CHANGING THE LANDSCAPE: EXCAVATIONS AT BLACK FRIAR'S COURT, LUDGATE BROADWAY, LONDON EC4

Kieron Tyler

With contributions by Ian M Betts, Geoff Egan, Lisa Gray, Katherine F Hartley, Kieron Heard, Nigel Jeffries, Jackie Keily, Jane Liddle, Alan Pipe, Kevin Rielly, Mark Samuel, Fiona Seeley and Roberta Tomber

SUMMARY

The Museum of London Archaeology Service undertook excavations at the site bounded by Pilgrim Street, Ludgate Broadway, Waithman Street and Apothecary Street in the City of London during 1999. The underlying geological deposits – floodplain gravels – had been truncated across the whole of the site by medieval quarrying. The sole pre-medieval feature recorded was a Roman well. In 1159 the site was granted to the Knights Templar as part of a plot on the east bank of the River Fleet. This passed to the Dominican Friary at Blackfriars in 1309 and became part of their outer precinct. The friary was founded in 1275 and the City wall was then extended westwards in stages during 1284–1320 to surround their outer precinct. This construction programme had a major impact on the site which was quarried on an unprecedented scale. The site was quickly consolidated, becoming part of the Dominicans' garden ground from 1309 to 1538, and pits within the garden ground dating from the life of the friary were recorded. Following the 1538 Dissolution of the friary the site passed into private hands and was developed. A well and cesspits from the post-Dissolution, pre-1666 Great Fire period were recorded. A number of post-1666 cesspits demonstrated the rebuilding of the area after the Great Fire.

INTRODUCTION

The site was located in the west of the City of London, west of modern Black Friars Lane. It was open land bounded by Pilgrim Street, Ludgate Broadway, Waithman Street and Apothecary Street (NGR TQ 3172 8109) (Fig 1). Following its clearance after bombing in 1940, the site remained undeveloped until the recent archaeological work by the Museum of London Archaeology Service (MoLAS), supervised by Kieron Tyler (Fig 2).

Redevelopment proposals comprised the construction of two buildings within the site limits. The basement slab of the northern building had a proposed formation level of 2.00m OD. The present pavement level around this area of the site is *c.*11.00m OD. The basement slab of the southern building had a proposed formation level of 4.90m OD. Pavement level surrounding this area of the site is *c.*10.40m OD. The new buildings were to have raft foundations without piling, requiring the underlying ground to be stable. Therefore, made ground was to be truncated down to the surface of the underlying geological deposit across the whole of the site. Excavations were undertaken from 28 January 1999 to 9 March 1999 to fulfil archaeological conditions attached to the two (conditional) planning consents in 1998, one given to each redevelopment scheme. Following the completion of the controlled archaeological works a watching brief was undertaken on the contractors' groundworks. The watching brief was terminated at the

Fig 1. Site location

end of October 1999 after contractors completed excavations in advance of casting the new basement slab.

Two factors constrained the extents of the archaeological trenches (Fig 3). Firstly, modern basement slabs truncated archaeological deposits at the west and north-west of the site. Archaeological survival under this slab was limited to an extensive, deep, backfilled quarry pit. The other constraint was the use of a battered slope to support the sides of the site during excavation. This was stepped down to the excavation area. The material in the battered slope was observed during mechanical excavation during the watching brief.

The archaeological sequence is expressed in terms of a period-based sequence of land use. Land-use entities are unique to the site and based upon a combination of stratigraphic development of the site with artefactual and documentary dating. The analysis resulted in a series of specialist research archives under the site code LUB98. This is lodged with the London Archaeological Archive and Research Centre and may be consulted by prior arrangement.

Limited archaeological evaluation was undertaken in both 1988 and 1993 when trial pits were excavated which demonstrated archaeological survival at the site (McCann 1988; McCann 1993a). Further evaluation to refine these findings was conducted in 1998 when five geotechnical test pits were dug alongside a borehole survey. These indicated that the London Clay underlying the site sloped down from east to west, towards the former River Fleet, and from north to south, towards the Thames. The 1998 evaluation also indicated the presence of a series of quarry pits which appeared to have been backfilled during the late 12th to late 13th centuries.

The 1999 excavations revealed that changes in land use occurred during periods when the site passed from one ownership to the next. Furthermore, features were dated to different periods of ownership. Consequently this article

Fig 2. General photograph of the site, looking to the north-east

demonstrates that historic changes in ownership had major impacts on land use at the site. The final change in land use reflected in the archaeological sequence was the Great Fire of 1666. Therefore it is the immediate post-Great Fire period, when the current street pattern was laid out, which defines the cut-off point of this report. Details of the analysis of 18th- and 19th-century material beyond the scope of this article are included in the research archive.

BACKGROUND: TOPOGRAPHY, HISTORY AND ARCHAEOLOGY

Topography

Two major topographic features are present in the site area: the gravel terrace of Ludgate Hill and the River Fleet, formerly aligned north–south to the west of the site.

The gravel terrace consists of the sands and gravels of the Middle Thames Terrace (Taplow Terrace) formed by the River Thames and its tributaries. London Clay underlies the gravel terrace. The interface between the gravels and the clay runs through, or just west of, the site (British Geological Survey 1993). To the south of the site the line of interface defines the confluence of the Fleet and Thames.

The Fleet is currently piped beneath Farringdon Street and New Bridge Street. Although street level over the Fleet has been raised, the river valley remains visible as the foot of Ludgate Hill is approached from the east.

Prehistoric

The potential for pre-Roman finds from the site was considered low (McCann 1993a).

Roman

During the Roman period the Blackfriars area saw little construction. It was beyond the limits

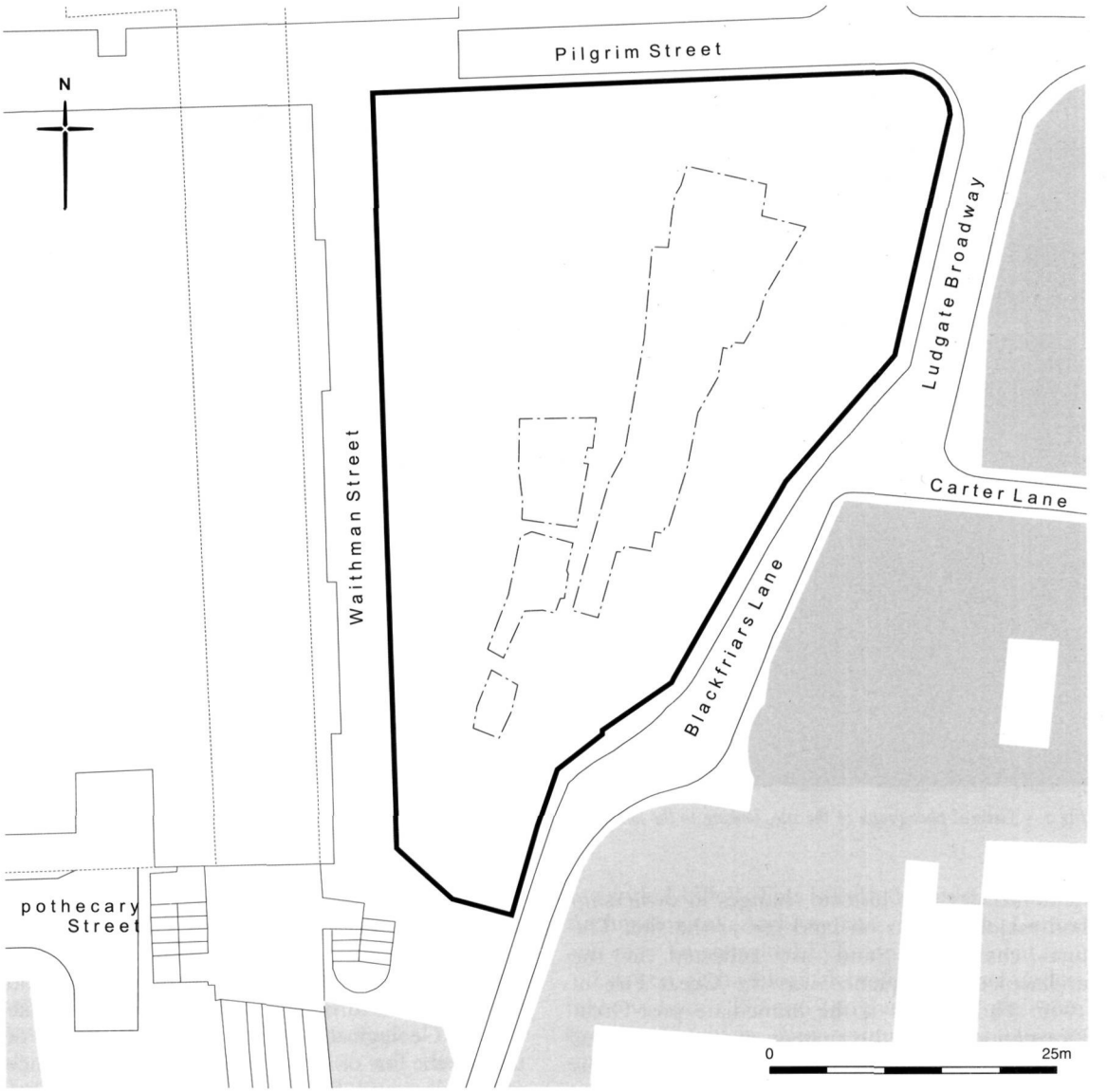

Fig 3. Site outline with limits of archaeological excavation trenches

of Roman *Londinium*, outside the city wall, built *c.*AD 200. The site is south of the Roman road (aligned along Ludgate Hill) which left the city at Ludgate. Roman law forbade burial within settlement areas and, consequently, cemeteries tended to cluster around the approach roads to Roman towns, including Ludgate Hill. Roman graves – inhumations and cremations – have been recorded both to the north and south of Ludgate Hill (Hall 1996, 58–64).

The nature of Roman activity in the area was clarified during the 1988 archaeological work on the Fleet Valley Project (site code VAL88), a consequence of the development of the Thameslink railway line between Blackfriars and Farringdon. The Roman road along Ludgate Hill was dated to the earliest years of the occupation before the construction of the city wall. No roadside burials were found during these works. Observations both beneath and to the west of the new railway line suggested a small island stood in the River Fleet to the west of the site (Fig 4). Further south, between the former Apothecary Street and Queen Victoria Street,

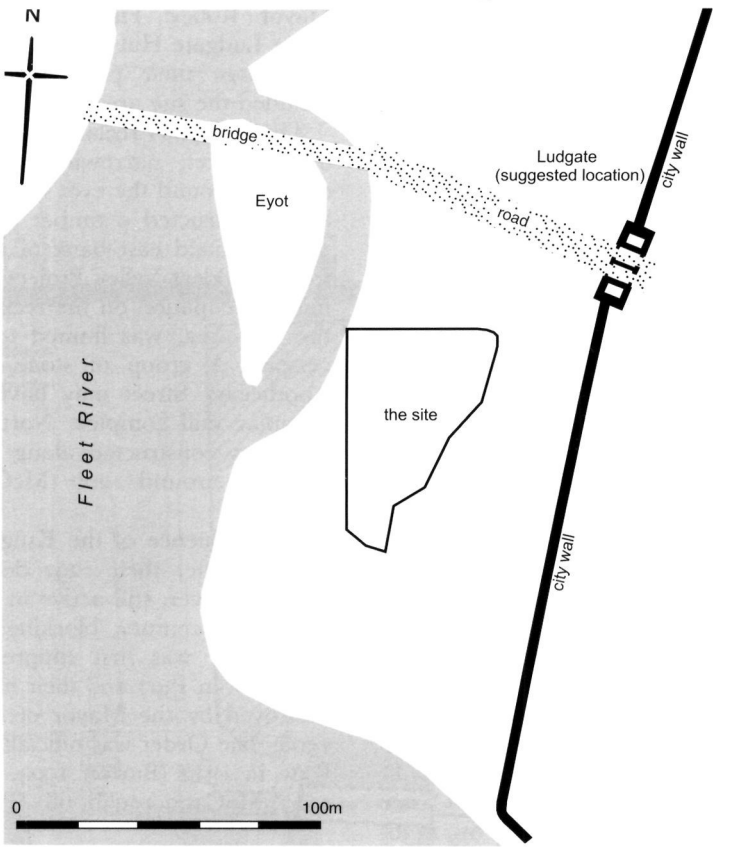

Fig 4. Topography of site area during the Roman period, after the late 2nd-century construction of the city wall. Note island (eyot) in the River Fleet immediately north-west of the site

Roman activity was limited to the excavation of quarry pits (McCann 1993b, 25–36).

