

EXCAVATIONS AT 415 WICK LANE, OLD FORD, TOWER HAMLETS: THE REDISCOVERY OF THE MEDIEVAL RESIDENCE OF GISSING PLACE

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INTRODUCTION

This online supplement has been published in support of an article in *LAMAS Transactions* Volume 75 (2024), 305–34 (Hogg with Ritchie 2025). Standard Museum of London reference codes are used for ceramic building materials and pottery fabrics, details of which are available online (www.mola.org.uk/resource/library). Context numbers are denoted by square brackets: [1]. Open Areas, Buildings and Structures are numbered and referred to thus: OA1; B1; S1. Registered finds (RF) are numbered using angled brackets: <1>. Figure and table numbering is continued from the main article.

In general terms the artefact assemblages were moderate in size and dominated by building materials. The majority of the medieval material was residual within post-medieval contexts. Much of the fabric of the medieval buildings had been removed and only a single piece of moulded stone was retrieved; this was a Reigate stone block, originally derived from a 16th- or 17th-century fireplace, although mortar adhering to its broken faces indicated its reuse. Single fragments of Kentish ragstone and possibly of Gabbro were also recovered.

The registered finds assemblage was small, containing only a few objects reflecting the original status of the site. Dress accessories included copper-alloy dress pins of broadly medieval date and a leather shoe heel. An 18th- or 19th-century trade token and an illegible coin were recovered from late post-medieval deposits. One object of note was a bone point (RF <9>) fashioned from the distal end of a horse metacarpal. Certain types of bone points, usually made from the proximal end of bovine metatarsals and with a socket, are relatively common finds. Their function is uncertain, but they are probably craft related with a possible link to leather working (MacGregor 1985, 174–5). The example from Wick Lane is not socketed, perhaps because it was made from the distal rather than proximal end which made it harder to work and may have had a different function than the socketed examples. Socketed tools are usually found in contexts of 11th- or 12th-century date. The example from Wick Lane came from medieval pit G40 (period 2,1; Fig 6).

The bulk metalwork assemblage consisted largely of iron nails of medieval and post-medieval date. Iron binding strips and a piece of copper-alloy wire were also retrieved. The clay tobacco pipe assemblage was surprisingly small comprising only 27 fragments of 18th- and 19th-century date, but did contain six bowls, three

of which were inscribed with makers marks as was one stem. Two could be linked to known makers, an OS12 bowl was initialled ‘WM’, likely to refer to William Manby c.1719–63 who at one point worked in Green Dragon Alley, Limehouse (Oswald 1975, 142). One stem fragment with relief mould foliate decoration contains part of a maker’s name and location, ‘GORDON’ and ‘[...]LANG’, moulded in relief on the stem sides. This is likely to refer to Arthur Gordon of Lane c.1823–57 (Oswald 1975, 136). Other finds recovered included small amounts of metallic slag, shells and fragments of fired clay.

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THE POST-ROMAN POTTERY

Luke Barber

Introduction

The fieldwork produced 218 sherds of post-Roman pottery, weighing 12,413g, from 48 individually numbered contexts. Some 136 different vessels are represented in the assemblage. The majority of the assemblage (168 sherds, weighing 10,801g) was recovered from Area B. The pottery has been fully quantified (number, weight and ENV) for the archive using Museum of London codes for both fabric, form and decoration where known. This data has been input into an Excel spreadsheet which also forms part of the digital archive.

Sherd sizes vary greatly. There are many small sherds (<20mm across) as well as numerous large sherds (>50mm across). Although no complete vessels are present there are at least two full vessel profiles represented. Sherd size tends to be largest for the 17th- to early 18th-century material with the earliest pottery generally being represented by smaller, though still quite fresh, sherds. However, overall, the post-Roman

Table 1. Post-Roman pottery assemblage by fabric

Fabric code	Expansion	Date range	No./weight	ENV
BONE	Bone china	1794–1900	6/126g	5
BORDG	Surrey-Hampshire border whiteware with green glaze	1550–1700	20/128g	3
BORDY	Surrey-Hampshire border whiteware with clear (yellow) glaze	1550–1700	6/65g	5
CBW	Coarse Surrey-Hampshire border ware	1270–1500	15/156g	13
CHEA	Cheam whiteware	1350–1500	3/23g	3
CHPO	Chinese porcelain	1580–1900	1/6g	1
CREA	Creamware	1740–1830	6/80g	2
EBORD	Early Surrey-Hampshire border whiteware	1480–1550	1/4g	1
ENGs	English stoneware	1700–1900+	3/46g	3
FREC	Frechen stoneware	1550–1700	2/4g	2
KING	Kingston-type ware	1240–1400	11/95g	10
LCOAR	Coarse London-type ware	1080–1200	2/12g	2
LOND	London-type ware	1080–1350	5/400g	3
LONS	London stoneware	1670–1900+	2/88g	2
MART2	Martincamp-type ware type II flask (dark brown stoneware)	1500–1600	2/64g	2
MCS	Coarse medieval sandy ware	1140–1300	1/8g	1
MG	Mill Green ware	1270–1350	5/90g	4
MG COR	Mill Green coarseware	1270–1400	9/108g	6
NDGT	North Devon gravel-tempered ware	1600–1800	8/6650g	1
PEAR	Pearlware	1770–1840	3/18g	2
PEAR TR	Pearlware with transfer-printed decoration	1770–1840	2/5g	2
PMFR	Essex-type post-medieval fine redware	1580–1700	3/144g	2
PMR	London-area post-medieval redware	1580–1900	24/1386g	17
PMRE	London-area early post-medieval redware	1480–1600	10/846g	5
PMSRG	London-area post-medieval slipped redware with green glaze	1480–1650	5/184g	3
PMSRY	London-area post-medieval slipped redware with clear (yellow) glaze	1480–1650	12/364g	9
RAER	Raeren stoneware	1480–1610	1/38g	1
RBOR	Surrey-Hampshire border redware	1550–1900	4/268g	3
RBORG	Surrey-Hampshire border redware with green glaze	1580–1800	4/114g	1
SHER	South Hertfordshire-type greyware	1170–1350	2/18g	1
STSL	Staffordshire-type combed slipware	1660–1870	3/310g	2
SUND	Sunderland-type coarseware	1800–1900	2/124g	2
SWSG	White salt-glazed stoneware	1720–1780	15/98g	7
TGW	English tin-glazed ware	1570–1846	2/3g	2
TGW BLUE	London tin-glazed ware with plain pale blue glaze	1630–1846	1/10g	1
TGW H	London tin-glazed ware with pale blue glaze and dark blue decoration	1680–1800	1/8g	1
TPW 2	Refined whiteware with under-glaze blue transfer-printed decoration	1807–1900+	9/128g	2
TPW 3	Refined whiteware with under-glaze brown or black transfer-printed decoration	1810–1900+	5/62g	2
TPW4	Refined whiteware with under-glaze colour transfer-printed decoration (green, mulberry etc)	1825–1900+	2/132g	2

pottery from the site does not show extensive signs of abrasion, suggesting the majority of it has not been subjected to repeated reworking.

