing 146 cat bones by hand collection and 17 from the sample; as well as from the Phase 6.2 pits [1529], [1630] and [1687] with 3/18, 32/0 and 21/0 bones by hand collection/samples. In combination the Phase 6.1 collections provided at least 3 adults, 3 juveniles and one very young kitten, and another 3 adults, 3 sub-adults, 1 juvenile and 4 young kittens from the Phase 6.2 deposits. There was a lesser quantity of dog bones but of interest amongst this small collection was a mandible (recovered from the brick-lined cesspit [856] Phase 6.2) with a clearly broken and reworn canine. This animal had clearly suffered a major trauma, probably a blunt force blow to the snout, the continued wear to this tooth signifying a total recovery. This type of injury may well relate to dog fighting and/or bear baiting, as shown by similar canine breakages noticed at the 16th- and 17th-century bear baiting sites on the South Bank (Capon and Rielly in prep). There is little doubt that the size of this animal would have been conducive to such a usage and the evidence, previously mentioned, concerning cock-fighting could be indicative of an area where various enclosed blood sports took place.

Finally and of some importance was the recovery of a guinea pig mandible and possibly a series of

limb bones (to be identified and temporarily placed with small mammal) from the fill [1665] within pit [1666] (Phase 6.1), this dated between 1740 and 1770. This is a particularly rare find with Pigiere *et al.* (2012, 1020-1) referring to just three European archaeological examples, 2 from England, including a partial skeleton from a late 16th-century deposit at Hill Hall Manor in Essex (Hamilton-Dyer 2009, 346) and two skull pieces from the Royal London Hospital, Whitechapel dated to the early 19th century (Morris *et al.* 2011). Two more have been added to this list since then, again from London, with partial skeletons recovered from an early 19th-century well at Stockwell Street, Greenwich (Rielly 2013) and, significantly, from a mid 19th-century well from the adjoining site of Babe Ruth (P. Armitage pers comm and PCA archives). It can be assumed that this animal and indeed the Babe Ruth example were domestic pets.

The incidental species, those which were living within or passing through this site of human occupation, include a variety of small rodents, with rat reasonably well represented. There is a wide range of sizes amongst the rat bones and with a definite black rat skull from [1630] (Phase 6.2), it can be assumed that this species as well as its larger cousin, the brown rat, were living in this area at this time. Of interest in this respect is the known usurpation of the black rat, with the last strongholds of this species being the more populated parts of the big cities and notably their dockland areas. These last refuges were however short lived with the brown rat eventually ousting the black rat in all parts of Britain apart from some exclusive retreats (as for example Lundy Island) moving into the 20th century (Yalden 1999, 183).

Late post-medieval/Modern – late 19th century onwards (Phase 7)

The final phase of activity, again divided into two sub-phases, each incorporate one bone bearing deposit, namely pit [1705] and construction cut [167] respectively. The former is located in Trench 2, while the latter is part of structure 40, a brick building abutting the northern perimeter of the site. Each provided rather small hand collected assemblages, and while different in respect that [1705] is dominated by sheep/goat and [167] by cattle bones, they are also similar as both comprise high proportions of head and/or foot bones (see Table 11 for [1705]). It is conceivable that these may represent the redeposited remains from previous craft waste collections (as described above). Otherwise they may be indicative of such crafts continuing in this area well into the 20th century.

Unstratified

While the bones from undated deposits are generally ignored or at best very briefly mentioned in animal bone assessment reports, this site provided a rather unusual element from the topmost machined levels (+) – an elephant tooth. This is clearly from an Indian rather than an African elephant, as noted by the compressed rather than diamond shape of the lamella. Its presence at this site could be explained in terms of a possible keepsake or even a traded item, either way an unsurprising find amongst a community so closely connected with foreign travel and/or trade. The latter stipulation

could be expanded with the possibility that this item may in fact represent the remains of an imported elephant, as part of the well known 19th-century trade in exotic animals supplying various zoological collections. This would have included the zoological gardens in Regent Park which was founded in 1829 and opened to the public in 1847, charging the princely sum of 1 shilling admission (Hahn 2004, 228-9). Chief amongst the companies profiting from this trade was that set up by Charles Jamrach, operating in the East End of London in the latter part of the 19th century and followed by his son up to the outbreak of the First World War. Their premises, close to the docks and also within a short distance of the Tobacco Dock excavations, included offices and menageries in St George's Street East (formerly known as Ratcliffe Highway) and Betts Street, as well as a warehouse in Old Gravel Lane (Larsson 2015). The arrival at the London docks of such exotic animals is shown in Figure 1, depicting a disembarking elephant as shown in the pages of an 1864 edition of the Illustrated London News.

Conclusions

This site provided a notably large collection which is generally in good condition, clearly well dated and with a substantial proportion of sieved bones throughout the occupation phases complementing the information available from the hand retrieved phase assemblages. There is a very broad occupation span, dating from the prehistoric (Bronze Age) with collections dating from the Roman, medieval and post-medieval eras. The vast majority of the bones were taken from Late Roman and post-medieval levels and these obviously provide the greatest potential concerning any further analysis of the site assemblage. The later of the two collections include the bones from Phases 5 and 6, with substantial quantities dating between the late 16th and early 18th and then the 18th and early 19th centuries respectively. Each of the other phases, the prehistoric and early Roman, Phases 2 and 3.1, the medieval (Phase 4) and the 'modern' levels (Phase 7), though reasonably well dated, all provided rather small amounts of bones. However, there are points of interest amongst the earliest Roman and latest post-medieval collections which are worth exploring.

There follows a brief description of the Late Roman and post-medieval collections highlighting their important features and the information these can potentially provide concerning animal usage within the relevant time periods. Comparisons with the data gathered from the adjacent sites as well as those from further afield, specifically within the adjacent conurbation, will form a major part of this synopsis.

Roman

With the exception of a partial equid skeleton from one of the early Roman deposits (Phase 3.1), the major part of the Roman assemblage, as mentioned above, dates to the 3rd and 4th centuries. Then within this period there is a notable bias towards the culmination of Roman occupation, with a notable concentration of levels dating from the 4th through to the 5th century. The sub-phases 3.2 (3rd

century) through to 3.6 (4th/5th centuries) all provide an overriding dominance of cattle bones followed by not dissimilar rather low proportions of sheep/goat and pig. This abundance pattern changes slightly on removal of the 'butchers/craft' waste which was found in each of the later phase collections (3.5 and 3.6), including deposits with high proportions of cattle head and foot parts as well as those collections featuring heavily fragmented and burnt bones. The latter were interpreted as possible glue manufacturing waste and the former as butchers waste. Apart from these few collections, the bones tend towards a mix of skeletal parts indicative of general refuse.

The noted dominance of cattle is also highlighted by the rather poor representation of other food species, limited to some game and poultry. Red deer is included amongst the game and it could perhaps be suggested that this would imply a high status element to the meat diet (after Cool 2006, 114). However all four bones are probably from a single individual, thus perhaps suggesting a celebratory/feasting interval amongst the general beef orientated diet. The cattle bones throughout these phase collections, although in particular within those dated to the 4th century, demonstrate a high proportion of butchered bones. The level of butchery, invariably undertaken using a cleaver, is reminiscent of similarly dated collections to the west, either within the city or in Southwark. It would certainly follow that the professional butchers assumed to be operating in *Londinium* at this time (see Pinney 1999 and Rielly 2010 after Maltby 1989) were undoubtedly operating within one or more of the satellite settlements as here at Shadwell.

It should be mentioned that the cattle bones included a high proportion of ageable (mandibular rows and limb bone articular ends) as well as measurable bones. While an analysis of this data was not attempted at this stage, it is clear that there is sufficient information to provide a detailed review of Late Roman cattle usage in this area including the possible 'type' of animals imported to the nearby butchers. Comparisons with the collections from the associated Shadwell sites will obviously aid the interpretation of this data. In contrast, the quantity of information is decidedly lacking concerning the other domesticates, the limitations of this data probably confining any further work to species representation/abundance only.

As previously noted, this excavation is on the western limit of a group of sites arranged along the southern side of The Highway, including, from west to east, the two previous PCA incursions, TOC02 and HGA02 (Douglas *et al.* 2011) and then the two predating but eventually published by MOLA – LD74 and LD76 (Lakin *et al.* 2002). Each of these sites provided relatively large animal bone collections taken from a predominantly Late Roman sequence (Armitage 2011; Rielly and Ainsley 2002). There are clear similarities between these assemblages and then with the bones from this site, in particular concerning the very high proportions of cattle bones and a rather poor array of other food species, although with the exception here of the HGA02 assemblage (associated with the bath house). This provided a somewhat greater abundance of poultry (mainly chicken), which could conceivably suggest a higher status; a point further demonstrated by the presence of a greater diversity of fish species (see Armitage 2011, 140). The question of status could also be raised concerning the recovery of 'specialist' waste collections. Probable butchers waste dumps were found

at LD76 dated to the 3rd century with intimations of some industrial usage of post-mortem products suggested by the finding of a series of timber-lined tanks (these dating to the 4th century) which could represent tanning pits (Lakin *et al.* 2002, 22-3).

Comparisons can also be made with the other and similarly dated satellite settlement at Bow. Several moderate to large bone collections were recovered from a number of sites as for example from a triumvirate of Old Ford excavations dating back to the 1970s (Locker 1979; Rixson 1971; 1972) and more recently from Lefevre Walk Estate (LEK95) and 91-93 Parnell Road (PRB95) in Izard and Rackham (in prep). A notable feature of these assemblages, again following the Shadwell sites, is the very good representation of cattle. In addition, there is a high proportion of butchers waste amongst the cattle bones, the generality of this evidence suggesting that this area had been used as a distribution centre, supplying the city with beef (ibid). This is perhaps difficult to reconcile with the evidence concerning the presence of contemporary and similar if not more substantial distribution centres within the city, as at the Guildhall and at Drapers' Gardens (see Liddle 2008 and Rielly 2010). Nevertheless this interpretation is certainly of interest and should be discussed regarding the economic connections between the two eastern satellite conurbations and the City. Age and possibly sex distributions will be included in this analysis, with the other Shadwell sites and the Bow collections offering notable quantities of such data (here following the redistribution analyses undertaken by Maltby 1994 in his attempt to differentiate the connections between the Roman urban centres of Dorchester and Winchester with their rural hinterlands).

Post-medieval

As stated above, the later occupation at this site is essentially contained within two major periods approximately dated between the 17th/18th (Phases 5.1 and 5.2) and 18th/19th centuries (Phases 6.1 and 6.2). A major feature of these collections, particularly shown within the initial subphase dated to the 17th century, is the presence of large quantities of 'specialist' waste. These include the cattle and sheep/goat components within the larger Phase 5.1 and 5.2 collections, thence through Phases 6.1, 6.2 and even into Phase 7 limited to sheep/goat only.