Saxon

Although there is no archaeological evidence that the area within the Roman city wall continued to be inhabited after the Roman withdrawal early in the 5th century, documentary sources imply activity by AD 604 when St Paul's Cathedral was consecrated (Schofield 1993, 21). The main trading focus of the early and mid-Saxon settlement was west of the Roman city, around Covent Garden, Aldwych and the Strand in an area known in the 8th century as *Lundenwic*. To date there is little archaeological evidence for activity in the former Roman city contemporary with *Lundenwic*.

The area of the Roman city was re-occupied after AD 886, when King Alfred established a *burh* (a fortified urban centre of Saxon administration). Given the paucity of early and mid-Saxon remains elsewhere in the City, it was considered unlikely that archaeological features and artefacts dating from before the city's late 9th-century re-occupation would be found in the site area. Indeed, the area between the city wall and the River Fleet was probably abandoned between the end of the Roman period and the mid-11th century (McCann 1993b, 47).

Although two late Saxon finds have been made close to the site, they provide little evidence for occupation. Both were excavated as part of the Fleet Valley Project. A substantial timber bridge abutment (dated to AD 1032), north-west of the site under Ludgate Circus, was presumably part of the structure which spanned the Fleet. Secondly, a group of human burials, dated to AD 1050–1100, was located on the edge of the contemporary bank of the Fleet, south of the former Apothecary Street, south of the site.

Although eleven individuals were interred, only three skulls were present, and these may have been the bodies of people killed in battle (McCann 1993b, 46–9, 52–3, 56).

Medieval

Edward the Confessor's development of Westminster as a centre of royal government was continued after 1066 by his Norman successors. Building programmes were also initiated within the walled city: Old St Paul's Cathedral dates from the early Norman period, replacing the Saxon church which had burned down in 1087.

As part of the route between the royal palace of Westminster and St Paul's and the City, Ludgate Hill was certainly important. At its foot, the River Fleet became a busy port. Stones for the construction of Old St Paul's were landed here, and coal was imported through the Fleet from the early 12th century.

Areas close to the site, within the walled city, were under development during the 11th to 12th centuries, while the site area remained just beyond the City wall. Castles built by William to control the City included Baynard's Castle (built by 1087) east of the study area, south of Carter Lane, and Montfichet's Tower (built by 1136) also to the east of the site in the Carter Lane area (Schofield 1993, 38–40). Outside the City wall, the King's Prison of Fleet was established north of Ludgate Hill by 1171.

Black Friars Lane, the eastern limit of the site, is known from the mid-14th century: in 1352–3 it was known as Castle Lane, presumably due to the proximity of Baynard's Castle (Lobel 1989, 97). North of the site, the timber Fleet bridge was replaced with a double stone bridge, either constructed or repaired in 1431 (the records are ambiguous); the bridge survived until the 1666 Great Fire.

The site area: ownership by the Knights Templar, 1159–1308

By the end of the 12th century the site area was under the ownership of the Order of Knights Templar. They had a house to the south of Fleet Street at the foot of Chancery Lane in 1128 (Burton 1994, 82). In 1159 Henry II granted them land on the east bank of the Fleet and the 'course of water of the Fleet' to build a mill. Mayor Robert Fitzwalter granted them land along Ludgate Hill and close to the Fleet bridge to enlarge their property which would have included the site area.

The Templars reclaimed land from the mouth of the Fleet, narrowing it considerably. The channel around the eyot was infilled, after which they constructed a timber revetment along the newly defined east bank of the Fleet. Evidence from the Fleet Valley Project excavations for the initial occupation on the reclaimed land, west of the site area, was limited to pitting, including cesspits. A group of stone buildings south of Apothecary Street may have been part of the Templar mill complex. North of the site stone buildings constructed along Ludgate Hill were dated to around 1200 (McCann 1993b, 57–8, 70–1).

The influence of the Knights Templar began to wane after their 1291 defeat at Acre. They were, however, still active in the site area in the early 14th century, blocking the Fleet in 1306. The order was first suppressed in France by Philip IV in 1307 and their mill on the Fleet was destroyed by the Mayor of London in January 1308. The Order was officially suppressed by the Pope in 1312 (Burton 1994, 268; Honeybourne 1947; McCann 1993b, 68).

The site area: enclosure by the City Wall, c.1284/1303–1320; and ownership by the Dominican Friary (Black Friars), 1309–1538

Further major changes occurred between Ludgate Hill and the mouth of the Fleet in the late 13th century. After an application by the Archbishop of Canterbury, Robert Kilwardy, Edward I granted an extensive site just inside the City walls to the Dominican Friars in 1275. The Dominicans, later known as the Black Friars, were a mendicant order that travelled, preaching and evangelising. The Dominican Friary in the City of London, established 1275, was joined by another at Guildford founded in the same year (Burton 1994, 113; Butler & Given-Wilson 1979, 51–3; Clapham 1912, 58; Poulton & Woods 1984, 5).

The inner precinct of the Dominican Friary was located along the current Carter Lane, immediately east of the site, across Black Friars Lane (Fig 5). South of Ludgate, both the Roman city wall and Montfichet's Tower were demolished to make room for the friars' buildings. In

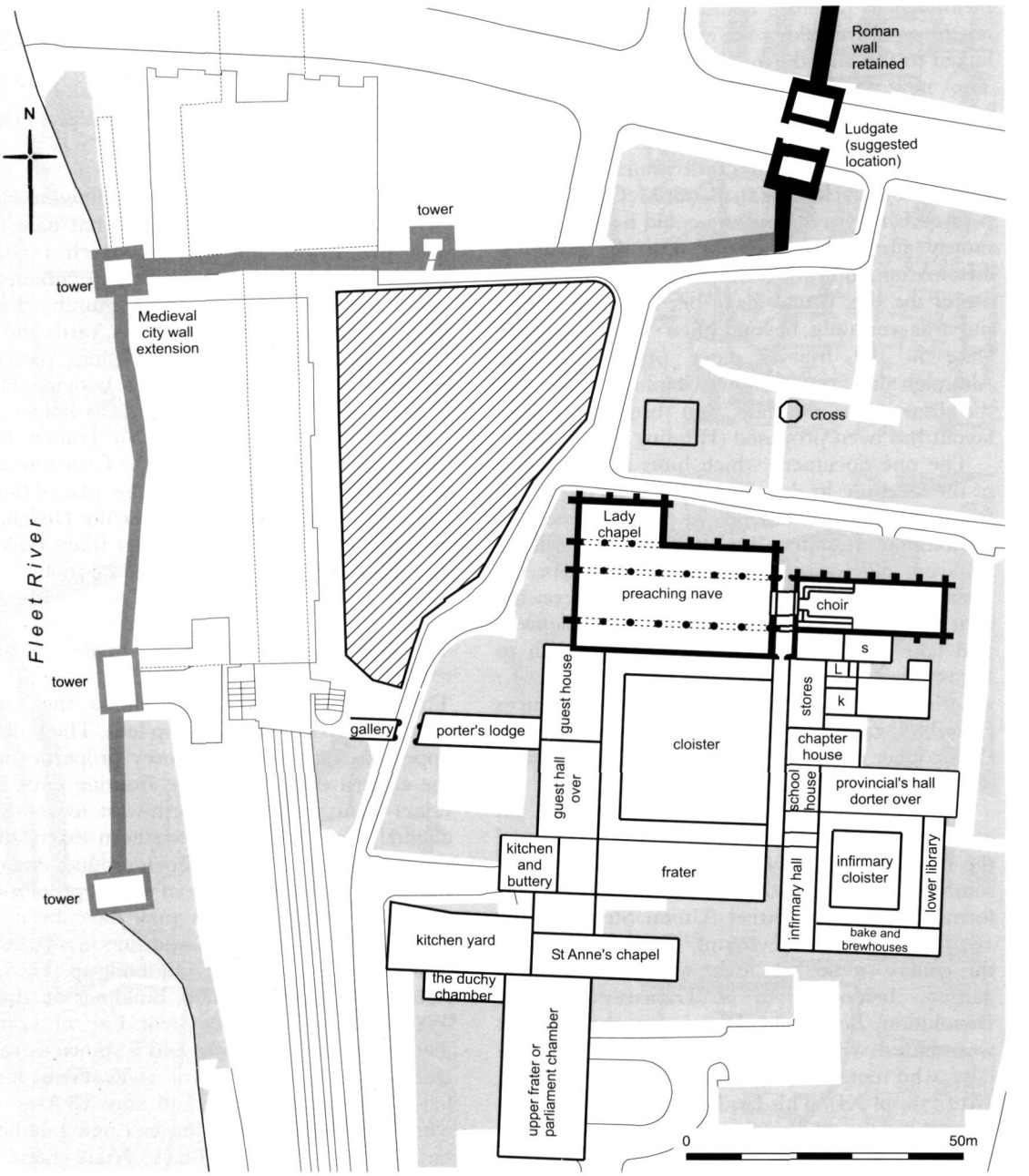

Fig 5. The site area during the medieval period with reconstruction of the plan of the priory of Blackfriars, founded 1274 (after Clapham 1912, pl XI). Note extension of City wall enclosing site area and the priory's outer precinct, completed by 1320

February 1278 Edward I ordered that their precinct be enclosed by a wall (Clapham 1912, pl XI; McCann 1993b, 87).

A new, east–west section of the City wall was built to enclose the friary precinct, between Ludgate and the Fleet, and was possibly complete by early 1284, certainly by 1303 (Fig 5). This stretch of wall was aligned along the north side of Pilgrim Street, immediately north of the site (McCann 1993b, 88–9).

In 1309, Edward II granted two plots of land next to the former Fleet mill to the friary. This

meant their precinct could be enclosed by a north–south wall along the east bank of the Fleet, linked to the already complete east–west section. The new section of north–south City wall, incomplete in 1315, was completed by 1320. A 50-metre stretch between Pilgrim Street and Apothecary Street was recorded during the Fleet Valley Project (Harben 1918, 78; McCann 1993b, 72, 91). Changes in land use could have followed shortly after 1309. There is little documentary information indicating the nature of the friars' use of the site; it may have been a garden. The site was certainly beyond their inner precinct, lying in the friary's outer precinct (Fig 5). Although this article follows Clapham's layout of the friary, an alternate, but broadly similar, layout has been proposed (Hunting 1998, 74).