The assemblage spans a number of different periods with the earliest sherds being of probable 12th-century date and the latest sherd dating to the second half of the 19th century. The majority of the assemblage belongs to the 17th to mid-18th century. A breakdown of the pottery by fabric is given in Table 1. All of the contexts producing pottery can be considered stratified to a degree, though few are truly closed. Low numbers of sherds, often consisting of undiagnostic pieces in long-lived fabrics, do not allow a reliable assessment of

residuality/intrusiveness in some instances though it is clear residuality and, to a lesser extent intrusiveness, is present. The largest context group consists of a mere 32 sherds (fill [2119] of the period 3.3 drain [2186], G14, dated c.1740–80). Most deposits produced less than five sherds apiece.

Due to the size and nature of the assemblage a brief overview of the pottery by ceramic period (including all residual and intrusive sherds) is given here. Observations of the best assemblages by phased site groups is given in the site narrative.

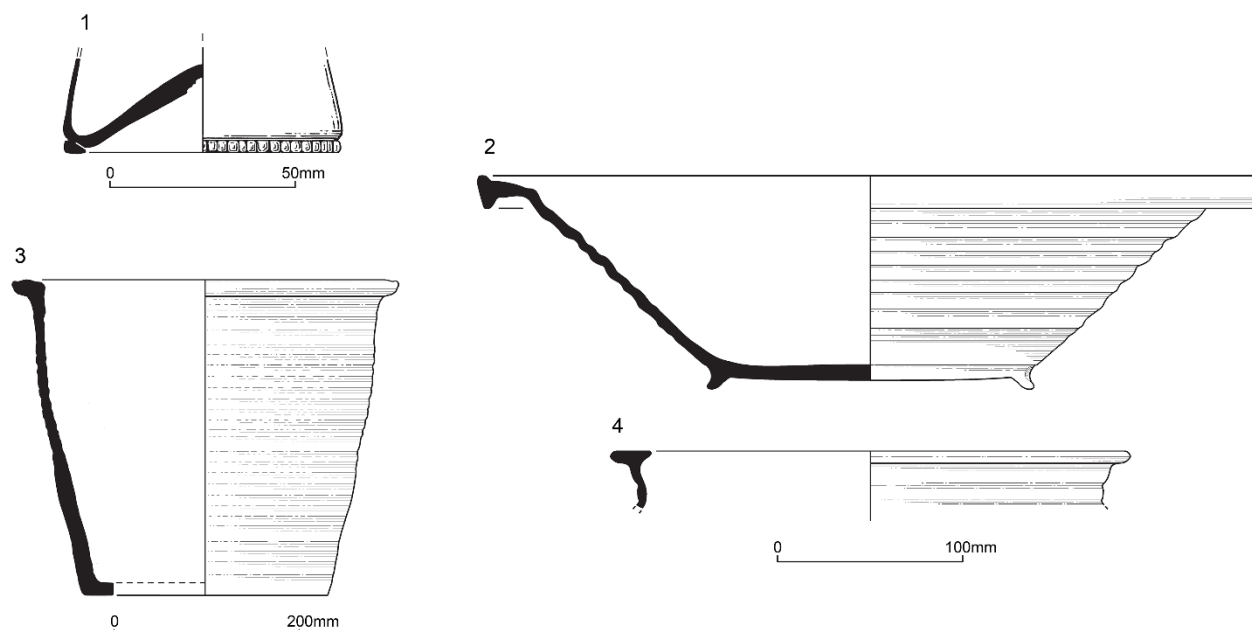


Fig 15. Selected ceramic and glassware finds. KEY: 1. Base of a cylindrical glass beaker with rigaree decoration from fill [2071] of construction cut [2070], G16, repair to S1, period 3.3; 2. Post-medieval redware bowl or pan with pulled tripod feet from kiln rake out [2006], G83, B10, period 3.1; 3. North Devon gravel tempered jar set upright at floor level within fill [2089] of cut [2090], G7, B7, period 4; 4. London-type ware dripping dish in occupation layer [2192], G46, OA4, period 2.1

The Assemblages

High Medieval (12th–Mid-/Late 14th Century)

The small assemblage of high medieval pottery was recovered from several contemporary deposits as well as being residual in later ones. The 35 sherds recovered are mainly composed of glazed jugs in London-type ware, Kingston-type ware and Mill Green wares (the latter in both the fine and coarse variant) with 18 different vessels being represented. White slip is common on the vessels, particularly the Mill Green examples, which also frequently are combed. Other vessel types in these wares are very limited but include a KING cooking pot with internally glazed base and a London-type ware dripping dish from occupation layer [2192] (Fig 15.4). The absence of other cooking vessels is quite notable with just a single example in MCS being residual in phase 3.3.

Late Medieval (Mid-/Late 14th–Mid-16th Century)

Sherds grouped under this ceramic period total just 20 pieces. The start date for some of the fabrics included within this group is clearly in the high medieval period (*ie* the Coarse Border Ware spanning c.1270–1500) and it is therefore not surprising that some of these sherds appear in period 2.1 deposits. Proportionally these types, including Cheam whitewares, are more dominant in period 2.2. Only one sherd of this period (a Raeren body sherd from levelling layer [1036], G61, B4) was recovered from period 2.2 deposits – the remaining sherds being residual in later periods. Overall, a mixture of cooking pots, jugs and dishes is represented with

virtually all deriving from the Surrey-Hampshire industry – the only import being the Raeren vessel. Several rims are present, including hammer-headed and lid-seated types, but, with the exception of green glaze, the vessels are typically plain.

Late Medieval to Early Post-Medieval (Late 15th–Early 17th Century)

This chronological division has been created to accommodate the local redware types (PMRE, PMSRG and PMSRY in particular) that start in the later 15th but continue throughout the 16th century and, in the case of the slipped examples, well into the 17th century. However, it appears most examples date to the second half of the 16th to early 17th centuries. A fairly typical range of pipkins, dishes, jars and bowls are represented, the most complete example being the bowl/pan with pulled tripod feet from period 3.1 layer [2006] (Fig 15.2). Decoration on these is limited to white slip and glaze, usually internally, but always as simple patchy coatings.

