

Fig. 1: Site location plan and natural geology of the area

Streams in the City

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Introduction

The Museum of London Archaeology Service (MoLAS) carried out archaeological investigations during 1998/99 on the site of Christchurch Court, formerly Sudbury House, an early 1960s office block fronting onto Newgate Street and Warwick Lane in the City of London (Fig. 1).¹

An initial evaluation of seven trial trenches (TP1–7) in 1997 indicated that archaeological remains had been heavily truncated, with the best survival along the Newgate Street frontage in the north-east (Fig. 2). TP1 contained evidence of Roman stratified deposits and cut features which were sealed by a truncation horizon at the approximate level of the natural brickearth surface.

This was the overall formation level for the 1960s Paternoster Square construction work, when limited archaeological recording of features had been carried out by Professor WF Grimes of the Roman and Medieval London Excavation Council and Peter Marsden of the Guildhall Museum, though a thorough search of the archives from that time has not uncovered any associated paper records. Following the demolition of Sudbury House in 1998, excavation of three discrete areas of archaeological survival (W1–2 and E) confirmed that the truncated stratigraphy dated from the Roman period. A watching brief in 1999 revealed Roman road gravel along the Newgate Street frontage (WB) and

post-Roman fills in a large drainage channel recorded in section (S9).

Geology and topography of the area

The site lies near the crest of the westernmost of two low hills around which the walled Roman city grew up. To the west the ground falls away sharply towards the River Fleet which, though now hidden and canalised, still flows south along its original course to join the Thames at Blackfriars. To the east of the site the natural surface slopes more gently towards the Walbrook stream. The ground to the immediate south and to the north of the site was relatively flat. Natural stream channels flowed south-west to the Fleet river, before being canalised and diverted

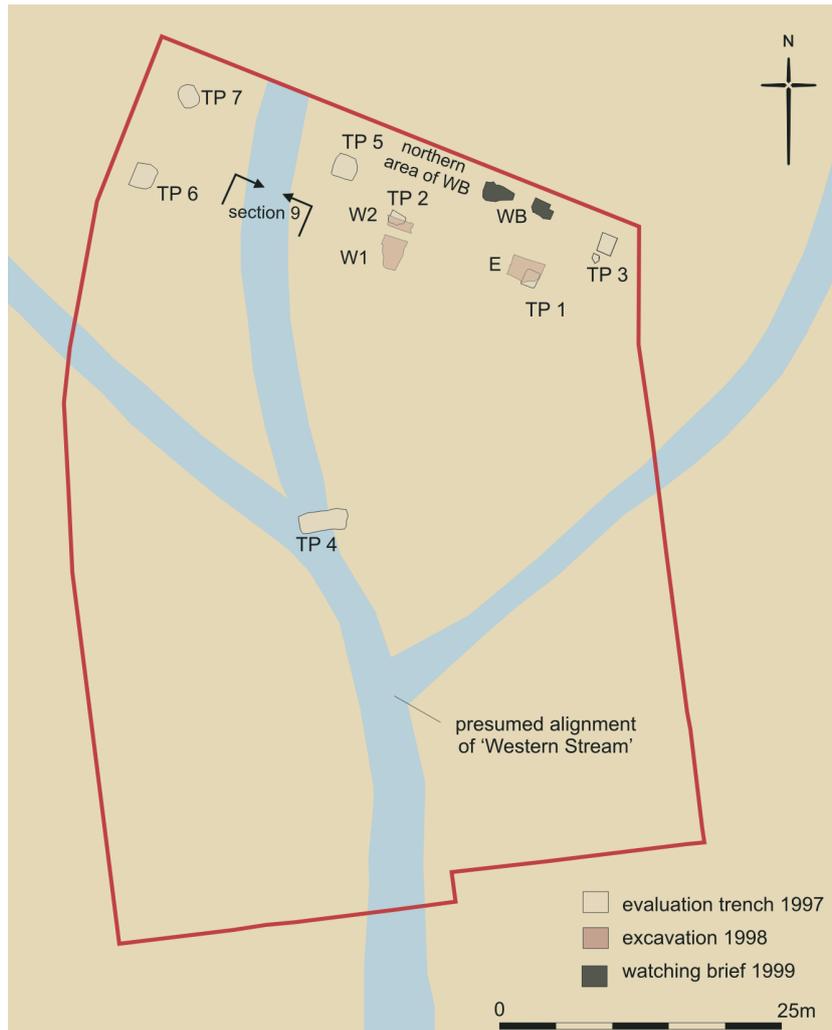


Fig. 2: Trench locations shown in relation to conjectured stream channels at the site

southwards in the Roman period (Fig. 3).

