



Fig. 1: the location of the site on the western section of the city wall

# The western stream, Roman city wall and medieval city ditch at 7–10 Old Bailey, London EC4

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## Introduction

Between March and April 2007, Museum of London Archaeology (MOLA), carried out archaeological investigations in advance of redevelopment at 7–10 Old Bailey (NGR 531790 181240).

The archaeological investigation comprised a controlled geoarchaeological coring exercise and localised excavation in the basement of the building, prior to demolition. The areas of excavation covered two ‘core areas’ at the north and south ends of the basement and three of the proposed new foundation positions (Fig. 3). Three further proposed foundations, initially programmed for excavation, were monitored during a watching brief, following the demolition of the building. The proposed development was designed to have minimal impact on the surviving archaeological remains. As such the original basement level was retained in the new building and consequently most of the surviving archaeological deposits have been retained *in situ*.

The site is located over the line of

the Roman and medieval city ditch and wall, (Scheduled Monument County Number LO26B) as demonstrated by early-20th-century investigations during redevelopment of the site.<sup>1</sup> The most recent archaeological work on the site began in 2000. Three phases of evaluation were undertaken prior to excavation in 2007, as part of the planning application process and in line with subsequent planning and Scheduled Monument Conditions. The evaluations uncovered remains of the Roman city wall, the medieval city ditch and foundations of the 19th-century Central Criminal Court. The results of the evaluations and excavation work are presented here, interpreted through plans and sections in conjunction with a number of conventions used within the text. Context numbers are presented in square brackets ([ ]) and accession numbers of finds as angled brackets (< >). These numbers refer to the site archive, which is held at the London Archaeological Archive and Research Centre (LAARC) under the site code ODY03.

## Archaeological and historical background

The main feature of archaeological interest on the 7–10 Old Bailey site is the city wall, built at the beginning of the third century AD, and the associated ditch. The section of wall at 7–10 Old Bailey stood on the high ground overlooking the Fleet River, which formed a natural defensive boundary on the western side of the Roman city. Access into the City would have been made via Newgate, some 150 metres to the north. Excavations at 1–6 Old Bailey<sup>2</sup> showed that the Roman ditch was recut in the late Saxon period, presumably coinciding with the reoccupation of the town by King Alfred in AD 886.

In the medieval period the city wall was rebuilt, and fortified with hollow bastions added along the western and northern sides of the wall. Two bastions apparently existed in the city wall between Newgate and Ludgate and are mentioned in various contemporary and 17th-century documents.<sup>3</sup> William Leybourn produced his Survey of the Wall which showed the Ludgate bastion

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to be almost wholly intact in 1676.<sup>4</sup> This bastion was projected to have stood at the rear of no. 6 Old Bailey opposite Stationers' Hall.

Excavations at 1–6 Old Bailey show that the medieval ditch was large with a base c. 12m wide, dug to the west of the Roman ditch and recut several times.<sup>5</sup> The city ditch has also been recorded to the north-east at King Edward Buildings, Newgate Street, where the top of the primary fill was located 6m below present ground surface.<sup>6</sup> This was overlain by a series of water-lain silts possibly of 12th-century date with the upper portion of the ditch infilled in the 16th century. The 16th-century writer Stow believed that the city ditch was dug (or more likely re-dug) in 1211–1213 and cleansed a number of times,<sup>7</sup> including broadening along certain stretches of the ditch. He recorded the existence of a defensive ditch between Newgate and Ludgate.<sup>8</sup> Examination of the city defences south of Newgate at Old Bailey in 1969 revealed two phases of medieval ditch. The earlier ditch had a narrow V-shaped profile, and had been almost entirely removed by the excavation of the later ditch over 24m wide and more than 6m deep.<sup>9</sup>

The city wall forms the ward boundary in this area, and documentary records of 1251 mention houses constructed to the east of Old Bailey, which had become a road by the medieval period.<sup>10</sup> It is evident from Stow's narrative that the frequent

cleansing and scouring of the city ditch eventually gave way to infilling and reclamation for houses and garden plots by the mid-16th century.<sup>11</sup> The first Old Bailey Sessions House was constructed in 1539 over the line of the city ditch to the south of Newgate Prison as this allowed prisoners to be conveniently brought to the courtroom for their trials. This first Sessions House was to the north of the 7–10 Old Bailey site.