Early Post-Medieval (Mid-16th–Mid-18th Century)

This period produced the largest assemblage and the fabrics present demonstrate continued refuse disposal spanning from the mid-/later 16th century right through to the mid-18th century. Although two sherds were recovered from period 3.1 deposits, including a Martincamp 2-type flask sherd from construction cut [2090] (G63, S1), the majority were recovered from period 3.3 deposits (36/703g). Some of the vessels

represented in period 4 are clearly residual or old examples in contemporaneous use. This may well be the case for the large 18th-century North Devon gravel-tempered jar from [2089] (Fig 15.3). There is quite a wide range of fabrics represented but the majority consist of local/regional coarseware types such as London-area post-medieval redware, Surrey-Hampshire border white and red earthenwares and Essex-type post-medieval fine redware. London stoneware and tin-glazed earthenwares are present but in smaller quantities and regional English wares are confined to Staffordshire products and the Devon vessel. Imports include a scatter of Frechen stoneware and Chinese porcelain. Overall vessels appear to be fairly typical of a domestic assemblage with vessels for storage, food preparation and serving as well as drinking. There is nothing to suggest anything other than a low/middle class household.

Late Post-Medieval (Mid-18th–19th Century)

The late post-medieval assemblage is quite small (38/721g), with the majority having been recovered during the evaluation work (29/614g). There are sherds of creamware and transfer-printed pearlware along with some late English stoneware (including part of a Bristol glazed bottle from a period 4 cut [2110] (G9, S5), transfer-printed whitewares (mainly table wares) and bone china (including part of a toy jug from robber cut [2074] (G4, OA5).

THE CERAMIC BUILDING MATERIAL

Isa Benedetti-Whitton

A large assemblage comprising 630 pieces of ceramic building material (CBM), collectively weighing 550kg, was collected from 104 individually numbered contexts, including standing walls (Table 2). It primarily consisted of roof tiles and complete or near complete bricks, but also included some sample sections of walls and floors.

Table 2. Comparative quantities and weights of CBM

CBM type	Quantity	% of total	Wt (g)	% of total
Roof tile	309	49.0	58125	10.6
Brick	192	30.5	354681	64.5
Structural tile (wall/floor)	60	9.5	23681	4.3
Brick wall sample	50	7.9	97809	17.8
Hardcore rubble	6	1.0	12731	2.3
Roman brick	4	0.6	902	0.2
Delftware tile	3	0.5	137	0.0
Floor tile	2	0.3	577	0.1
Pantile	2	0.3	1032	0.2
Tegula	2	0.3	427	0.1
Total:	630	100%	550,102	100

The assemblage was dominated by Tudor brick in two distinct brick forms, one larger and one more

modestly sized. There is little doubt that some of the earlier dating Tudor brick (early 16th century) is likely to have been used in later structures (late 16th–17th century), but there was only a small quantity of more recent bricks, and therefore little evidence to show any significant rebuilding on this site during the 18th century. The Museum of London (MoL) fabric codes were used to describe material (MOLA 2014, *Medieval and post-medieval ceramic building materials fabric dating codes*), available online at the MOLA Resource Library).

The Assemblage

Roof Tile

The vast bulk of the assemblage in terms of quantity was made up of flat (peg) roof tile fragments. A few examples had surviving glaze splashes, indicating a medieval date of pre-1400, but the bulk of the roof tile could not be precisely dated and could be of either medieval or post-medieval date. The fabrics noted were all typical of the London area. The impression is that the roofs of many of the buildings on site were clad with peg tiles.

Most of the fabrics present were variations of sandy orange clays, with varying quantities of quartz. Additional inclusions such as iron oxide speckle, calcareous matter or, in some instances, no apparent inclusions at all enabled the identification of certain fabric types within the London typology. However, with few exceptions, these fabrics were all used in the London region for long periods of time, and beyond indicating the relative popularity of some clay sources over others they do not provide much basis for interpretation or dating.

The only roof tile fabrics associated with specific time periods were MoL 2587 and 2279, the former of which is generally classified as a medieval fabric used until c.1450. Glaze residue or splatter was present on flat tile fragments made from MoL fabrics 2587, 2586 and 2271, in all cases indicating that these particular tiles were manufactured during the medieval period.

Fabric 2279 is a mid-later post-medieval fabric. It is generally a pantile fabric, although flat tile pieces in the current assemblage strongly resemble 2279 when compared with physical samples of 2279 pantile under the microscope. Pantiles only started to be used in the mid-1600s, increasing in popularity during the 18th and 19th centuries.

Bricks

Approximately 93% of all the bricks collected were formed from the same fabric, MoL 3033, or variations of this fabric (*eg* more quartz-rich 3046; cream-marbled 3039; gritty and micaceous 3223). Across the assemblage however, there were two clear sizes of brick present, one of which was unusually large, the other of which was more typically sized for bricks of this period. The larger brick in its largest manifestation could be as big as 275–290 x 125–130 x 60mm.

Bricks found at Waltham Abbey and Chelmsford Priory, each dating to the mid-15th century, were 230–

240mm in length, and even the largest bricks in Essex from this period are no larger than 250mm long (Ryan 1996, 58–9; 95). However, bricks surviving in the city walls at St Alphage's in the City of London are 'uncommonly large' with dimensions (276–280 x 114–130 x 60–67mm) more similar to examples recovered from Wick Lane (Smith 2004, 258). These City bricks have been associated with a temporary brickworks at Moorfields on the basis of an unusually large brick piece found during an excavation of brick pits in that area (Smith 2004, 258). The fabrics represented at St Alphage's were very similar to those at Wick Lane and considering the proximity of the two sites it is possible that Moorfields was the source for the unusually large bricks used at both locations. This link would place their manufacture within the range of the late 15th and early 16th centuries.

During the later Tudor period there was a conspicuous effort to regulate brick sizes, hence the charter of 1571 (discussed earlier; Lloyd 1925, 12). This charter specified that fired bricks should be to the Imperial equivalent of ~228 x 108 x 57mm. Of those examples that could be measured across the assemblage, a similar quantity of bricks (25–30%) fell into this more modest, post-1571 sizing (222–235 x 105–120 x 50–65mm).

Only 13 bricks across the assemblage were in fabrics outside the MoL 3033 family. One of these was a complete brick in a fabric similar to medieval fabric 3031, although in size this example was larger than would be typically expected of medieval bricks, which are more often ~180–190mm in length. Most of the non-3033 bricks were made from post-1666 fabric 3032, which is particularly distinctive as it contains ash and domestic debris, *eg* animal bone. Several examples of 3032 brick were vitrified, and some were also heat-cracked and warped.

A single example of London 'stock' MoL fabric 3035 was also present. It was frogged and had the remains of a possible maker's mark within the stamp, although this was obscured by the warped condition of the brick.

Wall and Floor Samples

The wall samples collected from site were composed of bricks and/or stacked roof tiles. Due to the generally broken nature of the bricks within these samples they provided little information regarding date or construction methods. Only two floor tile fragments were present in the assemblage. One of these was of probable early Tudor date, being 29mm thick and with traces of glaze around the edges, and the other was later 18th century.