The geology of the area consists of London Clay overlain by gravel and capped by brickearth where not truncated by erosion or later activity. During the redevelopment of the Sudbury House site and Paternoster Square in 1961 a total of 39 boreholes were sunk.² Brickearth subsoil was logged at all the locations except where truncated, with the highest extant level of brickearth recorded between 13.1 and 13.4 m OD.

During the more recent work the surface of natural brickearth, possibly untruncated, was exposed at 12.6 m OD in areas E and W1–2 and at 12.8 m OD in the watching brief area at the northern limit of the site. Truncated brickearth was recorded at 11.3 m OD in Section 9, with terrace gravels observed at 11.2 m OD, indicating that

the overlying brickearth must have originally been at least 1.6 m thick at this point.

Previous evidence of drainage channels, sometimes interpreted as a 'western stream'

Evidence of possible streams crossing the Newgate area was first noted in 1907–8 by Philip Norman and Francis Reader on the General Post Office site, north of Newgate Street, where they recorded two parallel, north-south channels (Fig. 3).³ To the south of Newgate, development of Paternoster Square and Sudbury House in 1961 led to a watching brief which traced parts of two channels which converged into a single north-south channel to the south.⁴ Marsden surmised that the two channels recorded by Norman and Reader to the north of Newgate equated to his channels, converging into a single

channel c. 30 m south of Newgate Street, although the actual junction area was not recorded. At the south edge of the Paternoster Square site the single channel apparently turned towards the south-west. The channel was visible as a broad dark stain cut into the surface of the orange natural brickearth and gravel.⁵ Marsden interpreted his findings as evidence of a natural stream channel flowing south to the Thames.

No profiles of the channels were recorded during these observations but some general descriptions and measurements were obtained. The profile of the main channel on the Paternoster Square site was described as being V-shaped, with the two converging arms c. 9.45 m across. The single channel was c. 11.6 m wide part way across the site, increasing to c. 21 m wide at the southern limit of the area. A borehole in the channel indicated that its base lay c. 4.90 m below the level of surviving natural, at c. 7.35 m OD.⁶ Channel fills were seen at several points and variously described as a deposit c. 2.1–2.4 m thick of 'black peat and pebbly grey sand' overlaid by 'yellow sand', 'black silt' and 'peaty gravel'. 'Clay and brickearth' and 'sandy clay' dumps sealed the earlier deposits in the eastern and western channels, where they were recorded just to the north of their conjectured junction.⁷

Excavations to the south-west of St Paul's at St Paul's Churchyard in 1985 (site code PCH85) encountered what was thought to be a continuation of the main north-south channel southwards, although it was seen to truncate early Roman deposits and contained fills dated to the early medieval period.⁸ This channel was also recorded further to the south at Bible House (site code BHO86), where its fills contained pottery dated to 1000–1150, leading Bentley to conclude that at least this section of the channel was a man-made medieval feature.⁹

Archaeological and historical background

Although no evidence has been found of a pre-Roman settlement in the immediate area of the Sudbury House site, general study has suggested that this part of the City was a suitable place for late prehistoric settlement.¹⁰

Prehistoric finds from the vicinity include a Bronze Age collared urn from GPO Newgate Street (site code GPO75) to the east¹¹ and Middle and Late Bronze Age ditches, a fence line and pits sealed beneath redeposited brickearth at Cripplegate to the north-east.¹² Evidence for Iron Age settlement (600 BC – 43 AD) is similarly sparse and found mainly in areas outside the City, including Thorney Island at Westminster and the eyots of north Southwark.