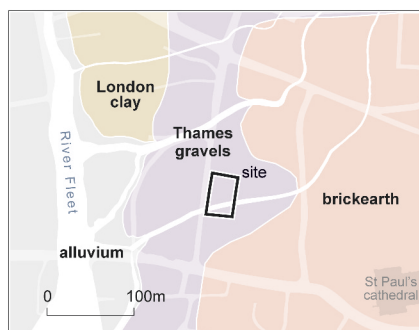
The massive rebuilding programme which followed the Great Fire saw the construction of relatively narrow properties on the site, with the city wall, still standing at this time, forming the boundary to rear gardens and yards. In 1774 a new Sessions House, just to the south of the 1539 building was constructed and was, in turn, replaced by the Central Criminal Court in 1834. This building was in turn demolished in 1907 and a new office building constructed by 1910, home for many years to the *Reader's Digest*. It was during demolition works in 1907 that the city wall was found to be faced with stone to a height of approximately 2m on the Amen Court side. A high brick wall, to the east of the Roman and medieval city wall, formed part of a property boundary between the Old Bailey building and Amen Court. Bricked-up undercrofts can be seen on the Amen Court side of the wall. Philip Norman and Francis Reader suggest that this was the precinct wall of St Paul's built in the 12th century and that it had a modern brick wall standing

upon the earlier structure, but the physical evidence points to an 18th-century date.<sup>12</sup>

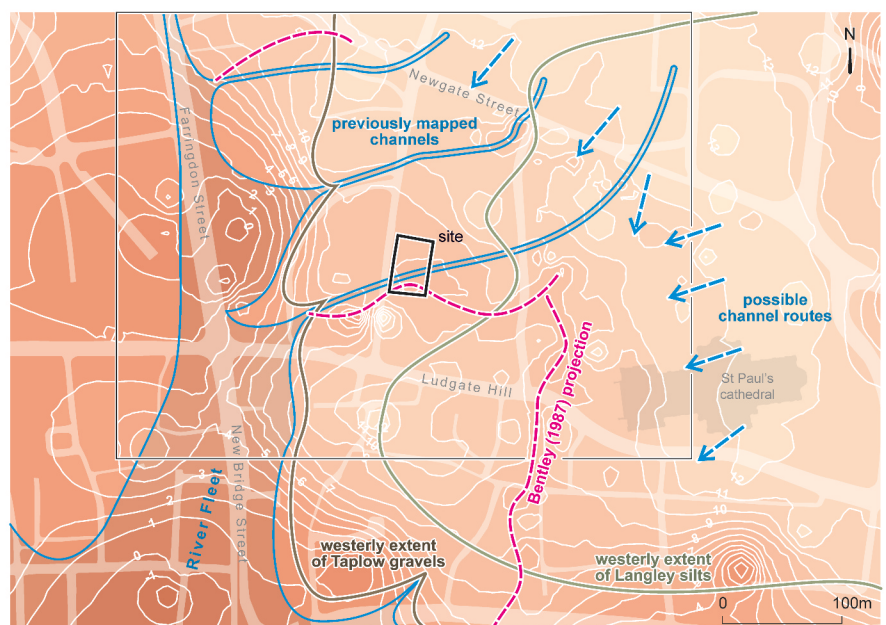
### The geology and topography of the area

The site lies on the eastern slope of the Fleet Valley, where the underlying geology consists of Eocene London Clay overlain by Pleistocene deposits of Taplow Terrace gravels capped with Langley Silts (BGs Sheet 256). To the north-west of the site at 19–25 Old Bailey<sup>13</sup> the natural gravel deposits were recorded at 11.80m OD sloping down to 10.60m OD in the south-west. Immediately to the south of the site at 1–6 Old Bailey<sup>14</sup> the natural brickearth had been truncated by later activity, but the gravel survived up to a height of 11.60m OD. On the site itself truncated natural gravel [134] was found to exist across the site (to a maximum of 9.50m OD in the south-eastern trench).

The topography of the western hill on which the site is situated has been shaped largely by the Fleet River but also by a number of streams that flowed across the high area from the interface of the Taplow and Hackney gravels in the north down to the Fleet in the west. Stream channels are known to have flowed in a south-westerly direction down to the Fleet River and were canalised in the early Roman period in advance of the construction of the city's defences. The existence of a 'Western Stream' flowing across the hill was postulated by Bentley in 1987<sup>15</sup> (Fig. 2)



**Fig. 2: the natural topography c. 9000 BC (Early Holocene surface) showing possible channel routes over the natural and modified topography in the vicinity of the land around the Old Bailey (ODY03)**



and reinvestigated during excavations in 1999.<sup>16</sup> The stream was thought to run southwards from the area around Newgate Street into the Thames. This projection runs contrary to the natural route a stream would take (with the contours rather than across them) and probably describes a complex network of Roman ditch systems and / or canalisation work in the early Roman period in advance of the construction of the city's defences rather than a natural river system.<sup>17</sup>