It can be proposed that the sheep/goat examples may well have been principally derived from the light leather industry, judging by the concentration of metapodials. However, the aforementioned large Phase 5.1 collections could more appropriately be interpreted as butchers waste. The cattle specialist waste (Phases 5.1 in particular) is invariably composed of concentrations of head parts and phalanges, again perhaps suggestive of butchers waste, although with certain 'foot' bones, the metapodials, largely removed prior to deposition. An unusual item amongst these collections, essentially taken from the samples, is the presence of a large proportion of burnt skull pieces, although also with a notable quantity of burnt limb bone fragments. It was suggested that these deposits may contain a mixture of butchers and craft waste, the burning and high fragmentation perhaps indicative of glue manufacturing detritus. This interpretation, however, is far from certain, in particular concerning the presence of skull fragments, not the most obvious skeletal element to use in

the manufacture of glue. While this aspect of the 'specialist' collections will require further thought, their general make-up is certainly suggestive of butchers waste. The alternative – tanning waste – is perhaps less likely considering the large quantity of mandibles. While it is now generally assumed that part of the head and the foot bones accompanied the skin to the tanner (after Serjeantson 1989), it is very unlikely that this included the entire head, in fact more likely just the horns and immediate skull (the nuchal area) as shown in Figure 2. As well as the metapodials, these collections also featured very few horncores, indicative of their separation, possibly at the scalding house/butchers, of horns for the hornworker and metapodials to the boneworkers. With such deliberate usage it is perhaps surprising that the phalanges were simply disposed of rather than being processed for the manufacture of glue or fertilizer.

In effect there is a markedly specialised deposition of animal bones dating to the 17th century, with a clear placement of such waste in the northern part of Trench 1, followed by some continuation at a notably lower level within the subsequent centuries, suggestive of similar activities perhaps changing towards small scale tanning/tawing moving into the latter part of the post-medieval era. This is of course also shown by the finding of a tanpit, dating from the mid 18th century. The historical evidence would suggest that various crafts (hornworkers and tanners) were in operation within this general area during the 17th and 18th centuries, as indicated by a study of baptism records highlighting parental occupations within the parish of St Dunstan, including the riverside hamlets, moving west to east, of Wapping, Shadwell and Ratcliffe (Yeomans 2006, 106-7). In contrast, the slaughterhouses accommodating this area were located at Aldgate (ibid, 106). While perhaps culled, they were clearly not butchered at this location, the combination of head and foot parts at this site suggesting a much closer source.

Following the exclusion of the specialist waste collections it can be seen that the food economy dating from the 17th century is clearly based on the usage of approximately equal numbers of cattle and sheep/goat, tending towards a greater proportion of sheep moving into the post-medieval era. Similar major domesticate abundance patterns have been observed at several City or Southwark sites, with a notable rise in sheep relative to cattle, towards parity or sheep dominance by the early post-medieval era (see Rielly in prep a). Notably, the earliest phase (5.1) appears to show a continuation of the medieval trait with a high proportion of cattle, however, this was interpreted as a probable bias linked to the greater abundance of specialist collections. It has been noted that the increase in sheep is a national trait, coinciding with a fondness for mutton and more specifically a dual usage animal which can provide a few clips of good quality wool prior to reaching maturity and being culled essentially as young adults (ibid and Trow-Smith 1957, 247). In common with the Roman data there is ample age and size data, both from collections dating to Phases 5 and 6 (although with a particular concentration of cattle age data deriving from the mandibles within the Phase 5.1 specialist waste), which will allow detailed studies of exploitation practices (including the aforementioned use of mutton) as well as analyses concerning the stature of the two major domesticates - cattle and sheep. A number of bones from each species were interpreted as 'large' (see above, Late 16th to 18th centuries), which in combination with the size data will provide further evidence for a subtle increase in domesticate size

by the 16th/17th centuries followed by a more substantial size change by the latter part of the 18th century following stock 'improvements' (for London evidence see Thomas *et al.* 2013 and Rielly in prep a; and the historical evidence in Rixson 2000, 215).

A final aspect of the 'change' observed in London animal usage moving into the post-medieval period is the very much greater usage of veal (see Rielly in prep a), a commodity which is certainly well represented at this site, at least from Phase 5.2.

There is a greater wealth of other food species compared to the Roman collections, however the best represented of these, rabbit and chicken, still form only a small part of the diet in Phase 5, rising to moderately important in Phase 6 or rather Phase 6.2. It is to be wondered if a lack of such species or at least a rather low representation may be associated with a poorer status. This is perhaps already suggested by the admixture of specialist waste at this site and also, in Phase 5.2, of a large dump of equid remains, undoubtedly derived from some local knacker's yard. The presence of chicken may be a special case, with the cost of fowl notably expensive during the 17th century, although decreasing to a more affordable price moving into the 18th century (after McKendry 1973, 65 in Armitage 2005, 77). The same price change can be seen with turkey, clearly very expensive following the first few decades of its introduction and then dramatically reduced as their popularity grew, becoming the principal celebratory feast bird by the 18th/19th centuries (Wilson 1973, 129-30). Hence no doubt the presence of such birds from the later post-medieval phases at this site.

Of interest, concerning the location at the docks is the potential for exotic species, whether individual items (parts of particular skeletons) or pets. These could represent keepsakes or captured animals either purchased at the docks or carried there by returning sailors. This site provided parts of a guinea pig (Phase 6.1) and turtle (Phase 6.2) as well as an elephant tooth from an unstratified deposit. It has already been mentioned that the guinea pig represents a rather rare find, particularly dating to the 18th century, and would undoubtedly have been kept as a pet. In contrast, the turtle could be the remains of a high class feast, although considering the previous evidence, it is perhaps more likely to be either a keepsake or craft waste, here assuming it is from a species of turtle suitable for tortoiseshell, as the hawksbill. The elephant tooth could also be a souvenir. However, it is tempting to associate this bone with the 19th-century trade in exotic animals, certainly including elephants, especially as the offices and warehouse of the major exponent of this trade - Charles Jamrach, were all within a short distance of this site and Tobacco Dock. Comparative species from other dockland sites will include the possible terrapin from a site in Limehouse dating to the 17th century (Armitage 2005, 81-2); a pelican as well as walrus from a ate 18th/early 19th-century cess pit at Payne's Wharf, Deptford (Armitage 2008); and also perhaps the guinea pig and probable Amazonian parrot found in an early 19th-century well in Greenwich (Rielly 2013).

Referring to the other Shadwell sites, there is a rather mixed array of data, essentially related to the prioritizing of the underlying Roman levels. The animal bones from the adjacent sites at TOC02 and HGA02 have both been assessed (Armitage 2004a and 2004b). However, while the former site provided substantial 17th-, 18th- and 19th-century bone collections, HGA02 produced a rather minor

post-medieval assemblage. The work on LD74 and LD76 was undertaken as part of a backlog site project funded by English Heritage following a London post-excavation review (Hinton and Thomas 1997). Here it was decided to concentrate on the Roman levels at this site, culminating with the publication by Lakin *et al.* (2002). It can thus be seen any comparative analysis must needs be limited to the collection from TOC02 and this at an early (assessment) stage. The available information is nevertheless of interest, demonstrating a general mix of domesticates, including poultry and some wild species, but without any intimation of 'specialist' waste deposits. However, there is evidence for specialist bone working activities, as noted by the presence of a small number of elephant ivory fragments, indicative of working waste rather than finished pieces. Such specialist workshops could be linked to the turtle fragment if this can be interpreted as craft waste.

There are a number of other sites in this general area which have provided suitably comparative bone collections. These include the aforementioned Limehouse excavation (Armitage 2005) and sites at Stratford as at 57 Broadway, with early post-medieval butcher's waste collections (Rielly 2015). Comparisons can also be extended to include the wealth of data from the City and Southwark.

Recommendations for further work

This site clearly offers a major quantity of information concerning animal usage through the Roman and post-medieval occupation periods. As stated this relates to the large quantity, good condition and close dating of the phased collections, although in particular those within Phases 3.2 to 3.6 (3rd and 4th centuries) and Phases 5 and 6 (17th to 19th centuries).

Within the former phase group further studies should aim at determining the nature of animal usage at this site, species representation, exploitation strategies and the size of the domestic stock, bringing in the evidence related to the other Shadwell sites. This should be compared and contrasted with the evidence compiled from contemporary levels within the City and Southwark, bringing in the corresponding evidence from the nearby satellite settlement at Bow. A major concern will be the relationship between these outer settlements and the major conurbation, specifically if they can be seen as sources of food supply or perhaps intermediaries between the city and production centres located to the north and east.

Post-medieval studies should also demonstrate similarities/differences between this extended part of London and the main City/Southwark community. Certain similarities have already been broached, as the increasing use of sheep, and further studies here should aim to confirm or otherwise the general trend towards mutton starting in and then extending from the early post-medieval period. It was also stated that size changes have been seen elsewhere dated to this period and there are already intimations that similar changes will be observed at this site. Unlike the previous collection, there is less scope for comparison with the other Shadwell sites, however, there is a wealth of corresponding data from other sites in this area as well as from the major part of London.

Specialist activities, as butchers and/or crafts were noticeable amongst the Roman collections.

However, these clearly form a major contribution amongst the later assemblages. Some problems of interpretation were highlighted, particularly concerning the possible glue manufacturing waste, which will require some research. Further work on the probable butchers and tanning waste collections will include searching for assemblages with similar attributes. It would also be useful to determine whether butchers or various crafts were in operation in this area during this period, this based on historical research. Some evidence has already been quoted concerning data taken from baptismal records.

An obvious concern will be the status of the settlement/area of London during the Roman and post-medieval periods, no doubt illustrated in the former by the presence of the bath house although it is of interest that the evidence does appear to show a lower status within those areas, including this site, to the west of this structure. Several points suggest a rather lower status in the post-medieval era, including the specialist waste deposits, with no obvious indication of status improvement moving further into the post-medieval era. However, this will be looked at in greater detail, including a review of the best represented meats, specifically looking at the cuts of meat as demonstrated by Armitage (2005) looking at a 17th- and 18th-century dockland site in Limehouse.

Finally, a portion of the animal bones will require further identification occasioning a visit to one or more museum collections. Included here are the bones set aside as possibly associated with the guinea pig skull; a variety of large rabbit bones to be compared to the bones of known domestic rabbits with the aim to deduce if such animals were consumed at this site; the turtle carapace fragment hoping to identify the species and therefore its possible use; and finally the elephant tooth in order to clarify that it is indeed an Indian elephant and to deduce its age.

Bibliography

Albarella, U., 1997. 'Size, power, wool and veal: zooarchaeological evidence for late medieval innovations', in G. De Boe and F. Verhaeghe (eds.), *Environment and Subsistence in Medieval Europe*, Papers of the 'Medieval Europe Brugge 1997' Conference, Volume 9, 19-30.

Albarella, U., 2003. 'Tawyers, tanners, horn trade and the mystery of the missing goat', in P. Murphy and E.J. Wiltshire, *The Environmental Archaeology of Industry*. Symposia of the Association for Environmental Archaeology 20, Oxbow Books, 71-86.

Armitage, P.L., 2004a. 'Assessment of the animal bone', in A. Douglas, *Phased Summary and Assessment Document of the Excavations at 130-162 The Highway, London Borough of Tower Hamlets*, Pre-Construct Archaeology Unpublished Report, 376-379.

Armitage, P.L., 2004b. 'Assessment of the animal bone', in A, Douglas, *Phased Summary and Assessment Document of the Excavations at 172-176 The Highway, London Borough of Tower Hamlets*. Pre-Construct Archaeology Unpublished Report, 295-299.

Armitage, P.L., 2005. 'The mammal, bird and fish bones from the post-medieval contexts,' in D. Killock and F. Meddens, 'Pottery as plunder: a 17th century maritime site in Limehouse, London.' *Post-Medieval Archaeology* 39/1, 74-82.

Armitage, P.L., 2008. 'Assessment of the animal bone', in A. Haslam, *An Assessment of an Archaeological Excavation on Land at Borthwick and Payne's Wharf, Borthwick Street, Deptford, London Borough of Greenwich, SE8.* Pre-Construct Archaeology Unpublished Report.