The one document which hints at the nature of the land use in the site area is a survey of the friary precinct compiled in 1551 after the Dissolution. It states: 'One void ground with a decayed gateway (rather gallery) therein ... abutting the Bridewell ditch [*ie* the Fleet] on the west side ... abutting to the common highway and lane [*ie* Blackfriars Lane], that guideth to the common stairs to the Thames side, ... abutting to Mr. Harper's garden and also Frances [illegible] garden at the north side and to Sir Christopher More's garden on the south side' (Clapham 1912, 61, 81–2).

Clapham has described the gallery as an east–west structure linking the inner precinct of the friary to the bank of the Fleet, just to the south of the site, along the south side of the former Apothecary Street (Union Street on the 1873 Ordnance Survey map). The land north of the gallery (*ie* the site area) was described as a garden, belonging to a Frances after the Dissolution. Before the Dissolution the precinct was shared with the friars by members of the laity, who rented houses from the prior (Clapham 1912, 76, pl XI). This land was probably garden ground for the whole life of the friary.

Post-medieval

Black Friars Lane was known as Water Lane by 1540 (Harben 1918, 614). The area south of the site, on both sides of the lane, was examined during the Fleet Valley Project excavations. Gardens or open spaces dating from the 17th century were recorded between the rear of the buildings and the east bank of the Fleet. These contained wells and rubbish or cesspits (McCann 1993b, 115–22).

The Dissolution of the Dominican Friary (Black Friars), 1538

The Dominican Friary was surrendered to Henry VIII on 12 November 1538. At that date there were just sixteen inmates. In March 1550, the bulk of the priory buildings were granted to Sir Thomas Cawardine – the church, cloister, chapter-house, churchyard, closes, yards and part of the guest-house. Other buildings passed to Thomas Godwine (the Ankar's Lodging House in 1544), Paul Gresham and Francis Boldero (the eastern range in 1544), and Sir Francis Bryan (the prior's lodging in 1547). The Crown retained a hall (Clapham 1912, 60). This places the site in the hands of Cawardine after the Dissolution. The superstructure of the former friary buildings was destroyed by the Great Fire of 1666.

The site area: post-Dissolution, after 1538

The Agas map of *c.*1562 shows the site as partially developed (Fig 6, top left). The buildings appear as one- and two-storey properties along the eastern edge of the site, fronting onto Black Friars Lane, and as a north-west to south-east aligned group across the northern extent of the site. Otherwise, the site is open ground. Although the date of construction of these properties is unknown, some of them may have been built after the site passed to Cawardine in 1550.

By 1658, the site was fully built-up (Fig 6, top right). In September 1666, buildings on the site were destroyed by the Great Fire of London. The site was then cleared and is shown as vacant land on the Leake map of 1666 (Fig 6, middle left). Rebuilding commenced after 18 May 1667 when the foundation of the first new building to be constructed along Black Friars Lane was surveyed. The final foundation was surveyed on 27 July 1676 (London Topographical Society 1967, 11–12). Ten years after the Great Fire, Black Friars Lane was again fully built-up, while the western half of the site stayed as open land (Fig 6, middle right). By 1746, when the Rocque map was compiled, the site was completely built over (Fig 6, bottom left).

The streets which bound the north and south of the site were laid out during the third quarter

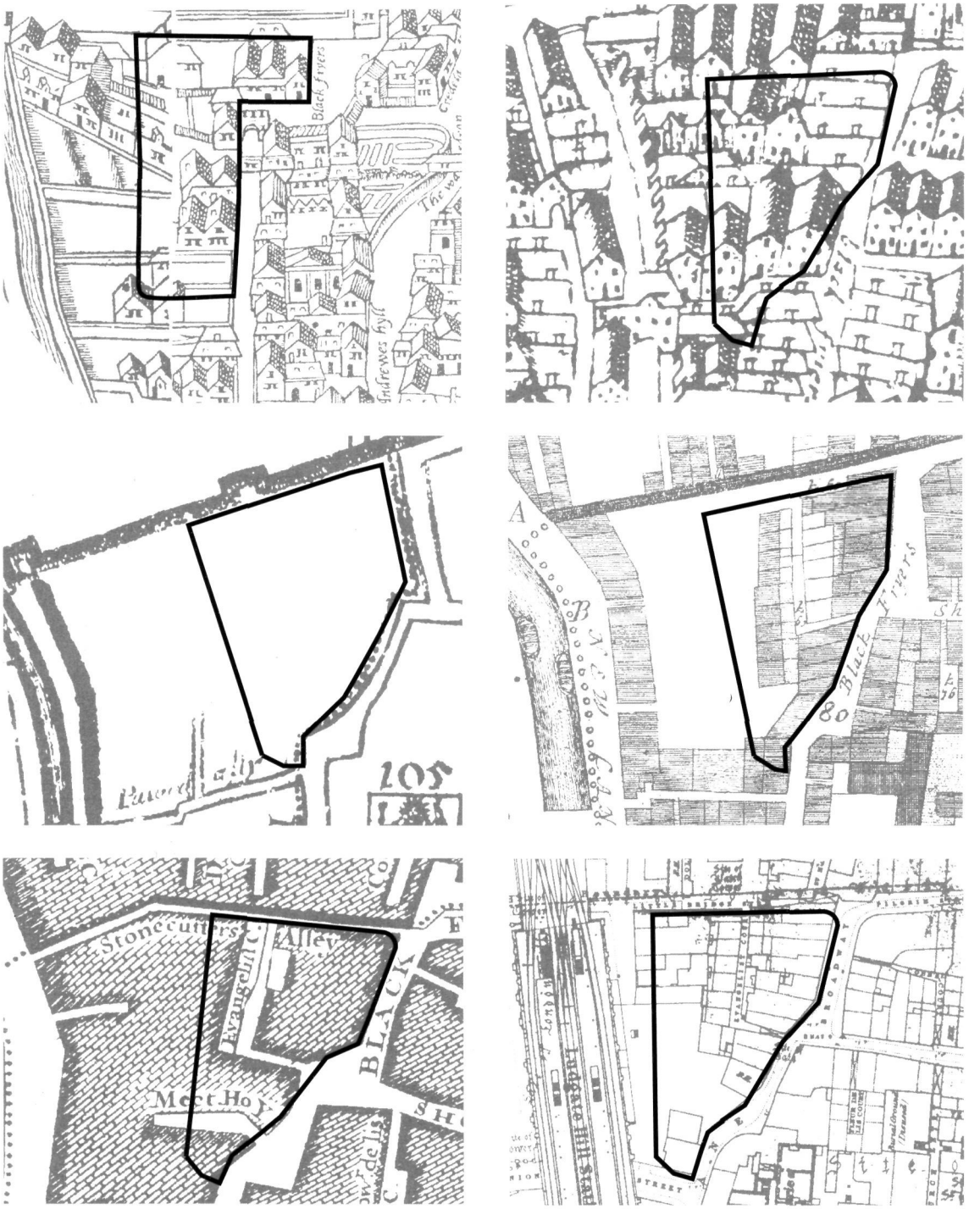

Fig 6. Historic maps with the site outline superimposed. Top left: the Agas map c.1562; top right: the Faithorne and Newcourt map, 1658; middle left: the Leake map, 1666, with the site cleared after the Great Fire; middle right: the Ogilby and Morgan map, 1676, the site built up after the Great Fire of 1666; bottom left: the John Rocque map, 1746; bottom right: the Ordnance Survey map, 1873 (reproduced by kind permission of the Guildhall Library, Corporation of London)

of the 17th century. Apothecary Street (Union Street in 1873; Fig 6, bottom right), to the south of the site, first appears on the Faithorne and Newcourt map of 1658; it was not on the Agas map of *c.*1562. On the Leake map of 1666 and the Rocque map of 1746 it is called 'paved alley'. Pilgrim Street, to the north of the site, first appears on the Ogilby and Morgan map of 1676 adjacent to the inside face of the City wall; the Rocque map of 1746 shows it as Stonecutters Alley. By 1873 it was known as Little Bridge Street (Fig 6, bottom right).

THE ARCHAEOLOGICAL SEQUENCE

Kieron Tyler
With contributions by Ian M Betts (building material), Geoff Egan (coins), Lisa Gray (plant remains), Katherine F Hartley (stamped Roman mortaria), Kieron Heard (tobacco pipes), Nigel Jeffries (post-Roman pottery), Jackie Keily (accessioned finds), Jane Liddle (faunal remains), Alan Pipe (faunal remains), Kevin Rielly (faunal remains), Mark Samuel (worked stone), Fiona Seeley (Roman pottery), and Roberta Tomber (Roman pottery)

Period 1: geological deposits

The underlying geological deposits were London Clay overlain by alluvial gravels. The London Clay survived to a maximum level of 4.39m OD at the east of the site and 1.90m OD at the north-west of the site. The surface of the clay sloped down across the site, from the east towards the River Fleet. The clay was sealed by alluvial gravels, observed across the whole site. In all areas of observation, the gravels were truncated by later activity. At the north-west of the site the surface of the gravel was truncated by modern concrete basement slabs at 2.79–3.89m OD. The gravels survived to 7.35m OD at the east of the site.

Period 2: Roman

A single feature datable to the Roman period was observed. This was a well, which went out of use after AD 120 (Fig 7). A square cut (0.90m by 0.90m) with a base level of 5.41m OD had been made into the Period 1 gravels towards the north-east of the site. It was truncated at 7.12m OD by a later quarry pit. What appeared to be the remains of a decayed timber lining, between 40 and 60mm thick, adhered to the inside face of the well-cut.

The cut was backfilled with grey-tinged yellow sandy clays. Although the upper backfill included no pottery, it did include three fragments of cattle bone, and a juvenile sheep/goat radius. A cattle calcaneum had extensive butchery marks, suggesting body dismemberment.

The lower backfill included sheep-sized bone fragments and a range of Roman finds, including a sherd from a Les Martres-de-Veyre samian dish, dated to after AD 100, and a Black Burnished ware 2 sherd dated to after AD 120.

Otherwise, the pottery assemblage from the lower backfill chiefly comprised large sherds from two amphorae (81 out of a total of 91 sherds). One vessel is a Baetican Dressel 20 amphora, the most common type found in London during the Roman period. These were used to transport olive oil from southern Spain (Davies *et al* 1994, 9). Most of the Dressel 20 fragments from the well are bodysherds. The other vessel is a Dressel 2-4 amphora, of a type primarily used to transport wine, produced at numerous centres primarily in the western Mediterranean area in the 1st and early 2nd centuries (Peacock & Williams 1986, 105–6) (Fig 8, No. 1). Petrological study suggests that this vessel may be from the Aegean or eastern Mediterranean area.

Also recovered from the backfill was a fragment (244mm maximum height) of painted plaster from a lower section of wall (Fig 8, No. 2). The design indicated that it was originally the upper part of a dado and a border area decorated with red, white, cream and black bands. This was found with early Roman brick and roofing tile.

