

The archaeology of 151–153 Bermondsey Street, Southwark

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with contributions by

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The article describes archaeological excavations at 151–153 Bermondsey Street, Southwark. The earliest recorded occupation, which was confined to the area of the site lying immediately adjacent to the street, was contemporary with the construction of Bermondsey Street possibly as a causeway. The land was reclaimed from marshland in the late 12th century. Documentary evidence indicates that the site lay within the northern precinct of Bermondsey Abbey at this date and that it may have been delineated by a stone precinct wall on the eastern side of the street. No evidence for a precinct wall was uncovered, but remains of a late-medieval building, which may have fronted Bermondsey Street, were found. This building may have stood until c1580. Three major phases of post-medieval construction activity were recorded, including a major rebuilding phase dated to after 1660, and incorporating medieval building stone and ceramic building material probably robbed from Bermondsey Abbey. Photographs and drawings indicate that the late 17th century buildings were still standing at the end of the 19th century, when they were in use by a currier and may previously have been occupied by a wool stapler. During the 18th and 19th centuries the marshy hinterland behind the street frontage was used for various industrial processes associated with the leather industry.

Introduction

Archaeological excavations were undertaken by Pre-Construct Archaeology Ltd intermittently between December 1999 and June 2000 at 151–153 Bermondsey Street, Southwark, London SE1 (TQ 3329 7960; fig 1). The site, measuring slightly in excess of 1500m², is located on the eastern side of the street, approximately 100m south of the junction of Bermondsey Street with Tanner Street and c200m north of the junction of Bermondsey Street with Abbey Street. The investigation involved examining the deposits in two evaluation and three excavation trenches (fig 2), measuring approximately 300m² or 20% of the total area of the development site.

In consultation with the local authority, the areas of archaeological excavation targeted locations where truncation from the proposed development was to be severe, such as lift pits and pile caps. The new building was not to contain a basement, and impacts were therefore localized.

Bermondsey Street appears to have been established as a causeway linking Bermondsey Abbey with Tooley Street and the Thames waterfront. It has been suggested that the street, as far north as Crucifix Lane, formed the western boundary of an enclosed northern precinct of Bermondsey Abbey, but this has not been verified by archaeological evidence. There seems, however, little doubt that all the land lying between the present-day Bermondsey Street, Tanner Street, Tower Bridge Road and Abbey Street was at some time owned by the abbey (Martin 1926, 195), even if there is some debate as to whether the land was physically enclosed. By the time of the Dissolution, most of the properties owned by the abbey had been assigned on long leases (*ibid*, 220). Aside from a few buildings in the close vicinity of the abbey church, it has not been possible to identify properties owned by the abbey at the time of the Dissolution. In the absence of any other major developed area of the parish, however, it seems likely that at least some of these properties were on Bermondsey Street. Sir John Fastolf owned a large manor house at the Thames end of Bermondsey Street and is known to have built 39 tenements in Bermondsey Street and Horsleydown beginning in the 1440s. Twenty-eight

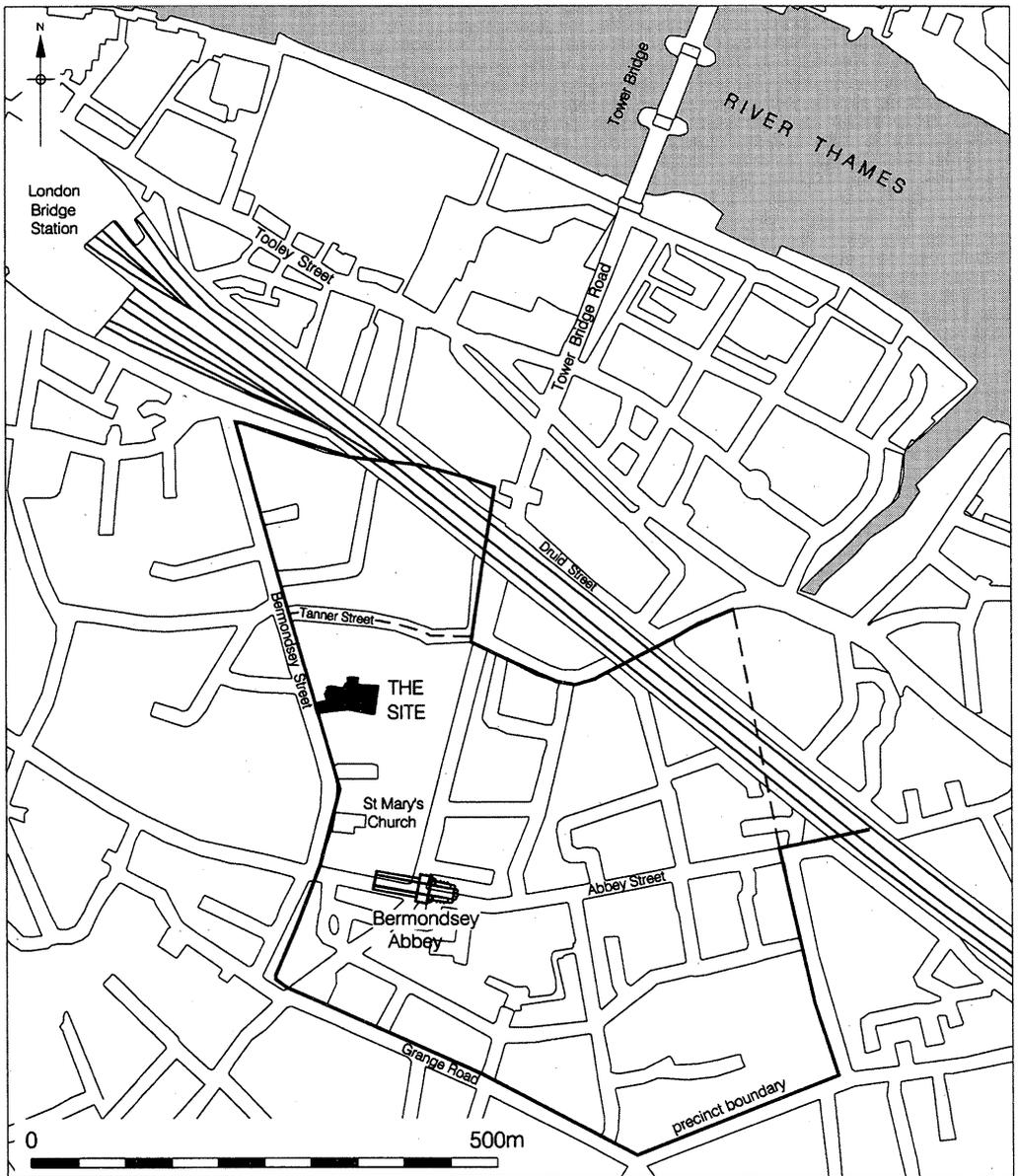


Fig 1 Bermondsey Street, Southwark: site location plan. (© Crown Copyright. MC 100014198)

of these properties were concentrated in two long rows of buildings, but eleven other buildings are presumed to have been individual properties. Analysis of this documentary evidence has suggested Fastolf's properties did not extend further south than Tanner Street (Carlin 1996, 35). For a medieval building on the site of 153–155 Bermondsey Street to have been in his ownership would indicate his estate extended further to the south than previously believed.

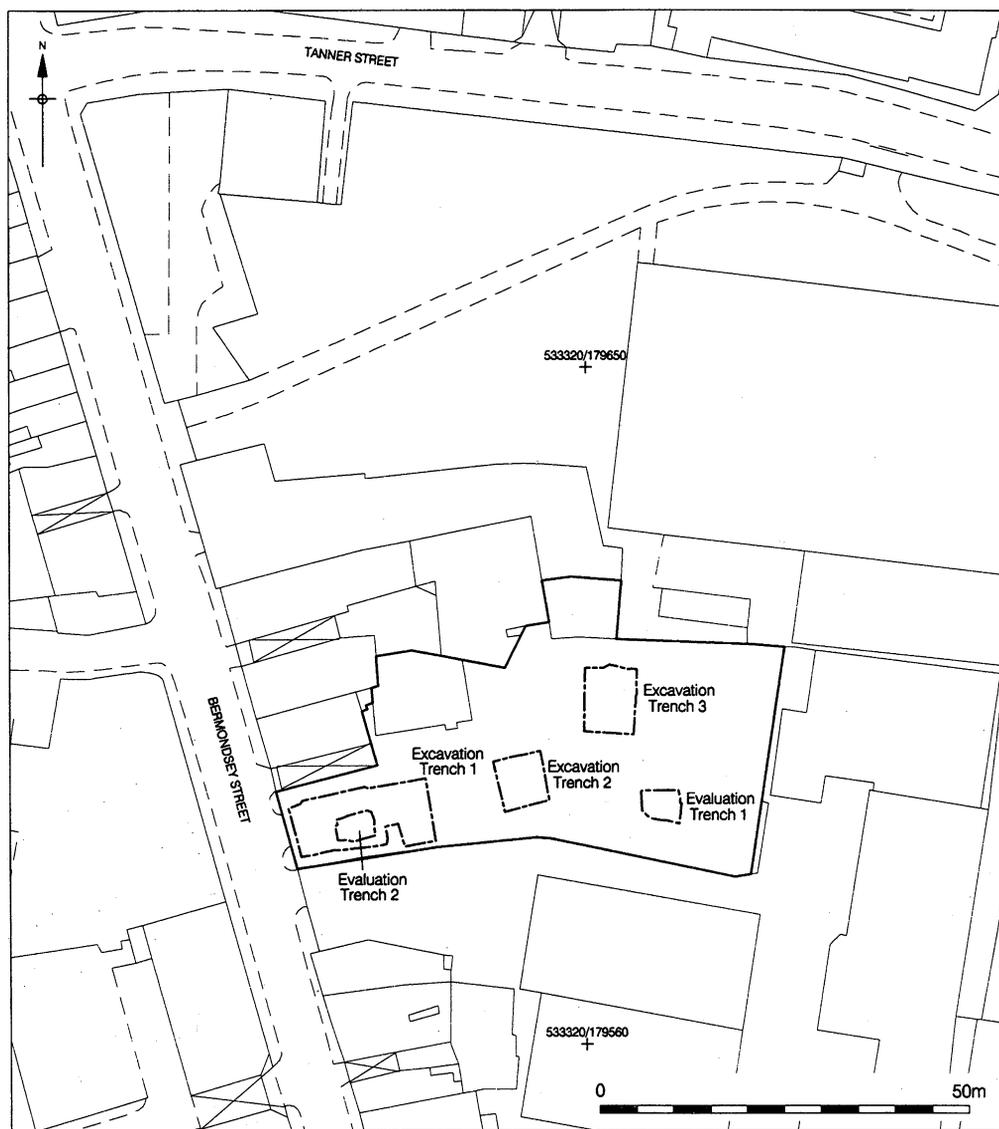


Fig 2 Bermondsey Street, Southwark: trench location plan. (© Crown Copyright. MC 100014198)

Geology and topography

The underlying geology of the area is London Clay overlain by drift deposits of natural sand and gravel. The site is located 750m south of the course of the river Thames. Before the establishment of river defences most of the area of north Southwark would have been subject to intermittent flooding due to changes in river levels. This resulted in the formation of peat deposits and the deposition of alluvial silts and clays in the lower-lying areas between the higher sand and gravel dyots. The level of the highest surviving natural gravel under Bermondsey Square (to the south of the site) has been observed at or about 2m above sea level. The level of the present-day pavement outside 151 Bermondsey Street is \approx 2.5m above

sea level. Archaeological investigations at Vinegar Yard, Tanner Street (100m to the north-east) recorded two phases of peat formation separated by a thin sand deposit, indicative of a high-energy flow flood of the lower peat deposit. The levels of the peat deposits were between approximately -0.60m OD and $+0.47\text{m OD}$. Radiocarbon dating produced a date of 980–805BC for the lower peat and 780–395BC for the upper deposits, calibrated with a 95% confidence interval (Heard 2000, 137–43).