Armitage, P.L., 2011. 'Animal Bone', in A. Douglas, J. Gerrard, and B. Sudds, *A Roman settlement and bath house at Shadwell, Excavations at Tobacco Dock and Babe Ruth restaurant, The Highway, London.* Pre-Construct Archaeology Monograph 12, 131-139

Armitage, P.L. and McCarthy, C., 1980. 'Turtle remains from a late 18th century well at Leadenhall Buildings'. *London Archaeologist* 4(1). 8-16.

Capon, L. and Rielly, K., in prep. 'Empire Warehouse, Bankside; evidence of bear-baiting waste from Bear Gardens 3 to Bear Gardens 5, 1522 to 1682'. *London Archaeologist*.

Cool, H.E.M., 2006. Eating and Drinking in Roman Britain. Cambridge.

Divers, D., Killock, D. and Armitage, P.L., 2002. 'Post-medieval development at 8 Tyers Gate, Bermondsey'. *London Archaeologist* 10(3), 69-75.

Douglas, A., 2004. *Phased Summary and Assessment Document of the Excavations at 130-162 The Highway, London Borough of Tower Hamlets.* Pre-Construct Archaeology Unpublished Report.

Douglas, A., Gerrard, J. and Sudds, B., 2011. A Roman Settlement and Bath House at Shadwell, , Excavations at Tobacco Dock and Babe Ruth restaurant, The Highway, London. Pre-Construct Archaeology Monograph 12.

Hahn, D., 2004. The Tower Menagerie. Penguin, New York.

Hamilton-Dyer, S., 2009. 'Animal Bones', in P. Dury and R. Simpson, *Hill Hall; A Singular House Devised by a Tudor Intellectual*. Society of Antiquaries/EH Monograph, 345-351.

Harcourt, R.A., 1974. 'The dog in prehistoric and early historic Britain'. *Journal of Archaeological Science* 1, 151-75.

Hinton, P. and Thomas, R., 1997. 'The Greater London publication programme'. *Archaeological Journal* 154, 196-213.

Izard, K. and Rackham, J., in prep. 'The animal bones', in G. Brown, B. Bishop, A. Douglas, J. Leary, V. Ridgeway and R. Taylor-Wilson, *Archaeology at the Lefevre Walk estate and adjacent sites at Old Ford.* Pre-Construct Archaeology Monograph Series

Levine, M., 1982. 'The use of crown height measurements and eruption-wear sequences to age horse teeth', in B. Wilson, C. Grigson and S. Payne (eds.), *Ageing and sexing animal bones from archaeological sites*. British Archaeological Reports British Series 109, 223-250.

McKendry, M., 1973. Seven Hundred Years of English Cooking. Treasure Press, London.

Lakin, D. with Seeley, F., Bird, J., Rielly, K., and Ainsley, C., 2002. *The Roman tower at Shadwell, London: a reappraisal*. Museum of London Archaeology Service Archaeology Studies Series 9.

Lawrence, M.J. and Brown, R.W., 1974. *Mammals of Britain: their tracks, trails and signs,* Blandford Press, London.

Larsson, E,. 2015 Charles Jamrach's Exotic Menagerie and the Victorian Wild Animal (http://animalhistorymuseum.org/exhibitsandevents/online-gallery/gallery-8-animals-and-empire/entergallery-8/ii-the-animal-resource/exotic-animal-trade/)

Liddle, J., 2008. 'The animal bones', in N. Bateman, C. Cowan and R. Wroe-Brown, *London's Roman amphitheatre: excavations at the Guildhall*. Museum of London Archaeology Service Monograph 35.

Locker, A., 1979. 'The animal bones', in W. McIsaac, I. Schwab and H. Sheldon, 'Excavations at Old Ford 1972-5'. *Transactions of the London and Middlesex Archaeological Society* 30, 83-86.

Maltby, M., 1989. 'Urban rural variations in the butchering of cattle in Romano-British Hampshire', in D. Serjeantson and T. Waldron (eds.), *Diet and Craft in Towns*. British Archaeological Reports British Series 199, 75-106.

Maltby, M., 1994. 'The meat supply to Roman Dorchester and Winchester', in A.R. Hall and H.K. Kenward (eds.), *Urban-rural connexions: perspectives from environmental archaeology*. Symposia of the Association for Environmental Archaeology 12, 85-102.

Masters, B.R., 1974. The public markets of the City of London surveyed by William Leybourn in 1677. London Topographical Society Publication 117.

Morris, J., Fowler, L. and Powers, N., 2011. 'A hospital with connections: 19th-century exotic animal remains at the Royal London Hospital'. *Post-Medieval Archaeology* 45(2), 367-373.

Pinney, J., 1999. *Cattle butchery practices in Roman Southwark*. Unpublished MSc Dissertation. Institute of Archaeology, University College London.

Rielly, K., 2010. Assessment of the animal bones from Drapers Gardens, City of London. Pre-Construct Archaeology Unpublished Report.

Rielly, K., 2011. 'The leather-production industry in Bermondsey - the archaeological evidence', in R. Thomson and Q. Mould (eds.), *Leather Tanneries - the archaeological evidence*. Archetype Publications Ltd in association with the Archaeological Leather Group, Exeter, 157-186.

Rielly, K., 2013. 'Domestic menagerie in Greenwich?' London Archaeologist 13(10), 281-2.

Rielly, K., 2014a. Assessment of animal bone recovered from 57 Broadway, Stratford, London Borough of Newham (BRW13). Pre-Construct Archaeology Unpublished Report.

Rielly, K., 2014b. Evaluation of animal bone recovered at Westminster Abbey Song School Relocation Project, No. 2 The Cloisters, Westminster Abbey, London SW1P 3PA (WSA14). Pre-Construct Archaeology Unpublished Report.

Rielly, K., 2015. Report on the animal bones from 57 The Broadway, Stratford, London Borough of Newham. Pre-Construct Archaeology Unpublished Report.

Rielly, K., 2016. Assessment of Animal Bone Recovered from the Eastern Triforium Galleries, Westminster Abbey, Westminster. Pre-Construct Archaeology Unpublished Report.

Rielly, K., in prep a. 'The animal bones', in S. Teague, *Life in medieval and post-medieval Southwark*. The Thameslink Project Monograph 2. Oxford Archaeology- Pre-Construct Archaeology.

Rielly, K., in prep b. 'The animal bones', in A. Haslam, *Excavations at the Elephant and Castle Leisure Centre, London Borough of Southwark*. Pre-Construct Archaeology Unpublished Report.

Rielly, K., in prep c. 'The animal bones', in A. Douglas, *Excavations at Bermondsey Square, London Borough of Southwark*. Pre-Construct Archaeology Monograph Series.

Rielly, K., 2005. 'The animal remains', in B. Yule, *A prestigious Roman building complex on the Southwark waterfront, Excavations at Winchester Palace, London, 1983-90*, Museum of London Archaeology Service Monograph 23, 158-167.

Rielly, K., and Ainsley, C., 2002. 'Animal bone', in D. Lakin with F. Seeley, J. Bird, K. Rielly and C. Ainsley, *The Roman tower at Shadwell, London: a reappraisal*. Museum of London Archaeology Service Archaeology Studies Series 8, 60-63.

Rixson, D., 1971. 'The animal bones', in H.L. Sheldon, 'Excavations at Lefevre Road, Old Ford, E3, Sept 1969-June 1970'. *Transactions of the London and Middlesex Archaeological Society* 23, Part 1, 72-74.

Rixson, D., 1972. 'The animal bones', in H.L. Sheldon, 'Excavations at Parnell and Appian Road, Old Ford, E3, Feb-April 1971'. *Transactions of the London and Middlesex Archaeological Society* 23, Part 2, 136-140.

Rixson, D., 2000. The History of Meat Trading. Nottingham University Press.

Serjeantson, D., 1989. 'Animal remains and the tanning trade', in D. Serjeantson and T. Waldron (eds.), *Diet and Craft in Towns*. British Archaeological Reports British Series 199, 129-146.

Sykes, N. and Curl, J., 2010. 'The Rabbit', in N. Sykes and T.P. O'Connor (eds.), *Extinctions and Invasions: A social history of British fauna*. Windgather Press for Oxbow Books, Exeter, 116-126.

Thomas, R., Holmes, M. and Morris, J., 2013. "So bigge as bigge may be": tracking size and shape change in domestic livestock in London (AD 1220-1900). *Journal of Archaeological Science* 40(8), 3309-3325.

Trow-Smith, R., 1957. A history of British livestock husbandry to 1700. Routledge and Kegan Paul, London.

An Archaeological Assessment of Land at the Highway, Wapping Lane, Pennington Street and Chigwell Hill, London E1, London Borough of Tower Hamlets (Parcel 4)

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West, B., 1982. 'Spur development: Recognising caponised fowl in archaeological material', in B. Wilson, C. Grigson and S. Payne (eds.), *Ageing and sexing animal bones from archaeological sites*, British Archaeological Reports British Series, 255-261.

West, B., 1995. The case of the missing victuals. Historical Archaeology 29(2). 20-42.

Wilkinson, R., 1825. Londina Illustrata.

Wilson, C.A., 1973. Food and drink in Britain. Constable, London.

Wilson, B., 1984. 'Medieval and Post-Medieval animal bones and marine shells', in T.G. Hassall, C.E. Halpin, M. Mellor and others, 'Excavations in St Ebbe's, Oxford, 1967-1976, Part II: Post-Medieval Domestic Tenements and the Post-Dissolution Site of Greyfriars'. *Oxoniensia* 49, 265-268.

Yalden, D.,1999. The history of British mammals. London.

Yeomans, L.M., 2006. A zooarchaeological and historical study of the animal product based industries operating in London during the post-medieval period. Thesis (Phd Archaeology) University College London.

Phase:	3.1	3.2	3.3	3.4	3.5	3.6	4
N bones	5	118	258	325	700	1183	56
%M+P	20.0	7.6	11.6	8.0	7.9	6.5	0.0
Phase:	5	5.1	5.2	6.1	6.2	7.1	7.2
N bones	79	5610	1654	1755	2662	38	39
%M+P	1.3	1.3	3.6	3.2	4.3	60.5	0.0

Table 1: Percentage abundance of abraded bones throughout the phase sequence showing data for the total hand collected assemblage; where N is the number of bones and % is the percentage of bones showing a moderate to poor (M-P) level of abrasion (and see text for method used).

Phase:	3.1	3.2	3.3	3.4	3.5	3.6	4
Dog	1	3	2	8	10	6	1
Rodent	0	0	0	0	0	0	0
% gnawed	20.0	2.5	0.8	2.5	1.4	0.5	1.8
Phase:	5	5.1	5.2	6.1	6.2	7.1	7.2
Dog	1	10	43	22	63	0	0
Rodent	0	0	1	3	19	0	0
% gnawed	1.3	0.2	2.7	1.4	3.1	0.0	0.0

Table 2: Percentage distribution of gnawed bones showing quantities of bones chewed by dogs and rodents in each phase with percentages calculated by combining all gnawed bones divided by the totals given in Table 1 x 100.

Phase:	2	3	3.1	3.2	3.3	3.4	3.5	3.6
Feature type								
							171	
Pit			2(3)	21(14)	11	97(38)	(1003)	76(119)
Ditch/Drain			(412)	16	83(16)	25(1)	4	65(30)
Well					1(38)		245	
Other cut					6		17	19
Posthole			1(1)	6(21)	23(5)	1	9	4
Beamslot					5			
Construction cut					2(11)			13
Masonry					2			
								1006
Layer	2(1)	10	2	75(47)	125(29)	202(93)	254(141)	(1008)
							700	1183
Grand Total	2(1)	10	5(416)	118(82)	258(99)	325(132)	(1144)	(1157)

Table 3: Distribution of hand collected and sieved (in brackets) bones by feature type within the Prehistoric and Roman phases.