Discussion

The Roman well was sunk into the floodplain gravels to tap ground water. Examples with similar dimensions have been recorded in the City of London. A square well from Mark Lane, on the east side of the City, was lined with boards 0.96m long and 50mm thick (the decayed lining at LUB98 was 40 to 60mm thick) (Wilmott 1984, 6–7). Allowing for the thickness of the boards this gives an internal width of 0.86m, within the range of the LUB98 example. Roman wells have also been recorded at sites outside the City wall, for example at West Smithfield (site

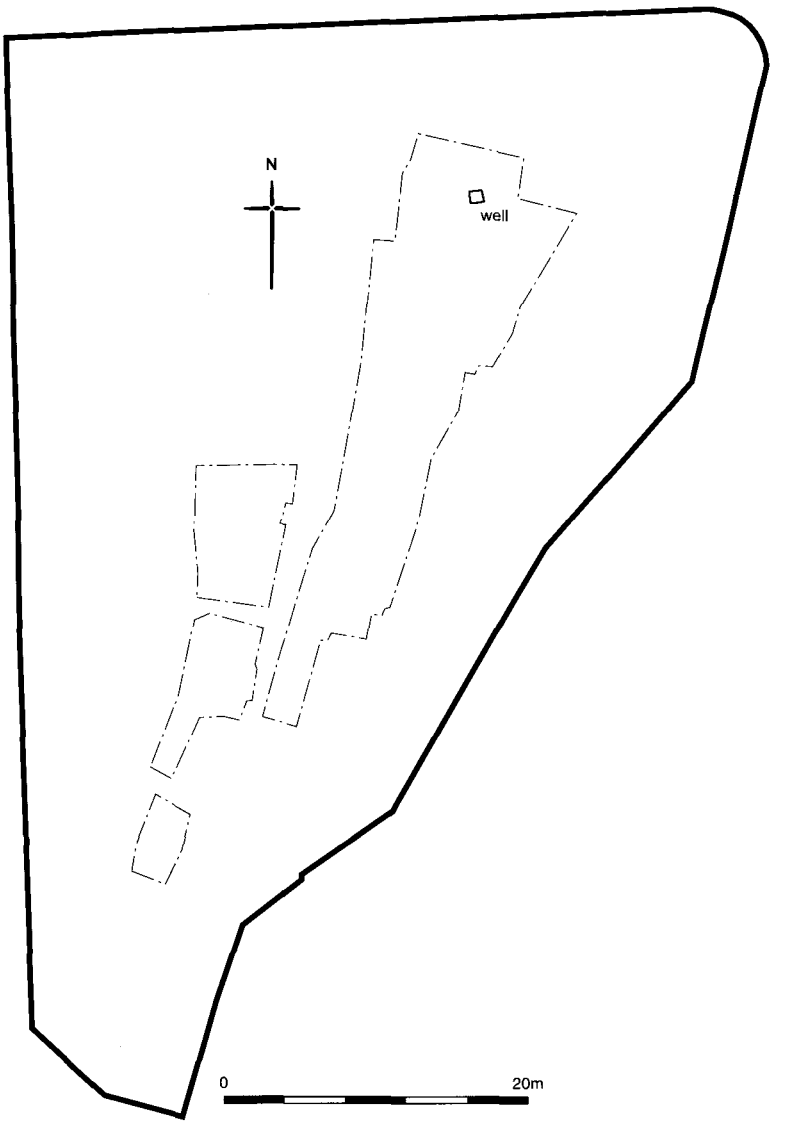

Fig 7. Period 2: Roman well

code WSI97), with backfill dated to the 1st–2nd centuries.

Period 3: medieval quarrying, before *c.* 1320

In Period 3, the alluvial gravels (Period 1) were quarried. All observed areas of the site were quarried (Figs 9–10). One massive quarry pit extended across the whole east–west width of the site (*c.*40m) and up to 21m north–south. This cut was dug through the alluvial gravel into the surface of the London Clay and had a base level of 3.34m OD at the east of the site where the alluvial gravel had been totally removed and the surface of the clay had been exposed. Although truncated at 7.35m OD, the northern slope of this cut was observed dropping to the south at a gradient of 3 in 4.

The remaining quarry cuts were located north of the massive quarry pit (Fig 10). They were smaller, measuring up to 8.50m north–south by 5.30m east–west and had base levels between 5.48m OD and 7.50m OD. They were truncated at levels between 6.21m OD and 7.90m OD.

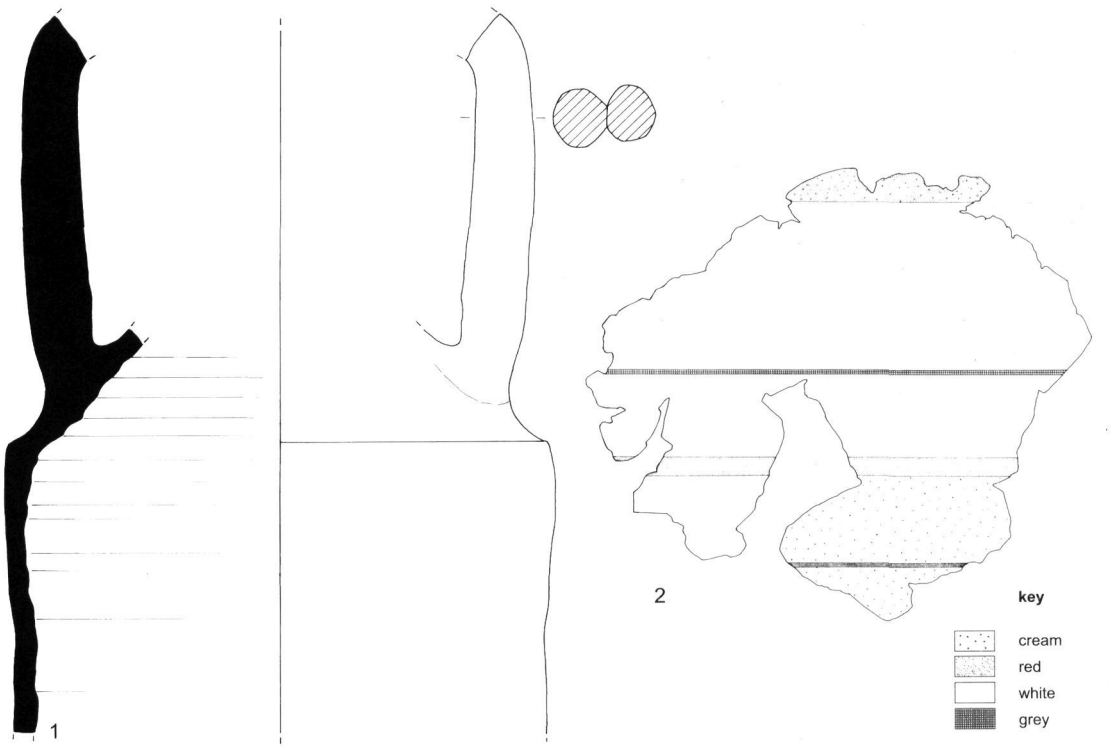

Fig 8. Finds from Period 2, the backfill of the Roman well: 1. Dressel 2–4 amphora; 2. Painted wall plaster (Scale 1:4)

Fig 9. The quarry pits under excavation

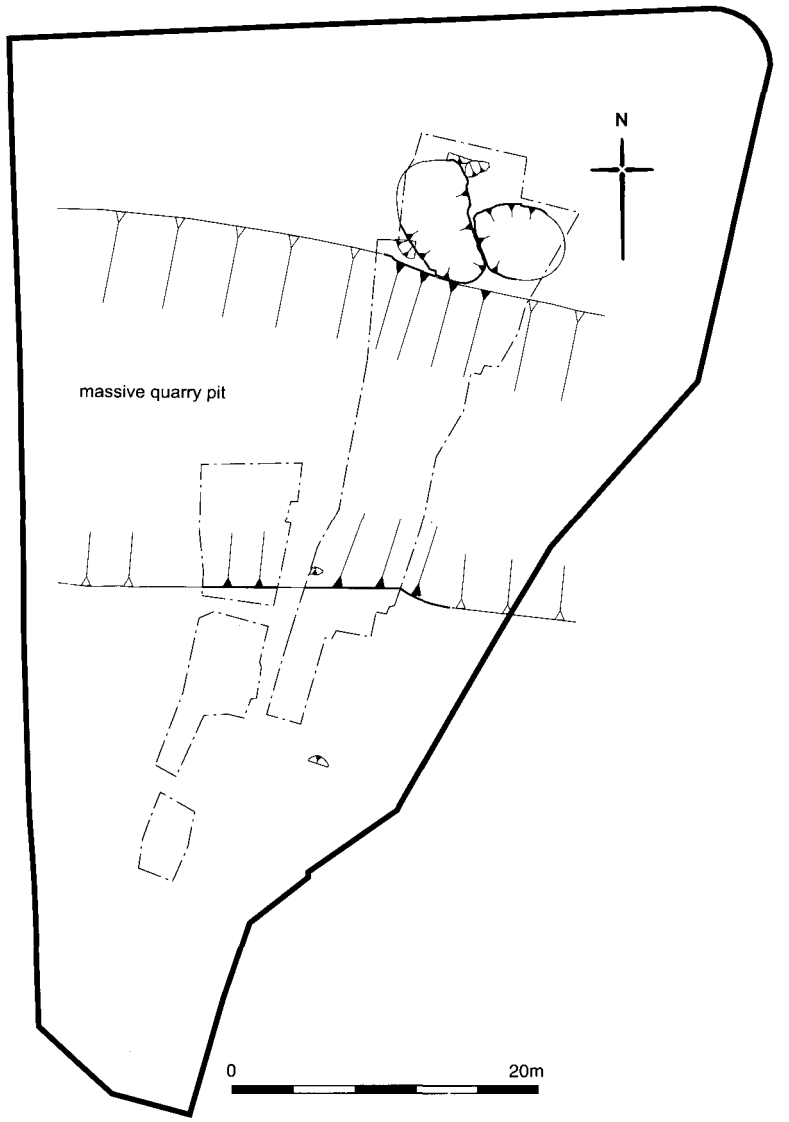

Fig 10. Period 3: medieval quarry pits, dug c.1309–1320

Discussion

The site area, outside the City wall before 1303–1320 and held by the Knights Templar from 1159 to 1308, may have been partially built-up by 1308. Buildings dating to the Templar period have been recorded both to the north and south of the site. It follows that the site area itself may have become partially built-up during the Templars' ownership. In which case, the Templars are unlikely to have undertaken full-scale quarrying.

Although there were no primary fills indicating when the pits were dug, the quarrying – a change of land use – probably took place after 1308, when the Templars surrendered the site. In 1309 the site was incorporated into the precinct of the Black Friars monastery and would have been a ready source of gravel for building work, specifically for the extension of the City wall, completed *c.*1320.

Period 4: medieval infill of quarry pits and consolidation, before *c.*1350

In Period 4 the quarry cuts were backfilled, consolidating the site. The deposition of the

landfill material, recorded across the whole site, was broadly dated to 1080–1350 by pottery. The landfill material spread across the limits of more than one pit. This was wholesale consolidation.

Tip lines, mainly down to the south-west, were apparent, as were slight differences between individual deposits. Overall, however, the landfill was homogeneous and must be seen as evidence for one activity, taking place over a limited period (initially defined by the pot dating). The uppermost landfill deposit had a truncated surface level of 10.75m OD, indicating that the contemporary ground surface was higher.