Archaeological and historical background

A number of sites of prehistoric date are known from the general vicinity of north Southwark, mostly located on the natural sand and gravel islands. Examples include a small ring ditch at Fennings Wharf of Bronze Age date (Sidell *et al* forthcoming), a pit, burnt mound deposits and ard marks at Phoenix Wharf (Bowsher 1991), further ard marks at Lafone Street (Bates & Minkin 1999) and Hunt's House (Taylor-Wilson 2002), and pits, ditches and a wooden ard tip at Three Oak Lane (Proctor & Bishop 2002). A wooden trackway was uncovered at Bramcote Grove (Thomas & Rackman 1996, 221–53), a wooden and stone structure, probably a platform of middle Bronze Age date was observed at 5–27 Long Lane (Douglas forthcoming), and another unidentified wooden structure of prehistoric date was found at 127 Long Lane (Beasley 1998).

No stratified Roman finds have been found in the immediate vicinity of the development site, although clearly Southwark had a significant and extensive Roman presence.

Archaeological excavations at Abbey Buildings, Abbey Street uncovered a ditch and various Saxon finds including sherds of chaff tempered ware, coins, cloth and antler objects and dumps of burnt daub believed to derive from Saxon buildings. The Domesday Book suggests that a church may have existed in Bermondsey prior to the establishment of Bermondsey Priory, possibly on the site of St Mary's Church. The abbey was founded in 1082 and belonged to the Cluniac order. It became an important and influential element of the local economy (Steele forthcoming).

Bermondsey Street was established by the late 12th or early 13th century, and it has been suggested that it ran along the western side of the northern precinct of the priory (Martin 1926, 192–228). Sir John Fastolf owned considerable property holdings in north Southwark including, at the time of his death in 1459, 39 tenements in Bermondsey Street (Carlin 1996, 57). Prior to the excavation reported here there had been little archaeological evidence of medieval buildings in this area. Excavations to the north at 100–104 Bermondsey Street (Killock 1999, 125–40) produced 13th or 14th century pottery in residual contexts. The earliest structural remains found, brick and stone walls at a level of approximately $+1\text{m OD}$, formed the corner of a room, respecting the line of modern-day Bermondsey Street. A building dated to the late 16th or early 17th century superseded these walls.

During the late medieval period tanning began to develop as a major industry in Bermondsey. Evidence for liming pits associated with tanning processes have been found at numerous sites in the vicinity, notably at Brunswick Court, 9 Tanner Street (Drummond-Murray *et al* 1994, 257) and 33 Tanner Street (Heard 2000, 141–3). Tanning pits and post-medieval buildings have been recorded at 8 Tyers Gate (Killock 2000).

The archaeological sequence

NATURAL

Layers of naturally deposited silty clay interleaved with layers of peat and silty peat were observed across the site, but no evidence was found of the sand or gravel islands that elsewhere in north Southwark have tended to be the most favoured ground for prehistoric habitation. The alluvium (250) in excavation trench 1 was cut by a naturally created channel (255) on an approximate north–south alignment, observed in the exposed sections of a machine

sondage, where the exact dimensions and orientation of the feature could not be recorded. However, the channel appeared to be at least 700mm deep. There was no evidence of revetting and the gently eroded sides and rounded base appear to indicate a naturally cut feature. The channel was infilled with alluvial deposits from which no finds were recovered. Similar type natural channels are known from other sites in the vicinity, at least one of which may be linked with adjacent Bronze Age activity (Heard 2000). Assessment of the deposits revealed bad pollen preservation and high humification of the peats from the site, precluding more detailed environmental analysis (Palmer & Branch 2001).

The channel was sealed by a series of horizontally laid alluvial deposits (290, 175, 174 and 173) of which only the uppermost contained pottery dating to the late 17th century. No finds were recorded from the alluvial deposits in excavation trench 2, but pottery recovered from the surface of deposit (130) in excavation trench 3 dated to the medieval period.

ROMAN

No evidence of Roman use of the site was found, although three sherds of Roman pottery and one fragment of Roman tile were recovered as residual finds in post-medieval contexts.

LATE MEDIEVAL

A sequence of silty clays was recorded in evaluation trench 2 and pottery dated to the period 1000–1150 was recovered from layer 58. The ceramics were residual, given the presence of post-medieval tile in the same context, but may indicate Saxo-Norman activity somewhere on or near the site, particularly as the sherds are large and fresh-looking (see Meddens, below). Similar dump deposits were recorded in excavation trench 1, and medieval pottery was recovered from deposit 249. These formations suggest that the western (Bermondsey Street) end of the site was dry during the medieval period and that the marsh or otherwise marginal land may have been restricted to the eastern half of the site. It seems probable that construction of the causeway in the late 12th or early 13th century resulted in the reclamation of peripheral land on either side of the road. The date of the medieval finds is consistent with the suggested date for the construction of the street or causeway.

Building 1 (fig 3)

A series of posts and the remnants of a timber base-plate formed an L-shaped feature (268), perhaps part of a larger rectangular structure (building 1). Two planks (251), seated on mortar (252) and a bedding deposit (253) largely formed from decomposed timber, may represent the remnants of an associated floor. Medieval pottery was recovered from the fill of posthole 286 and from the bedding deposit (253). A series of dump deposits (214), frequently containing animal bone, tile fragments and both medieval and post-medieval pottery, sealed the timber. These features were probably part of a timber-framed medieval building, and the overlying dump deposits would appear to indicate an early post-medieval demolition date.

In the south-eastern corner of excavation trench 1, a group of stakes, structure 169 (fig 3), cut the natural alluvium. It may be somewhat exaggerated to describe 169 as a structure, and there appears to be nothing directly connecting the stakes to the medieval timber feature recorded further to the west. However, a series of dump deposits were delimited by the stakes, perhaps representative of the rear boundary of a property fronting Bermondsey Street. The stakeline was situated approximately 17m behind the present street frontage and may delimit the east–west extent of the medieval building allotment, of which approximately two-thirds of the length would be taken up by garden. The north–south extent of the allotment is not so clearly defined, but it would be fair to suggest a width of between 4 and 4.5m. (This correlates with the width of later post-medieval buildings, themselves probably respecting the dimensions of a medieval land allotment.) The archaeological site would therefore represent



Fig 3 Bermondsey Street, Southwark: late medieval phase plan.

the greater part of two such land allotments, of which only the northern one appears to have been built upon during the medieval period. This in itself may be of significance, suggesting that the medieval development of buildings along Bermondsey Street from the direction of the Thames had stopped at this location.

The stakes and associated dump deposits were sealed by the garden soil deposits (166 and 165) lying between levels of +0.68m OD and +1.07m OD. Medieval pottery was recovered from deposit 166. The levels of the garden soils (165 and 166) were very similar to those of the dump deposit (214) further to the east. A heavily truncated, but obviously circular, feature (283) cut through the surface of the uppermost dump deposit (214), the surviving fragment suggesting an original diameter of approximately 1m. The backfill contained late-medieval ceramics. The circular feature was cut by a cesspit (270), measuring close to 2m in diameter. The cesspit was backfilled with a variety of domestic and kitchen rubbish including oyster and cockle shells, chalk and greensand fragments, animal bone, medieval pottery and iron fragments. Among the small finds recovered were a 16th century coin or token with a cross and lobate design, an iron ring and a fragment of carved animal bone (see Egan & Keys, below).

There were no medieval structures located to the rear of building 1 but areas of garden soil, the top of which occurred at $c+1.1$ m OD, were recorded.

NORTHERN POST-MEDIEVAL BUILDING (fig 4)

Building 2

Building 2 represented the earliest surviving phase of post-medieval building on the site. The east room was rectangular in shape with internal dimensions of 4.4m north-south \times 2.8m east-west and was defined by four low foundations: 53, 54, 185 and 232. Each was constructed from a mixture of chalk, flint, sandstone, brick and tile fragments, which had been truncated by later activities. The foundations were set in shallow construction trenches with a maximum depth of 150mm. Layer 215 formed a floor consolidation deposit within

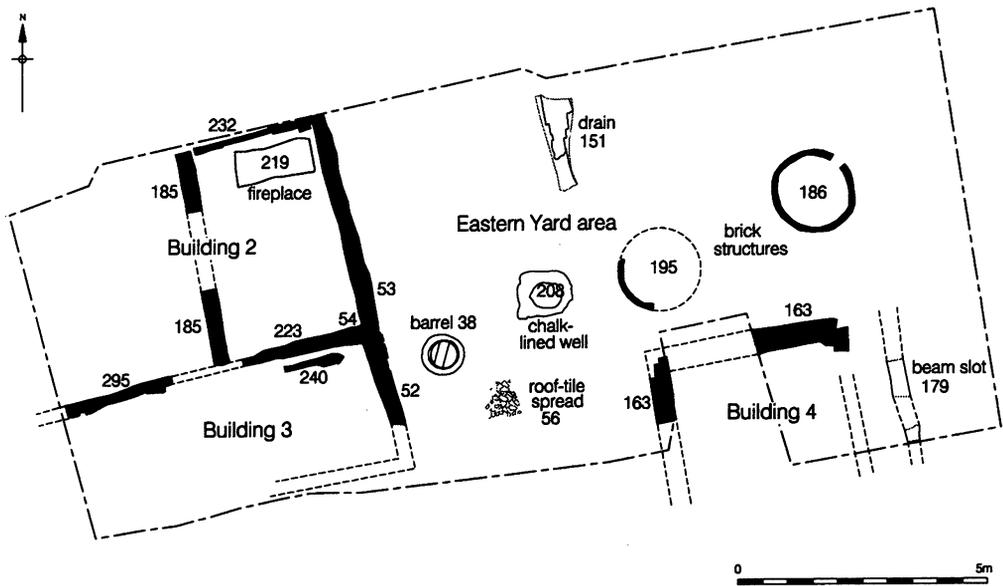


Fig 4 Bermondsey Street, Southwark: buildings 2 and 3, first phase and building 4.

the structure. The core elements of building 2 were established in a position matching that of building 1, perhaps demonstrating a continuity of use through the medieval/post-medieval interface. The west room was defined as the area lying between the foundations and the projected frontage of the original building on to Bermondsey Street. The dimensions of this area were 4.4m north-south \times 3.6m east-west. A sequence of dumped deposits (209, 210 and 211) formed a consolidated ground surface in the west room. A small amount of residual medieval pottery was recovered from deposit 211. Building 2 is likely to have been larger than the surviving excavated elements in isolation, extending at least as far to the west as Bermondsey Street. None of the superstructure of the building remained, but it is likely that the original construction was timber framed, with the foundations acting as sleeper walls for timber base plates as it is improbable that a substantial brick or masonry structure could have been built on such shallow foundations. Although there was evidence for floor make-up deposits within building 2, no intact floor surfaces survived. No fireplaces or stair foundations were found and the lack of a central chimney foundation suggests that the hearths were probably located against the side wall of the building served by an external chimney. Unfortunately the truncation of the external walls of the building has removed any evidence that might have existed of special measures taken to fireproof the wall area surrounding such a fireplace. Pottery and ceramic building materials recovered from the building suggest a construction date between 1580 and 1660.

While building 2 occupied the northern area of the site, the southern half initially was not built upon, but it was utilized for rubbish pits. At the south-western corner of the site, pit 243 contained medieval pottery and post-medieval tile, and a larger pit (238) contained small fragments of post-medieval tile. At its eastern extreme pit 238 was cut by pit 236, but no datable finds were recovered. These developments were soon followed by the construction of building 3.