Phase:	2	3	3.1	3.2	3.3	3.4	3.5	3.6
Species								
Cattle		5	2	40	89	116	343	442
Equid		1			7	9	6	4
Cattle-size	1	2	2	61	122	165	290	681
Sheep/Goat		1	1	6	9	12	22	17
Sheep						1		
Pig		1		7	5	11	17	21
Sheep-size	1			4	26	8	14	13
Red deer						1		4
Dog						1	3	1

Rabbit							1	
Small mammal							1	
Chicken							3	
Teal						1		
Total	2	10	5	118	258	325	700	1183

Table 4: Hand collected species abundance within the Prehistoric and Roman phases

Phase:	2	3.1	3.2	3.3	3.4	3.5	3.6
Species							
Cattle			3	3	6	119	135
Equid		12					
Cattle-size		403	53	29	75	907	830
Sheep/Goat		1	4	1		4	16
Pig			2	1		1	10
Sheep-size			16	62	51	112	165
Dog			1				1
Small mammal			1	1			
Small rodent	1			1			
Chicken			1				
Snipe						1	
Uniden bird				1			
Amphibian			1		·		
Total	1	416	82	99	132	1144	1157
N samples	1	3	8	12	8	8	11

Table 5: Sieved species abundance within the Prehistoric and Roman phases

Period (date)	Date	Phase	Cattle	Sheep/Goat	Pig	N
			%	%	%	
Roman	3-4	3.2-3	82.7	9.6	7.7	156
	4	3.4-5	87.9	6.7	5.4	522
	4	3.4-5*	81.5	10.1	8.4	335
	e5	3.6	92.1	3.5	4.4	480
	e5	3.6*	84.4	7.1	8.5	224
Early post-medieval	17	5.1	94.2	5.3	0.5	4426
	17	5.1*	61.2	32.1	6.7	134
	l17-e18	5.2	44.6	44.9	10.5	897
	l17-e18	5.2*	43.4	45.4	11.2	762
Late post-medieval	18	6.1	30.4	55.5	14.1	751
	l18-e19	6.2	28.3	56.6	15.1	1076

Table 6: Percentage abundance of major domesticates within the larger phase collections / combinations, with dates by century AD, where e is early and I is late and where N is the sum of cattle, sheep/goat and pig bones from that phase and % equals sum of individual species/N x 100 (hand collected bones); 3.4-5*, 3.6*, 5.1* and 5.2* exclude the butchers and/or industrial/craft waste collections, as described in Tables 6 and 7 (all bones).

Phase:	3.5	3.6	5.1						5.2	
Parent Context:	[1157]	[974]	[441]	[470]	[307]	[316]	[362]	[367]	[1565]	[945]
Skeletal part										
Skull	7	4	326	15	13	1	4	257	20	2
Mandible	44	28	243	47	26	2	13	320	7	2
Maxilla	9		5					2	3	
Loose teeth:										

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Phase:	3.5	3.6	5.1						5.2	
Mandibular	3	13	138	29	4	2	6	204		1
Maxillary	10	8	56	2	1		1	70		
Metacarpal	16	44	5					4	1	7
Metatarsal	24	40	2	1			1	1		5
Metapodial		6	4	2				5		
1st phalange	1	5	607	68	18	4	3	181	5	
2nd phalange	1	3	460	13	8	1	1	92	1	
3rd phalange		2	510	25	9	1	1	115	2	
N head and feet	115	153	2356	202	79	11	30	1251	39	17
All cattle bones	186	246	2419	202	80	13	32	1340	46	23
%head and feet	61.8	62.2	97.4	100	98.7	84.6	93.7	93.3	84.8	73.9
All bones	243	635	2683	206	92	18	66	2278	178	42

Table 7: Skeletal distributions within particular cattle assemblages dated to Phases 3.5, 3.6, 5.1 and 5.2 where N is the number of bones and All refers to all bones in that feature. The bones from Phase 5.1 [316] and 5.2 [945] can also be included, these with 11 (84.6%) and 17 (73.9%) head and foot bones out of 13 and 23 cattle bones, and total counts of 18 and 42 bones respectively.

Phase:	4	5	5.1	5.2	6.1	6.2	7.1	7.2
Feature type								
			5556			1619		
Pit	38(1)		(5145)	874(424)	814(660)	(725)	38	
Cesspit				4(63)	699(446)	759(236)		
Tanning pit					14(66)			
Sunken b-lined feature				11				
Ditch/Drain				29	5	1		
Well				605(378)	63(50)	122(79)		
Other cut			9	11	9	(30)		
Timber structure					15(73)			
Posthole			12			6		
Construction cut				21	98	70		39
Robbing trench				1		81		
Layer	18	79	33	77(32)	15(11)	4		
Garden feature					23			
Garden layer			_	21				
Grand Total	56	79	5610 (5145)	1654(897)	1755 (1306)	2662 (1070)	38	39

Table 8: Distribution of hand collected and sieved (in brackets) bones by feature type within the medieval and post-medieval phases.

Phase:	4	5	5.1	5.2	6.1	6.2	7.1	7.2
Species								
Cattle	19	9	4168	400	228	304	6	24
Equid	2		4	93	3	1		
Cattle-size	29	43	1094	431	355	481	2	6
Sheep/Goat	2	12	234	403	417	609	27	4
Sheep				1		2		
Pig	1	2	24	94	106	163	2	
Sheep-size	2	12	45	162	303	596	1	3
Red deer					1			
Fallow deer			1					

Phase:	4	5	5.1	5.2	6.1	6.2	7.1	7.2
Deer species						1		
Dog			23	3	27	14		
Cat	1		4	22	207	163		
Hare						4		
Rabbit		1	1	4	15	70		
Small mammal			10	8	39	81		
Black rat						3		
Rat					3	17		
Guinea pig					1			
Whale				1				
Chicken				11	31	102		1
Chicken-size			1		4	6		
Goose				7	3	18		1
Goose-size				11				
Mallard				1	10	15		
Turkey					1	2		
Widgeon					1			
Dove				1		5		
Crow				1				
Small crow			1					
Turtle						1		
Total	56	79	5610	1654	1755	2662	38	39

Table 9: Hand collected species abundance within the medieval and post-medieval phases

Phase:	4	5.1	5.2	6.1	6.2
Species					
Cattle	1	530	32	36	15
Cattle-size		4501	300	276	248
Sheep/Goat		51	53	189	108
Pig		3	7	25	23
Sheep-size		56	438	551	395
Dog			2	12	11
Cat			18	48	32
Hare			1		
Rabbit		1	4	4	12
Small					
mammal			26	126	185
Mole					1
Mouse					1
Black rat				2	
Rat				3	13
Small rodent			1	4	3
Chicken		1	6	4	4
Chicken-size		2	7	22	17
Goose;			1	1	
Goose-size				1	
Mallard				2	1
Teal			1		
Small passer					1
Total	1	5145	897	1306	1070

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N samples	1	ρ	15	16	17
N samples	I	0	l io	10	17

Table 10: Sieved species abundance within the medieval and post-medieval phases

Phase:	5.1		5.2		6.1	6.2	7.1
Parent Context:	[441]	[367]	[540]	[1565]	[845]	[834]	[1705]
Skeletal part							
Skull	9	16		23		2	
Mandible	16	50		17	2	3	1
Maxilla	2	2		4	1	1	1
Loose teeth	11	52	2				
Metacarpal	1	2	13		1	1	1
Metatarsal	1		23		37	12	20
Metapodial					2		
1st phalange	1	1			1		
N head and feet	40	123	38	44	44	19	23
All S/G bones	47	129	39	56	56	31	27
%head and feet	85.1	95.3	97.4	78.6	78.6	61.3	85.2
All bones	2683	2278	42	178	87	68	37

Table 11: Skeletal distributions within particular sheep/goat (S/G) assemblages dated to each of the post-medieval phases with the exception of Phase 7.2 where N is the number of bones and All refers to all bones in that feature.

Phase:	5.1	5.2		6.1		6.2	
Trait:	L	S	L	S	L	S	L
Species							
Cattle	64	1	27	1	35	18	51
Cattle-size	2	1	14		27	42	31
Sheep/Goat			3		18	14	11
Pig	2		1		7	9	10
Sheep-size	3			1	2	10	1
Chicken				1			7
Goose							1

Table 12: Distribution of 'large' (L) and sawn (S) bones by species and phase

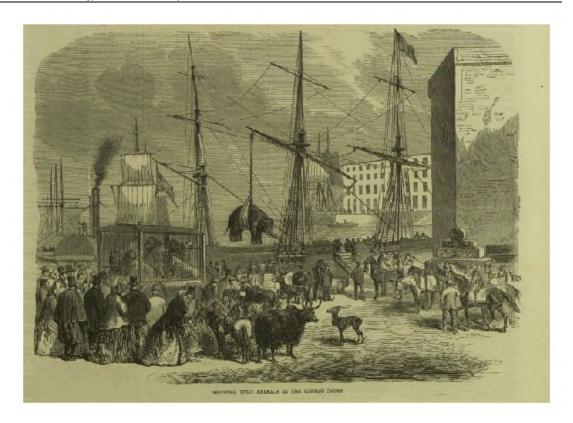
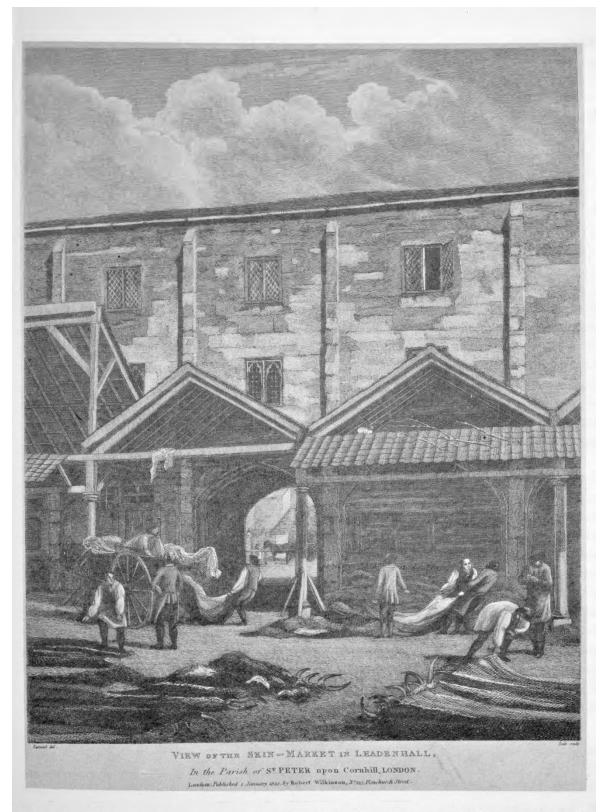


Figure 1: The caption beneath this illustration reads 'Shipping Wild animals in the London Docks', this taken from the London Illustrated News (London: England) May 21st 1864. (See http://animalhistorymuseum.org/exhibitsandevents/online-gallery/gallery-8-animals-and-empire/enter-gallery-8/ii-the-animal-resource/exotic-animal-trade)



I. Leadenhall Market: view of the Skin Market, showing the old hall and the stalls. Line engraving by Dale after Samuel. (From R. Wilkinson. Londina Illustrata, 1825).

Figure 2: An early 19th-century illustration of the Skin Market in Leadenhall showing collections of cattle hides with horns still attached (taken from Wilkinson 1825 in Masters 1974, 23).