The Romans founded Londinium soon after the invasion of 43 AD, with a Thames crossing established just to the east of the present day London Bridge and extensive settlement taking place on both the north and south banks of the river during the 50s AD. To the north of the Thames, development extended west of the Walbrook along the main east-west road to Newgate. Although the town was destroyed in the Boudican revolt of *c.* AD 60/61, reoccupation was rapid and extensive redevelopment was underway by the late 60s AD. One of the earliest Roman features in the area of the site was the main east-west road, which ran close to the line of modern Newgate Street (Fig 3).¹³ The area south of the main road was served by a series of secondary roads, with another east-west road lying *c.* 420 Roman feet to the south, near the line of modern Cannon Street. Roman activity recorded at Paternoster Square in the 1960s included a pottery kiln and a crucible associated with metal working,¹⁴ with other industrial evidence from the area including iron, furnace and hearth slag from GPO Newgate.¹⁵

Later Roman London differed in character from the earlier settlement, with an apparent decline in commercial activity and associated roadside occupation from about the mid-2nd century onwards noted at many sites, although the city's continued importance is clearly shown by the construction of the landward defences in about 200 AD.¹⁶ In the 3rd and 4th centuries many of the timber buildings were apparently replaced by stone-built houses set back from the roads, with unused land turned over to agriculture or horticulture. The nearby Warwick Square site showed little trace of late Roman occupation other than a horizon

of 'dark earth', pitting, evidence of 3rd-century coin forging and part of a stone building.¹⁷ More recent work at 3–9 Newgate Street to the west,¹⁸ Paternoster Square to the east¹⁹ and the Merrill Lynch Financial Centre to the north²⁰ provide further evidence for a gradual decline in intramural late Roman occupation.

The archaeological sequence

Early Roman external activity

The earliest activity recorded on the site consisted of stakehole clusters in excavation areas E and W1, and a gully 1 m wide and 0.40 m deep with two associated postholes found to the north in the watching brief area (not illustrated). The limited extent of the excavation areas and lack of associated finds makes interpretation difficult, but this activity may be associated with the establishment of fences or insubstantial structures on open ground adjacent to the main east-west road. Similar features were found just to the east at Paternoster Square.²¹

All of the excavation areas contained a deposit of reworked brickearth between 0.2 and 0.3 m thick with a surface at *c.* 12.90 m OD. The deposit probably represents a general levelling dump associated with landscaping, perhaps contemporary with construction of the first roads and buildings in the area. The layer contained finds that could only be broadly dated to the Roman period, but

finds from overlying deposits indicate a likely date range of AD 50–70.

The main east-west road

An east-west aligned ditch measuring 1.0 to 1.5 m wide and 0.5 m deep, with steep sides and a flat bottom, cut into the redeposited brickearth in area W1, *c.* 6.5 m south of the line of the main east-west Roman road (Fig. 4). Pottery from the ditch was dated to AD 70–140. Similar ditches have been found to the west at 3–9 Newgate Street²² and at Paternoster Square²³ and have been interpreted as parts of a setting-out ditch for the main east-west road, with the ditch found at Sudbury House almost certainly being part of the same feature.

The east-west road was represented by two small patches of rammed gravel metalling situated near the northern limit of excavation. A slight camber was noted upon excavation, sloping down towards area E to the south. The uppermost surviving surface of the road metalling lay between 12.9 and 13.2 m OD. This corresponds closely with Marsden's 1960s evidence of a road metalling of rammed gravel 10.5 ins (*c.* 0.28 m) thick overlying the natural brickearth at 13.1 m OD in the north-western part of the site area.²⁴ Finds from the road metalling recorded during the most recent excavations are dated to AD 50–60. No evidence for the southern roadside ditch was found, probably due to the extensive truncation in the area.