Delftware Tiles

Three fragments of tin glazed or 'delftware' wall or fireplace tiles were collected from G93 [2119], two of which fit together to form the upper right area, including corner, of a wall tile portraying the Oostpoort (Eastern Gate) of Delft in blue on an open white background. The corners are embellished with 'spider head' motifs, which are generally considered an earlier feature of delftware tiles in Britain, *c.* late 17th–18th

century (Tyler *et al* 2008, 102). This tile could have been manufactured in either the Netherlands or Britain. The designs produced during this early period in London are believed to have copied the Dutch ones to some extent (Betts & Weinstein 2010, 27), and both the building pictured and the spider head corner decoration are Dutch in origin. However, tiles of this general design, a central image against a white, borderless background, do not seem to have been popular for long, being supplanted around the mid-18th century by designs contained within a roundel, and with different corner ornamentation. This example is therefore mostly likely to date to *c.* 1650–1700.

The Mortar

The mortars used at Wick Lane were predominantly white or slightly off-white lime mortars, of a type that was used as early as the Roman period, and then throughout the medieval and post-medieval periods, although following *c.* 1666 and especially in the Victorian period there was greater experimentation with mortar types, ultimately leading to the innovation of modern cement. Given the difficulties surrounding the precise dating of the brick assemblage, some consideration was given to using the mortar as a supplementary dating method. This proved to be impossible given the lack of consistency between the various mortars with the differences identified often being superficial. The range of mortars encountered are described below.

Sandy Lime Mortar

The remnants of particularly sandy white lime mortar were present on some roof tile fragments from medieval contexts. Some later dating fabric 3033 bricks were found within later contexts with remnants of a sandy lime mortar, cream in colour and almost certainly different to the earlier mortar. The fact that the white sandy lime mortar type appears only to be present on tile pieces would support a medieval date. Brick was not widely used locally until *c.* 1480, and prior to this roof tile, and specifically peg tile, was the most widely manufactured type of CBM.

Beige and Pink Coloured Lime Mortars

A darker off-white beige-to-brown mortar was more visually conspicuous within the assemblage, as was a pale, pink toned lime mortar. CBM with these mortar types came exclusively from period 3.1 and 3.2 features, including oval wall G67 [2023]. The CBM from the addition to oven G67 [2025] comprised some loose tile pieces completely covered in beige mortar with frequent inclusions, and a large chunk of wall made up of incomplete brick pieces.

The bricks from the B7 walls [2017] and G88 [2050] were broken and of unclear although approximately Tudor date and the common mortar type would suggest coeval construction. Complete fabric 3033 bricks were also recovered from floor surface G105 [2196] but were completely coated in beige mortar that obscured their form.

Pink coloured mortar was only present on CBM from two contexts, B7 walls [2139] (period 3.1) and [2019] (period 3.2). However, other bricks collected from [2139] presented the less distinctive white and off-white friable lime mortars that were common across the site, so it is suggesting this wall was subject to rebuilding or patching at different points in its lifetime.

Lime Mortar with Pebbles

Lime mortar containing small pebbles, both complete and present as large fragments, was only noted from three contexts on site, brick surface [2180] from kiln S2 (period 3.1), and B7 walls [1018] and [2035] (period 3.2).

Grey and Charcoal-Flecked Mortars

Grey mortars generally date to the mid-later post-medieval period, and in almost all instances date after c.1666. Often the grey colour is due to the presence of large quantities of wood ash in the mortar. The grey-coloured mortars from Wick Lane were not consistent in anything but their colour. In addition to the waste-and-ash-tempered mortar there was also a very fine grey mortar with chalk inclusions.

THE GLASSWARE

Elke Raemen

A small assemblage of 15 fragments of glass (weight 518g) were recovered from eight different contexts. The majority of the assemblage is of little significance, including small and fairly undiagnostic fragments, with few pieces closely dateable.

Three wine bottle fragments were recovered from a feature dug into the floor of building B7 (fill [2089], cut [2088]), which can only be dated broadly to c.1650–1800. Most pieces date to the mid-18th to 19th century and lack intrinsic interest. Full records on these finds are included in the site archive.

Of greater interest is the earliest fragment recovered, comprising a base from a green-tinged rigaree-decorated base from a plain cylindrical beaker (Willmott 2002, Type 1.1). It was recovered from construction cut [2070] (fill [2071], G16) for a repair to drain S1 (Fig 15.1). This type of beaker was very common and dates to c.1550–1670. Pottery from the same context dates to c.1625–75. Rigaree-decorated bases were not in use beyond the mid-17th century (Willmott 2002, 36–7), suggesting either the group dates to the first half of the 17th century or that this beaker represents an older vessel that remained in use until the second half of the 17th century. The pottery suggests low/middle class occupants, and the beaker need not be out of place in a middle-class household of the early 17th century, when glass became an obtainable luxury.

THE ANIMAL BONES

Gwendoline Maurer

Introduction

An assemblage of 895 animal bones weighing approximately 3623g in total was analysed, deriving from both hand-collected and bulk-sampled contexts. Most of the faunal assemblage was recovered from the deposits associated with the medieval (period 2) assemblage. The breakdown of taxa identification and surface modifications per context and sample can be found in Tables 3, 4 and Figure 16.

Methods

Where possible, bones were identified to species and element (Schmid 1972; Hillson 1999) and the bone zones present noted (Serjeantson 1996) and assigned to a spreadsheet. Elements that could not be confidently identified to species, such as long bone, rib, cranial and vertebral fragments, have been categorised by taxa size (large/medium/small) and type (mammal/bird/fish). The assemblage contained insufficient sample sizes for age-at-death estimations to be made. Specimens have been studied for signs of butchery, burning, gnawing, non-metric traits and pathology.

Results

Relative Taxonomic Abundance

The medieval assemblage (period 2) contains both wild and domestic taxa (Table 3 & Fig 16). Wild animals represented were rabbit, small rodents (including mouse, vole and shrew species), anurans (frog/toad) and partially identifiable bird bones including duck species and possible partridge. Fish bones were particularly abundant, although the majority were indeterminate. Where species determination could be attempted fish bones were identified as gadid, including probable cod, whiting and pollack, and one flatfish.

The post-medieval assemblage (period 3) mostly featured domestic livestock. Fish, birds, and microfauna were almost entirely absent.

The 19th- to 20th-century assemblage (period 4) only included 16 bones deriving from demolition material within earlier structures and buildings. The species present included pigs, cattle, caprines, one horse, and one roe deer. Given the late date and paucity of these remains they do merit further discussion.

Taphonomy

In the medieval assemblage high temperature burning (calcined and carbonised bone) was identified on 57 specimens from periods 2.1 and 2.2, relating mostly to Building B4, but also open areas OA2 and OA4. These temperatures indicate disposal strategies rather than cooking traditions (Shipman *et al* 1984; Pearce & Luff 1994).