APPENDIX 15: FISH BONE ASSESSMENT

Philip L. Armitage

Introduction

This report presents the results of the analysis of 2,482 fish bone elements from the Phase 5 and Phase 6 contexts at the TBF10 site; dating from the 18th and 19th century.

Of the 2,482 fish bones, 2,181 (87.9%) were derived from sieved samples and 301 (12.1%) collected by hand during the excavation; the later notably biased towards larger skeletal elements from larger species. Among the sieved material from both phases there is a predominance of herring and sprat bones making up almost two thirds (64%) of the total. These bones are mostly from very small, immature fish and represent "whitebait" (see below).

Methods

The TBF10 specimens were examined under low power (10X magnification) using a Motic binocular microscope. Identifications were made using the author's modern comparative osteological collections and with reference to established published works (Newdick 1979; Libois & Hallet-Libois 1988; Watt et al. 1997; Klippel & Sichler 2004, Radu 2005; Wouters et al. 2007). Reference was also made to the University of Nottingham's Archaeological fish on-line resource. Where species could not be determined in certain of the gadid (cod family) bones, these were categorised as either "large gadids" or "small gadids" depending on size, with the latter probably comprising mostly immature whiting. Similarly, the category "plaice/flounder" was applied for recording purposes when the precise species identification was uncertain. Omitted from the assessment were spines/rays/ribs and highly fragmented cranial bones lacking diagnostic features.

Microsoft Excel spreadsheets showing the complete sets of recorded NISP data for species represented in the sieved samples and hand collected material from each phase/context were prepared for the site archive. Measurements (in mm) taken on selected specimens using Draper dial callipers (graduated 0.02mm) (system of Morales and Rosenlund 1979) were also entered into the site archive sheets.

Results

Numbers of species represented

Table 1 provides a summary of the numbers of identified specimens present (NISP) for each species in each of these phases. The recovered fish bone elements (Phases 5 and 6 sieved and hand collected combined) represent the remains of 19 taxa: 11 marine, 5 migratory/estuarine and 3 freshwater species.

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Quantification of the numerous very small/tiny *clupeid* (sprat & herring) vertebrae present in sample <507> context [1545] Phase 5, involved extrapolation based on a subsample ¼ total sample. NISP data for the other species in sample <507> reflect their true (complete) count.

Preservation & modification

Excluding the fragmented spines/rays/ribs, preservation of the fish bone overall was good. However, eroded/leached/abraded cod bones were present in Phase 5 contexts [134] and [796] (3 specimens), and in Phase 6 context [2167] (6 specimens). Evidence of butchery (chopping) was found only in cod bones:

Phase 5 context [1545] - 1 vertebra

Phase 6 context [2171] - 1 cleithrum & 1 postcleithrum

The incidence of burnt fish bone was remarkably low (0.2% total NISP); all affected were calcined vertebrae (2 herring, 2 plaice and 1 cod). Nine herring vertebrae and a single salmon vertebra had been chewed (masticated).

Interpretation

Full interpretation and discussion will require detailed analysis of the material (see below) but preliminary observations indicate the fish bones are discarded domestic (kitchen/table) food waste, revealing the inhabitants enjoyed a wide variety of marine and estuarine fish, supplemented to a much lesser extent by those from freshwater sources. The presence of immature sprats/herrings is worthy of note as these represent what was known as "whitebait". According to Mrs Beeton (1869, 175) these "highly esteemed little fish" appeared "in innumerable multitudes in the River Thames, near Greenwich and Blackwall, during the month of July" ... fried in a pan with lard and flour and served with lemon and brown bread and butter, they formed a "tempting dish to vast numbers of Londoners who flocked to the various taverns of these places in order to gratify their appetites". From the mid 18th century through to the late 19th century, the whitebait fishery supplying Londoners was an extensive and flourishing enterprise (Wheeler 1979, 70-78) and it appears the Tobacco Dock inhabitants were among those who enjoyed this fish delicacy.

Research questions and recommendations for future work

Based on the assessment, the assemblage merits detailed recording and full analysis focusing on the following aspects:

What can the fish bones tell us about the socio-economic status of the inhabitants?

The consumption pattern should be considered in the context of the contemporary (18th and 19th century) market prices of different fish. Of particular interest for example, is the presence of several

large sized plaice and turbot (based on comparison with modern comparative specimens) suggesting a certain degree of affluence, as these would have been costly food items in London at that period. In general, sizes of the various fish represented in the TBF10 assemblages should be calculated from the measurements taken on selected fish bone elements employing the regression formulae in the following published sources: Wheeler and Jones (1976) – cod; Jones and Scott (1985) - whiting, Libois *et al.* (1987) – freshwater eel and Klippel & Sichler (2004) - mackerel.

Fresh v. preserved fish

Head to body part representation (anatomical signatures) for selected species should be calculated after the method of Locker (2001, 159-160) in order to determine whether these fish were supplied/purchased fresh or in preserved form. Such information together with the size data will provide clues as to the fisheries supplying these fish (e.g. whether the cod was from inshore or distant water fisheries). Recognition of dried salted cod imported from distant water fisheries may be made on the basis of skeletal elements present and their pattern of butchery – useful references include Brinkhuizen (1994), Cumbaa (1979), Klippel and Sichler (2004) and Harland (2009).

Comparison with other post-medieval assemblages.

In the published archaeological literature, Roman, medieval and early post-medieval fish bone assemblages from London and elsewhere in Britain are available for comparative work. However, there is currently a distinct paucity/absence of comparable material dating from 1700s to 1900. The Tobacco Dock fish bone from Phases 5 and 6 contexts therefore potentially will make a significant contribution to our knowledge of British fisheries and role of fish in the diet during this more recent time span. Although these aspects are more widely covered in historical sources the value of the TBF10 material lies in providing closer (more focused) insight into such aspects from the perspective of households in a particular locality near London.

Bibliography

Brinkhuizen, D.C., 1994. 'Some notes on fish remains from the late 16th century merchant vessel Scheurrak SO1', in W. van Neer (ed.), *Fish Exploitation In The Past*. Proceedings of the seventh meeting of the ICAZ Fish Remains Working Group. ROB/AAO, 197-205.

Cumbaa, S.L., 1979. An Analysis of Animal Bones from the 1696 Wreck of HMS Sapphire, Bay Bulls, Newfoundland. Unpublished Report Parks Canada Ref. 32.

Jones, A.K.G. and Scott, S.A., 1985. 'The fish bones', in M. Atkins, A. Carter, and D.H. Evans, *Excavations in Norwich 1971-78 Part II*. East Anglian Archaeology Report 26, 223-228 & microfiche MFT.26.

Klippel, W.E. and Sichler, J.A., 2004. 'North Atlantic fishes in inland context: pickled mackerel (*Scomber scombrus*) in the historic period'. *Historical Archaeology* 38(4), 12-24.

Harland, J.F., 2009. *Technical Report: The Fish Bone from St. John's Triangle, Cambridge (site code SJT07)*. Reports from the Centre for Human Palaeoecology, University of York 2009/01.

Libois, R.M., Hallet-Libois, C. and Rosoux, R., 1987. 'Éléments pour l'identification des restes crâniens des poissons DulÇaquicoles de Belgiquie et du Nord de la France.' 1 – Anguilliformes, Gastéiformes, Cyprinodontiformes et Perciformes. Fiches D'Ostéologie Animale Pour L'Archaéologie No. 3. Centre de Recherches Archéologiques – CNRS (France).

Libois, R.M. and Hallet-Libois, C., 1988. 'Éléments pour l'identification des restes crâniens des poissons DulÇaquicoles de Belgiquie et du Nord de la France.' 2 – *Cypriniformes*. *Fiches D'Ostéologie Animale Pour L'Archaéologie No. 4*. Centre de Recherches Archéologiques – CNRS (France).

Locker, A., 2001. *The Role of Stored Fish in England 900-1750 AD; the Evidence from Historical and Archaeological Data*. Ph.D. Thesis, Dept. Archaeology, University of Southampton, published by Publishing Group Limited, Sofia, Bulgaria.

Morales, A. and Rosenlund, K., 1979. Fish Bone Measurements. Copenhagen, Steenstrupia.

Newdick, J., 1979. The Complete Freshwater Fishes of the British Isles. London, Adam & Charles Black.

Radu, V., 2005. Atlas for the Identification of Bony Fish Bones from Archaeological Sites. Asociaţia Română de Arheologie Studii de Preistorie Supplementum 1/2005.

Watt, J., Pierce, G.J. and Boyle, P.R., 1997. *Guide to the Identification of North Sea Fish Using Premaxillae and Vertebrae.* International Council for the Exploration of the Sea (ICES) Research Report No. 220.

Wheeler, A., 1979. The Tidal Thames The History of a River and its Fishes. London, Routledge & Kegan Paul.

Wheeler, A. and Jones, A.K.G., 1976. 'Fish remains,' in A. Rogerson, *Excavations at Fuller's Hill, Great Yarmouth*. East Anglian Archaeology 2, 208-224.

Wheeler, A. and Jones, A.K.G., 1989. *Fishes*. Cambridge, Cambridge University Press. Cambridge Manuals in Archaeology.

Wouters, W., Muylaert, L. & van Neer, W., 2007. 'The distinction of isolated bones from plaice (*Pleuronectes platessa*), flounder (*Platichthys flesus*) and dab (*Limanda limanda*): a description of the diagnostic characters'. *Archaeofauna* 16, 33-72.

Mrs. Beeton, I., 1869. The Book of Household Management. London, Ward, Lock, and Tyler.

Internet source for the species identifications: Archaeological Fish Resource, Dept. Archaeology, University of Nottingham. http://fishbone.nottingham.ac.uk/index.aspx

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Phase		5.2	6.1	6.2	5.2	6.1	6.2	All
Collection		Н	Н	Н	S	S	S	H+S
Species								
Marine:								
Gadus morhua	cod	3	10	82	2	3	96	196
Merlangius merlangus	whiting			3		17	17	37
Melanogrammus aeglefinus	haddock			10		2	11	23
Gadidae	large/medium gadoid			2	2		8	12
Gadidae	small gadoid (mostly v.small whiting)			11	2	3	33	49
Pleuronectes platessa	plaice	13	3	63	3	14	45	141
Pleuronectidae	flatfish (plaice/flounder)		1	37		64	25	127
Pleuronectidae	small flatfish (sp.indet.)			22	7	21	151	201
Scophthalmus maximus	turbot			2			1	3
Solea solea	common sole					4	2	6
cf. Limanda limanda	dab			1				1
Scomber scombrus	mackerel		2	3	21	22	10	58
Raja clavata	thornback ray (roker)			14	2	7	70	93
Elasmobranch	vertebrae = probably roker			12	1	1	26	40
Clupea harengus	herring			1	35	113	382	531
family Triglidae	gurnard (sp.indet.)						1	1
Subtotal		16	16	263	75	271	878	1519
Migratory & estuarine:								0
Sprattus sprattus & Clupea harengus	young sprats & herring (see note a)				200	501	163	864
Anguilla anguilla	freshwater eel				20	18	35	73
Dicentrarchus labrix	sea bass					1		1
Platichthys flesus	flounder			6		1	9	16
Salmo salar	salmon					1	4	5
Subtotal				6	220	522	211	959
Freshwater:								0
Esox lucius	pike						1	1
Rutilus rutilus	roach						2	2
Leuciscus cephalus	chub				1			1
Subtotal					1		3	4
								0
Total		16	16	269	296	793	1092	2482

Table 1: Numbers of identified specimens (NISP) by taxa and phase (H = hand collected; S = sieved)

Notes: (a) Mostly immature sprats but also some immature herring = "whitebait" (see report) b) Quantification of the "whitebait" vertebrae (500+) for context [1545] <507> was estimated by extrapolation based on subsampling (1/4 total sample)

APPENDIX 16: ENVIRONMENTAL ASSESSMENT

Marta Pérez Fernández

Introduction

This report summarises the findings from the assessment of bulk samples taken from various contexts during an excavation at Tobacco Dock, London. The aim of this environmental assessment is to: 1) provide an overview of the contents of the bulk samples, 2) determine the environmental potential of these samples 3) identify if further analysis needs to be undertaken.