SOUTHERN POST-MEDIEVAL BUILDINGS (fig 4)

Building 3

One ground-level room was constructed in the southern area of excavation trench 1. This room shared a party wall to the north with building 2, continuing the alignment of the rear wall and presumably sharing a frontage onto Bermondsey Street. It was defined to the south and west by the limits of excavation and by wall 52 to the east with dimensions of 2.8m north–south \times 6.2m east–west. The north–south width was conjectured as later remodelling of the western side of the building which had removed all evidence of the original structure. The alignment of the first walls, floor levels and internal structures appeared to have been retained in the rebuild. It seems likely that the room continued beyond the western limit of excavation and fronted onto Bermondsey Street. The east wall of building 3 was roughly constructed of brick and limestone blocks, up to 0.4m wide and 0.3m deep. This wall was truncated to the south by a modern intrusion, but it clearly abutted building 2 and continued the alignment of the rear wall foundation. Some co-operation must have existed between the owners of the still-standing building 2 and the new construction, as evidenced by the keying-in of the rear wall of the new structure with the wall of the standing building. Slightly inside the alignment of the northern party wall, a single course brick foundation (240), probably an internal support for timber flooring, was bedded on a mortar levelling deposit. The remains of two floor make-up layers were recorded in the building. Deposit 233 comprised mainly coarse mortar fragments, often with pieces of chalk and ceramic building material. Finds from the layer suggested an early post-medieval date. Floor make-up deposit 233 was sealed by a clay/silt layer (192), the bedding deposit for a tile or brick floor. Although no extant floor tiles or bricks survived in this area, small patches of sheep metapodials pressed into the bedding clay represented repairs to the original floor. The survival of these small squares of repair is fortuitous. While there may have been some value in robbing out the original tile floor, it appears the small areas of knucklebone repair were not considered worth retrieving. The small amount of pottery recovered from the layer (192) confirmed an early post-medieval construction date.

Building 4 (fig 4)

The foundation of building 4 was constructed entirely of a type of brick produced in the period 1450–1700. The building foundation (163) sat over a mortar bedding (164) and dump deposits (224 and 225). Deposit 225 was very similar in composition to a dump/tile deposit 56 recorded in the open courtyard further to the west and contained pottery dated to 1570–1800 (Meddens 2001). The dimensions of the brick foundation were consistently 0.4m wide and two courses deep and formed a rough L-shape with what seems to have been a deliberate terminal at the southern end of the western arm, perhaps indicating the location of a doorway. The area enclosed by the building measured 2.3m north–south \times 3.4m east–west, but it appeared to extend further to the south beyond the limits of excavation. Building 4 was located approximately 10m behind the frontage of Bermondsey Street and may have functioned as an outbuilding associated with building 3 which fronted on to the road. Unfortunately little or no archaeological evidence survived to suggest what function the building may have served. The brick foundations may indicate the whole was brick built, rather than being a largely timber structure. This may suggest some concern regarding fire precautions, for example if the building was intended as a workshop or kitchen. It is possible of course that building 4 backed on to, but was otherwise unconnected with, building 3. If this were the case, it is unclear whether separate access was possible and perhaps an alleyway existed on the southern side of building 3, an area not observed since it lay beyond the limits of the present excavations. Immediately to the east of building 4, a robbed-out north–south aligned beamslot (179) was recorded which lay exactly parallel to the east wall of the brick building and was of similar width. No datable finds were recovered from its backfill. It may

be significant that the location of the beamslot is close to that of the earlier stakeline (169), possibly forming the eastern boundary of the medieval building plot (building 1).

The area immediately east of buildings 2 and 3 and north of building 4 appears to have been in use as an open yard enclosing an area of 8.5m north–south \times 10m east–west. There were no indications of any boundary divisions in the open courtyard area, which may indicate that the facilities in the courtyard were in common usage for all three buildings. Towards the central area of the yard a chalk-lined well (221) was located, with an internal diameter of c 0.6m and a base at -0.7 m OD. The chalk lining (208) was formed from finely cut chalk blocks, not dissimilar in dimensions to post-medieval brick types, laid in alternating radial and transverse courses. The lining was bonded with clay rather than mortar, which may have been an attempt to improve the water-tightness of the well. The feature contained two fills. The lower of the two (218) was approximately 0.1m thick and included both residual Saxo-Norman pottery and pottery dated to 1630–1700 (see Meddens, below). Other finds included two knife handles, a bone comb, a fishhook, a bone needle (see Egan & Keys, below) and a leather shoe (Mould 2000). The upper fill (180) was 0.7m thick and contained exclusively post-medieval pottery. Eight small finds were recovered from it: a chisel blade, two knife handles, part of a barrel hoop, three iron hooks similar to boat hooks, and a wood and bristle brush (see Egan & Keys, below). A sunken barrel (39), filled with a mixed dark brown/grey sandy silt and rubble (37), was found immediately west of the chalk well. The presence of the wooden base of the barrel would seem to make it unlikely that this was a well, and it may represent a storage or rubbish pit. Pottery from the fill was dated to the 17th–18th centuries, but two 14th century floor tiles demonstrate that residual material was also present. To the east of the barrel, a small spread of broken roof tile (56) was located. This was of early post-medieval date although a single sherd of pottery from the layer dated to 1350–1450. The tile deposit (56) was similar to deposit 225 recorded below building 4.

Two further circular brick features found in the yard area appeared to be contemporary with the chalk well and the barrel. Feature 195 was severely truncated by a relatively modern concrete foundation, but the original diameter was estimated to be c 1.2m. A small amount of pottery dating to the 19th century was recovered from the fill (194), perhaps the result of the concrete intrusion. A circular foundation (186) measuring 1.6m in diameter was recorded at the eastern extreme of the yard area. Unlike the circular features to the west, the brick foundation (186) was of no great depth (0.27m), suggesting that it was probably a base for a structure rather than a well. Slightly to the north a small brick drain (151) was located, measuring 0.6m across and 2m long, but continuing beyond the northern limit of excavation. The construction backfill of the drain contained pottery dated to after 1580.

EARLY 17TH CENTURY MODIFICATIONS TO THE POST-MEDIEVAL BUILDINGS (fig 5)

Building 2

Major structural alterations to the east room of building 2 involved the construction of a new east wall foundation (159), extending the footprint of the building by approximately 0.8m. It may be that the 'extension' as such is illusory, as the increased area is virtually entirely taken up by the width of the new foundation. At the same time no change appears to have been made to the foundations of the west wall (185). The foundation (159) was 0.68m wide \times 0.43m deep and was constructed of a mixture of sandstone and chalk blocks with brick and tile fragments in a fine sandy mortar. It was founded on a levelling deposit (222) that sealed the remnant foundation of the earlier structure, indicating that the earlier wall was out of use at this time. Although as recorded a later feature truncated the new foundation, there seems little doubt it had originally extended over the full width of the building. The thickening of the wall foundation may indicate that the rebuild was designed to carry a greater load than the earlier building and therefore indicative mainly of changes to the upper stories. Presuming that the original foundation supported a timber-framed structure, the thickness

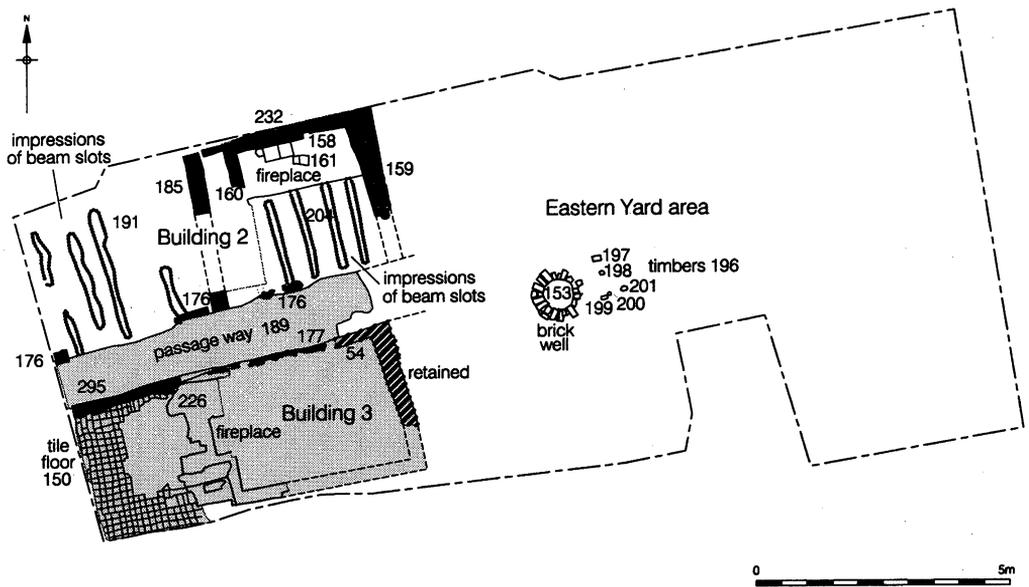


Fig 5 Bermondsey Street, Southwark: 17th century modifications to building 2.

of the rebuild may suggest the replacement wall was of a more substantial form, possibly of brick or stone.

Pottery recovered from the foundation fill indicated a rebuild date after 1580, but it has not been possible to further refine this date. However, the floor levelling deposit (204), contemporary with the rebuilt wall, included pottery finds dated to after 1600. Within the floor deposit, five north-south aligned timber joist impressions were clearly visible. The joist slots were individually up to 0.2m wide and 50mm deep and spaced between 0.4 and 0.5m apart. A concentration of sheep metapodials (205) measuring 0.14m² was pressed into the base of one joist slot, but no evidence survived of any timber within the slots or of overlying floorboards. The joist slots were only recorded in the southern half of the room. It is possible that the later construction of a fireplace had removed all traces of earlier floor joists in the northern half of the room.

Most of the northern area of the room was occupied by a fireplace measuring 0.72m north-south × 1.6m east-west and defined by the foundations (160 and 158). The northern foundation (158) was bonded into the rebuilt east wall (159) and sat directly on top of the earlier foundation forming the north wall of building 2. A 1m wide gap was left between the west wall of the newly remodelled fireplace and wall (185). The fireplace was probably a replacement for an earlier structure in the same position and as there is no evidence of a new chimney being constructed, it may have utilized the original feature. The fireplace had resulted in the scorching of the underlying make-up deposit (204). Within the fireplace, clay lens (219), sand deposit (230) and consolidation layer (229) were also scorched and all contained large fragments of charcoal. The consolidation deposit (229) was sealed by a tiled hearth floor (161) seated on a mortar bedding deposit (162).

A levelling deposit (191) extended across the whole of the area of the west room of building 2 and was similar in form and relative level to the floor deposit (204) recorded to the east. Also within the levelling deposit (191) lay a number of north-south aligned joist slots and although not so well defined as those in the room to the east, they were more extensive, appearing to indicate that the timber floor spanned the whole width of this room. The average width and depth of the slots was the same as those in the east room. No timber remains

survived. Finds recovered from deposit (191) included a copper ring and a number of copper pins as well as pottery ranging in date from the 11th century through to post-1600. Building 3 remained essentially unchanged during the early 17th century.

LATE 17TH CENTURY BUILDING MODIFICATIONS (fig 5)

Building 2

The floor joist impressions (191) were sealed with a dump deposit (190). This in itself may have been a floor of beaten earth, or more likely the ground consolidation for the next phase of building. A number of pottery finds, as well as a silver coin, probably of the English Commonwealth (1650–1659) and a small number of copper pins were recovered. The dated finds give a *terminus ante quem* for the earlier phase of building and an indication of the likely date of the next major rebuilding work. A major modification to the northern structure was evidenced by the insertion of a 1.10m wide, east–west aligned passage (189), bounded by shallow brick foundations (176 and 177). The passageway was constructed entirely within the area of the northern building and did not appear to affect the shared party wall with the southern building. A compacted earthen floor (149) was inserted into the passage and produced a large quantity of pottery and six small finds: a decorated bone or ivory handle; two coins of James I (1603–1625); a coin of Charles I (1625–1649); a copper object, and a possible loomweight.