Just to the north-east at 3–9 Newgate Street<sup>18</sup> and Paternoster Square,<sup>19</sup> auger transects confirmed that the natural drainage was from the north-east to the south-west, running towards the River Fleet. Reconstruction of the topography of the area indicated that the direction of the stream found on the Paternoster Square site<sup>20</sup> would run through the southern side of 7–10 Old Bailey (see Figs. 1 and 2). This is in accord with observations made by Norman and Reader to the rear of 7–10 Old Bailey during demolition in 1907, which identified two streams located 20 feet (c. 6 metres) from the south-east corner of the site, cutting through the natural brickearth, the larger of the two estimated to be 17 feet wide (c. 5m). Indeed, on site at the base of the north sondage in the Southern trench, a stream/palaeochannel of unknown depth and aligned ENE–WSW was recorded below the city ditch (see Fig. 5). It was filled with a sequence of waterlogged banded coarse sands, silty clay and gravel with manganese and rootlets, [140–145]. It did not contain any of the peaty or humic material seen within the channel at Paternoster Square, which has been proven to be historic in date and related to man-made features. Instead its fill tends to indicate a channel of some antiquity – perhaps Pleistocene – flowing in the direction of the Fleet. Although the channel fills cannot be dated and might be thousands of years older than the excavation of the city ditch, evidence for the natural topography and pattern of water flow across the natural strata suggests the likelihood that a watercourse flowed down the hillside from the river terrace draining into the Fleet when the ditch was excavated.

A recent reappraisal of the natural topography of the City has been carried

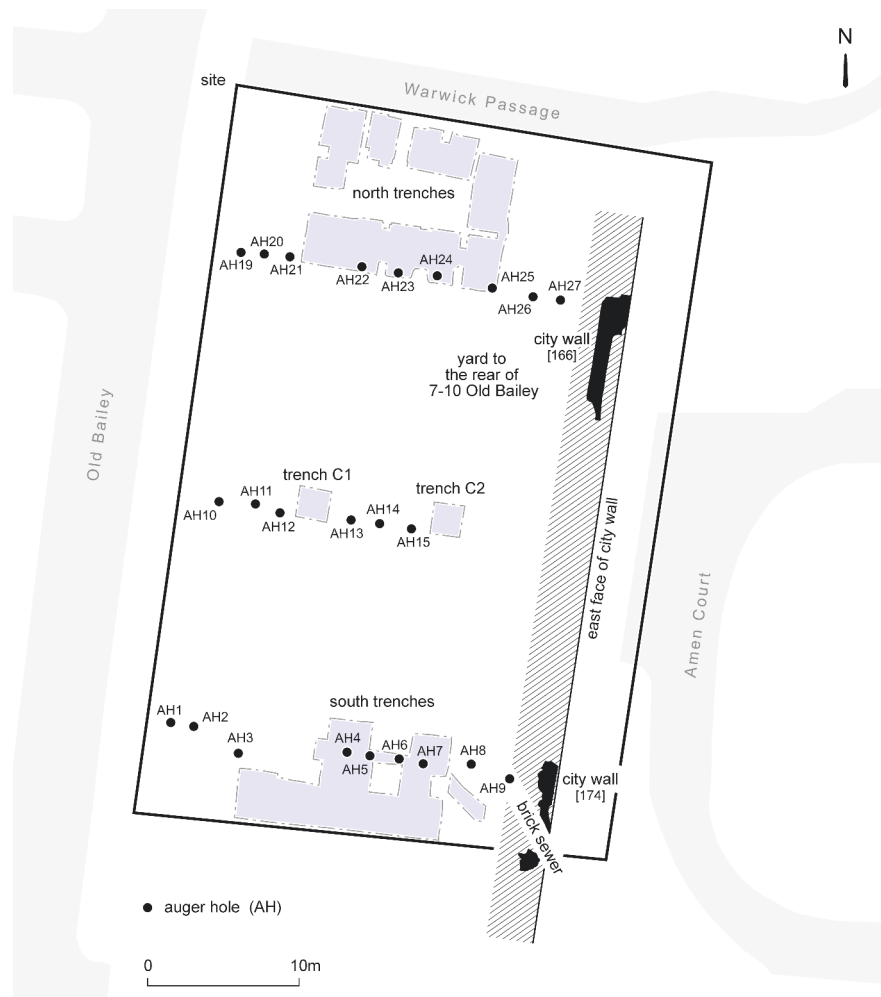


Fig. 3: plan showing the surviving sections of the Roman city wall, excavation areas and auger-hole positions within the city ditch (scale 1:500)