Methodology

A total of 130 bulk samples were processed by Pre-Construct Archaeology Ltd using the floatation method. The samples were taken from a range of archaeological features including pits, ditches, postholes and other features (rubbish pits, cess pits, wells, etc.). A 300µm mesh was used to capture the flot (light fraction) and a 1mm mesh for the residue (heavy fraction). The residues were dried, sieved at 1, 2 and 4mm and then sorted to retrieve artefacts and un-floated organic remains which were then bagged and labelled. The abundance of each class of material was recorded and entered into the database. After drying the flots were scanned for material under a binocular microscope and the results recorded.

Flots were scanned for the presence of charred grain, chaff, weed seeds, charcoal, molluscs and other environmental remains. These were recorded on a non-linear scale to denote 'abundance': - Occasional (up to 5 items), 2- fairly frequent (5-25), 3- frequent (25-100), 4- abundant (>100). A note was also made of all other inclusions, i.e. coal, slag, hammerscale, bones, *etc.* The results of the assessment of the flots are presented in Table 1 and Table 2.

Residues were scanned for the presence of charred plant remains and artefacts. The smaller soil fractions were scanned with a magnet to find hammer-scale and/or metal work. When the residue was sorted and all the finds extracted, the rest of the sediment was discarded. A similar non-linear scale denoting abundance was applied, and a note made on each context record. The artefacts found were giving to the finds department for further process and analysis.

Results

All the samples processed produced flots ranging from than 1ml to 410ml (Table 1 and Table 2).

The excavation took place in two different periods of time, the flots are divided in: flots from the 1st phase of the excavation (Table 1), and flots from the 2nd phase of the Tobacco Dock excavation (Table 2).

1st phase flots

57 flots were assessed for the first phase of excavation at Tobacco Dock. Wood charcoal was presented in all of the flots, and most of them produced fragments large enough to be identifiable to species level. Charcoal could provide some information about the fuel used during the different periods of the site.

Some of the samples: <3>, <18>, <19>, <21>, <46>, <48>, <56>, <60>, <80>, <131>, <137>, <149>, <152>, <153>, <158> and <203> contained charred grain remains. The majority were too fragmented, distorted and burnt to be identified. However, preliminary identification of some of them suggest: barley, undetermined wheat and possible oat. No chaff has been found in the flots indicating that the grain was not processed onsite. The fragmentation of the cereals also indicate that they were burnt repeatedly or at very high temperatures.

Other charred seeds were found in samples <18>, <100> and <119>, they have not been identified. Sample <63> contained a possible legume seed and sample <113> a charred hazelnut shell fragment.

All of the flots (except samples: <32>, <70>, <123>, <137>, <143>. <150> and <206>, have produced uncharred seeds. These are identified as: Sambucus nigra (Elder), Chenopodium album (Fat-hen), Polygonum/Rumex sp. (knotweed/sorrel/dock), Rubus fruticosus (Brambles) and Urtica dioca (nettle). These could be representative of the environment around the site and arrived to the site by diverse methods: air, contamination, human transport, etc. Other uncharred seeds found: Ficus (Fig) and Vitis vinifera (grape-vine) are more likely to have been brought for human consumption to the site and/or part of domestic waste.

Most of the flots contained some amount of coal, hammerscale and slag, indicating that some industrial activity was carried on the site through time or the disposal of industrial waste in that area.

2nd phase flots

72 flots were assessed for the second and last phase of the excavation at Tobacco Dock.

All the samples, except sample <506> and sample <574>, contained wood charcoal, the majority too small to be identifiable but some of the flots had pieces large enough to be identifiable to species level.

Most of the flots had also few charred grains, but samples <549> and <551>, both from an occupational layer, had a large amount of grains. Most of the grains are too burnt and fragmented to be identified but within them there are some possible barley and oat grains.

Some samples had a large amount of uncharred seeds, these can be divided broadly into two categories: seeds that could provide information about the environment around the site and seeds

that provide economic information. Sambucus nigra (Elder), Chenopodium album (Fat-hen), Polygonum/Rumex sp. (knotweed/sorrel/dock), Rubus fruticosus (Brambles), Aethusa cynapium (Fool's Parsley) and Urtica dioca (nettle) seeds can be included in the first group. Ficus (Fig), Malus sp (Apples) and Vitis vinifera (grape-vine) seeds were probably brought to the site for consumption of as part of domestic refuse.

Like the flots from the 1st phase of the excavation, these ones also have coal and hammerscale, which can be interpreted as industrial waste or could indicate that industrial activities were carried out on site.

Discussion

The assessment has revealed large amounts of wood charcoal but an overall paucity of other charred macrobotanical remains.

Charred grains were present in a number of samples although in very small quantities. The scarce assemblage included some barley (*Hordeum*, sp.), possible oat (cf. *Avena* sp) as well as some indeterminate cereal grains. The small assemblage of charred crop remains is far too limited to provide significant information relating to agricultural economy.

The assessment has confirmed the presence of a large quantity of uncharred macrobotanical remains and wood charcoal and a limited amount of other charred seeds. Uncharred remains can be preserved by waterlogging or in anoxic conditions. Notes made during the initial assessment of the samples and features indicated that although some of the deposits were moist, they were not waterlogged. It is therefore more likely that the uncharred botanical remains were preserved in anoxic conditions.

Many of the uncharred weeds found are tolerant of a range of ecological conditions although most are particularly common on arable or disturbed/waste land. These herbaceous taxa include: fat hen, knotgrass, common chickweed and nettle. Many of these plants have edible leaves and may have been collected from naturally occurring vegetation in the local area.

The single hazel nut shell fragment may represent food waste or naturally occurring hazel trees in the vicinity. Bramble or raspberry (*Rubus fructicosus*) and elder (*Sambucus nigra*) may also represent food waste or plants growing in hedges, scrub or at woodland margins. Fig (*Ficus carica*) seeds can be linked to food with more certainty as the fruit of this plant was imported, almost certainly in a dried form.

If the seeds remains are considered contemporary with the site occupation, some of the remains could represent food or kitchen waste, providing limited evidence for the consumption of fruits such as figs, blackberries/raspberries and apples. The presence of blackberries/raspberries could also simply represent the natural vegetation growing in the surrounding area. In fact the assemblage

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contained several plants commonly found on disturbed/waste grounds and Elder occurs as a hedgerow plant too.

Recommendations

These samples can provide some economic or environmental information. It is recommended that the samples where the wood charcoal can be identified to be sent to a charcoal specialist. This will provide information about the fuel used on site.

Table 1: Assessment of 1st phase flots TBF10

					Flot		
Sample number	Context number	Feature	Vol (ml)	Charcoal	Unchar. Seeds	Grains/charred seeds	Other
1	6	Well	20	3	(3)Vitis, (2)Rubus, (1)Chenopodium, (2)Sambucus, (2)Ficus, (1)Nettle		(1)modern snails, (1)hammerscale
2	66	Well	25	4	(2)Vitis, (3)Ficus, (1)Prunus, (2)Rubus, (2)Chenopodium, (2)others		(3)roots, (2)coal, (1)small bones
3	111	Pit	295		(4)Sambucus, (3)Rubus, (2)Ficus, (2)others	2 (poss Avena)	(4)roots, coal and hammerscale.
5	156	Pit	18	4	(3)Sambucus, (1)Rubus		(3)roots, (4)coal
6	170	Pit	81	3	(2)Sambucus		(4)coal, (2)hammerscale
7	181	Pit	60	3	(3)Sambucus, (1)Chenopodiaceae		(4)coal, (2)hammerscale, (2)roots.
8	173	Cess pit	2		(4)Sambucus.		
9	195	Pit	29	3	(3)Sambucus, (2)other		(4)coal, (2)hammerscale.
10	148	Well	30	3	(4)Rubus, (3)Sambucus, (1)Chenopodiaceae, (1)Vitis, (1)Aethusa, (1)Ficus		(4)coal, (2)roots.
12	259	Rubbish pit	3	2			
13	262	Well	25	3	(2)Sambucus, (1)Chenopodiacea, (1)Vitis		(4)coal
15	308	Well	52	4	(2)Rubus		(4)coal
17	320	Pit	95	2	(2)Sambucus, (2)Rubus		(4)coal, (2)slag
18	348	Well	83	4	(2)Vitis, (3)Rubus, (3)Sambucus, (2)Ficus, (1)Chenopodiaceae, (1)Aethusa, (1)Rumex/poly.	1, (1) other charred seeds	(4)coal, (2)roots, (1)hammersccale, (1)slag.
19	359	Pit	55	4		1	
		_		-	(2)Sambucus, (2)Rubus,	1	(3)coal, (3)insect remains, (2)slag.
20	366	Pit	16	4	(2)Sambucus, (1)Rumex/poly		(4)coal, (2)slag, (1)hammerscale, (2)small bones
21	382	Layer	6	3	(2)Sambucus, (1)Chenopodiaceae, (1)Rumex/poly	1	(4)coal, (3)roots, (2)hammerscale.
22	411	Pit	15	3	(2)Sambucus		(4)coal, (2)slag, (2)bone fragments
32	439	Bone pit	11	4			(2)coal
35	469	Pit	53	4	(1)Rumex/poly, (2)Ficus, (2)Sambucus, (1)Rubus.		(4)coal, (2)roots, (1)small bones.

					Flot		
Sample number	Context number	Feature	Vol (ml)	Charcoal	Unchar. Seeds	Grains/charred seeds	Other
		Linear		_			
43	508	feat	3.5	2	(1)Chenopodium, (1)others		
46	516	Layer	10	2	. , , , , , , , ,	1 (barley and rye)	(3)coal, (2)roots, (2)hammerscale.
48	529	Pit	9	2	(1)Sambucus, (1)Urtica, (1)Rumex/poly, (1)Sedum, (1)Sonchus	1	(4)coal, (2)hammerscale
49	532	Layer	4	2	(2)Sambucus, (1)Rubus, (1)Chenopodium, (1)Prunus		(3)coal, (2)roots.
56	564	Pit	9	4	(1)Sambucus, (1)Rubus, (1)Chenopodium, (1)Sedum	1	(3)coal, (3)roots.
					(1)Chenopodium, (1)Rumex/poly,		
60	570	Pit	9	2	(1)Urtica	1 (barley)	(3)roots, (2)coal.
		Tanning			(1)Sambucus, (1)Solanum n.		
62	574	pit	34	2	(1)Rumex/poly, (1)Rubus, (1)Urtica		(4)coal and hammerscale
						(1) charred	
63	576	Pit	6	3	(1)Chenopodium, (2)other	legumi	(1)roots), (1)coal, (1)hammerscale and ash slag.
70	604	Pit	3			1	(2)roots, (1)insects, (2)coal.
7-	650	347 11	2	2	(2)Sambucus, (3)Silene, (2)		(2)
75	650	Well	2	2	, , , ,		(2)roots, (1)insects.
79	656	Layer	6	2	(1)Sambucus, (1)Chenopodium, (1)Carex		(1)insect, (4)coal, (2)hammerscale, (1)slag.
					(1)Perpsicaria, (1)Sambucus,		
80	662	Layer	6.5		(1)Sonchus	1	(1)insect, (4)coal, (2)hammerscale.
95	714	Pit	6	4	(2)Sambucus.		(2)coal
97	721	Pit	4	3	, , , , , , , , , , , , , , , , , , , ,		(3)coal
100	768	Pit	12	3	(1)Rumex/Poly, (1)Urtica	(1) charred seed	(4)coal, (1)slag
101	770	[ot	10	3	(2)Sambucus, (1)Chenopodiaceae.	1	(4)coal, (1)hammerscale
110	756	Layer	3	2	(1)Sambucus		(3)coal, (1)slag
112	831	Layer	25	2	(2)Sambucus	1	(4 roots, (4)coal, (2)slag
113	899	Layer	65	4	(3)Sambucus, (3)Urtica, (2)Rumex/Poly, (3)Chenopodiaceae, (3)Stellaria, (1)Rubus, (1)Solanum, (3)Other	(1)grain, (1)hazelnut shell, (1)Sambucus	(4)coal, (1)small bones, (2)slag, (2)insect, (2)hammerscale
114	941	Ditch	7	4	(1)Sambucus		(3)coal.
115	956	Layer	28	3	(1)Sambucus	1	(3)coal, (1)hammerscale.