Building 3

The main modification to building 3 was the insertion of a double-axial brick chimney foundation 226, measuring 2.4m north–south × 1.4m east–west. Central chimneys of this type became increasingly popular from the 15th century onwards (Schofield 1994, 114). There was evidence of burning on both sides of the foundation confirming that back-to-back fireplaces utilizing a single chimney had heated both rooms. A wall foundation (295) was also rebuilt, continuing to form a party wall with building 3 to the north. As a result of the insertion of the chimney foundation a west room was created where a tile floor (150) was laid. A rebuilt north wall (295) abutted onto and aligned exactly east–west with the south wall of building 3. The chimney foundation (226) was formed from Caen stone and greensand blocks with brick laid within a foundation cut (213). A great number of the Caen stone blocks were re-used medieval mouldings (see Sabel, below). Pottery recovered from the foundation was dated to after 1600. The foundation separated the east and west rooms and acted as a central brick spine to the building. Although in this case there were no remains surviving above foundation level, it is known that the central chimney block in many 17th century buildings acted as the support for wooden stairs leading to the upper storeys of the building. Nearly all the timber staircases shown in the early 17th century Ralph Treswell surveys are located adjacent to the central chimney stack (Schofield 1987).

The floor of the west room was laid with re-used medieval Westminster-type and post-medieval square red clay tiles (150), based on bedding deposits of mortar (206) and sand (207). Finds from the bedding sand (207) include pottery dated to after 1580 and a coin of Charles II (1660–1685). The most obvious and closest source for the medieval tiles and the moulded stone in the central fireplace foundation would be Bermondsey Abbey. Although documentary evidence suggests that the principal period of demolition of the abbey was a century earlier (Beard 1986, 188), parts of the abbey buildings are known to have stood until the beginning of the 19th century and appear to have remained a source of building material until then.

In the courtyard the upper levels of the chalk-lined well (208) were rebuilt in brick (153). A much wider construction, cut (155), lined with timbers (196) and backfilled with a mixed clay deposit (154) was excavated at ground level, although the lower part of the well seemed

unaltered. Pottery recovered from the construction fill dated the rebuild to after 1600. The upper backfill of the well, representing its final abandonment, included pottery sherds dated to after 1780, indicating its use throughout the post-medieval history of the site.

Some evidence of the contemporary ground conditions in the area to the east of the post-medieval buildings and yard were provided by a series of alluvial layers recorded in evaluation trench 1. Layer 43 was a dark blue/grey sandy silt overlying a dark brown/black organic material (44), which in turn overlay a dark brown/grey silty clay (45), composed of mid-brown/grey silt clay (46) and a layer of mid-grey/brown silty clay (47). This sequence may be indicative of flooding events. Pottery from layer 47 suggests a mid to late 17th century date.

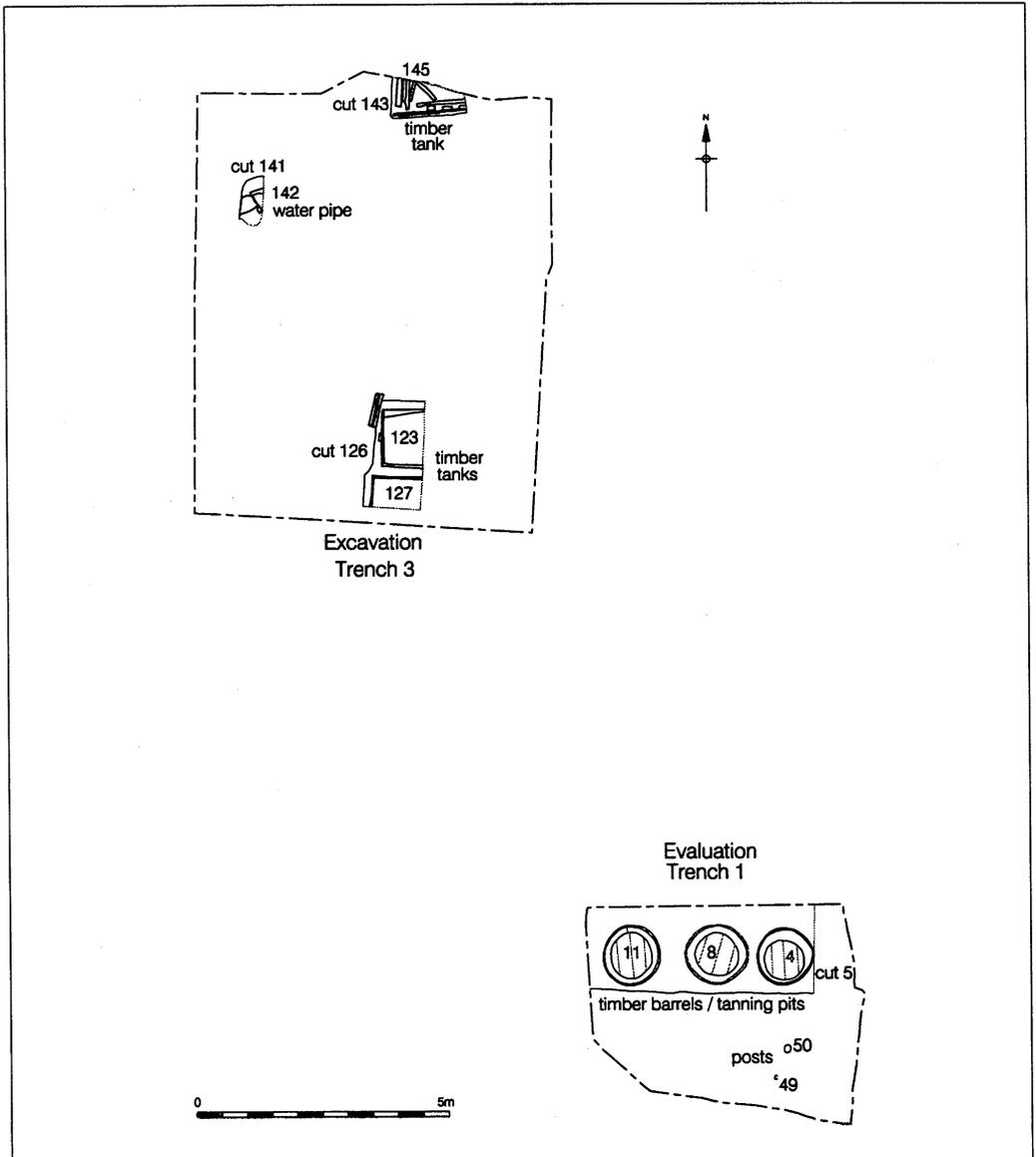


Fig 6 Bermondsey Street, Southwark: 18th century phase plan.

18TH CENTURY (fig 6)

In evaluation trench 1 a pit (5) containing the bases of three timber barrels (4, 8 and 11) was located. Barrel 4 was filled with mixed sandy silt, mortar and rubble (36), a mid-brown organic silt (1) and light-blue/grey clay and lime (2). Barrel 8 was filled with dark red/brown silty organic clay (6) and off-white lime (7). Barrel 11 was filled with light yellow/brown silty clay sand (9) and a strongly odoriferous mid-blue/grey green silty organic clay (10). The feature represents a series of tanning tanks in a single pit, presumably with a different part of the tanning process taking place in each tank. The strong chemical smell emanating from the fills of barrel 11 may indicate that it held a stronger solution to that in the other two barrels. Pottery and clay tobacco pipes recovered from the barrels indicated a late 18th century date for their abandonment. A pewter tankard retrieved from barrel 4 was probably dated to 1786

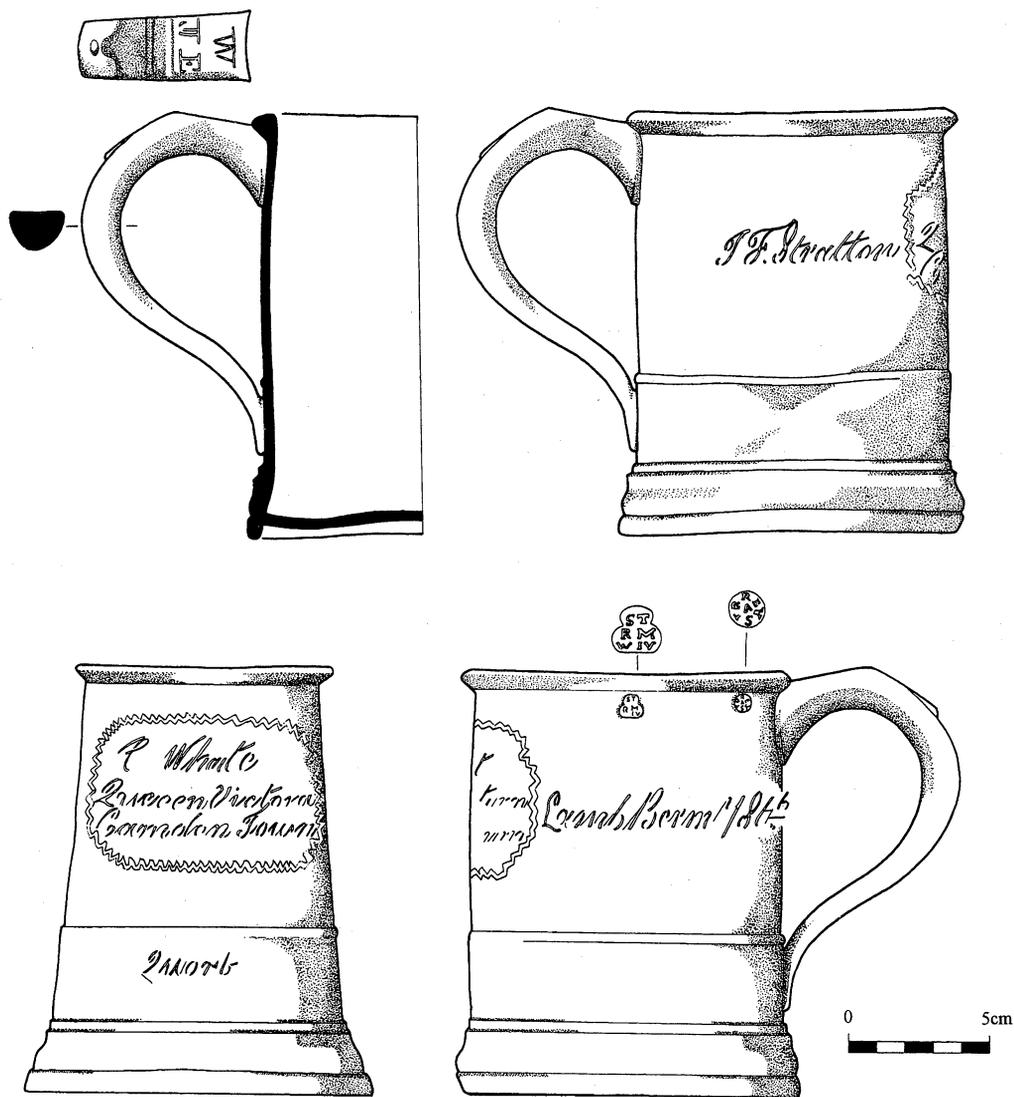


Fig 7 Bermondsey Street, Southwark: 18th century pewter tankard facades.

based on a partially legible engraved inscription on the side of the tankard and a set of initials 'W.T.E' on the handle. References to two public houses are made on the side of the vessel: the 'Lamb' in Bermondsey and the 'Queen Victoria' in Camden Town. In addition, the name of an individual, probably J.F. Stratton, is inscribed (fig 7). A tankard that appears to have been used in two different establishments is a unique find, making the vessel of particular interest. Two wooden posts (49 and 50) were recorded to the south of the tanning pits. These were fairly shallow, and it is assumed they were driven supports for a possible above-ground structure. Additionally, a rectangular wooden tank (13) filled with dark orange/brown silty sand (12) was found. This was built in a rectangular straight-sided cut 15 filled with light yellow/brown clay (140). This tank may be of slightly later date as its abandonment backfill contained 19th century pottery.