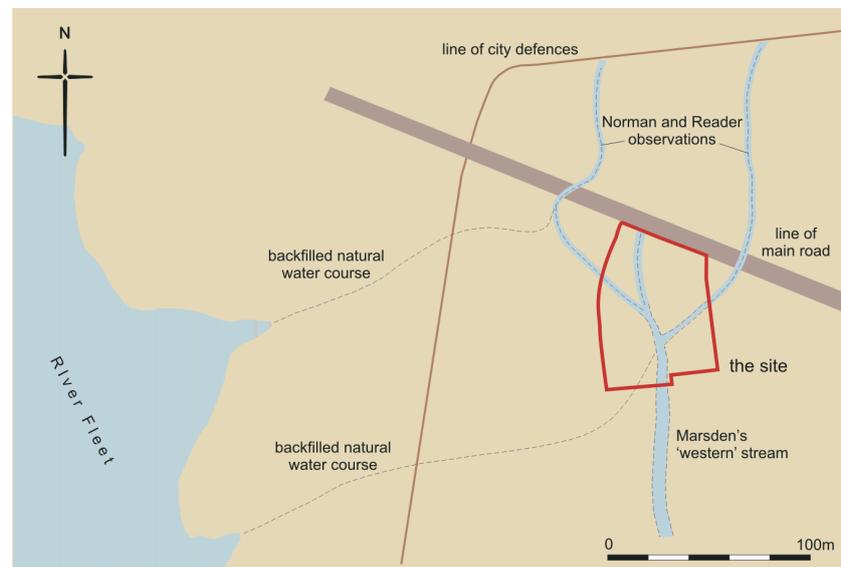


Fig. 3: Natural and early Roman topography in the Newgate area, with the site outline and conjectured alignment of streams and ditches also shown

LONDINIUM'S 'WESTERN STREAM'

Parts of several timber buildings, with associated brickearth floors and occupation deposits, were recorded to the south of the road and sealing the setting-out ditch. At least five phases of rebuilding were recorded. The three earliest phases were associated with pottery dating to AD 50–100 and a coin of Claudian date AD 45–65. Associated evidence of burning may be related to the Boudican revolt. The building sequence was completed by the north-eastern corner of a more substantial building in area W1, represented by a north-south aligned beam slot and its corresponding western return. A gravel spread located to the north in area W2 probably represents an associated path or yard. Pottery from the latter part of the sequence was dated to AD 50–160. The uppermost deposits associated with the Roman buildings lay at 13.27 m OD and the sequence was truncated above this level by the construction horizon for the 1960s building.

A similar sequence of occupation deposits was recorded 8 m to the east in area E, but had apparently been truncated by partial archaeological excavation during the 1961 work at the site. The surviving sequence was represented by the gravel metalling of a yard or path, perhaps associated with a building to the south of the east-west road. The metalling was sealed by a series of gravel surfaces alternating with burnt occupation deposits.

Truncation meant that the occupation sequence recorded to the south of the main road was very fragmentary and difficult to interpret. The evidence for timber buildings and

burnt horizons associated with relatively early pottery is consistent with a 1st- and early 2nd-century building sequence along the south side of the main road. The southern edge of the road was not precisely located due to truncation and it is possible that the building frontage encroached northwards towards the road over time. Similar roadside sequences have been recorded to the west at 3–9 Newgate Street and to the east at Paternoster Square.

A drainage channel and its fills

A large drainage channel, measuring at least 7 m wide and 2 m deep, was recorded in section in the north-west corner of the site (Figs. 4 and 5). It is thought that the channel was open during the Roman period and gradually backfilled in the post-Roman period. Fills of the feature contained pottery dating to AD 970–1050.

The eastern side of the channel was recorded but the alignment of the ditch could not be determined from the immediate site evidence, as it was entirely truncated to the south and survived only as a 0.2 m thick veneer against a modern concrete foundation to the north. Modern truncation had also obscured or removed evidence of the contemporary ground surface from which the channel had been cut, though this may have lain at about 13 m OD if the channel was established in the early Roman period. The base of the cut was not observed but the channel was at least 2 m deep. The steep profile of the eastern edge of the cut suggests that it was man-made.

Discussion of the evidence for streams and drainage channels

The antiquarian observation of two apparent natural stream courses on the GPO site to the north of Newgate in the early 20th century, combined with the Paternoster Square 1960s watching brief records of two converging channels, led to an overall interpretation of the evidence as representing parts of a single 'western stream' rising to the north of Newgate and running south to the Thames, continuing in use during the Roman period and only finally backfilled in the early medieval period. Within this scenario the channel recorded at the Sudbury House site could appear to be the western arm of this stream.