					Flot		
Sample number	Context number	Feature	Vol (ml)	Charcoal	Unchar. Seeds	Grains/charred seeds	Other
118	974	Layer	25	3	(1)Chenopodiaceae, (1)Sambucus	(1)oat	(3)roots, (4)coal, (1)hammerscale, (1)insects
119	963	Floor	15	3	(2)Sambucus, (2)Rubus	(1)charred seeds	(4)coal, (1)slag.
123	985	Hearth	26	4			(3)coal, (1)insects, (1)slag
130	975	Floor	19	4	(2)Sambucus, (1)Urtica, (1)Rumex/Poly, (2)Other		(2)coal, (1)slag
131	1025	Layer	25	3	(2)Sambucus	1	(3)coal
137	1019	Pit	150	4		2	(2)snail, (2)burnt bone
143	1090	Layer	10	3			(2)coal, (1)hammerscale
149	1032	Layer	30	4	(2)Sambucus	1	(2)coal
150	1124	Wall	2	2			
152	1120	Linear feat	10	3	(2)Sambucus, (2)Stellaria, (1)Rumex/Poly, (1)Urtica	1	
153	1132	Pit	39	4	(2)Sambucus	1	(2)coal, (2)slag, (3)roots
158	1159	Pit	4	3	(2)Sambucus, (1)Chenopodiaceae, (1)other	1	(2)coal, (1)slag
164	1183	Pit	4	3	(3) Ficus, (2) Rubus, (2) Sambucus		(3)coal, (3)roots, (1)hammerscale, (1)insects
199	1334	Layer	8	3	(2)Sambucus, (2)other		(3)roots.
203	1349	Layer	12	3	(2)Sambucus	1	(3)roots
206	1137	Pit	1	1			

Key: 1- Occasional, 2- fairly frequent, 3- frequent, 4- abundant

Table 2: Assessment of 2nd phase flots TBF10

			F						
Sample number	Context number	Volume (litres)	Feature	>2mm charcoal			Flot		
					Vol (ml)	Charcoal	Unchar. Seeds	Grains	Other

Sample number	Context number	Volume (litres)	Feature	>2mm charcoal			Flot		
					Vol (ml)	Charcoal	Unchar. Seeds	Grains	Other
500	1504	26	Cut	1	29	2	(2)Rubus, (2)Sambucus,	1	(4)coal, (2)hammerscale, (1)slag, (2)fish/small bones
501	1502	24	Rubbish pit		410	3	(3)Rubus, (2)Ficus, (2)Vitis.	2	(4)coal, (2)hammerscale, (2)fish/small bones, (2)roots.
502	515	27			74	2	(4)Rubus, (2)Vitis, (2)Ficus, (2)Solanum, (1)Prunus		(3)coal, (2)small bones
503	1513	9	Rubbish pit		223	3	(3)Sambucus, (3)Rubus, (2)Ficus, (2)Rumex, (2)Aethusa, (2)Vitis		(4)coal, (2)slag, (3)roots, (2)fish/small bones.
504	1523	24	Rubbish pit		93	2	(2)Rubus, (2)Sambucus, (1)Aethusa	1(pos. oat)	(3)coal, (2)hammerscale, (2)small/fish bones.
505	1528	24	Rubbish pit	1	95	2	(3)Rubus, (2)Ficus, (2)Sambucus, (1)Aethusa	2	(4)coal, (1)hammerscale, (2)fish/small bones
506	1531	19	Cess pit		61		(3)Rubus (1)Solanum (2)Ficus (2)Vitis (1)Prunus (1)Malus		(2)coal, (2) small bones, (1)hammerscale
507	1545	24	Cess pit		22	2	(2)Sambucus, (2)Rubus, (2)Ficus, (1)Vitis, (1)Malus	1	(4)coal, (4)small/fish bones.
508	1556	24	Cess pit		52	3	(3)Rubus, (2)Sambucus, (2)Ficus, (2)Vitis, (2)Malus, (1)Prunus		(4)coal, (2)insects, (3)fish/small bones
509	1550	24	Rubbish pit		144	3	(3)Rubus, (2)Sambucus, (2)Ficus, (1)Prunus, (1)Solanum, (1)Vitis	2	(4)Coal, (2)hammerscale, (1)small bones.
510	1552	26	Pit		47	3	(2)Rubus, (2)Sambucus, (2)Ficus, (2)Aethusa, (2)Chenopodium		(4)coal, (1)hammerscale, (2)fish/small bones
511	1566	21	Cess pit		97	3	(3)Rubus, (3)Sambucus, (2)Chenopodium, (2)Malus, (2)Ficus		(4)coal, (2)small/fish bones.

Sample number	Context number	Volume (litres)	Feature	>2mm charcoal			Flot		
					Vol (ml)	Charcoal	Unchar. Seeds	Grains	Other
512	1582	26	Rubbish pit	2	208	3	(3)Sambucus, (3)Rubus, (2)Ficus, (2)Chenopodium, (2)Aethusa	1	(4)coal, (2)roots, (2)small/fish bones, (3)hammerscale
513	1603	22	Rubbish pit		144	(2)small	(4)Rubus, (4)Sambucus, (2)Aethusa, (3)Ficus, (2)Vitis, (2)Solanum, (2)Chenopodium	1	(4)coal, (2)fish/small bones.
514	1614	24	Rubbish pit	1	45	(2)small	(2)Chenopodium, (1)Aethusa, (1)Urtica, (1)Sambucus, (1)Ficus		(3)coal, (2)slag, (1)hammerscale
515	1600	25	Rubbish pit		143	3	(3)Rubus, (3)Sambucus, (1)Vitis, (3)Ficus, (1)Malus.		(4)coal, (4)roots, (2)small/fish bones, (1)slag
516	1648	23	Rubbish pit		469	4	(3)Sambucus, (3)Rubus, (2)Ficus, (2)Aethusa		(4)coal, (4)fibre, (2)slag, (2)fish/small bones
517	1653	27	Rubbish pit		273	3	(4)Rubus, (4)Sambucus, (2)Aethusa, (3)Ficus, (2)Vitis, (2)Solanum, (1)Chenopodium	2	(4)coal, (2)slag, (2)hammerscale, (2)small/fish bones
518	1620	24	Floor		14	(2)small			(3)coal, (2)hammerscale, (2)roots, (1)slag
519	1686	27	Rubbish pit	1	68	2	(2)Sambucus, (2)Rubus, (2)Ficus, (2)Aethusa	1	(2)coal, (2)fish/small bones.
520	1552	27	Pit		232	3	(3)Rubus, (3)Sambucus, (2)Ficus, (2)Aethusa.		(4)coal, (3)hammerscale, (3)fibre, (2)small/fish bones
521	1712	27	Rubbish pit	1	236	3	(4)Sambucus, (4)Rubus, (3)Ficus, (3)Vitis, (2)Aethusa, (2)Solanum	2	(4)coal, (2)hammerscale, (2)small/fish bones
522	1710	22	Pit		116	3	(3)Rubus, (2)Ficus, (2)Sambucus, (1)Solanum, (2)Vitis, (1)Malus, (1)Aethusa	1	(4)coal, (2)roots, (2)small/fish bones, (2)hammerscale

Sample number	Context number	Volume (litres)	Feature	>2mm charcoal			Flot		
					Vol (ml)	Charcoal	Unchar. Seeds	Grains	Other
522	1720	20	Dubbish sik		00	2	(2)Sambucus, (2)Rubus, (2)Ficus, (2)Aethusa,	1	(4) and (2) and II find have a (2) have a great
523	1720	20	Rubbish pit	1	99	2	(2)Chenopodium, (1)Vitis (3)Rubus, (3)Vitis, (3)Ficus, (2)Aethusa, (3)Sambucus, (2)Chenopodium,	1	(4)coal, (2)small/fish bones, (2)hammerscale.
524	1716	27	Rubbish pit		99	3	(3)Solanum	2	(4)coal, (3)hammerscale, (2) small/fish bones
525	1733	21	Rubbish pit		8	2	(2)Rubus, (2)Sambucus		(4)coal, (2)hammerscale, (2)fish/small bones, (1) slag
526	1736	23	Rubbish pit		49	2	(2)Rubus, (2)Sambucus, (1)Vitis, (2)Malus	1	(2)small/fish bones, (3)coal, (2)slag, (1)hammerscale
527	1743	21	Rubbish pit		114	3	(3)Rubus, (3)Ficus, (2)Vitis, (2)Sambucus, (1)Solanum	1	(4)coal, (2)hammerscale, (3)roots, (2) small/fish bones
529	1750	4	Pit		3.5	2(small)			(2)coal, (3)fibre
530	1752	28	Pit	1	173	3	(4)Sambucus, (4)Rubus, (3)Ficus, (2)Vitis, (2)Aethusa, (1)Solanum	1	(3)coal, (2)small/fish bones, (2)hammerscale
531	1758	28	Rubbish pit		111	(2)small	(3)Rubus, (2)Sambucus, (2)Ficus, (3)Vitis, (1)Solanum, (1)Aethusa	1	(3)coal, (2)hammerscale, (1)slag, (1)insects, (2)small bones
532	1759	25	Rubbish pit		145	4	(3)Rubus, (2)Sambucus, (2)Vitis, (2)Ficus, (2)Chenopodium, (1)Rumex, (1)Malus	1	(2)small/fish bones, (4)coal, (1)hammerscale.
			Boundary						
533	1745	20	ditch	4	45	4	(3)Rubus, (1)Rumex	1	(2)coal, (3)roots.
534	1737	18	Boundary ditch	2	33	4(small)		2	(3)roots.
535	1814	20	Made ground		8	4	(2)Sambucus, (1)Chenopodium, (1)Stellaria		(4)coal, (2)hammerscale, (2)roots.