Backfills of the massive quarry pit

The most complex depositional sequence was the backfills of the massive quarry cut, where 202 separate contexts were recorded.

Although 28 of the backfill contexts of the massive quarry cut contained redeposited Roman pot, medieval pottery in 31 of the fills was entirely domestic. London-type ware and its various decorative derivatives (early style and polychrome) was, not unexpectedly, the most common. It was the major source of glazed jugs in London from the late 12th to mid-14th century (Pearce, Vince & Jenner 1985, 1). Saxo-Norman pottery (Early Medieval Sandy ware, flinty ware, shelly ware and grog-tempered ware) in these fills was residual.

The largest group of pottery from one of these backfill deposits consisted of 130 sherds from up to 52 vessels; the majority was from one vessel – a London ware jug with white-slipped decoration that had broken into 57 pieces. Fourteen, often abraded, sherds of South Hertfordshire greyware were also recovered. Some of these sherds were rare examples with small spots of green glaze applied to their external surfaces. Regional imports also included a Kingston-type ware cooking pot. This white-fired, wheel-thrown, sandy earthenware was one of the main types of pottery used and found in London between the early 13th and the early 15th centuries (Pearce & Vince 1988, 6). This vessel, together with the two sherds of London polychrome ware, gives a *terminus post quem* date of *c.*1230–1350 for this particular fill. Fragments of mid-12th- to early 13th-century shouldered peg, flanged, and curved roof tiles were also present together with a piece of roofing slate.

Faunal remains included cattle and sheep/goat lower limbs, and two entire cat long bones. A large male sheep horncore could be indicative of horn-working waste. Some evidence of veal consumption was apparent: very young cattle femurs were excavated, one with evidence for butchery. This is indicative of a fairly high status diet. In addition, a red deer radius is indicative of venison, another high status meat, being consumed.

The remaining quarry pits

The backfills of the remaining, smaller, quarry pits located to the north of the massive pit were similar in character and contained finds comparable to those noted above. The fills comprised grey-brown mixtures of silt, sand and clay and redeposited alluvial gravel.

One backfill, to the north of the site, included an assemblage of 71 sherds of pottery from up to 63 vessels, discarded between *c.*1180 and 1220. As the source of the material redeposited on the site as backfill is unknown, this dating is little help in establishing when the consolidation of the site occurred. Of all the pottery groups from the backfill sequences, this was in the best condition, consisting of large sherds with little abrasion. In common with the other pits, some Roman material was present, but little earlier medieval pottery was found. The fabrics and forms were similar to the massive quarry group: South Hertfordshire and shelly sandy ware cooking pots and London-type ware jugs were dominant; the last including a range of strap handles with thumbed or slashed decoration and, in one case, a rod handle with applied 'ears'. A few of these London ware vessels were also decorated in the Rouen-style (Pearce, Vince & Jenner 1985, 28) (Fig 11, No. 1). Also recovered was the rim profile from a jug with thumbed and stabbed decoration applied to the handle, a common feature of this industry (Fig 11, No. 2). A South Hertfordshire ware bowl with a hole pierced just below the rim has no parallels from published excavations (Fig 11, No. 3). The lack of sooting on the vessel indicates the vessel had not been heated on a fire; it may have served as some kind of strainer or colander.

This deposit also included one kilogram of animal bone including a sheep metacarpal from a small, medieval-type sheep and a number of horse remains. Two horse tibias, a femur, and an astragalus of similar size and stature may

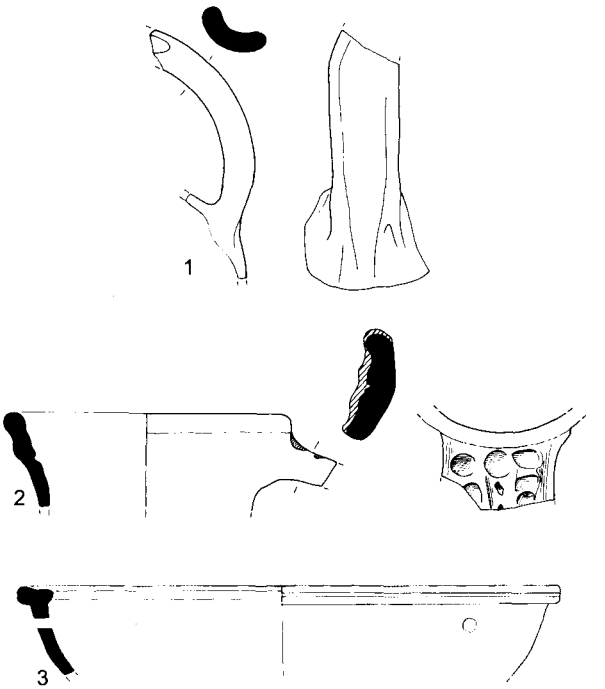

Fig 11. Pottery from Period 4, medieval infill of quarry pits: 1. Handle from a London ware Rouen-style jug; 2. Rim profile from a London ware Rouen-style jug with thumbed and stabbed decoration applied to the handle; 3. South Hertfordshire ware bowl with a hole (Scale 1:4)

derive from the same individual indicating that the hind legs of the horse may have been deposited together into the quarry pit. Bone-working was evident in the form of a sawn distal cattle tibia and metacarpal.

Another backfill group included four small groups of pottery with high levels of residual contamination from the early medieval or Roman period. One sherd is a 6th- to 7th-century Frankish import and, although residual, is a very unusual find (Fig 12). It is decorated with a linear band of diagonal roller-stamping and appears to be the shoulder of a biconical jar (Vince & Jenner 1991, 113).

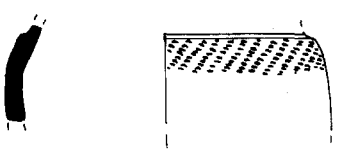

Fig 12. Pottery from Period 4, medieval infill of quarry pits: Frankish import, shoulder of a biconical jar with a linear band of diagonal roller stamping (Scale 1:2)

Medieval peg tile was also present (dating to 1180–1480) together with residual Roman pottery and building material.

Plant remains from all these landfills indicate that they had not accumulated over time but were deposited soon after the excavation of the pits. There was no evidence for aquatic plants and thus no evidence for the pits being open long enough to collect water. Furthermore, the range of weed seeds expected from plants growing around and in an open pit was absent.

Discussion

The medieval pottery recovered from the quarry pit backfills is overwhelmingly local in character with little evidence of wares from outside London and its immediate environs. London ware makes up 33.7% of total sherd count of the medieval assemblage while its earlier variant, London coarse ware, provides a further 6.9% and South Hertfordshire ware adds another 24.4%. The only wider English imports found, Thetford and Stamford wares, appear to be residual.

In common with many medieval assemblages the dominant forms are cooking pots and jugs. The pottery found in the quarry fills reflects the disturbance caused by the digging and subsequent rapid backfilling of this feature. Consequently, the condition of the pottery is often poor and usually consists of small-sized, fragmented, groups. The pottery confirms the land use sequence, as no fabrics can be dated beyond the mid-14th century.

The most reasonable explanation is for the Period 4 consolidation to have taken place as a result of the activities associated with the foundation and subsequent building works of the Dominican Friary – Blackfriars. In this case, consolidation may have taken place after the site area was ceded to the Friary in 1309 and possibly before, or shortly after, the completion of the new north–south stretch of the City wall by 1320: a date within the range of *c.*1230–1350 indicated by the pottery.

The pottery suggests the landfill material came from a local, London, source while the environmental evidence indicates the quarry pits were backfilled quickly after their excavation.

Period 5: later medieval *c.*1350–1538

Period 5 included evidence for activities undertaken after the deposition of the Period 4 landfills. Features observed were a kitchen waste pit, a lined cesspit (Cesspit 1) and a truncated pit of unknown purpose (Fig 13).

Kitchen waste pit

The kitchen waste pit was recorded towards the north-east of the site (Fig 13). It retained a single fill which included pottery dated to 1380–1500, within the lifespan of the friary. The pottery included 37 sherds of Coarse Border ware (the later products of the Surrey whiteware industry) and three sherds of residual London ware. Amongst the Coarse Border ware was the near complete profile from a flat-topped cooking pot, a fragmented bifid-rimmed cooking pot, and the base from a plain conical jug. The flat-topped cooking pot shows signs of being heated over a fire or stove, which caused the lower part of the body to reduce to a grey colour. The inside of the lower base had tidemark residues, from the boiling and reduction of the liquids it once held. Its base was also slightly worn and abraded, providing further evidence of use. These flat-topped cooking pots are typologically dated to the late 14th century (Pearce & Vince 1988, 85).

The pit also contained nearly 1,000 animal bones, constituting over a third of all faunal material recovered from the site. There were remains of fish, bird, small and large mammals as well as seafood. All domesticated animals were well represented, with a mix of body parts, mainly upper and lower limbs. Cattle-sized ribs and vertebrae were common. A pair of infant cattle metacarpals may have come from the same individual. Rabbit and cat remains were present. Goose and chicken were common, with chicken in the majority. Fish bones included a large cod, within the 40–50lb range, a good size for a bottom-trawled cod. The fish showed evidence of butchery.

Seafood was also well represented. A total of 1.32kg of marine mollusc shells were recovered by hand-collection. This distinctive shell group was dominated by very well preserved adult and young adult common whelk (*Buccinum undatum*), common/flat oyster (*Ostrea edulis*), common cockle (*Ceastoderma edule*), and common mussel (*Mytilus edulis*). At least one oyster valve from this context was very heavily damaged by the boring sponge *Cliona celata*. All these species were commercially fished and of economic importance. They are available from the outer Thames estuary and adjacent coasts.

Cesspit 1

A typical medieval chalk-lined cesspit was recorded along the eastern edge of the site, opposite the west end of Carter Lane (Fig 13). Although the full north–south length (2.50m) was recorded, the eastern extent was beyond the limit of excavation. Base level was 6.80m OD and the pit was truncated above 8.00m OD. The base was lined with a compact layer of chalk while the sides were lined with squared chalk blocks. Tile levelling courses were laid between the uneven chalk courses. Bonding material was light-yellow sandy mortar. The lined pit contained a primary fill of a soft dark-purple to black deposit, probably cess. This was sealed by a mixed backfill which included one sherd of London ware pottery broadly dated to *c.*1080–1350.