A bored-out timber tree trunk (142) represented the remnants of a wooden water pipe in excavation trench 3. The timber pipe was set in an east-west aligned construction cut (141). No datable finds were recovered from the construction fill 135, but 19th century pottery was found in the silt inside the water pipe. The pipe may have fed directly into one of the three tanning pits recorded in this area. Immediately to the east of the water pipe was a rectangular wood-lined tank (145). The dimensions of this tank could only be partially determined as it extended beyond the north and east limits of excavation. It measured at least 1.35m long × 0.7m wide. To the south of tank 145 lay a large rectangular construction cut (126) in which two wood-lined tanning tanks (124 and 127) had been set. The tank (124) survived to a depth of 1.5m and in plan measured 1.13m north-south × 0.8m east-west. Pottery from its fill was dated to the 18th century.

The finds

THE POTTERY, by Frank Meddens

The pottery assemblage consists of a total of 1007 potsherds with a total weight of *c*21,220g. This material derives from 52 contexts pertaining to eight phases dating from the medieval period to the 19th century. None of the more tightly dated groups was of sufficient size to be worthy of quantification.

The earliest material comprises eight sherds of redeposited Late Saxon Shelly ware. This material comprises relatively large fragments that are fresh and unworn in appearance. The presence of two rod skillet handles (fig 8, nos 2 and 3) are similar to illustrated examples (Vince & Jenner 1991, 51-2, fig 2.24, no 25). The sherds were recovered from alluvial deposits of medieval date (phase 1), possibly reflecting one or more flooding events, and from a wall foundation of 17th century date pertaining to phase 5. From the condition of this material it is unlikely to have been subject to much movement, although considering the date of the deposits from which it was recovered the possibility of its displacement over some considerable distance cannot be totally discounted.

The pottery associated with phase 1 is a small group of predominantly common medieval material of 14th-15th century date comprising Cheam ware, London ware and Kingston ware. There is one piece of London Stoneware of 18th century date almost certainly representing recent contamination of the context.

The assemblage from phase 2 includes a considerable component of residual medieval ceramics, some of which are of interest.

A rim and handle fragment of a Paffrath-type ladle was recovered. The fabric is in a high-fired grey earthenware. The particular form is uncommon. It has an everted rim on a globular body with a horizontal rod handle attached to the lip, neck and body. It is probably of 13th century date (Gaimster 1997, 65) and its presence, though clearly residual, may well be related to the location of the site on the margins of Bermondsey Abbey, which would have had access to imports of this nature.

Phase 3 pertains to some time during the 17th century. The ceramics comprise a small

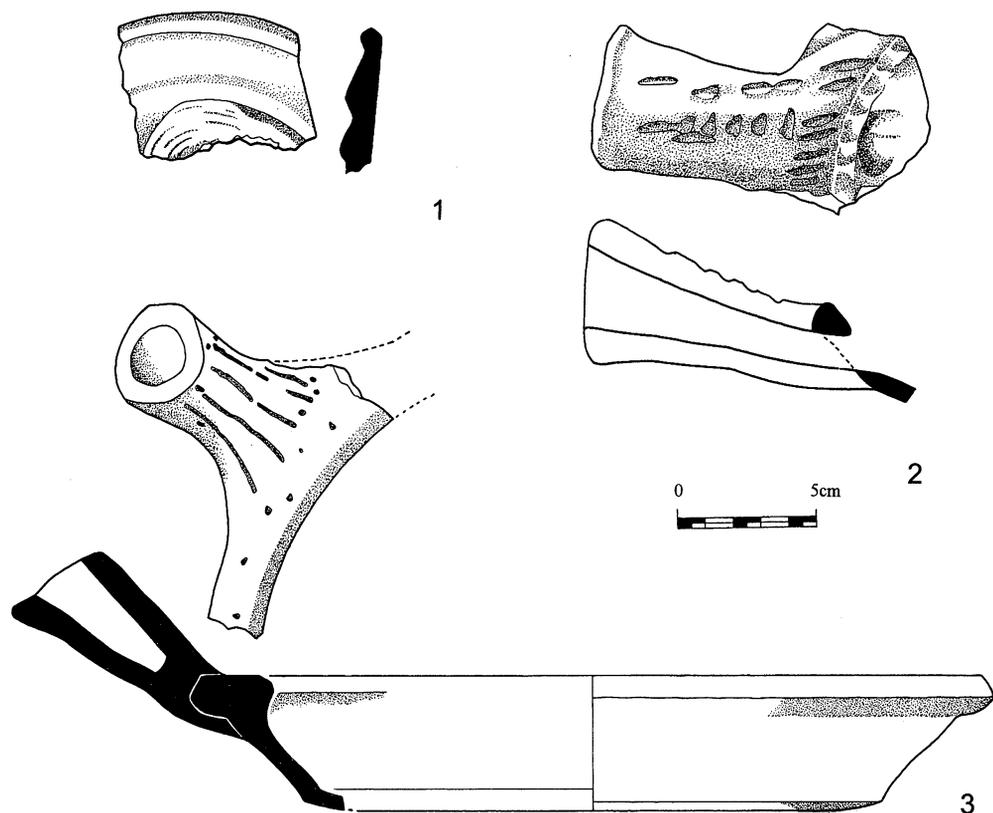


Fig 8 Bermondsey Street, Southwark: (1) Terracotta roundel fragment, (2) Late Saxon Shelly ware skilket, (3) Late Saxon Shelly ware skilket.

assemblage of common residual medieval and late-medieval wares and some 17th century products such as Green-glazed Border ware and post-medieval Redwares.

The ceramics from phase 4 included a number of items of locally produced tin-glazed wares dating mostly between the second and third quarter of the 17th century. These comprise pieces of a charger with a blue, orange and yellow design dating to the first quarter of the 17th century similar to examples known both from Southwark and the Netherlands (Britton 1987, 106-7, fig 28). There is a small plate with a foot-ring and an interior blue-on-white design. A small blue-on-white decorated lid dating between *c* 1630 and 1800 was recovered. A post-medieval Redware skilket with a recessed horizontal rod handle and flat base is also of note, as is a dish in yellow-glazed post-medieval slip-coated Redware (formerly GUYSY) dating between 1480 and 1650. A fragment of a Raeren-type stoneware jug of 16th century date, consisting of a body sherd with the base of a handle came from a demolition dump. The body was underfired. A further piece of a Raeren jug comprising a rim was also recovered.

For phase 5 a rim sherd of a Portuguese Merida ware jar of 17th century date is noted which derived from context 149. A further fragment of Iberian pottery came from the same context and consisted of a body sherd of an olive jar, dating between 1550 and 1750.

Phase 6 is late 17th century in date. The associated ceramic assemblage is typical of the period including Borderwares, post-medieval Redwares, post-medieval black glazed wares and locally produced tin-glazed wares. There is a residual component of earlier medieval and late-medieval pottery.

Phase 7 dates to the 18th century. A small group of nineteen potsherds includes single fragments of early Transfer-printed ware and Staffordshire black-glazed ware (formerly Jackfield ware). The remainder of the group is composed of unremarkable residual medieval and late-medieval pottery.

All the pottery from phase 8 is residual and derives from dumped deposits. There is one piece of particular interest: this comprises a terracotta roundel fragment, probably from a portrait plaque, with remnants of a white slip on the surface and traces of red paint (fig 8, no 1). It has the remains of a moulded portrait figure showing hair in a classical style, possibly from a female form. This piece is of 16th century date and is indicative of the following of architectural fashion for the period. However, as the plaque fragment was residual within deposits of 19th century date it has unfortunately lost its original context and it is therefore impossible to ascertain whether it originally was connected with the Bermondsey Street site.

THE OTHER FINDS, by Geoff Egan and Lynne Keys

Character of the assemblage

Most of this assemblage spans the late 15th–18th centuries, but there are some slightly earlier medieval objects and a few from the 19th century. There is a fragment possibly from a Saxon composite comb of antler. The finds include several dress accessories, mainly of common forms, including two standard late-medieval lead/tin shoe buckles, and a twisted wire loop as sewn in purses to act against cut-purse theft in the early 16th century. Less common are the decorative buckles from the late 17th/18th centuries – one being for a shoe or knee-breeches. There are some other notable items: a locking buckle from the late 15th/early 16th century to keep a purse in place on the belt (not necessarily related to the twisted loop, though this is possible) and a large, late 17th/early 18th century decorative button probably for a cloak. Common accessories in the form of lace chapes and pins were, as on many sites, recovered in some numbers.

An iron double candlestick and two fragments of stone mortars are all medieval and suggest a degree of affluence. In contrast, two repairs for splits in copper-alloy vessels made of sheeting are commonplace.

Five very varied, decorative post-medieval cutlery handles include two with silver mounts – an unusually high occurrence among excavated groups, also suggesting a more affluent milieu than that frequently encountered for the post-medieval period. A small, tin-coated copper-alloy spoon with a maker's stamp was probably for a child and dates to the late 17th century; the same applies to an enigmatic bone whistle, and a Victorian toy half-sovereign coin – this also constitutes an unusual archaeological find. A playing counter may equally have been for adult or for children's use.

Evidence for several manufactures are represented – bone bead-making by a waste panel, pin-making was taking place probably in the 16th century (even if none of the recovered pins shows signs of manufacturing faults, the surest way of defining a maker's assemblage), and copper-alloy casting was going on somewhere in the area, but there is no focus among the finds to indicate whether this was close by, or what the product(s) were. Domestic enterprise is the most likely explanation for the presence of a late spindle whorl, two sharpening stones, a post-medieval thimble and pair of scissors. A scrubbing brush is a reminder of domestic work at its most mundane.

Awareness of fire risk (rather than riverine pursuits) may be indicated by at least one of three large hooks similar to boat hooks all found in the same deposit. Their purpose may have been to pull away flammable building materials at the threat of a serious conflagration. Alternatively, they might have had uses in the tanning industry, which otherwise seems under-represented among the finds. A sword hook, and a dagger blade, which is most unusually still in its copper-alloy sheath chape, introduce a martial element. A complete 18th century pewter tankard has a Surrey control stamp and the name of the user or owner, along with

an apparently different set of initials and the address of local taverns in Bermondsey Street and Camden.

One deposit produced four early/mid-17th century farthings, though these are common and enduring issues prone to residuality. Far less common, in archaeological terms, are two tiny silver pennies from the middle of the same century. A conical lead weight was almost certainly not for commercial purposes.

THE ANIMAL BONE, by Robin Bendrey

The assemblage of animal bone from the site is of species commonly eaten in the medieval and post-medieval periods. A single crab claw is of relative rarity and only one other parallel is known from a post-medieval Southwark site. A distinction can be made between the bones primarily resulting from domestic consumption and those that are more likely to be the result of industrial activities, in particular leather working (Bendrey 2001).

THE MEDIEVAL WORKED STONE, by Ken Sabel

In total, 59 worked stone fragments were recovered from the excavation. Most of the material (48 fragments) was Caen stone, imported from Normandy; the rest was Reigate stone. Both types of material were mostly brought into the site for re-use in building 3, which was probably built after 1660, but they originally had been used in the medieval period in a high-status ecclesiastical building or buildings. The re-use of material from religious buildings was a common practice following the dissolution of the monasteries from the mid-1530s onwards.

The nearest likely source of these stones is the Bermondsey Abbey precinct, situated to the south. The founding of St Saviour's Priory in *c* 1098 coincided with the period of the most intensive use of Caen stone, which was the main freestone used in London during early Norman times (Clifton-Taylor 1987, 23) and continued in use throughout the medieval period. Caen stone was used in the late 11th–12th century walling of the infirmary within the abbey precinct (Beard 1986, 89). Beard states that the abbey church was probably largely demolished following its dissolution in 1538 (Beard 1986, 188), although Martin demonstrated that some buildings survived in the abbey precinct into the 18th century (Martin 1926, 201–7). The exceptionally good condition of most of the Caen stone indicates that it was probably re-used from a freshly dismantled building and supports the view that some abbey buildings still stood in the 17th century. Bermondsey House, which was built on the abbey site immediately following the dissolution, was also in a ruinous state by the late 17th century (Martin 1926, 220), and the material may also have come from that building, implying that the material was re-used twice. However, the stone's excellent condition precludes the possibility that it suffered two demolitions.