Table 3. NISP (number of skeletal elements identified by bone type and taxa) and MNI (minimum number of individuals) counts for taxa identified in periods 2, 3 and 4

Taxa	Total	Medieval						Post-medieval						19th–20th century	
		2.1		2.2		2.3		3.1		3.2		3.3		4	
		NISP	MNI	NISP	MNI	NISP	MNI	NISP	MNI	NISP	MNI	NISP	MNI	NISP	MNI
Cattle	17	6	2	1	1							9	1	1	1
Caprine	12	1		1		1						9	2		
Sheep	4	1	1	1								1	1	1	1
Goat	1									1	1				
Pig	5			1								1	1	3	1
Horse	3	1										1		1	1
Cat	1			1	1										
Roe deer	1													1	1
Rabbit	1	1	1												
Large mammal	60	32		10								14		4	
Medium mammal	37	14		7				1				11		4	
Small mammal	5			5											
Microfauna	3	1		2											
Microfauna/bird	6	6													
Small rodent	1	1													
Mouse/Vole sp	3	2	1	1											
Shrew sp	1	1	1												
Vole sp	1	1	1												
Anuran	1	1													
Bird	33	26		7											
Small bird	23	22	4									1	1		
Duck sp	1	1	1												
cf Partidge	3	3	1												
Fish	103	44		59											
Gadid	1	1													
Gadid - Cod?	1	1													
Gadid - Pollack?	1	1													
Gadid - Whiting?	1			1											
Flatfish	1	1													
Indeterminate	564	375		171				17						1	
Total	895	544	13	268	2	1	0	18	0	1	1	47	6	16	5

Table 4. NISP and MNE (minimum number of skeletal elements) per skeletal element and phase. Elements have been grouped into nine anatomical regions according to Stiner 1994

Element		Medieval 2		Post-medieval 3		19th–20th C 4	
		NISP	MNE	NISP	MNE	NISP	MNE
Head	Cranium	2		1			
Mandible	Mandible	2	1	10	3	3	2
	Lower dentitia	1					
	Dentitia	1		1			
Neck	Atlas	2					
Axial	Thoracic	2	1				
	Caudal	5					
	Vertebra	24	1				
	Rib	39		12		6	
Shoulder	Scapula	5	4	4	3		
	Humerus	4	3	4	4	1	1
Lower forelimb	Radius	2	2	2	1		
	Ulna	13	10				
	Metacarpal	1	1	1	1		
	Carpometacarpal	11	9				
Haunch	Pelvis	5	2	3	2	1	1
	Femur	8	4	1	1	1	1
Lower hindlimb	Tibia	1	1				
	Tibiotarsus			1	1		
	Metatarsal			4	1	1	1
Feet	Phalanx 1	3	2			1	1
	Phalanx 2			1	1		
	Phalanx	6					
Other	Long bone shaft	38		4		1	
	Unidentified	638		17			

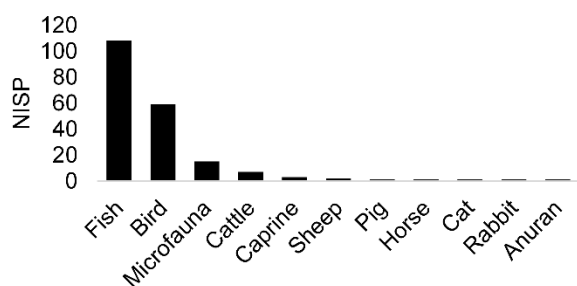


Fig 16. Bar chart depicting the NISP count of the taxa represented in the medieval (Phase 2) assemblage

In the post-medieval assemblage high temperature heat exposure was again the most common form of burning, with calcination affecting 18 bones from

context [2006] (G83), the rakings from the possible malt kilns from period 3.1.

The medieval assemblage contains seven bones displaying canid gnawing, all from period 2.1 in OA2 and OA4. Similarly, in the post-medieval assemblage canid (n=7) and rodent (n=1) gnawing was identified, with all deriving from period 3.3 demolition deposits of structures S1 and S4. These period 2 and 3 patterns, suggest deposition practices that allowed scavengers access to refuse before it was covered.

Pathology and Non-Metric Traits

The early post-medieval assemblage contains one caprine radius from G20 demolition layers context [2001], displaying periosteal new bone formation just below the proximal epiphysis. This could have been a result of localised trauma (Baker & Brothwell 1982). A cattle second phalanx recovered from the drain repair

G16 context [2071] showed possible non-metric bone growth on the plantar aspect of the proximal articulation. A cattle mandible from context [2001] presented grade II calculus and some alveolar resorption (Dobney & Brothwell 1987).

Body Part Representation, Butchery and Consumption

The body part component from the medieval assemblage suggests the shoulders, lower hindlimbs and haunch were well represented (Table 4). These parts are the most meat-rich parts of an animal's carcass. Low meat bearing parts such as cranial and metapodial fragments are underrepresented. Roasting was identified on one large mammal long bone fragment, again from OA4, suggesting that meat was occasionally roasted on the bone.

THE PLANT REMAINS AND WATERLOGGED WOOD FROM THE BULK SAMPLES

Mariangela Vitolo

Introduction and methods

Seven bulk soil samples were taken from pits (OA2, G40, [2112], [2115]) (OA4, G60, [2060], [2062]), a charcoal raking from a kiln (B10, G83, [2006]) and occupation and levelling layers (B4, G53, [2144]; OA4, G46, [2192]), spanning the medieval to the early post-medieval periods. A number of deposits appeared to be organic in nature whilst also containing a large amount of cultural material. Quantification and identifications of the macrobotanical remains and wood are listed in Tables 5, 6 and 7.

Results

Period 2.1: Medieval (1240–1400)

The pits in OA2 (G40) produced only two charred caryopses of wheat (*Triticum* sp) and wheat/barley (*Triticum/Hordeum* sp). A moderate amount of uncharred botanical remains, including seeds, fruit pips and nutshells, could be contemporary with the

excavated contexts and have been preserved in an anoxic environment, due to the waterlogged conditions. The range of waterlogged taxa was restricted. The grape (*Vitis vinifera*) pip and hazel (*Corylus avellana*) nutshell fragments could have originated from human diet, whilst the seeds of water-dropwort (cf *Oenanthe aquatica*), redshank/persicaria (*Persicaria* sp), goosefoot (*Chenopodium* sp) and bittersweet (*Solanum dulcamara*) are derived from the local vegetation. These wild plants grow in open environments, and water drop-wort occurs near lakes or rivers. A small number of fragments of waterlogged wood of elm (*Ulmus* sp) were also present in OA2.