Sample number	Context number	Volume (litres)	Feature	>2mm charcoal			Flot		
					Vol (ml)	Charcoal	Unchar. Seeds	Grains	Other
537	1858	24	Burnt flint		6	3(small)			(2)coal, (4)soil.
538	1876	22	Gravel surface		6	2	(1)Chenopodium		(3)coal, (2)roots
539	1883	21	Pit		4	2(small)	(1)Sambucus, (1)Stellaria		(3)roots
540	1888	16	Posthole		7	4	(1)Sambucus	1 (barley)	(2)roots, (3)contamination
541	1899	5	Pit		1	1(small)			(1)coal, (1)roots
542	1891	22	Pit	1	7	3(small)			(2)coal, (4)soil.
543	1896	20	Surface		8	4	(1)Prunus		(2)roots, (2)coal, (2)slag
544	1900	17	Pit		4	(3)small	(1)Sambucus		(2)coal, (2)roots
545	1898	6	Pit		1	2(small)			(2)roots, (2)coal
546	1904	26	Surface		25	3(small)			(3)coal, (4)soil
547	1905	19	Occupation layer	1	7	4(small)	(1)Sambucus	1	(4)roots
548	1919	18	Surface	2	9	4(small)	(1)Chenopodium, (1)Stellaria	1	(3)roots, (2)coal
549	1921	23	Surface	2	174	3	(1)Rubus	(3)Barley, (2)Oat	(3)Roots, (2)coal, (1)slag
550	1920	20	Occupation layer		15	4	(1)Stellaria, (1)Prunus	1	(3)roots, (3)coal, (2)hammerscale
551	1937	20	Surface		38	(3)small		3	(3)roots
552	1945	8	Surface		9	(2)small			(3)coal, (2)hammerscale
553	1951	32.5	Surface	2	50	(4)small	(1)Sambucus (1)Solanum	1	(1)small bones (2)coal (3)roots
554	1954	21	Pit		7	(2)small	(1)Rubus		(4)coal, (2)hammerscale
555	1955	21	Pit		7	2	(1)Sambucus		(1)slag, (3)coal, (1)hammerescale
556	1939	18	Surface		1	1(small)			(2)contamination, (1)coal
557	1968	14	Boundary ditch		18	(2)small	(2)Rubus, (1)Aethusa		(2)coal, (1)hammerscale, (1) small/fish bones
558	1990	20	Surface		10	(4)small			(3)coal, (2)roots
559	2060	27	Surface		49	(2)small		1 (oat and barley, pos.)	(4)coal, (2)slag, (2)hammerscale, (1)small bones

Sample number	Context number	Volume (litres)	Feature	>2mm charcoal			Flot		
					Vol (ml)	Charcoal	Unchar. Seeds	Grains	Other
560	2055	21	Surface	2	40	2	(2)Chenopodiaceae, (1)Sambucus, (2)Rubus, (1)Rumex	1	(3)coal, (1)slag, (1)hammerscale
561	2070	15	Demo layer	3	23.5	4	(2)Sambucus, (1)Chenopodium	2 (pos. Barley)	(4)coal, (2)ash slag
562	2067	18	Surface		2	(2)small	(1)Sambucus, (1)Chenopodium		(2)coal, (1)fish bone, (2)roots.
563	2117	26	Occupation layer		9	(1)small		(1) frag	(3)coal, (2)hammerscale
565	2136	27	Posthole		3		(1)Solanum (1)Rubus		(2)coal
566	2139	26	Posthole		3.5	(2)small			(3)coal
567	2146	24	Surface		5		(1)Rubus		(2)coal
568	2144	12	Surface		9	4(small)			(4)contamination, (4)coal
569	2142	26	Surface		1				(2)coal
570	2148	27	Surface		3	1			(3)coal, (2)hammerscale, (1)small bones, (1)burnt flint
571	2149	5	Pit		3	4(small)		1	(2)coal, (3)contamination
572	2153	23	Surface		<1				(2)coal
573	2157	26	Ditch		5	(3)small	(1)Rubus	1	(3)small bones, (2)roots, (2)fibres
574	2171	19	Well		86		(4)Rubus, (3)Ficus, (3)Vitis, (2)Sambucus, (2)Malus, (1)Prunus		(2)coal, (2)small bones, (2)roots
575	2173	10	Surface		1	2(small)	(1)Sambucus, (1)Solanum, (1)Chenopodium		(2)coal, (1)slag.

Key: 1- Occasional, 2- fairly frequent, 3- frequent, 4- abundant

APPENDIX 17: HUMAN BONE ASSESSMENT

James Young Langthorne

Introduction

During the archaeological investigation at Tobacco Dock a small assemblage of residual disarticulated human bone was recovered from four post-medieval contexts and a single late Roman deposit. Post-medieval contexts [897], [1515] and [1710] were fills of pits while [1814] was a layer of silty sand made ground. The late Roman context [2079] comprised a layer of demolition material. This report contains the results of an assessment of the disarticulated skeletal remains.

Disarticulated Bone

The table below describes the human bone recovered from each of the five contexts:

Context no.	Skeletal Element	No. of fragments	Condition	MNI for each context	Sex	Age	Pathology/Comments	Phase (prov.)
						Infant-		
897	Tibia (right)	1	Good	1	N/A	Juvenile	No visible pathology.	5
			Good-				Small find <502>. No	
1515	Pelvis (fragments)	2	Moderate	1	Undeterminate	Unknown	visible pathology.	5
							Small find <522>. No	
						Mid-Old	visible pathology, Heavy	
1710	Dentition (molar)	1	Very Good	1	Undeterminate	Adult?	wear on occlusal surface.	5
	Humerus (shaft							
1814	fragment)	1	Good	1	Undeterminate	Unknown	No visible pathology.	5
2079	Radius (shaft fragment)	1	Moderate	1	Undeterminate	Unknown	No visible pathology.	3.5

Overall there was a fairly good level of preservation and in the cases of the tibia from pit fill [897] and the tooth from pit fill [1710] were complete rather than fragments from larger bones.

No pathological conditions or sexually dimorphic traits were identified within the disarticulated assemblage although it was possible to age the tibia from pit fill [897] as that of an infant-juvenile individual and the heavy wear on the occlusal surface of the molar from pit fill [1710] indicated a possible mid-old adult.

The minimum number of individuals the entire collection of disarticulated bone represented was 3.

Recommendations for further work

In conclusion it is unlikely that further work on this small residual assemblage of disarticulated material will provide any useful information. The results of this assessment and any further work could be presented in a publication text.

Bibliography

Brothwell, D., 1981. Digging Up Bones. British Museum London.

APPENDIX 18: OASIS FORM

OASIS ID: preconst1-309018

Project details

Project name Tobacco Dock

Short description of the project

An archaeological excavation carried out on land at The Highway, Wapping Lane, Pennington Street and Chigwell Hill. The site is located on an escarpment overlooking the Thames floodplain to the south, Lithics suggest that the site was occasionally visited during the Mesolithic and Neolithic era. A few pits and postholes and a 'burnt mound' dating to the Bronze Age represent the earliest recorded archaeological features. Roman ditches, wells, pits, postholes and occupational deposits attest to an occupation including the remnants of clay-and-timber buildings. The site appears to have been abandoned in the early 5th century, The site was re-occupied at the end of the 16th or early 17th century. Excavated wells, cess pits and rubbish pits attest to occupation of the site throughout the 18th and 19th centuries. The earliest post-medieval buildings, probably date to the late 17th century. By the middle of the 18th century the cartographic and archaeological evidence suggests that all the surrounding street frontages were built up. Ceramics indicated that a 17th century drinking establishment probably existed on site. An 18th century tanning pit is evidence for an onsite leather manufacturer. The animal bone assemblage produced evidence of bone working taking place in the 19th century.

Project dates Start: 04-09-2010 End: 06-02-2015

Previous/future

work

Yes / No

Any associated project reference

codes

TBF10 - Sitecode

Type of project Recording project

Site status Local Authority Designated Archaeological Area

Current Land use Other 13 - Waste ground

Monument type DITCH Roman

Monument type PITS Roman

Monument type BURNT MOUND Middle Bronze Age

Monument type BUILDINGS Roman

Monument type WELLS Roman

Monument type BUILDINGS Post Medieval

Monument type WELLS Post Medieval

Monument type PITS Post Medieval

Monument type CESS PITS Post Medieval

Significant Finds LITHICS Mesolithic

Significant Finds LITHICS Neolithic

Significant Finds LITHICS Bronze Age

Significant Finds POTTERY Bronze Age

Significant Finds POTTERY Roman

Significant Finds POTTERY Post Medieval

Significant Finds TILE Early Medieval

Significant Finds TILE Post Medieval

Significant Finds BRICKS Post Medieval

Significant Finds GLASS Roman

Significant Finds GLASS Post Medieval

Significant Finds COINS Roman

Significant Finds ANIMAL BONE Roman

Significant Finds ANIMAL BONE Post Medieval

Investigation type "Full excavation", "Open-area excavation"

Prompt Planning condition

Project location

Country England

Site location GREATER LONDON TOWER HAMLETS TOWER HAMLETS

Tobacco Dock

Postcode E1

Study area 3600 Square metres

Site coordinates TQ 3745 8070 51.507989665766 -0.019189552187 51 30 28 N 000

01 09 W Point

Height OD / Min: 2.95m Max: 6.85m

Depth

Project creators

Name of PCA

Organisation

Project brief originator

CgMs Consulting

Project design originator

Peter Moore

Project

director/manager

Peter Moore

Project supervisor

Alistair Douglas

Type of

sponsor/funding

body

Developer

Name of

sponsor/funding

body

Messila house Limited

Project archives

Physical Archive

recipient

LAARC

Physical Archive

TBF10

Physical Contents

"Animal

Bones", "Ceramics", "Environmental", "Glass", "Industrial", "Leather", "

Metal","Wood","Worked bone","Worked stone/lithics"

Digital Archive

recipient

LAARC

Digital Archive ID

TBF10

Digital Media available

"Database", "GIS", "Images raster / digital photography", "Survey",

"Text"

Paper Archive

recipient

LAARC

Paper Archive ID

TBF10

Paper Media available

"Plan", "Report", "Section", "Survey ", "Unpublished Text"

Project bibliography 1

Grey literature (unpublished document/manuscript)

Publication type

Title An Archaeological Assessment of Land at The Highway, Wapping Lane,

Pennington Street, and Chigwell Hill, London Borough of Tower Hamlets E1

(Parcel 4).

Author(s)/Editor(s) Douglas, A

Date 2018

Issuer or publisher

PCA

Place of issue or publication

London

publication

Entered by

Alistair Douglas (adouglas@pre-construct.com)

Entered on 13 February 2018

$^{\circ}$ C A

PCA CAMBRIDGE

THE GRANARY, RECTORY FARM BREWERY ROAD, PAMPISFORD **CAMBRIDGESHIRE CB22 3EN** t: 01223 845 522

e: cambridge@pre-construct.com

PCA DURHAM

UNIT 19A, TURSDALE BUSINESS PARK **TURSDALE DURHAM DH6 5PG** t: 0191 377 1111

e: durham@pre-construct.com

PCA LONDON

UNIT 54, BROCKLEY CROSS BUSINESS CENTRE 96 ENDWELL ROAD, BROCKLEY **LONDON SE4 2PD** t: 020 7732 3925

e: london@pre-construct.com

PCA NEWARK

OFFICE 8, ROEWOOD COURTYARD WINKBURN, NEWARK **NOTTINGHAMSHIRE NG22 8PG** t: 01636 370410

e: newark@pre-construct.com

PCA NORWICH

QUARRY WORKS, DEREHAM ROAD **HONINGHAM NORWICH NR9 5AP**

T: 01223 845522

e: cambridge@pre-construct.com

PCA WARWICK

UNIT 9. THE MILL. MILL LANE LITTLE SHREWLEY, WARWICK WARWICKSHIRE CV35 7HN t: 01926 485490

e: warwick@pre-construct.com

PCA WINCHESTER

5 RED DEER COURT, ELM ROAD **WINCHESTER** HAMPSHIRE SO22 5LX t: 01962 849 549

e: winchester@pre-construct.com