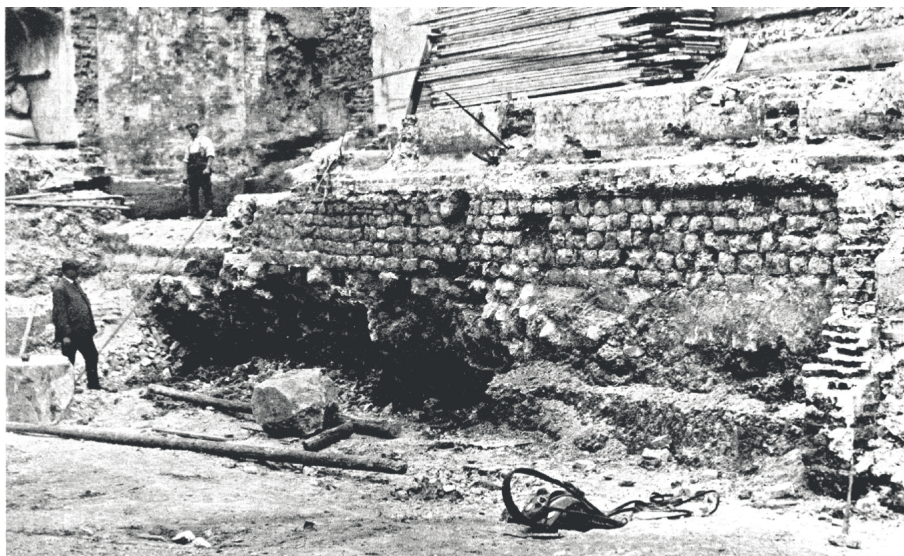
out by MOLA Geoarchaeology using point data from archaeological sites (including 7–10 Old Bailey) and boreholes, allowing a more detailed interpretation of the surface of the brickearth and gravel land surface at the beginning of the Mesolithic. Low areas include both natural features such as watercourses and human interventions into the Pleistocene strata during the Roman period and later (Fig. 2). Whilst this is very much work in progress, the GIS modelling of the natural topography corroborates previous reconstructions and also suggests other routes or sources of streams that may have sculpted the area in the Pleistocene and the prehistoric. The modelling shows that the south-western part of the western hill was dissected by stream channels, draining from the arc of higher ground to the north and east, and combining to erode the brickearth and gravels to form an irregular step in the part of the river terrace lying in the fork between the Fleet valley and the

Thames floodplain.

The modelling emphasises the westerly direction of the drainage in this part of the London area in antiquity. Streams flowed from the north off the Hackney Gravels in particular but also possibly from the plateau of Langley Silts that runs north–south toward the Thames (Fig. 2). This is because the Langley Silts form a low permeability stratum, above the river terrace deposits, which will absorb a certain amount of water but also expel the water effectively creating a sheet of sediment across which the water flows. This may have led to the apparent shaping of the contours by possible channel routes from water that ran off the brickearth to the Fleet and seems particularly visible along the 11m OD contour in the east (Fig. 2).

Although the previously inferred watercourses correspond well with the indentations in the gravel and brickearth as mapped by the BGS, the modelling hints at further channels and

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**Fig. 4:** the north end of the Roman city wall as seen in 1907, looking north-east from 7–10 Old Bailey (*Archaeologia* 63), and the remains of the north end of the city wall in 2007

slight deviations to the routes of the streams. It shows that the site itself lies within a major tributary valley of the Fleet, which forms a relatively broad swathe (approximately 80m wide) where the surface lies between 8m and 9m OD widening toward the Fleet. The tributary valley would have captured water draining from the higher ground, and this natural characteristic must also have been a feature of the city ditch in the vicinity of the site, although the later fills showed little evidence for flowing or even pools of water, perhaps hinting at the impact Roman and later activity must have had on the natural drainage of the City. It seems logical that the Romans worked to manipulate, canalise and control the streams flowing across the river terrace, but by so doing they severed many of the links that help us reconstruct the natural environment existing before their activities took place.

### Roman city wall

The existing eastern boundary wall between the site and Amen Court incorporates earlier elements and reflects the line of the City Wall. Work in 2007 established that the city wall survived to a high level beneath the small yard on the eastern side of the site.<sup>21</sup> In addition, remedial works on the eastern side of the site allowed an opportunity to observe and record the condition and extent of the Roman city wall where two stretches of the wall were exposed during the removal of the western retaining wall of the existing (1910) building (Fig. 3). The northern stretch [166] measured 8.50m long by 1.10–1.85m wide and stood 0.65m high (maximum exposed); its western side truncated by the 1910 retaining wall. It was constructed of roughly hewn ragstone blocks, flint and broken tile. On the east side, two courses

of Roman tiles were observed in section and represent the remains of the eastern face of the superstructure of the wall.