Period 2.2: Medieval (1350–1500)

Deposits in OA4 produced a small amount of charred plant remains which are likely to represent a background scatter of waste of domestic origin. Free-threshing wheat (*Triticum aestivum/durum*), barley (*Hordeum vulgare*) and cultivated vetch (*Vicia* sp) could all have been consumed at the site and become charred as a result of an accident occurring during cooking or meal preparation. Waterlogged conditions persisted in period 2.2. leading to the preservation of uncharred caryopses of rye (*Secale cereale*) and barley, as well as a possible olive pip (cf *Olea europea*) and grape pips. Wild radish (*Raphanus raphanistrum*) is also edible and the pods from this plant could also have derived from material used for human consumption. The other weed taxa from OA4, such as elder (*Sambucus* sp), goosefoot and common knotgrass (*Polygonum aviculare*), are typically recovered from waterlogged deposits and might have accumulated naturally within the archaeological deposits. Very small fragments of waterlogged wood were recorded from OA4, including some incomplete roundwood. All the wood was identified as oak (*Quercus* sp).

B4 mostly yielded charcoal (see Vitolo below) and a small amount of waterlogged wood. The wood fragments were too small to be identified. Macrobotanical remains were limited to a charred grain of hulled barley and an uncharred wild radish pod, the latter likely also preserved thanks to the waterlogged conditions.

Table 5. Quantification of botanical remains from the residues

Sample no.r	Context no.	Parent Context type	Period	Landuse	Sample volume litres	Charred botanicals quantity and identifications	Weight (g)	Uncharred botanicals quantity and identifications	Weight (g)
1	2060	2061	P	2.2	OA4	40		* cf <i>Olea europea</i> , <i>Secale cereale</i> , <i>Hordeum vulgare</i>	<1
2	2062	2063	P	2.2	OA4	40	** <i>Hordeum</i> sp, <i>Triticum aestivum/durum</i> , <i>Vicia</i> sp	* <i>Vitis vinifera</i>	<1
6	2112	2117	P	2.1	OA1	40	* <i>Triticum</i> sp, <i>Triticum/Hordeum</i> sp		<1
7	2115	2117	P	2.1	OA1	40		* <i>Corylus avellana</i> , <i>Vitis vinifera</i>	1
8	2006	2006	DU	3.1	B10	40	* <i>Triticum/Hordeum</i> sp		<1
9	2144	2144	OL	2.2	B4	40	<i>Hordeum vulgare</i> 1	* <i>Raphanus raphanistrum</i>	<1
10	2192	2192	OL	2.1	OA4	40		* cf <i>Raphanus raphanistrum</i> pods	<1

Table 6. Dry flot quantification of botanical remains

Sample no.	Context no.	Parent	Context type	Period	Landuse	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Crop seeds charred	Identifications	Preservation	Other botanicals charred	Identifications	Preservation
1	2060	2061	pit	2.2	OA4	40	40	70	10	*** <i>Sambucus</i> sp, <i>Chenopodium</i> sp, <i>Polygonum aviculare</i>			**	**	<i>Hordeum</i> sp, <i>Triticum/Secale</i> sp, Cerealia	+/++			
6	2112	2117	pit	2.1	OA1	120	120	40	40	*** cf <i>Oenanthe aquatica</i> , <i>Solanum dulcamara</i> , <i>Chenopodium</i> sp			**						
8	2006	2006	dump	3.1	B10	250	100	10	10		**	***	****	**	<i>Triticum aestivum/durum</i> <i>Triticum/Hordeum</i> sp	++/+	* Poaceae culm node		++

Table 7. Wet flot and wet-sieved fraction quantification of botanical remains, plus weight in grams

Sample no.	Context no.	Parent	Context type	Period	Landuse	Sub-sample scanned (ml)	Macrob botanical Remains	Identification and preservation notes	Wood	Notes on Preservation of Wood	Identification and preservation notes
2	2062	2063	Pit	2.2	OA4			100		*** small fragments, occasional round wood fragments, but incomplete	
7	2115	2117	Pit	2.1	OA1			100	** <i>Persicaria</i> sp, Polygonaceae, well preserved but restricted range of taxa	** small waterlogged wood fragments	<i>Ulmus</i> sp, 3
8	2006	2006	Dump	3.1	B10			100		**** mostly charcoal, very well preserved. Occasional waterlogged wood.	<i>Quercus</i> sp, 3, all fragments were hard and sections were not easily obtainable.
9	2144	2144	Occupation layer	2.2	B4			100		** mostly charcoal, some very small waterlogged wood fragments	
10	2192	2192	Occupation layer	2.1	OA4			100		** wood fragments, mostly small.	<i>Quercus</i> sp, 1

Period 3.1: Tudor (Pre-1571)

The kiln rake out from building B10 produced moderate amounts of caryopses of free-threshing wheat and wheat/barley alongside grass family culm nodes, which were of the right size to be of cereals. No waterlogged plant macrofossils were recovered from this landuse, although a small amount of uncharred oak wood was recorded. The fragments were fairly hard to the touch and difficult to obtain sections from.

Discussion

The highly organic deposits at Wick Lane preserved a variety of food plant remains which can give a glimpse into the diet that was available to Londoners in medieval and Tudor times. As the excavation area lies on the edge of a watercourse with ready access to the Thames, it is not surprising that exotic imports from the continent, such as grapes and olives found their way on to the site. No doubt such foodstuffs would have been reserved for the tables of the wealthy households. The samples also contain a background signature of the agricultural and crop processing activities carried out at the site. Free-threshing wheat, barley and rye were common cereals in medieval London; often a mixture of wheat and rye (maslin) or all three cereals was used to make a cheaper variety of bread for the poor, rye and barley also being common ingredients in brewing. Unfortunately, the assemblages are too small and lacking in crop processing by-products (such as chaff and weeds) and as such no information can be gathered on crop husbandry and processing practices.

Waterlogged wood was preserved in small amounts. Elm timber is particularly resistant to decay as it does not rot easily; it was therefore often used for pilings in wet ground including at Rochester Bridge in Kent during its rebuilding in 1383–93 (Salzman 1952, 84–5). The fragments of elm from this context were small but are likely to derive from larger timbers. It is notably that the timber structures encountered on site were generally made of oak with an absence of elm.

THE CHARCOAL

Mariangela Vitolo

Introduction and Methodology

Three samples from OA4, B4 and B10 were selected for charcoal analysis. These contexts span from the early medieval period 2.1 to the early post-medieval period 3.1.

One hundred charcoal fragments were extracted from the flots and heavy residues of each sample, as this is considered the minimum suitable number of fragments to analyse for assemblages from temperate zones where floristic diversity is relatively low (Asouti & Austin 2005; Keepax 1988).

The fragments were fractured by hand along three planes (transverse, radial and tangential) according to standardised procedures (Gale & Cutler 2000; Hather 2000; Leney & Casteel 1975). Charcoal specimens were

viewed under a stereozoom microscope for initial grouping, and an incident light microscope at magnifications up to 400x. Taxonomic identifications were assigned by comparing suites of anatomical characteristics visible with those documented in reference atlases (Hather 2000; Schoch *et al* 2004; Schweingruber 1990). Genera, family or group names have been given where anatomical differences between taxa are not significant enough to permit more detailed identification. Notes have also been made on the presence of round wood. Taxonomic identifications of charcoal are recorded in Table 8, and nomenclature used follows Stace (2010). Latin names are given at first mention and, with the exception of the Maloideae group, taxa are subsequently referred to by their English common names.