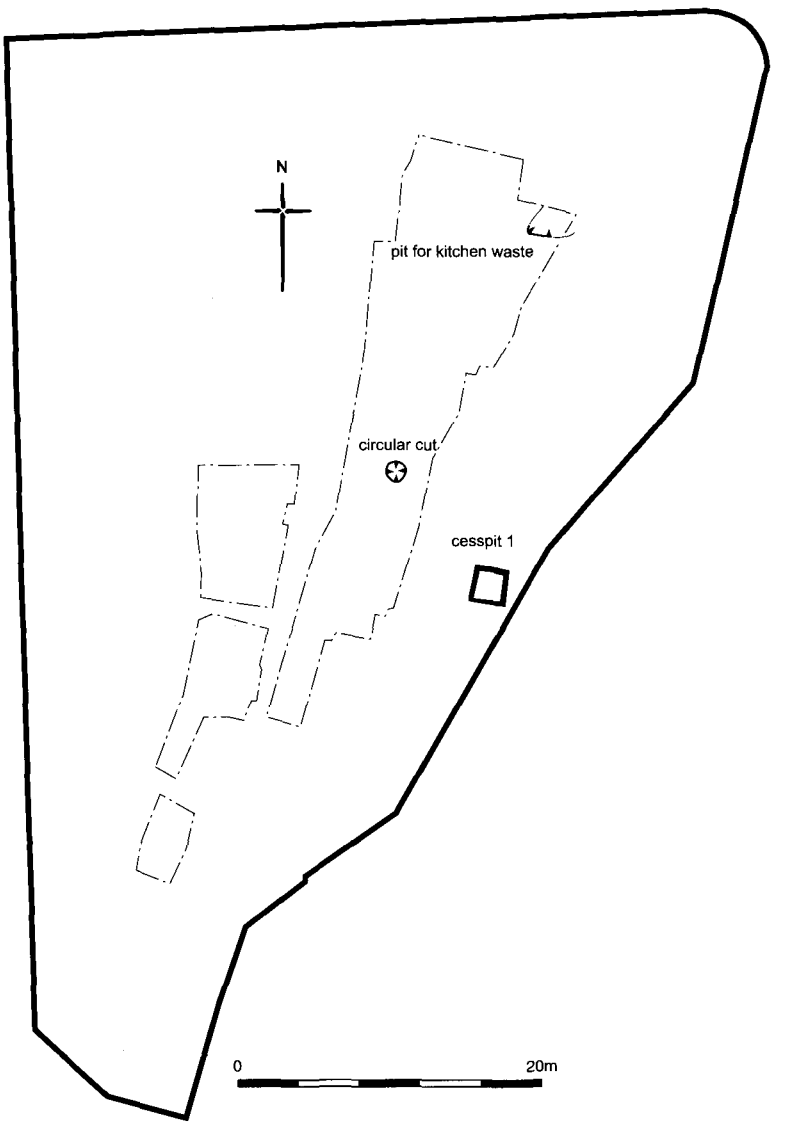

Fig 13. Period 5: later medieval activity associated with the Dominican Friary c.1350–1538

Circular cut

A flat-bottomed circular cut was located near the centre of the site (Fig 13). The diameter was 1.26m, base level was 7.77m OD; the feature was truncated at 8.01m OD.

Although there was nothing (*eg* a lining or a primary fill) to suggest the purpose of this feature, the backfill included peg tile dated 1480–1800, as well as Tudor-type red brick dating from the mid/late 15th century to 1666. The pottery found in the backfill was one non-diagnostic sherd of London ware pottery, dated to between *c.*1080 and 1350. This suggests the feature could have been backfilled before 1538 when the site was still within the outer precinct of the Dominican Friary.

Discussion

These features date from when the site was under the ownership of the Dominican Friars (Black Friars). The site area was within the friary's outer precinct and probably in use as

gardens, certainly until the 1538 Dissolution. Therefore, these cut features can indicate something of the nature of Dominican activities (and diet).

The pottery from the kitchen waste pit, when compared with the animal bone and other environmental evidence also discarded in the pit, represents a group of vessels in use in a medieval kitchen.

Period 6: post-medieval. The site from the 1538 Dissolution to clearance following the Great Fire of 1666

After the dissolution of the Dominican Friary in 1538, the bulk of the monastic buildings were passed to Sir Thomas Cawardine who in 1550 received the churchyard, other yards and closes. The site was redeveloped from 1550, and a series of features dating from this period were recorded (Fig 14). By *c.*1562 the site was partially developed, with stretches of buildings concentrated along the eastern frontage and northern end of the site (see Fig 6, top left). The site remained open behind these properties. By 1658 the site appears to have become fully built-up, with little open ground between each property (see Fig 6, top right).

Any traces of buildings contemporary with Period 6, *eg* foundations, were removed during subsequent clearance, but deeper features – a well and a cesspit – were recorded. The well, and probably also the cesspit, would have been located in a yard behind or between the properties on site.

Brick-lined well

A circular, brick-lined well was located along the eastern edge of the site (Fig 14). Dating evidence indicates that the well was in use by *c.*1650–1700, and possibly backfilled after the 1666 Great Fire. The internal diameter of the well was 1.10m. The well was truncated at *c.*9.00m OD and extended to a depth below *c.*5.50m OD.

The backfill of the well included 64 pottery sherds from up to 14 vessels. Two complete profiles were present. The first is from a green-glazed border ware chamber pot, typologically dated by its flat-topped rim to between *c.*1650 and 1700 (Pearce 1992, 32–4). The second profile is from a red border ware dish with a sooted base. The other pottery is derived from a number of sources. Other redwares include the substantial upper rim and body profile from a post-medieval redware handled bowl and two storage jars. English pottery from further afield included a Staffordshire ware slip-decorated mug. Continental imports consist of two sherds of Rhenish stoneware and the lower neck of a jug with a Bartmann facemask. A Chinese blue and white porcelain teabowl represents the first example of Far-Eastern wares in the post-medieval assemblage.

The well backfill provided the only evidence for pantile roofing from the excavation. This rooftile is possibly Dutch: pantiles were being imported into London from *c.*1630 and are not thought to have been made in England until around 1695 (Smith 1996).

Cesspit 2

Towards the north-east of the site was a rectangular, brick-lined cesspit (Fig 14). The pit measured 1.54m by 1.50m externally and base level was at 7.94m OD. It was truncated at 8.23m OD. Like the well, the dating evidence suggests use before the 1666 Great Fire.

The primary fill included tobacco pipe dated to 1610–1710, peg tile dated to 1480–1800, and plain glazed Flemish floor tile (*c.*late 15th to *c.*mid-16th century). Bone in the primary fill contained a small number of domesticates, fish bones, three rabbit tibias, and juvenile dove.

The primary fill was sealed by a backfill which included tobacco pipe dated to 1610–1710, one sherd each from a yellow-glazed Surrey/Hampshire border ware dish and bowl, and the pedestal base from an undecorated tin-glazed ware, possibly from either a salt or drug jar. Building material included peg tile (1480–1800) and another plain glazed Flemish floor tile similar in date to that noted above. A fragment of coal was recovered. Bone in the backfill included a human metapodial and the remains of suckling pigs.

Cesspit 3, disuse c.1665–1680

Cesspit 3 was a rectangular brick-lined structure located south-east of Cesspit 2 (Fig 14). Base level was 7.23m OD. The cesspit was truncated at 8.36m OD.

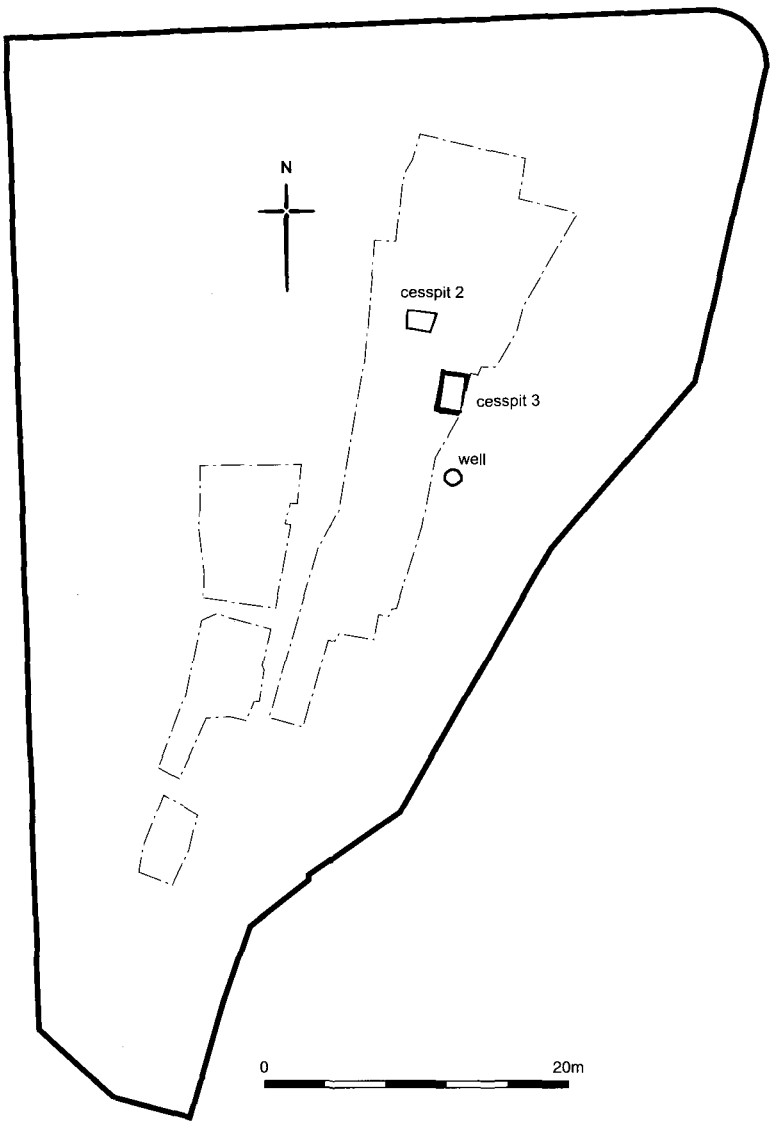

Fig 14. Period 6: post-medieval, the site between the 1538 Dissolution and the Great Fire of 1666

The backfill included 39 sherds of pottery from up to 17 vessels. The pottery included the complete profile from a yellow-glazed border ware dish, decorated with a pie-crust edged rim that is so far unparalleled (Fig 15, No. 1). Continental imports included a Rhenish jug with the interwoven initials *PVA* above an anchor medallion (Fig 15, No. 2). The initials refer to the Dutch merchant, Peiter van den Anker, who was part of a consortium of London-based Dutch traders that monopolised the trade in Rhenish stonewares between 1660 and 1665 (Gaimster 1997, 82–3). The group also included two border ware vessels that had been directly exposed to fire, causing them to change from their usual red-fired body to a white one.

Clay tobacco pipe was limited to one plain pipe bowl of type AO15 dated 1660–80 (Atkinson & Oswald 1969). Nine fragments of 17th-century green-glass wine bottles with long necks and globular bodies were also recovered.

The material found in this cesspit was

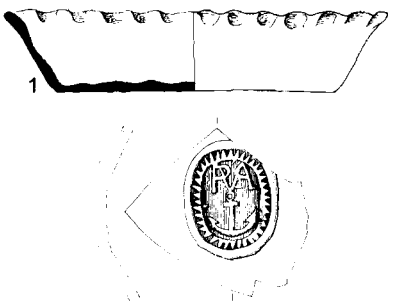

Fig 15. 1. Complete profile from a yellow-glazed border ware dish, decorated with a pie-crust edged rim from Cesspit 3; 2. Rhenish jug with the interwoven initials PVA above an anchor medallion from Cesspit 3 (Scale 1:4)

discarded between *c.*1665 and 1680. It is probable that the finds were disposed of soon after the Great Fire of 1666 – an interpretation supported by the two border ware vessels.

Period 7: post-medieval. The site following consolidation after the Great Fire of 1666

The Great Fire of 1666 would have destroyed any buildings on the site (see Fig 6, middle right). After clearance Black Friars Lane had been built up by 1676 (see Fig 6, middle right). Features dating from the post-Great Fire period of redevelopment, mainly brick-lined cesspits, were recorded on the site (Figs 16–17). The properties on the site in 1676 had yards to their rear and it is probable the cesspits recorded in Period 7 were located in these open areas (Fig 16). As with Period 6 no traces of the contemporary buildings survived due to subsequent clearance.