The southern stretch of the wall [174] measured 7.48m long by 1.20–1.50m wide and stood 0.40 m high and was also truncated on the western side by the 1910 retaining wall. Roughly hewn ragstone blocks and flint formed the internal core of the wall, but three courses of neatly faced ragstone blocks on the eastern side formed the eastern face of the wall. Closer observation of the facing blocks indicated some reconstruction work, probably in the late 19th century, as the mortar was the same as that used in the construction of the base of a late Victorian brick-built sewer cutting through the wall. This latter feature was seen in the 1907 excavations and noted by Norman and Reader thus: “A brick sewer was found at the base, which at some later time appeared to have tunnelled through the

masonry ... it was 3 ft 6" wide".<sup>22</sup> In addition, they also observed that the outer face of the wall had been repaired at a later date. It is evident from the surviving remains observed during 2007 that the wall had been subjected to extensive truncation during the 1907–1910 redevelopment, as can be seen when comparing the photographic evidence of Fig. 4.

Elsewhere on the site no other evidence for Roman occupation was present, although fragments of Roman brick and tiles were found residually in early medieval contexts from the southern trench, specifically in the layers [113], [115] and [126] that

predated the city ditch and within backfill [131] of a heavily truncated early medieval ditch [132] (Fig. 5).

**Early medieval**

The earliest medieval evidence was located in the south-west corner of the southern trench and is represented by a series of silty gravelly dumps [113], [114] and [126], that produced a small amount of cooking pot and jugs ranging in date from the 11th and 12th century and a fragment of Niedermendig lava quern <11>. Cutting through the dumps, or contemporary with them, was the base of an undated ditch [132] that produced a single residual fragment

of Roman tile. The ditch may be evidence for the truncated Saxo-Norman phase of the city ditch, with the gravel dumps forming a metallated surface related to maintenance (Fig. 5).

**Medieval city ditch**

Evidence for the later medieval city ditch was found to survive only on the southern side of the site, as it had largely been destroyed by the mass foundations of the 18th-century Sessions House on the northern part. It was heavily truncated, with its eastern side c. 5m to the west of the of the Roman city wall, whilst the outer edge is calculated to lie some 17m to the west (Fig. 5).

The ditch [123] cut through the possible Saxo-Norman city roadside ditch [132], with its easternmost extent recorded in the south-eastern trench, [184] and further evidence was recorded to the north, in Pile Cap trench C1, [185] and Pile Cap trench C2, [158]. In all, the ditch was found to survive to a maximum width of c. 13.00m with a maximum depth of 1.70m. The basal fills of the ditch were gravelly in nature and indicative of natural causes with sedimentation washing down the side slopes.

Recutting or scouring of the ditch appeared to be evident in cut [116] and further evidence survived in the form of a timber revetting/platform [162] (Fig. 5), used to prevent further silting up or as a means of access to carry out further scouring as necessary. The