Results*Summary of Recorded Taxa*

Anatomical characters observed on the charcoal fragments from analysed features at Cliffsend Thanet were consistent with those of the following taxa:

- Fagaceae: *Quercus* sp, of which two species are native to Britain, *Quercus robur* (pedunculate oak) and *Quercus petraea* (sessile oak); *Fagus sylvatica*, beech
- Betulaceae: *Corylus avellana*, hazel; *Alnus* sp, alder; *Carpinus betulus*, hornbeam
- Maloideae: subfamily including several taxa that are generally not distinguishable, such as *Malus* sp, apple, *Pyrus* sp, pear, *Crataegus monogyna*, hawthorn, and *Sorbus* sp, rowan, service and whitebeam
- Oleaceae: *Fraxinus excelsior*, ash
- Salicaceae: *Salix/Populus* sp, willow/poplar

Preservation

Large flecks of charcoal were preserved in most assemblages, particularly from post-medieval B10 which consisted almost exclusively in round wood stems of hazel and hornbeam. Some of these fragments were complete with the bark and the measurement of their diameter averaged from 12 to 20mm with six to seven growth rings, with a few outliers presenting more or less rings. The growth patterns were generally uniform, apart from a couple of fragments where more wood had been deposited rapidly in the first years, a character generally associated with coppicing. The medieval assemblages also contained some round wood, all consisting of incomplete stems.

Charcoal fragments presented evidence of iron concretions, which made them very hard to section and obscured some of the anatomical characters. Growth patterns were generally uniform, except for a handful of ash and oak fragments which were slow grown.

Discussion

The charcoal assemblages from Wick Lane represent fuel waste originating from activities carried out at the site. Such waste might have accumulated gradually and

Table 8. Charcoal Identifications of Wick Lane samples. KEY: rw – round wood

Taxonomic ID	English Name	Sample no.	8	9	10
		Context	2006	2144	2192
		Parent context	2006	2144	2192
		Landuse	B10	B4	OA4
		Period	3.1	2.2	2.1
		Context type	Dump	Occupation layer	Occupation layer
<i>Quercus</i> sp	oak		28 (rw 1)	35 (rw 8)	40 (rw 7)
<i>Fagus sylvatica</i>	beech			4	3
<i>Fraxinus excelsior</i>	ash		2 (rw 1)	3	5
Maloideae	hawthorn, whitebeam, rowan, apple, pear			1	1
<i>Corylus avellana</i>	hazel		20 rw	2	2
<i>Alnus</i> sp	alder		9 (rw 4)	40 (rw 2)	41 (rw)
<i>Carpinus betulus</i>	hornbeam		41 (rw 25)	8	7 (rw3)
<i>Salix/Populus</i> sp	willow/poplar			3	1
<i>Acer campestre</i>	field maple			1	
Indeterminate	distorted			2	
Indeterminate	knotwood			2	

could have been derived from a range of sources, such as domestic activity (cooking and heating) and firing kilns.

The identified trees or shrubs grow in a variety of vegetation environments, including mixed deciduous woodland (oak, ash, hazel), woodland margins (field maple), scrub (Maloideae), whilst alder and willow/poplar could have been sourced from riverbanks. Hornbeam tends to form woods and copses on clay soils in south-eastern England, but it is also used for hedging (Stace 2010). Most of the woody taxa identified in the assemblage produce reasonably good fuel and could have been selected specifically for their burning properties. Alder wood does not burn very well when fresh, but it does after being turned into charcoal (Taylor 1981). Charcoal is lighter than wood in terms of calorific value and this would have aided its transport making it cheaper than fresh wood (Keene 2012).

The assemblages are too small to ascertain the origin of the wood in terms of its management regime, such as coppiced woodland. However, by the early medieval period most of the English woodland was under the control of local estates (Rackham 1990) and likely to have been managed in order to guarantee a steady stream of fuel and timber. In the 11th century fuel wood used in the City of London was derived from the Chilterns or parts of the Weald (Galloway *et al* 1996), by the 14th century most of the fuel wood traded into London consisted of faggots deriving from coppiced woodlands in Middlesex and Kent (Keene 2012). Talwood (logs) made from beech or oak was also commonly sold to Londoners. The two types of wood were destined to different uses, faggots for use in bakeries, breweries and industries, whilst talwood was used as domestic fuel. Oak, beech and ash appear frequently in the manorial accounts regarding the sales of fuelwood to London (Galloway *et al* 1996) and these taxa appear in the medieval deposits at Wick Lane. The early post-medieval charcoal assemblage contain species – particularly hazel and hornbeam – that were often coppiced or pollarded during this period. However, this

over-reliance of Londoners on managed woodlands for fuel might have been over-estimated (Warde & Williamson 2014). At the end of the 16th century there was a shortage of wood in the vicinity of London which might have led people to source fuel from a wider range of materials.

THE STRUCTURAL TIMBERS

Stacey Adams and Lucy Allott

Introduction and Methodology

Various timbers used in medieval (Period 2.1) wharf structure W1, timber walkway RW1 and two isolated timbers in OA2 were preserved in the waterlogged anaerobic environment (Fig 6). Due to a high level of hydrocarbon contamination, only three of the ten W1 timbers could be lifted, photographed and drawn (on site) and no taxonomic identifications were obtained. Six of ten RW1 timbers were brought off site for detailed recording and identification while all remaining timbers were left *in situ*.

The six extracted timbers from RW1 were gently cleaned, recorded on pro forma sheets, photographed, subsampled for taxonomic identification and rewrapped for temporary storage. Wood samples were manually sectioned along three planes (transverse, radial and tangential), according to standardised procedures (Gale & Cutler, 2000), and examined under a transmitted light microscope at 50x to 300x magnification in order to determine the woody taxa. Identifications were made with reference to comparative atlases (Schoch *et al* 2004; Schweingruber 1990) and nomenclature follows Stace (1997). The timber results are detailed in Tables 10 and 11. Sections of timbers <003> (2075), <004> (2076), <005> (2077) and <007> (2081) were submitted for dendro-chronological dating but results were inconclusive.

Table 9. Timber record from W1, Area A

Timber no.	Timber context no.	Timber type	Parent context	Structure type	Area	Sub-Group	Length (m)	Breadth (m)	Width (m)	Conversion	Joints/fixtures	Tool marks	Unintentional/excavation marks
9	1043	plank	plank [1043]	timber quay?	A	47	0.88		0.13	tangentially-faced	scarf joint		broken by machine.
10	1044	post	post [1044]	timber quay?	A	47	1.19	0.14			mortise joint	axe marks.	broken by machine.
11	1045	post	post [1045]	timber quay?	A	47	0.63	0.16			cross lap joint, rabbet joint?		