The 1660s date for the re-use of the stone does not rule out the possibility that it derives from demolition material from the Great Fire of London (1666) or the slightly later Fire of Southwark (1676). Some of the material is burnt, but this could be accounted for by its use in a fireplace in building 3. There were also other medieval structures in Southwark which may have been the source of some of the stone, for instance the house built for Earl de Warenne, discovered in 1830, which had a barrel vaulted stone undercroft that incorporated Caen stone features and typically Norman decoration (Schofield 1993, 52). Caen stone has also been recorded at Southwark Cathedral (Mayo & Divers 2002), which was initially built in the 12th century. However, the fact that re-used Caen stone has been found in post-medieval contexts on several sites in the vicinity suggests that Bermondsey Abbey is the most likely source. These sites include Swan Street and Long Lane (Beasley 1999; Douglas 2000), and in walls incorporating re-used stone on the site of Bermondsey Abbey, in Bermondsey Square (Divers 1999).

The only stone recovered from a medieval context on the site consisted of two Reigate stone pieces.

CAEN STONE

The numbers quoted in pointed brackets refer to the worked stone number allocated to the object.

All 48 Caen stone pieces were classified as type stones, in that they all differed in size or shape. Many of the fragments were almost complete. They are discussed according to their architectural use and form.

General walling

There were eleven fragments of ashlar blocks of varying sizes. These would have been used in the general walling of the higher status parts of the priory and associated buildings. The total lack of weathering on most of the stones is indicative of their probable internal use. Many showed characteristically medieval diagonal tooling, with the spacing between the marks varying between 1 and 4mm. The diagonal tooling on the joints that would have been hidden within the masonry was generally produced by a punch or point, with the occasional use of a chisel. Some stones still bore traces of identical light brown sandy mortar, indicating that they probably originated from the same phase of building.

Two of the ashlar fragments showed closely set vertical tool marks created by a claw on their one visible face as well as the usual diagonal tool marks elsewhere produced by chisels, punches or points and one had the vestiges of an iron cramp set into one surface. Stone <54>

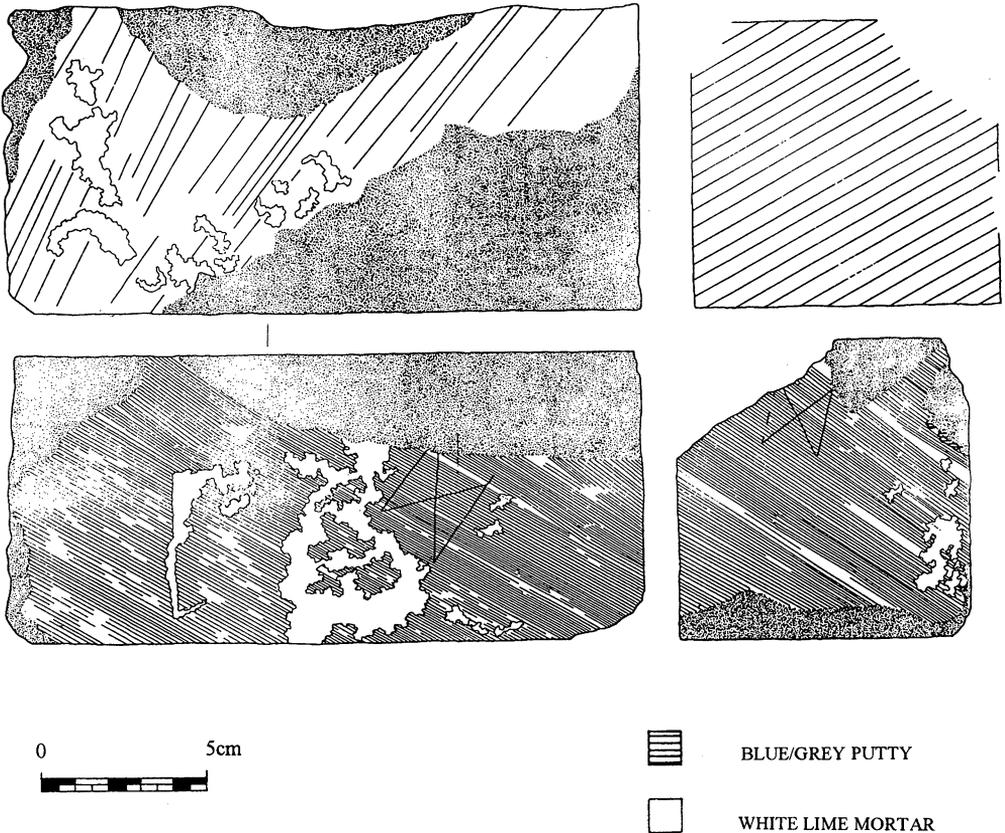


Fig 9 Bermondsey Street, Southwark: Caen stone ashlar fragment with mason's marks, stone 54.

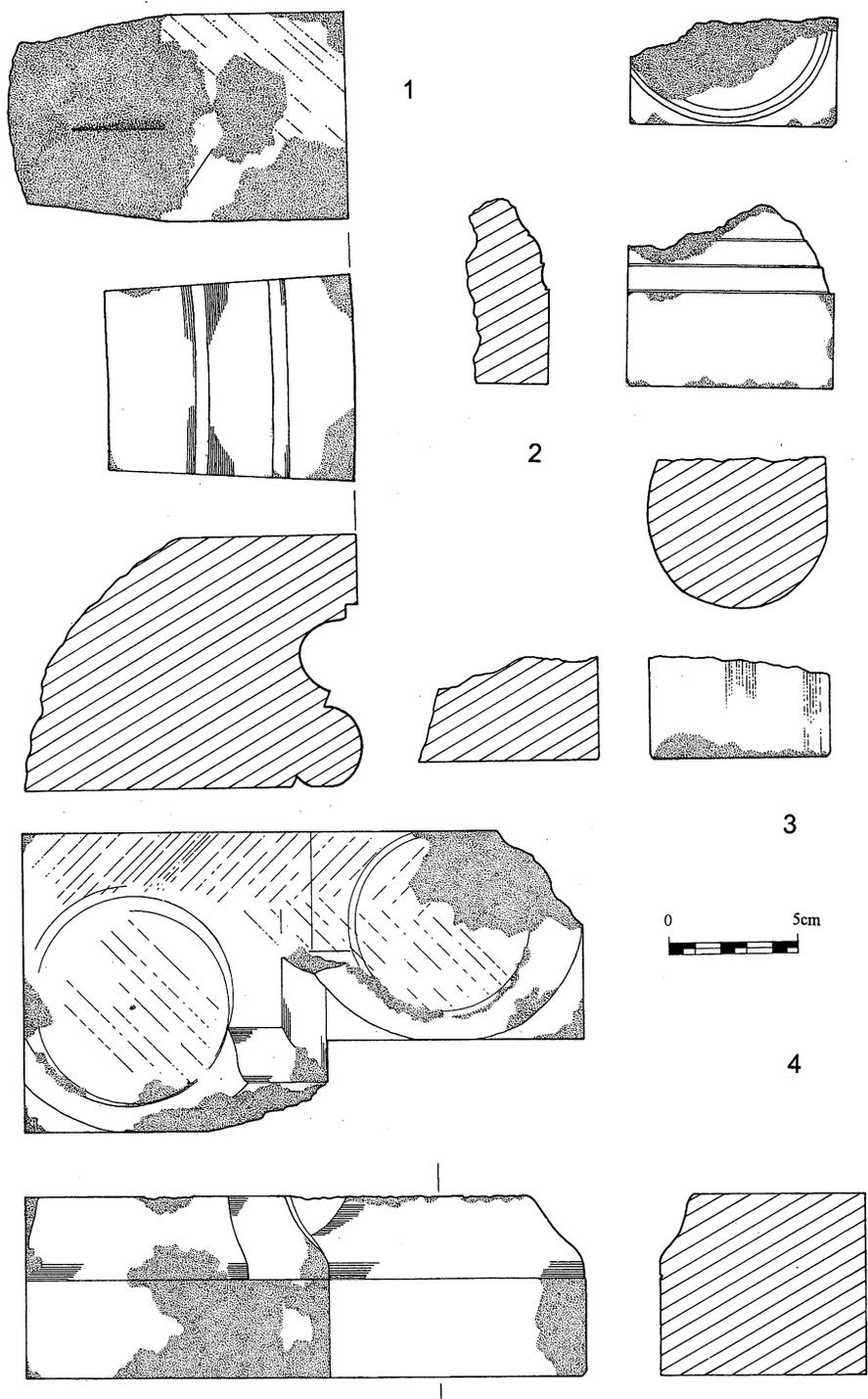


Fig 10 Bermondsey Street, Southwark: (1) Caen stone voussour fragment, stone 1, (2) Caen stone pier fragment, stone 14, (3) Caen stone roll moulding fragment, stone 2, (4) Caen stone base fragment, stone 15. For key see figure 9.

displayed two identical mason's marks on adjacent faces (fig 9), possibly indicating orientation of the stone when laid.

*Jamb*s

Two very similar possible window or door jamb fragments were recovered (<55>).

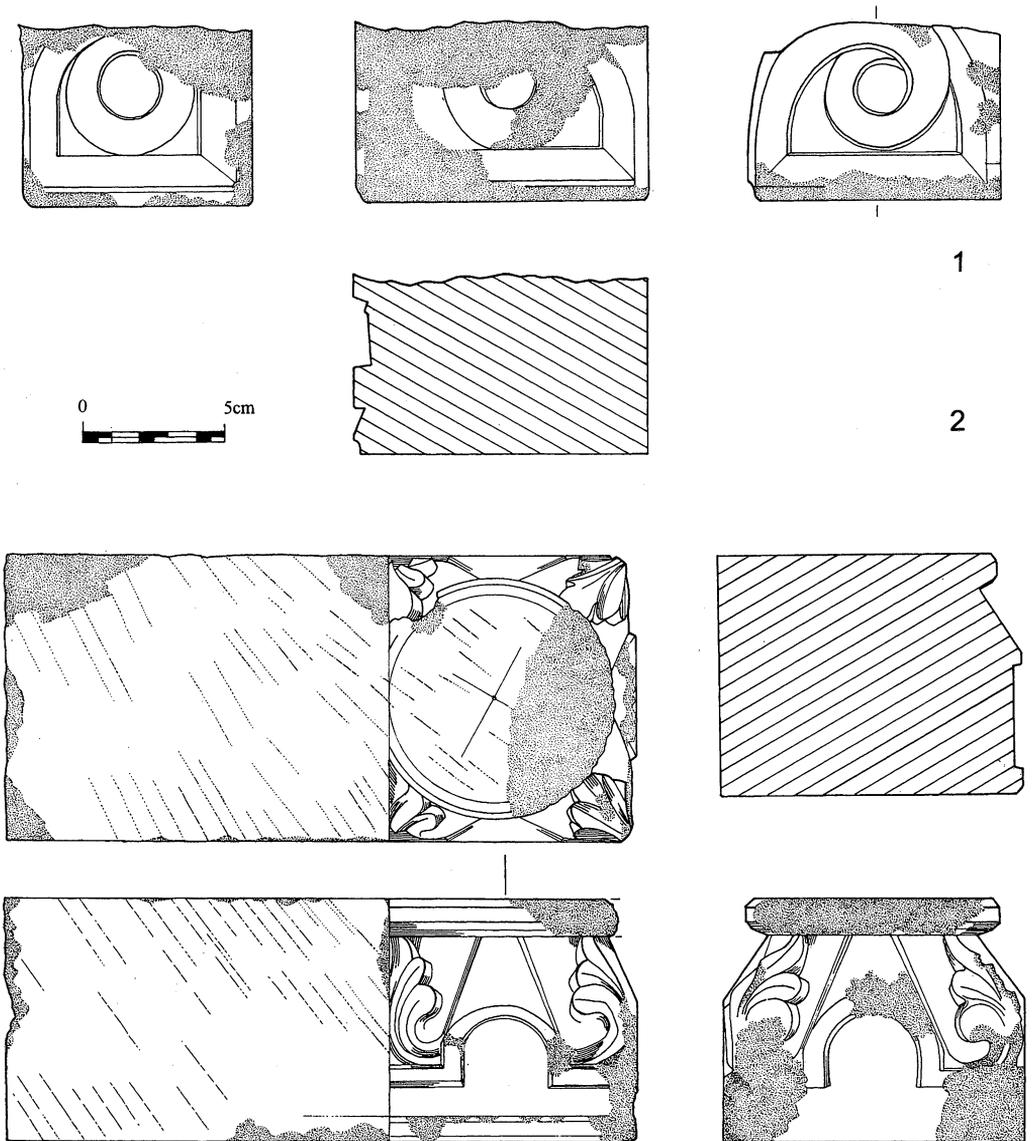


Fig 11 Bermondsey Street, Southwark: (1) Caen stone pier fragment, showing Norman style geometric decoration, stone 7, (2) Caen stone arcade fragment, stone 59. For key see figure 9.