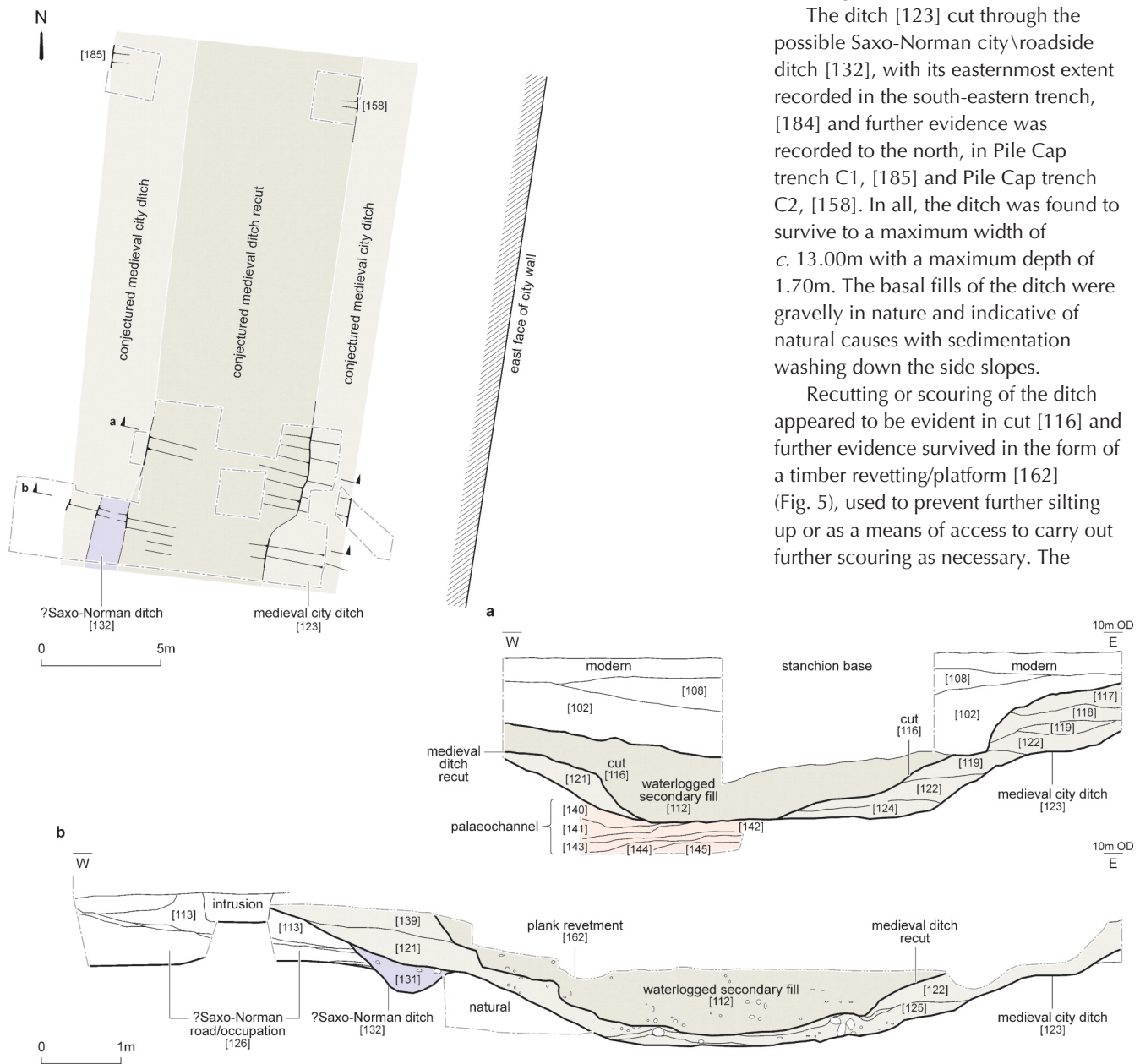


Fig. 5: plan of the medieval city ditch and recut, and profiles of the palaeochannel and ditch backfills as recorded in sections a and b at the southern end of the study area. (scale 1:200)

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subsequent infill of the ditch was markedly different compared to the basal fills and consisted of a blackish/brown organic deposit, indicative of a waterlogged and stagnant environment as indicated by the rich waterlogged plant material that included rushes, sedges and spike rushes.

A large amount of pottery dumped in the city ditch was recovered mostly from context [112], and was dominated by London-type ware (LOND), with a smaller number in identifiable 12th-century fabrics and styles. By comparison, Kingston-type ware (KING) was much less frequent. London-type ware jugs were by far the most common form recorded, and occurred in a wide range of forms, one of which is illustrated (Fig. 6). A high proportion of them were decorated, with North French and Rouen style jugs typical of the first half of the 13th century,<sup>23</sup> and highly decorated and white slip-decorated vessels current during the mid-13th to early 14th centuries.<sup>24</sup> They were complemented by highly decorated Kingston-type ware jugs, including one with anthropomorphic decoration, as well as one vessel with decorative stamped bosses.<sup>25</sup>

Other forms were less frequent and of these, cooking vessels were the most common. They included cooking pots in LOND, KING and SHER, as well as residual early medieval wares, and part of a LOND dripping dish from [112].<sup>26</sup> Only one sherd of imported pottery was identified, in Dutch red earthenware



Fig. 6: photograph of London-type ware jug

from [127].

In common with many other medieval city ditch assemblages, the registered finds consist mainly of fragmentary leather shoe-parts and other leather items which were discarded as rubbish and preserved in the anaerobic conditions in the ditch-fill.

A small amount of leather came from backfill [112], dated by pottery to c. 1270–1300, and included a fragment from the front of a scabbard <14>: a rectangular panel with faint traces of an engraved foliate design with a background of stamped circles inside a tooled border. The design is similar in style to that on other mid-13th-century scabbards from London.<sup>27</sup> There were also several worn one- and two-piece shoe soles with pointed toe-shapes, two short lengths of rand and some fragments of upper (vamp). The only other notable finds are two mica schist hones <5> and <9> and a fragment of Niedermendig lava quern <7>.