Table 10. Timber record from Area B

Timber no.	Timber context no.	Parent context	Area	Sub-group	Length (m)	Breadth (m)	Width (m)	Condition 1–5 (1=good, 5=poor)	Condition notes	Knotwood	Bark/Sapwood/Heartwood	Conversion	Tool marks	Unintentional/excavation marks	Taxonomic ID.	English name	Taxonomic notes
3	2075	construction cut [2079]	b	181	1.19	0.25	0.19	4	scuffed in places, a little cracking on sapwood.		s	halved	saw marks, rope wear.		<i>quercus</i> sp	oak	
5	2077	construction cut [2079]	b	180	0.67	0.23	0.23	3	sapwood largely degraded, weathered with cbm inclusions.		s,h	boxed heart	saw marks.		<i>quercus</i> sp	oak	
6	2078	construction cut [2079]	b	179	1.95	0.12	0.10	2	timber in four parts, very soft and fragile.	y	b,s,h	whole	clearly been cut but no tool marks.	snapped/broken into 4 pieces.	maloideae	apple sub-family	high ring curvature
7	2081	construction cut [2079]	b	178	0.59	0.23	0.24	4	sapwood mostly worn off and weathered on one end.	y	s,h	box-quartered	clearly been cut but no tool marks.		<i>quercus</i> sp	oak	fast-growing
8	2082	construction cut [2079]	b	176	0.56	0.15	0.12	2	warped/dried-out and cracked. one end is very threadbare.	y	s	whole - trimmed one side	saw marks and possible faint axe mark.	excavation mark.	<i>quercus</i> sp	oak	
4	2076	posthole [2207]	b	174	1.58	0.15	0.13	4	flat end a little weathered.		b,s,h	whole	saw marks.	several dents.	<i>quercus</i> sp	oak	slow-growing

Results

Period 2.1: Medieval (1240–1400)

W1 Timber Wharf

The structure comprised two lines of upright posts and two horizontal planks, overlying the southern line of posts. Of these, three squared posts were photographed, drawn on site and subsequently discarded (Table 9). The first [1043] was straight grained, measuring 1.03m long although with some modern damage at one end and was roughly squared with maximum width/depth measurements of 150mm. The damaged end preserved remnants of a simple lap joint and the opposing end retained a possible mortice. Timber [1044] measured 1.19m in length and was roughly cuboid with width/breadth measurements of 140mm. One end preserved a square sectioned tenon (30 x 30mm), off set from the centre while the opposing end and side revealed some modern damage. Axe marks were present along one edge while the opposing side was smoothed and rounded, the cause of which is unclear. The third squared post, [1045] was 0.63m in length with a maximum width of 170mm. Two joints were present on either longitudinal side of the timber. The cross-lap joint on one side would have facilitated the slotting of another piece of wood whilst the rabbit joint on the other side would slot with another timber to create a 90° angle. The joints and fixtures were likely created to allow for the construction of the wharf. There is no indication that the three selected timbers fitted together as part of structure although it is possible that timbers left *in situ* possessed joints that would coincide with those recorded.

RW1 Timber Walkway

Timber structure RW1 comprised 10 upright posts showing various forms of conversion, states of preservation and growth forms. Of the six posts recorded in detail (Table 10), five were identified as oak and one as *Maloideae* (defined earlier) [2078]. Timbers [2076], [2077], [2078] and [2082] were whole with sapwood (and bark on [2076] and [2078]); [2075] was halved with some tangential trimming along the length, at 90° to the halving cut (Fig 17); while [2081] was boxed along two surfaces with full curvature and sapwood preserved around the rest of the circumference. All of the posts were incomplete with snapped or weathered ends and varied greatly in length, with the longest measuring 1.95m (although preserved in four segments) and the shortest measuring only 0.56m in length. Timbers [2075], [2076] and [2078] were reduced at one end to form rough points, presumably to facilitate being driven into the ground. No joints or fixings were recorded on any of the posts and evidence for tool marks was limited to those left by saws and axes used to convert the timbers, create the pointed tips or remove side branches. Parallel lines that may result from rope wear were recorded at the boxed end of [2075] (Fig 17).

All of the posts were derived from relatively small trunks or large branches with few alterations. Growth

rates in the oak appear to vary with [2081] displaying wide spaced growth rings indicative of fast growth while [2076] contains tightly spaced rings which result from slower rates of growth.

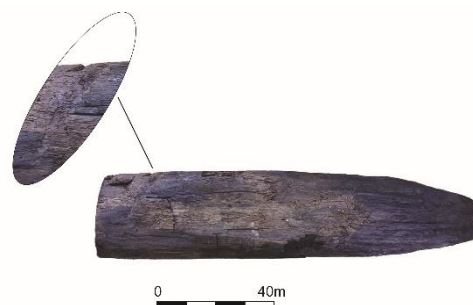


Fig 17. Timber [2075] from Area B, G25, trackway RW1, period 2.1

OA2

Two further disassociated timbers recorded in OA2 comprise a plank fragment recovered from a natural alluvial deposit [2/064] with possible medieval inclusions and post [2/078] from stakehole [2/079] which may have formed part of the lining of a medieval refuse pit. The predominant feature of the oak plank fragment is a drill hole through the tangential section of the wood which would have allowed the timber to be fixed as part of a structure or object with a peg. This plank was from a sizable timber, far larger than those used in the W1 or RW1. Its original function is however unknown. The stake was cut from a large branch or stem of oak and was whole in section although cut to a point at one end. The upper exposed end had degraded considerably leaving the hard central heartwood protruding. Several cut marks and notches were recorded along the sawn edge of the stake.

Discussion

Historical sources state that the River Lea was used for long-distance transportation of goods, particularly grain and wine, in the 13th century (Jones 2000: 66, 72). In 1425 and 1430 statutes were passed to improve its navigation (Priestley 1831, 379), demonstrating its importance as a waterway (Jones 2000, 66). Timber from London's hinterland could also have been transported along the river (Galloway *et al* 1996, 447).

Contextual and stratigraphic information is limited for the timber wharf (W1) and walkway structure (RW1) at Wick Lane due to the contaminated nature of the site. Although remnants of joinery were evident on timbers from W1 there was no indication that any of the surviving timbers in either of the locations interconnected, which further restricts their interpretation beyond simple plank and post structures. The use of timbers from trees with relatively small diameters displaying variable growth rates and limited conversion or alteration from their original form could indicate a small scale, perhaps expedient, level of construction. Oak is an excellent structural timber (Taylor 1981) and is eminently suited to being used in

such structures; however the use of Maloideae is perhaps more surprising, although still useful structurally (Taylor 1981, 45). The Wharf at Wick Lane is overlain by wall G48 dated to period 2.2 (1350–1500), indicating it was most likely out of use by the late 14th century significantly prior to the abandonment of the use of the River Lea by the mid-16th century for transporting goods to London (Jones 2000: 67).

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