Voussoirs

Three voussoir fragments were found. One was a bowtell and hollow moulded arch moulding (<1>, fig 10, no 1). One was plain wedge shaped and the third was similar to the second but with a rebated face which would have been concealed within the masonry (<27>).

Other arcade-related fragments

Several pier fragments were recovered and are listed below:

The base of an attached shaft from a clustered pier or respond (<14> (fig 10, no 2). This fragment bears a vertical score marking out the line between the carving and the face concealed within the masonry.

A roll moulding fragment from an attached shaft ring or the top of an attached shaft (<2>; fig 10, no 3).

A base fragment from a compound pier or respond (<15>; fig 10, no 4) which displays evidence of the manner in which the stone was worked. Its top surface shows two circles with central holes, produced by the dividers that marked out the location of the columns and a score delineating the edge of one of the two columns.

A block showing typically Norman geometric decoration (<7>; fig 11, no 1) may be part of a dossier or string extending from above an abacus. The fact that the stone is decorated on three sides indicates that it is likely to have been set at the springing of an arch.

An arcade capital was also found (<59>; fig 11, no 2). This was attached although the shaft may have been freestanding. It would have been topped by a square abacus. Stylistically the capital appears to be late Norman. It is a cushion capital that shows some developments on the usual forms of decorative treatment. The decoration on the sides of its upper section appears to be a development of scallop decoration where only the central scallop is present in a stylized manner. The bottom corner leaves are carved in higher relief than is usual in Norman decoration, although they do not have the volume of the Early English stiff leaf. The capital probably dates to the late 12th century. The base of the capital has the circle of the shaft marked out by dividers; its centre has a cross which does not align with the corners of the top of the capital.

Plinths or reveals

A curved possible pier plinth fragment (<6>; fig 12, no 1) with a mason's mark on its external face was recovered. This is a relatively rare but not unknown location for such a mark. There were also two plain chamfered moulded stones that may have derived either from plinths or reveals. One (<56>) had linear scoring, possibly applied to indicate the orientation of the stone.

Tapered stones

Eighteen of the fragments were from stones that tapered. The angles of the tapering sides deviated from a right angle, relative to the faces of the stones, by between 5 and 10 degrees. Examples were found tapering in on one, two three and four planes. Although some of these may have appeared in splays others probably derive from vaulted apses. Triple apses were typical features of Cluniac priories (Evans 1972 (1938), 56–8) and it is likely that the abbey church and other buildings had apses.

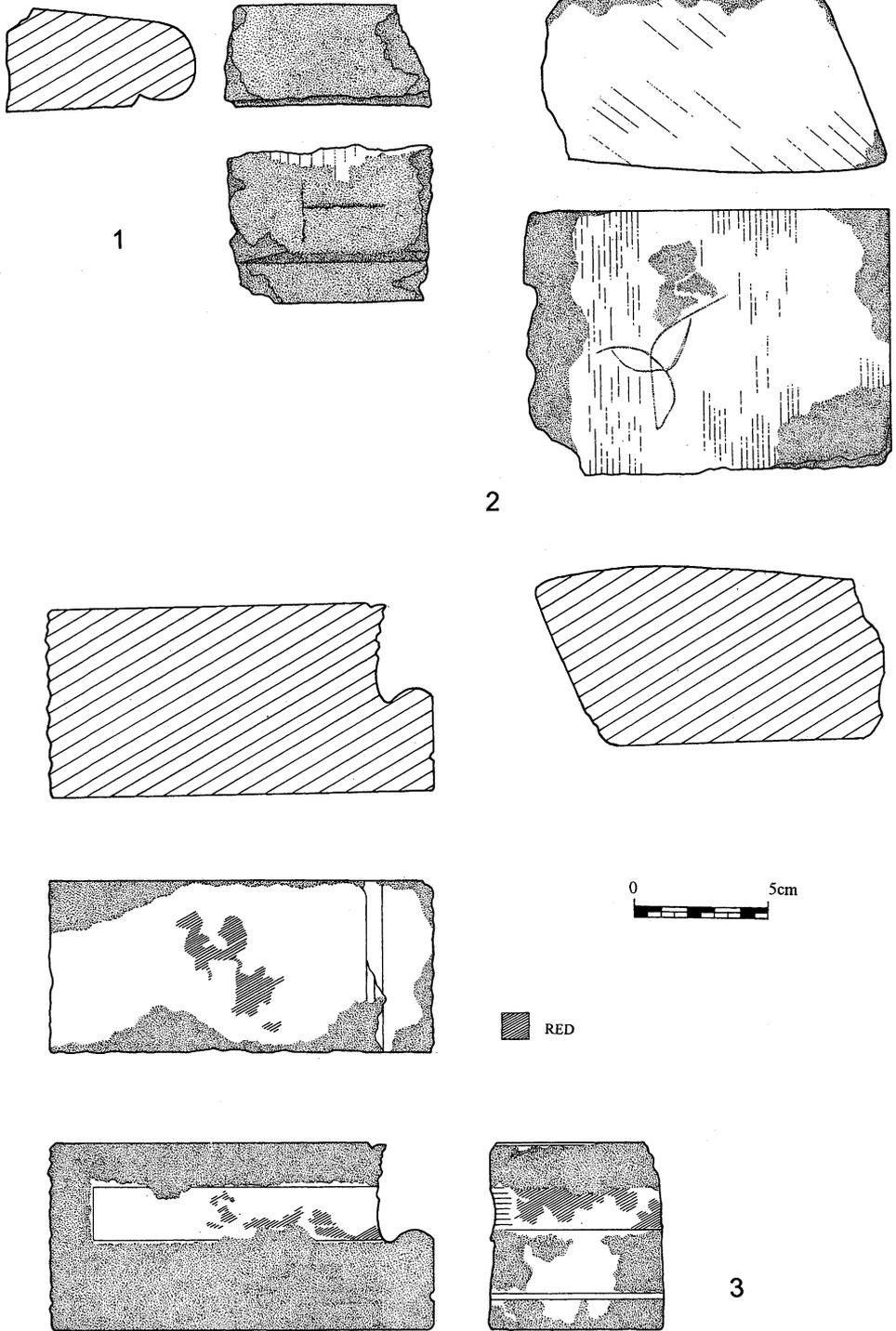


Fig 12 Bermondsey Street, Southwark: (1) Caen stone pier plinth, stone 6, (2) Reigate stone arch fragment with mason's mark, stone 8, (3) Reigate stone string fragment, stone 16. For key see figure 9.

Reigate stone

Reigate stone was used from the 11th century onwards (De Domingo 1994, 240), and although easy to work, was found to weather badly. By the 14th century its use was generally avoided in exterior work (T Tatton-Brown, pers comm). The Reigate stone found at this site appears to derive from a variety of disparate architectural features, possibly from several structural elements or buildings. Two of the fragments <170> were recovered from a medieval agricultural soil. Both were very badly weathered. One was from an ashlar block and the other (<8>) was a roll moulded curved fragment from an arch which bore a mason's mark on its outer face (fig 12, no 2). The degree of wear suggests that they were used in exterior work and may have required replacement during the medieval period.

A string fragment had a recess on two of its faces that retained traces of red paint (<16>; fig 12, no 3). This would have been positioned on an internal angle within the ecclesiastical building.

Other fragments included part of a possible pier base, part of a window-sill with two round mullion mortices (<12>) and a possible window-sill fragment with a hollow drip moulding and a worn top surface (<3>). There was also a fragment that was splayed trapezoidally, which may have been used in the external walling of an apse. Another fragment was from a badly weathered moulding of uncertain form.

Conclusion

As discussed above, the most likely source of these stones is Bermondsey Abbey, although other origins cannot be ruled out. The building represented was richly decorated with compound piers with capitals bearing leaf decoration. Caen stone seems to have been the main building stone used. The Reigate stone, which appeared in smaller quantities, may have been used in later phases of the building and some of it may come from other buildings. Martin concludes that the church itself was not altered during the 12th century (Martin 1926, 220). However, other buildings, such as a new presbytery (finished by 1206), were built during this period (*ibid*, 209) and it is possible that some of these elements may have survived into the 17th century and that some of the stone recovered derived from these structures.

Discussion

No evidence of prehistoric activity was found in the excavations. Marsh conditions probably existed on and around the site until at least the construction of Bermondsey Street, possibly as a causeway, in the late 12th or early 13th century. The annals of Bermondsey Abbey suggest that parts of the abbey precinct were subject to river inundation throughout the medieval period (Martin 1926, 195). Although a stone river wall was built in the 17th century, floods in Bermondsey continued into the post-medieval period and major inundations occurred in 1736 and 1796 (Anon 1953).

The exact date of the earliest building development on the site is likely to be late medieval, as the latest associated pottery fabrics date to the late 15th or 16th centuries. Unfortunately the structural remains are too fragmentary to indicate much about its form or contents, or to extrapolate the size of the building plot or other contemporary structures. The demolition debris sealing the late medieval building dates to the late 16th century, suggesting the building spanned the interface between the late-medieval and post-medieval periods. No medieval building remains were located on the land plot immediately to the south, perhaps indicating that this area was not developed until the post-medieval period, at approximately the same time as the demolition of the neighbouring earlier building. By 1598, when Stow describes the street, it is fully developed with the houses in a continuous row and on both sides of the street (Stow 1598).

Surprisingly little information is available to suggest the wealth or status of the occupants

of the Bermondsey Street medieval buildings. The first 96 entries in the 1381 Poll Tax return for Southwark are thought to refer to properties in Bermondsey Street, Horsleydown and Battle Mills (Carlin 1996, 47) and list the occupations and professions of residents at that time. Leather working is represented by a single entry of a 'currier' and is certainly not the dominant occupation it later became in the area. It has been suggested that lessees of properties lying within the precinct of Bermondsey Abbey were prohibited from carrying out certain commercial activities (Martin 1926, 220), and this may be reflected in the Poll Tax return. However, at the Priory of St John's, Clerkenwell, examination of biological remains has shown that some areas were set aside for craft workshops, in particular the working of horn and tanning (Sidell *et al* forthcoming). This evidence cannot be linked directly to the site nor can it be proven whether the building lay within the abbey precinct or indeed was standing in 1381.