However, inconsistencies in the evidence for a north-south stream became increasingly apparent and were collated by Bentley in 1987, including evidence that the channel recorded to the south of St Paul's was a man-made Saxon or medieval feature, perhaps the re-cut of a Roman precursor.²⁵ More recent work has led to a major review of the evidence from the Newgate area, allowing reinterpretation of all the evidence for natural streams and man-made channels. Auger transects at 3–9 Newgate Street²⁶ and Paternoster Square²⁷ have confirmed that the natural drainage was from the north-east towards the River Fleet to the south-west. The western and eastern stream channels recorded by Norman and Reader to the north of Newgate, previously thought to have been the converging arms of a single stream which ran south to the Thames, have

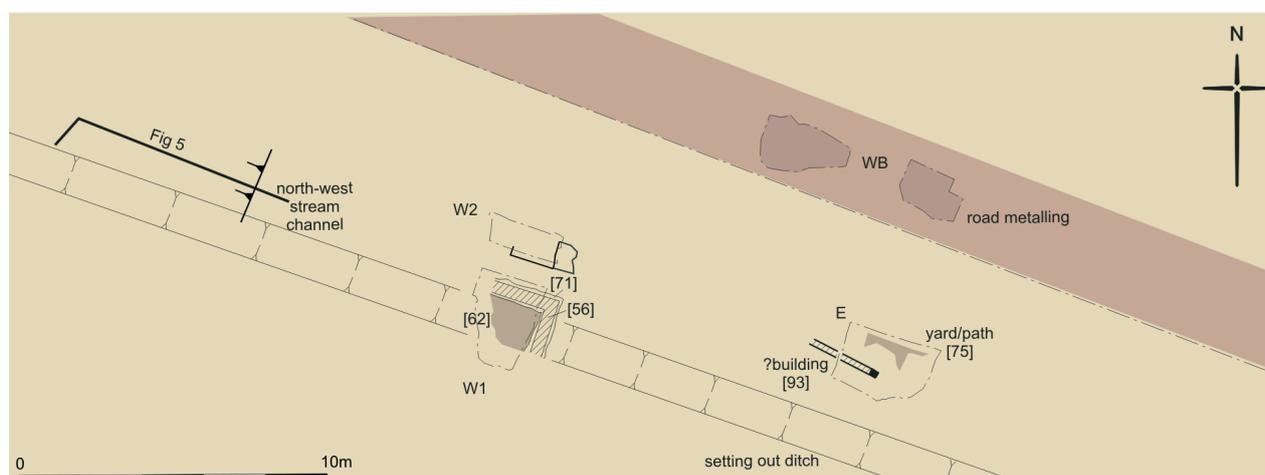


Fig. 4: Plan showing the major Roman features found at the site



Fig. 5: a Roman drainage channel recorded in section, containing early medieval fills

therefore been reinterpreted as two separate, parallel streams which ran south-west to the Fleet.²⁸ These streams, which were canalised in the early Roman period, were then diverted southwards across the Paternoster Square site to the Thames. This reorganisation of the area's drainage may have been a precursor to the construction of the city defences at the end of the 2nd century.

The Sudbury House channel may provide evidence for a third man-made

Roman drainage channel converging with the large man-made ditch running south to the Thames. The various channels remained open into the post-Roman period, with the main channel re-dug in the mid- to late Saxon period as a boundary ditch or defensive feature.²⁹

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2. The borehole records are held in the MoL archive at the LAARC; for the area now covered by Sudbury House, these are BH 1–2, 10–12, 14, 17, 19–20 and 24; ref. no. GM 136.
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7. See 'Paternoster Square 1961-2' Museum of London archive GM136.

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21. Watson *op cit* fn 19.
22. Pitt *op cit* fn 18.
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24. Marsden *op cit* fn 13, 135–9.
25. Bentley *op cit* fn 8.
26. Pitt *op cit* fn 18, 46–8.
27. Watson *op cit* fn 19.
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