No further attempts at maintaining the ditch were carried out. A robber trench [111] was recorded on the alignment of the timber revetting in the Southern trench, indicating that this section of the ditch was left unmanaged after c. 1350, as it was left to silt-up naturally, incorporating waste material from a number of sources, as evidenced by the upper fill in the Southern trench [102] which contained pottery dated to the middle of the 14th century. Some of these are of the same date and form, and, in one case, the same vessel as found in [112].

The largest concentration of pottery came from this context [102]. It dates from the middle of the 14th century, although the finds were mostly typical of the period c. 1270–1350. Other contexts in the same area give a later date, in the second half of the 14th and 15th centuries. There was a higher proportion of KING jugs with stamped boss decoration, made using different designs, including flowers, shields, fleur-de-lis, 'raspberries', shells and wheel symbols.<sup>28</sup> There are also sherds from a metal copy baluster. All these types are more common in the later 13th and 14th centuries. No north French or Rouen style decoration was recorded, although some were from jugs in the highly decorated and white

slip-decorated styles, as well as tulip-necked balusters, which appear to have been made after c. 1270.<sup>29</sup> There are also sherds from at least six jugs in Mill Green ware, which was first used in London at the same date, and a number of cooking pots with flat-topped rims,<sup>30</sup> as well as the long legs and distinctive angled handles from a cauldron,<sup>31</sup> and sherds from two frying pans.<sup>32</sup> There were fewer cooking vessels, although other forms are represented including a near-complete bottle and a drinking jug.

Similar forms were found in contexts dated to the 14th century, with coarse border ware present in the upper fills of Pile Cap 2, both of which are datable to after c. 1400. These also included cooking pots and bunghole jugs, as well as part of a lobed cup, all of which were used in London in the late medieval period. There are very few continental imports, limited to part of a pipkin in the southern trench [100] and a drinking jug or *trichterhalskrug* in Siegburg stoneware in Pile Cap C2. The low proportion of imports is of interest, since they tend to be more numerous on sites closer to the Thames (north and south banks), which may be a reflection of their proximity to the wharves where imported goods were brought into the City. Since the better quality imported wares are often seen as indicators of wealth and status, their poor representation in the city ditch fill is notable, especially when balanced with the high proportion of decorative jugs recovered on the site. A similar emphasis on jugs can be seen in the pottery recovered from the backfill of the city ditch at Heron Tower in Bishopsgate<sup>33</sup> and St Bartholomew's Hospital,<sup>34</sup> various 13th-century features in the Cripplegate area,<sup>35</sup> close to but not in the city ditch. Another inland site, Baltic House on St Mary Axe, also produced a high proportion of jugs from mid- to late 14th-century features, and included a high proportion of imports, mostly French.<sup>36</sup> These groups are both related to individual household use, so might be expected to differ from communal dumping in the city ditch. What links them all, however, is the strong emphasis on jugs, many of them decorated, which can be closely paralleled in the contemporaneous



Fig. 7: photograph of the 16th/17th-century brick soakaway

Leather from context [102], dated by the large group of pottery to the mid 14th century, consists of a small group of fragmentary one- and two-part shoe-soles, all heavily worn from use. A small rectangular strip cut from cattle hide with a line of six awl-holes at each short end, may have been a strap-fastener.

The most complete leather item from the site, part of a child's toggle-fastening low boot from context [152] <15>, was found with pottery dating to c. 1400–1500 in Pile Cap C2. Toggle-fastening shoes and boots were worn from the late 13th to the mid-14th centuries, and, in the case of children's footwear, possibly into the late 14th century.

Animal bone waste consisted of a general mix of cattle, sheep, goat and pig bones, many with butchery marks indicative of food waste. The site lies near to St Nicholas Shambles, an area known for butchers' shops and abattoirs, and may have derived from this area. In addition, and as by-product of butchery, a rich group of horn cores was found in backfill [151] from Pile Cap C2, probably waste from horn-working.

pottery from the city ditch fill excavated on the Merrill Lynch site in Newgate Street. A closely comparable pattern emerged from analysis of this material, with minimal imports and a high proportion of decorated jugs.<sup>37</sup>

Other finds included Norwegian Ragstone hones, <1>, <2>, <6> [102], <4> [103]. Norwegian Ragstone hones, from the Eidsborg quarries of southern Norway, were imported as ballast throughout the late Saxon and medieval periods, and are common finds in London. Some pieces may come from the same hone, but this is still a relatively large number of hones from a small assemblage. Two fragments of degraded green potash glass <12> [102]; possibly from the base of a vessel, from the southern trench, and two highly corroded copper-alloy objects, one of which has a broken loop and may be part of a horse-harness pendant <3> [151], came from Pile Cap C2.