The earliest phases of post-medieval building were timber framed, built on shallow brick and stone foundations. These buildings were modified in a number of ways over a relatively short period. The dimensions and ground plans, although fragmentary, have a number of published parallels, most notably among other Southwark buildings surveyed by Ralph Treswell at the beginning of the 17th century (Schofield 1987). Two rows of buildings surveyed, at 44–48 Blackman Street (now the southern end of Borough High Street, on the eastern side of the street), and the Mealmarket (located at the north end of Borough High Street, on the western side of the street backing on to Green Dragon Court). There are striking similarities between the southernmost of Treswell's Mealmarket buildings and the first phase of building 2. The room dimensions are virtually identical, as is the location of a fireplace against the side wall, rather than in the centre of the room. The Treswell survey was carried out in 1611 and although the construction date for the Mealmarket buildings is not known, they must date to later than 1537, the date of the original post-Dissolution land assignment. This fits well with the late 16th century construction date postulated for building 2. The similarity in dimensions between the Treswell building and excavated building 2 is not unexpected. It might be imagined that most timber-framed buildings of this date are of similar proportions, dictated more by the engineering characteristics of suitable sized timber framing than by the size of the site.

Perhaps surprisingly, given the close parallels in the overall width of buildings, room sizes in the Treswell plans are remarkably inconsistent, irrespective of the type or location of chimney. The Mealmarket buildings are of three-room plan (or more) with a common yard behind the southern three properties, and virtually all the Blackman Street buildings are of two-room plan with long separated gardens behind and outhouses (presumably toilets) at the rear end of the garden. The Bermondsey Street buildings are therefore a hybrid of both common plans in their room layout and relationship to yard or garden area. The Treswell two-room plans, however, invariably show a shop at the front and a kitchen area to the rear. The larger-room properties are more complex but in principle the room configurations are the same. There are no obvious reasons why the function of the ground floor rooms of the Bermondsey Street buildings would not have followed this pattern, with a public room or shop on the street frontage and with a kitchen or private area behind. The upper stories of the building presumably were providing private household accommodation and storage.

Options for the locations of fireplaces are somewhat limited in buildings of this date and could really be only in one of two places – in the centre of buildings or against external walls. External chimneys came into more frequent use in London after the 14th century, probably associated with the division of open halls into smaller room areas. The central double-axial stack began to be introduced in the 15th century (Schofield 1994). The Treswell surveys show that while many early 17th century buildings contained double-axial central chimney blocks, there were still many fireplaces shown located against external walls. Often both types of fireplace were present in the same building. The double-axial fireplace in building 3 appears to have been constructed after 1660, some 50 years later than the Treswell survey. Treswell shows the virtually identical ground plan in his Borough High Street illustration that perhaps

demonstrates that this type of building is not precisely datable on the basis of ground plan alone. Quite often the central chimney block is also the location of stairs leading to the upper floors. No stair locations were recorded in any phase of the Bermondsey Street buildings, but the Treswell plans suggest a number of possibilities.

Access through to the back of the Bermondsey Street buildings appears to be limited in the earliest phases and considerably improved after later rebuilding. Both sets of Treswell surveys, admittedly not referring specifically to these properties, show long corridor access through some buildings to get to yards or gardens at the rear, whereas some show what appear to be extremely limited or non-existent through-routes. The Bermondsey Street buildings seem to indicate that through access is limited in the earliest building phases and considerably improved after later rebuilding. Whereas none of the Treswell's Blackman Street buildings show stand-alone structures to the rear of the street frontage, several appear to display extended rear rooms with obvious parallels for the arrangements between building 3 and building 4. In the Mealmarket survey, any of the buildings could be considered a parallel, because of the greater depth of the building and the larger number of rooms.

The major rebuilding of the post-medieval buildings is dated to after 1660. The impetus for the rebuild may have been directly associated with a return of confidence following the Restoration of the English throne in that year, or perhaps more likely part of the London-wide refurbishment and rebuilding boom that followed the Great Fire of London in 1666 (Milne 1986). A great fire in Southwark destroyed 600 houses in the Borough area in 1676 (Elliot 1861) and again provided the impetus for considerable rebuilding work. It would not be at all surprising for the consequences of either building boom to extend to Bermondsey Street.

The closest and most obvious source for the medieval tile and building material re-used in the late 17th century building must be Bermondsey Abbey, although documentary evidence suggests that the principal period of demolition of the abbey was a century earlier (Beard 1986). The initial demolition of abbey buildings, including the 300 feet long abbey church, had been carried out by Sir Thomas Pope in the late 1540s, while at the same time he constructed a reported 100-room mansion in the remains of the abbey cloister. However much building material Pope re-used in his mansion construction, a considerable quantity must have remained on the site since substantial parts of the abbey buildings are known to have still been standing at the beginning of the 19th century. Archaeological excavations in the south-west corner of the abbey precinct (Steele 1998, 265–70) have shown that large quantities of medieval building stone and chalk were used to backfill cellars at the beginning of the 18th century, hardly indicating a local shortage of building material. Ironically, Pope's mansion lay derelict by the mid-17th century (Martin 1926, 220) and in itself could have formed a source of already once re-used medieval building materials to again be recycled. Two small areas within the post-medieval buildings utilized sheep metapodials to repair or replace floor tiles. There is an interesting contemporary parallel for this type of flooring recorded during excavations at a nearby building at 8 Tyers Gate in 1999 (Killock 2000, 36). Other examples of this use of knucklebones are known (Armitage 1989, 147–60) and it is certain that they are a by-product of industrial processes, rather than re-used domestic rubbish. However, in an area such as 17th/18th century Bermondsey, with a large number of producers of such waste, the occurrence of a knucklebone floor does not necessarily indicate that the process had taken place on individual premises.

It seems probable that the buildings functioned as shops from the 17th century onwards, but there are no strikingly obvious indications as to the shop function. A child's leather shoe found in the lower fill of the well 218 has been dated to the 17th century and is rare and may have been a high-status item. However, it is not known whether it was owned by an occupant of the house or a result of the industry of the occupants, or derived from another source. The Bermondsey area was by this date known for tanning and other leather-based industries and there is plenty of evidence for tanning pits in the land to the rear of the buildings at 153–155 Bermondsey Street, but nothing earlier than the 18th century.



Fig 13 Mid-19th century photograph of Bermondsey Street, Southwark.

There are a number of 19th century drawings and photographs (fig 13) showing eight timber-framed, jettied four-storey buildings forming a row and numbered 88–96 Bermondsey Street. The street was renumbered in the early 20th century so that the row 88–96 became 165–151 Bermondsey Street (Leech 2001). The buildings occupying the site of 151–153 are the two on the extreme right (southern end) of the row. The building at 153 is shown to be of four floors with a shop and a possible through passageway on the ground floor, double windows on the first and second floor and a double attic window. There appears to be a central chimney showing about halfway back along its length. Although of similar width, jettied, and also four floors, the building at 151 has little else in common with 153. There is a doorway on the right-hand side of the ground floor shop premises (possibly aligned with the passageway through the building recorded during the excavation) there is a single three-light window on the first floor, no windows on the second floor and a louvred opening in the attic. The buildings were described as ‘old’ when drawn in 1828 (Leech 2001) and it seems likely that they had survived largely unchanged from the last phase of post-medieval buildings recorded during the excavation. Of some further interest is the fact that although the buildings at 151–153 Bermondsey Street have since been demolished, the remainder of the row shown in the 19th century drawing is still in existence, although with severely altered facades.

In the earliest trade directory for Bermondsey Street (1881) the buildings at 151–153 Bermondsey Street are described as being the premises of a currier and it seems probable that the buildings functioned as shops from the 17th century onwards. The drawing of 153 Bermondsey Street (fig 14) depicts a louvred opening in the attic, and this has been suggested as indicating that tanning or a similar noxious industry requiring ventilation was taking place on the premises (Chancellor 1926, 92–5). Although the trade directories indicate the buildings at 151–153 Bermondsey Street to have been in use by a currier, the earliest drawing is captioned ‘The Old Woolstaples Houses’, perhaps indicating a previous industrial use of the



Fig 14 19th century drawing of 153 Bermondsey Street, Southwark.

buildings. The wool stapling industry is confined almost entirely to the central area of Bermondsey Street and Tanner Street and at the end of the 19th century some 30 or 40 wool staplers lived close by (Saunders 1950, 75). The industry processed wool taken directly from skins and sold it on to hatters, woollen and worsted makers. The trade was largely one of recovery, sorting, grading and packing and the wool was not treated or subjected to any industrial process by the wool staplers. It was dependent on the close proximity of leatherers and hatters at either end of the wool stapling process.

Pottery recovered from the site appears not to have moved any great distance between being broken and deposited and there are a number of sherds of 16th and 17th century domestic fine wares, suggesting that the inhabitants of the buildings were relatively affluent. A number of coins recovered from the site are crucial in dating various construction phases and are of some interest in their own right, but not of any great face value. The 18th century pewter tankard (fig 7) must be noted. It is of a type in relatively common usage throughout this period. A terracotta roundel fragment, showing part of a female head, was recovered from an unstratified context. This piece is important as it comprises a fragment of a portrait plaque, with remnants of white slip over the surface and traces of red paint (fig 8, no 1). It has remains of a moulded portrait figure showing hair in a classical style, possibly from a female figure. This piece is of 16th century date and is a smaller version of a type of decoration fashionable at some of the larger houses of the period (Howard 1983; Morris 1999; D Gaimster, pers comm). The find is indicative of the following of what would have been architectural chic in a probably less prosperous setting. It is possible that such an attractive item may have held some sentimental value, accounting for its presence in a later dated context.

The sheep metapodials used as repairs to the post-medieval tiled floor and in the base of floor joists certainly derived from industrial rather than domestic use (Bendrey 2001). A similar floor surface has been excavated previously on the opposite side of Bermondsey Street in a building dated to the 18th century (Killock 2000, 36).

Conclusions

It appears that as a result of the building of the street or possibly construction of a causeway, running from Bermondsey Abbey to the Thames waterfront roadside, development took place in this area. Ground was consolidated and properties were built from the roadside frontage back. As the frontage filled up buildings were extended to the rear. Shops and workshops were located along the façade and storage and accommodation above. The opportunistic aspect of these developments is also seen in the extensive employment of re-used stone and ceramic building materials, as seen in the worked stone and ceramic floor tiles in repairs and alterations to the structures. Flooding events are evident for the medieval period and the 17th and 18th centuries and evidence for them survived in dated alluvial deposits. The artefact assemblage is suggestive of more well-to-do lower class or middle-class occupants of the properties. Changes to the properties are frequent and small scale, indicative of a dynamic, adaptive and possibly reactive population in the area. This pattern continued well into the 19th and 20th centuries with wholesale changes starting to take place, when buildings that still include many early structural aspects in their fabric start to disappear and are replaced. Over this period there is also a general drift in the area from a more pluralistic and varied economic outlook to a much more specialized set of occupations related to leather production and associated trades.

ACKNOWLEDGEMENTS

The archaeological work was funded by Acorn Homes (Bermondsey) Ltd. PCA Ltd would like to thank Ken Voase of Acorn Homes in particular for his assistance, and Kim Stabler who monitored the excavations for the London Borough of Southwark. Gary Brown of PCA Ltd project managed the site. I am also grateful to Mark Beasley who supervised the evaluation, and to Alan Rae who supervised the final week's work on site while the author was on leave. Cate Davis and Josephine Brown produced the illustrations and Frank Meddens managed the post-excavation work. Thanks are due to all the staff of PCA Ltd who worked on the evaluation, excavation and post-excavation work. I am also indebted to Geoff Egan and Lynne Keys for their work on the small finds, Robin Bendrey for his report on the animal bone, Quita Mould for her work on the leather, Adrian Palmer and Nick Branch for their work on the sediments and pollen, Ken Sabel for his work on the buildings, stone and ceramic building material, Roger Leech for his documentary research, David Gaimster for his comments on the pottery, and to Frank Meddens for his pottery report. Finally I would like to thank Gary Brown and Frank Meddens for editing this paper, and the anonymous peer reviewer for his comments.

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