Cesspit 4: disuse after c.1580–1710

Cesspit 4 was located close to the south of the excavation area (Fig 16). Base level was 6.11m OD and the pit was truncated at 6.70m OD.

The backfill contained coal and coal dust. A small, fragmented, group of pottery from the infilling dates to *c.*1580–1700. Tobacco pipe was dated to 1580–1710. Also found were fragments from the rim and neck of a glass urinal, part of the rim of a mould-blown beaker, and a fragment of corroded sheet iron, possibly part of a vessel. Urinals were used in the study and analysis of urine (uroscopy) as an aid to medical diagnosis and were common from the 13th/14th centuries to at least the 17th century (Shepherd nd; Charleston 1984, 258).

Cesspit 5: use late 18th century–early 19th century

Cesspit 5 was north of Cesspit 4 (Fig 16). Base level was 8.03m OD. The cesspit was truncated at 8.22m OD.

Within the cesspit was a loose, red-brown, humic, primary fill. This was the only fill; there was no backfill. Although the finds were mainly deliberately dumped domestic rubbish, some were probably accidental discards, such as a virtually complete patch box, a night-light holder, and a group of coins.

The primary fill contained uncharred plant remains preserved by waterlogging. Abundant raspberry (*Rubus ideas* L) and elderberry *(Sambucus nigra* L) seeds were present along with moderate quantities of blackberry (*Rubus fruticosus* L) seeds and low numbers of fig (*Ficus carica* L) seeds. Plant remains preserved by mineralisation consisted of low numbers of cherry (*Prunus avium/cerasus*) kernels and unidentifiable leguminous (*Fabaceae*) seeds. Mineralisation occurs when organic remains are exposed to faecal material, bones or lime which replaces the organic compounds in the remains with calcium phosphate (Greig 1982, 49), calcium carbonate, or silica (Zohary & Hopf 1993, 6).

Faunal remains included chicken and fish bones, an infant cattle radius and a foetal/neonatal pig tibia. The latter indicate veal and suckling pig consumption. Fly puparia and small rodent remains were also recovered.

The primary fill contained finds deposited during the life of the cesspit. These included redeposited Roman tile and pottery, and tobacco pipe and peg tile which can be only broadly dated (1780–1910 and 1480–1800 respectively). A group of 69 pottery sherds, from up to 21 vessels, consisting of a range of Creamwares, decorated Chinese porcelain, and coarse red earthenwares, dated the infilling of this cesspit to between *c.*1745 and *c.*1800. The most complete Chinese porcelain vessels were two teabowl profiles, further decorated by being painted dark green over the existing red under-glaze chrysanthemum pattern. This decoration style, known as klobbering, was applied after these pieces had been exported from China. This was

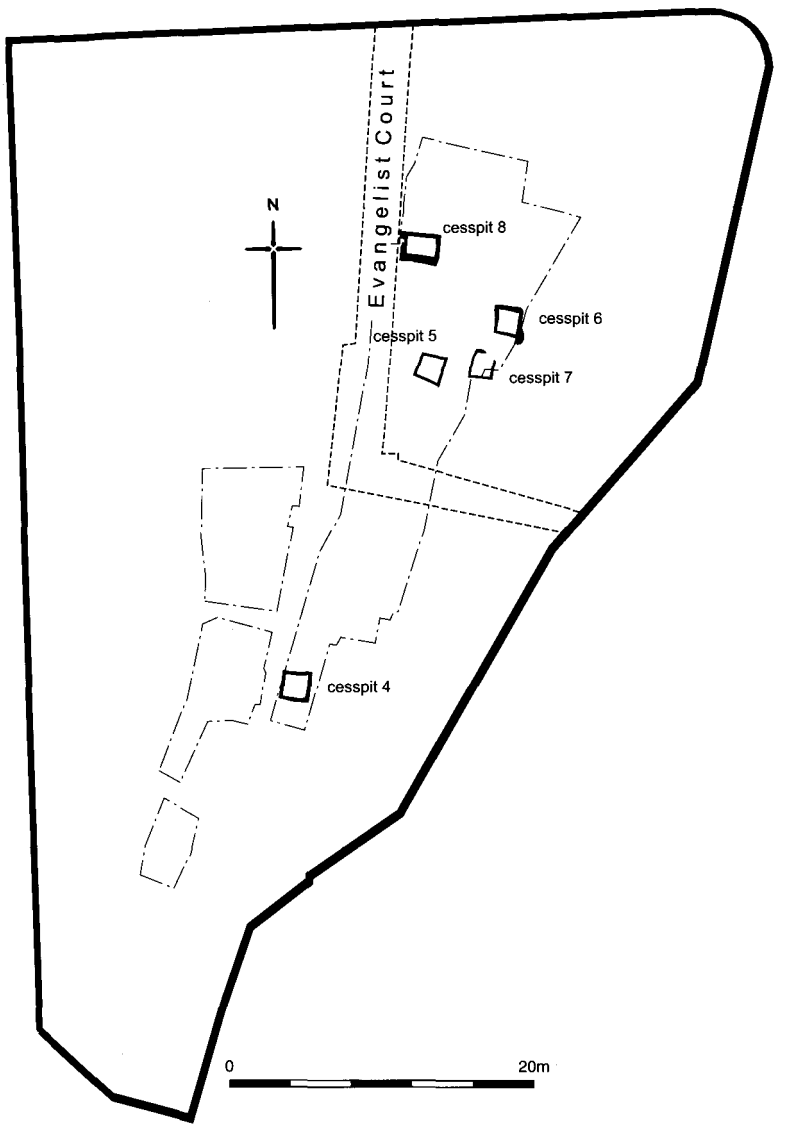

Fig 16. Period 7: post-medieval, the site after the Great Fire of 1666, with overlay of Evangelist Court showing relationship of cesspits to street pattern

common practice on pieces of imported Chinese porcelain during the 18th century, which were altered in Britain and Europe to suit contemporary tastes (Sheaf & Kilburn 1988, 182). The post-medieval redwares include two profiles from unusual, small, unglazed, rounded dishes (Fig 18, Nos 1–2). No parallels for these vessels have been found, but their unglazed, coarse fabric suggests they were horticultural vessels.

The primary fill of Cesspit 5 also produced an enamelled, copper-alloy patch box. The outside of the lid was decorated with a disintegrated transfer-printed design of a kissing couple and the words 'I Love Too Well To Kiss And Tell'. The inside contained the remains of a mirror, indicating that this was a patch rather than a snuff box. Such small boxes, often with sentimental or romantic designs and mottoes, were produced in large numbers from the late 18th to the early/mid-19th century (Benjamin

Fig 17. Cesspit 6 under excavation

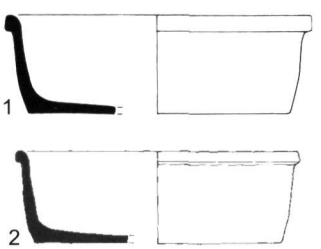

Fig 18. Pottery from Period 7, the site after the Great Fire of 1666: Post-medieval coarse redware, profiles from two small, unglazed, rounded dishes from Cesspit 5 (Scale 1:4)

1978, 10). Other copper-alloy finds include drawer or cupboard handles, a cutlery handle, a plain, round box lid or base, part of a stud, and 37 badly corroded George III halfpennies (1760–1820). Also found was a silver George I half crown.

Another find was a complete 19th-century glass nightlight holder with a globular body sitting on a small stem (identification by John Shepherd). Such objects were mass-produced from the 18th to the 20th centuries (O'Dea 1958, 47).

Cesspit 6, disuse c.1800

Cesspit 6 was a rectangular brick-lined structure located to the north-east of Cesspit 5 (Fig 16). Base level was 7.61m OD. The cesspit was truncated at 8.40m OD.

Pottery from the backfill of Cesspit 6 included the base of a plain tin-glazed ware jar and the base from a post-medieval redware flower pot. Also recovered were peg tile dated to 1480–1800, plain unglazed Flemish floor tile (mid-16th/17th to 18th century), and fragments of brown-glazed Victorian machine-made drain pipe with the impressed letters of the manufacturer. The cesspit disuse is after 1800, perhaps *c.*1850.

Cesspit 7, use after c.1665–1680

Cesspit 7 replaced Cesspit 3 (Fig 16). Base level was 8.29m OD. The cesspit was truncated at 8.46m OD.

The backfill included demolition debris, but no objects of note. Dating is based on it being later than Cesspit 3.

Cesspit 8, disuse c.1830–1850

Cesspit 8 was located to the north-west of Cesspit 7 (Fig 16). Base level was 7.61m OD. The cesspit was truncated at 8.34m OD. The pit measured 1.90m east–west by 1.25m north–south internally.

The fill was a peaty, grey-brown deposit mixed with demolition debris (brick, mortar). Presumably some primary fill remained in the pit at its backfilling.

The pottery from this cesspit consists of 74 sherds, from up to 34 vessels which date to between *c.*1830 and 1850. The pottery consists of English and Chinese porcelain with larger quantities of industrial finewares, such as Creamware and Pearlware. These are either transfer-printed or under-glazed hand painted. With a narrow range of fabrics and forms, closely dated to within twenty years, the assemblage might be part of a selective clearance from a nearby domestic household (Pearce 2000, 145–6). However this group does not match the criteria established for a clearance group and it is difficult to discuss this group beyond the source and chronology of the wares represented.

More dating evidence came from an assemblage of tobacco pipe dated 1830–1850. There were 30 19th-century pipes with moulded marks on the sides of the heel or spur. Some of these have an additional stamped mark on the back of the bowl, facing the smoker. The products of at least 12 different pipe makers are represented but there is nothing to indicate that any of the makers was working in the vicinity of the site. It is not unusual for large groups of pipes of this date to have been derived from a number of sources.

Some of the pipe makers can be positively identified. John Hurst was working in Cowcross Street, West Smithfield during the period 1808–49 (Atkinson & Oswald, 1969). There are two pipes with his name and address stamped on the bowl (with the City of London Arms) and the initials *IH* moulded on the spur (Fig 19, No. 1). There are four type AO28 bowls (from three different moulds) and a type AO29 bowl with the initials *JH* moulded on the spur (Fig 19, Nos 2–3). William Williams had a workshop at 295 Kent Street, Borough in 1823–51 (Tatman 1994, 144–5). His surname (with the City of London Arms) is stamped on the back of a type AO28 bowl that has the initials *WW* moulded on the spur (Fig 19, No. 4). There are five examples of the *HC* mark, on type AO28 pipes from three different moulds (Fig 19, Nos 5–7). This mark does not seem to have been recorded previously. The pipes might have been made by one of the following makers, taken from the List of London tobacco pipe makers 1800–99 (Atkinson & Oswald 1969): Hannah Clark, Queens Court, Holborn (1832); Henry Cox, High Holborn (1837–40); Mrs H Cox, Queens Court, Holborn (1840–53). The other makers' marks have all been recorded in small numbers on sites elsewhere in the City and surrounding boroughs. They cannot be attributed with any degree of certainty.