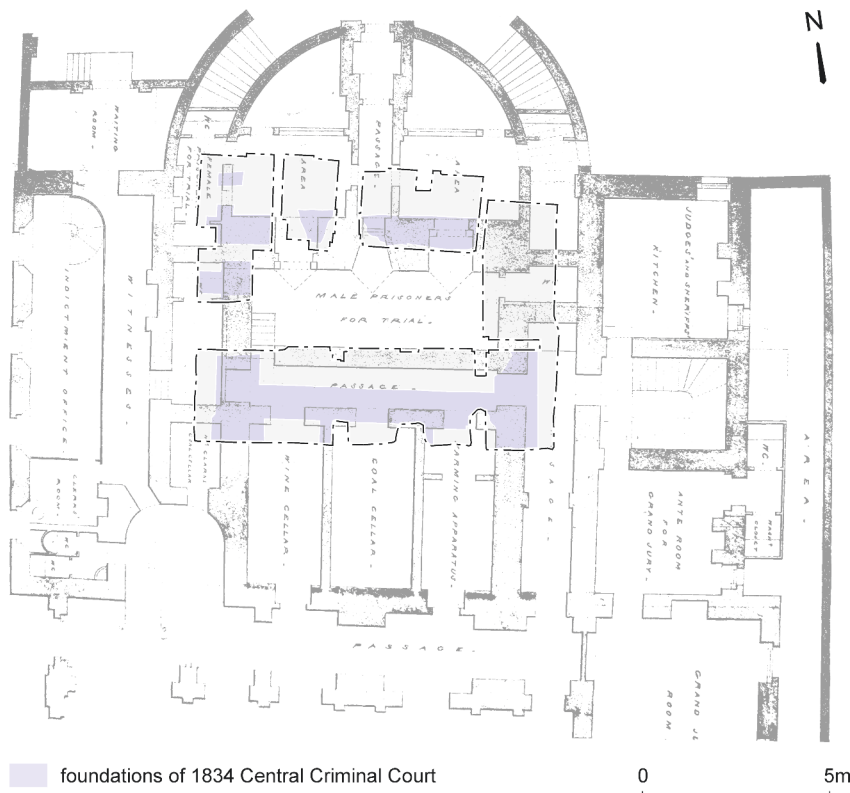


Fig. 8: plan of the foundations of the 1834 Central Criminal Court

**Post-medieval**

There was little surviving evidence for post-medieval occupation on the site after the ditch went out of use, other than a heavily truncated brick-built soakaway [106], cutting through the top of the backfilled ditch of the southern trench (Fig. 7). Measuring 1.45m in diameter, only two courses of brickwork had survived, which allowed it to be dated to the mid-16th to 17th century. It probably represents a feature that lay in a backyard of a house constructed after the city ditch was finally infilled, in the 16th century or more likely after the Great Fire.

The evidence for later post-medieval activity was recorded on the north side of the site, where mass foundations of the 1834 Central Criminal Court were uncovered. This building replaced the 1774 Sessions House and was part of the Central Criminal Court (Fig. 8).

**Conclusion**

The 2007 excavation, carried out 100 years after Norman and Reader's investigations in 1907, confirmed the existence, extent and location of the Roman city wall and the medieval city ditch. The observations of the Roman city wall allowed comparison with those made in 1907. It is evident that a significant amount of the wall was

demolished at that time, leaving it much reduced in height and width. The 2007 excavation noted the absence of the outer facing stones along its western edge, whilst there was some survival along the inner eastern face on the southern side of the site.

Ground reduction across the site between 1907–10 had truncated the deposits with the city ditch, and the mass foundations of the 1834 Central Criminal Court had removed it totally on the north side of the site. However, there was sufficient evidence to indicate that this section of the city ditch had become stagnant by the 14th century and was infilled by the 16th century.

The geoarchaeological evidence confirmed the flow of a stream westwards through the southern part of the site, first posited in 2007.<sup>38</sup> The work is a further contribution to the data gradually being amassed on the topography of the City of London.

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30. *Op. cit.* fn. 25, fig 94, nos 297, 306–8.

31. *Ibid.*, fig 96, no 320.

32. *Ibid.*, fig 97, nos 334, 342.

33. D. Sorapure 'Excavations at Heron Tower, Bishopsgate, City of London EC3' *Trans London Middlesex Archaeol Soc* (in prep).

34. H. Lewis and S. Turner *Excavations at St Bartholomew's Hospital – Phase 1* MOLA unpub client report (BPP05) (2009).

35. J. Pearce 'The medieval and post-medieval pottery' in E. Howe and D. Lakin, *Roman and medieval Cripplegate, City of London*, MoLAS Monogr 21 (2004) 116.

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38. *op. cit.* fn. 19.