The non-ceramic finds included objects of a personal or domestic nature, comprising buttons, parts of a copper-alloy purse frame (Fig 20, No. 1), an incomplete bone or ivory needle case (Fig 20, No. 2), a broken drinking glass, a key, a slate pencil (Fig 20, No. 3), and a coin. Virtually all of the objects are broken or damaged. All of the objects are mass-produced, everyday items and do not indicate any great degree of wealth, and were probably accidental losses.

CONCLUSIONS

Roman activity beyond the limits of the city wall is well documented and the site was certainly no exception, even though evidence was limited to a single well which fell out of use after AD 120. There may have been Roman burials in the area, but the evidence was missing due to later truncation.

The site was subject to development from 1159 to 1308 when it was owned by the Knights Templar. Although archaeological excavations in the vicinity have demonstrated that buildings dating from the Templar period existed both north and south of the site, evidence for similar structures was completely missing from the site. Once again this was a result of later truncation.

It is the first half of the 14th century which provides convincing evidence for exploitation, when quarry pits were excavated across the whole site. The City wall was lengthened down to the bank of the River Fleet just beyond the north limit of the site by *c.*1284–1303. The wall was then extended north–south along the bank of the Fleet from 1309–1320, after the site was granted to the Dominican friars. The archaeological work has shown that any Templar-period buildings on the site would probably have been

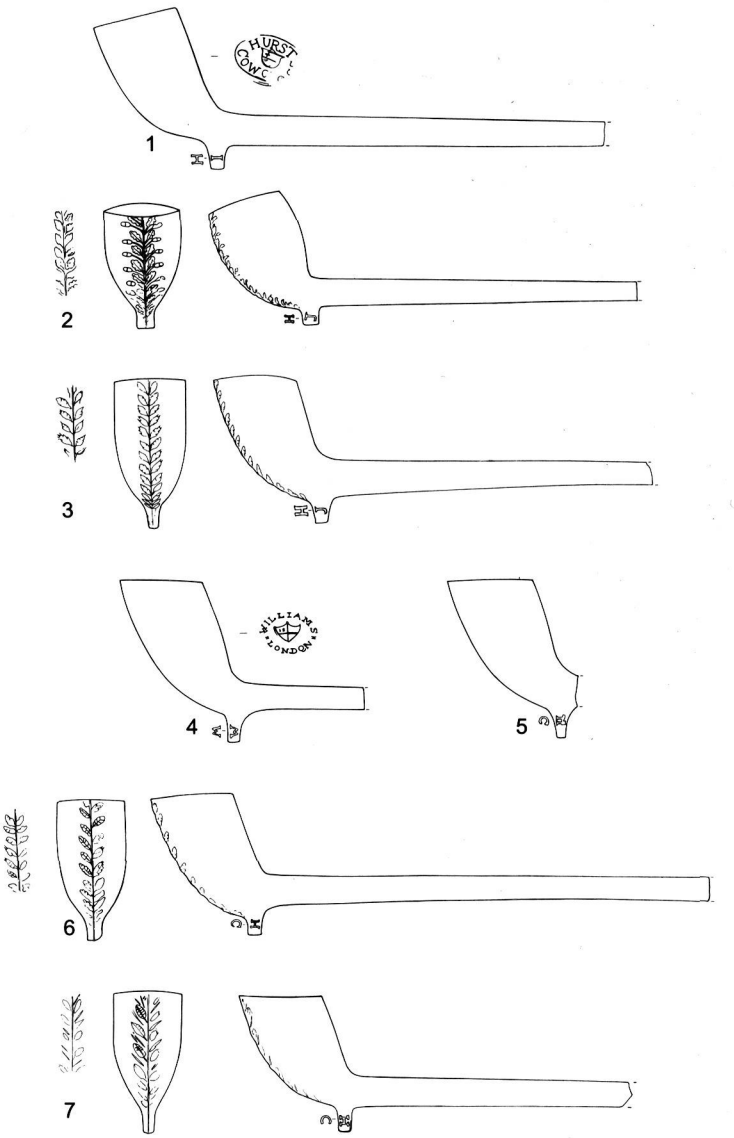

Fig 19. 19th-century tobacco pipe from Period 7, the site after the Great Fire of 1666. 1. Marked HURST COW X STR/IH; 2. Marked JH; 3. Marked JH; 4. Marked WILLIAMS LONDON/WW; 5. Marked HC; 6. Marked HC; 7. Marked HC (Scale 1:2)

demolished when the site was quarried for its gravels for use in the construction of the new City wall.

Once the wall was completed the site was quickly infilled – probably soon after 1320 – with soils containing pottery, mainly from the London region. Although the origin of the landfill is unknown, it had not been imported from far afield. The site then became a garden ground within the outer precinct of the Dominican friary. Part of the garden was used for the disposal of the friary's kitchen waste including the remains of geese, cod and seafood from the Thames estuary. Mundane foodstuffs included chicken, beef and rabbit. A late 14th-century cooking pot which had been used for boiling liquids was found with the kitchen waste.

The range of foods represented by this assemblage is broad, with seafood and fish well represented. Monastic meals generally consisted

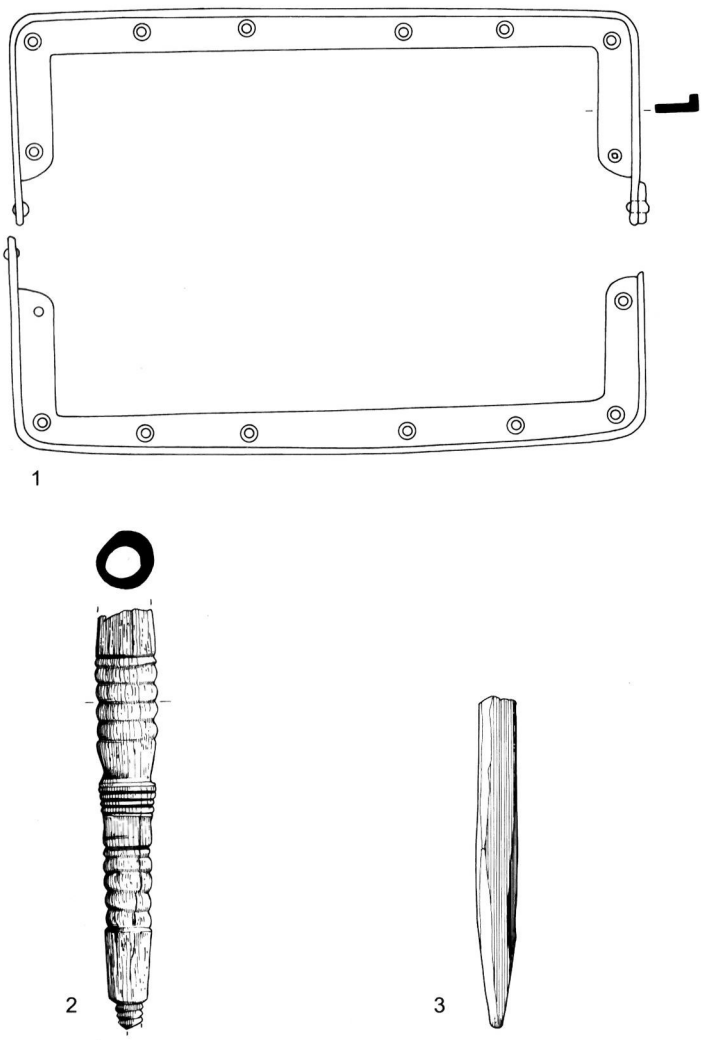

Fig 20. Non-ceramic finds from Period 7, the site after the Great Fire of 1666. 1. Copper-alloy purse frame; 2. Ivory/bone needle case; 3. Slate pencil (Scale 1:1)

of bread, cheese, vegetables, beans and cereals with pittances (extra dishes) of fish and eggs on special occasions (Burton 1994, 166). As Dominicans were subject to a vow of poverty, the site assemblage might not necessarily derive exclusively from monastic food waste, but may include material left after interaction with the secular world. The eating of meat with guests would presumably have occurred and it is probable that the restriction on the eating of flesh varied from house to house and, although some houses adhered to the rules on the eating of meat on only certain days of the year (which applied to the regular clergy), partial abstinence appears to have been the popular compromise (Burton 1994, 167). Indeed, the Luttrell Psalter of *c.*1325 depicts Dominican friars at the table of Sir Geoffrey Lutrell, so it is clear that when travelling and preaching the friars did not exist in isolation. Similar activities may have taken place at the Ludgate friary.

Following the Dissolution of the friary in 1538 the garden ground passed to Sir Thomas Cawardine in 1550. Some development must have ensued. Features constructed under this ownership included a well and a cesspit. The primary fill of the cesspit included some food waste in the form of fish and rabbit bones. Both

the well and cesspit were infilled soon after the Great Fire of 1666.

Building after the Great Fire was on a more intensive scale, as demonstrated by the six cesspits recorded at the site. Finds from the cesspits were overwhelmingly domestic in nature, either rubbish or chance losses. Amongst the food waste (seeds and bone), tobacco pipes, domestic and Chinese pottery in Cesspit 5 were bones from small rodents and fly pupae. Clearly, regular emptying was not a priority.

The excavations at Black Friar's Court have shown how the nature of exploitation of the landscape changed under different ownership. In the early 14th century it became a quarry then garden grounds. By the second half of the 16th century there was evidence for limited residential usage. This intensified after the Great Fire, with the site eventually becoming fully built-up by the mid-18th century.

APPENDIX: STAMPED MORTARIA FROM PERIOD 4

Katherine F Hartley

Amongst the residual Roman pottery recovered from the medieval backfill of the massive Period 4 quarry pit were stamped fragments of two mortaria.

The fabric of both fragments is at the finer end of the range produced in the Verulamium region (Verulamium region white ware). One was from a well-worn and slightly burnt mortarium; the clay added to form the spout has flaked off. The broken left-facing stamp reads]O$\underline{O}$[..]; further examples will show whether the initial O is the beginning of the stamp (Fig 21, No. 1). The other was the flange and bead from a mortarium fired to cream at the surface, but otherwise pink, with buff-brown slip. The partially impressed stamp reads [.]OM$\underline{X}$ (Fig 21, No. 2).

Both stamps were from the same die. Other examples are known from Keston, Lower Warbank, in Kent, and Wallsend along Hadrian's wall (neither published). No pottery from Wallsend dates from before the construction of Hadrian's Wall. The end-borders do not survive on any examples, but the full stamp may read OOMX. However, this interpretation is uncertain. X is often used as a space-filler, but it could possibly be VA ligatured. Likewise the second O has little horns at the top and could be interpreted as Q if the stamp is reversed. There is also an indication that the diagonal bar visible in part of the second O continues across the first O. This is one of many semi-legible, but readily identifiable, stamps produced in the Verulamium region in the first half of the 2nd century. The optimum date for this potter's rim-profiles is AD 110–140. Few if any mortaria were being stamped in the Verulamium region after AD 140.

This is an uncommon potter and it is surprising that two of his stamps should be found on the same site if they are not from the same vessel but, in view of the considerable difference in rim-profile, it is unlikely that they are from the same vessel.

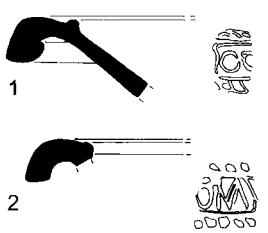

Fig 21. 1. Stamped mortarium fragment]O$\underline{O}$[..]; 2. Stamped mortarium fragment [.]OM$\underline{X}$ (Scale 1:4)

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