THAMES WATER MAINS REPLACEMENT BERMONDSEY 03 ARCHAEOLOGICAL REPORT

LONDON BOROUGH OF SOUTHWARK

AN ARCHAEOLOGICAL WATCHING BRIEF



May 2011 THAMES WATER MAINS REPLACEMENT



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COMPASS ARCHAEOLOGY LIMITED 5-7 SOUTHWARK STREET LONDON SE1 1RQ

Telephone: 020 7403 9660

e-mail: mail@compassarchaeology.co.uk

Author: Emma Jeffery

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Abstract

This report covers the archaeological watching brief undertaken during Thames Water mains replacement works between 28th August 2010 and 18th May 2011. The works were located to the north of Jamaica Road up to the southern bank of the River Thames, and between Cherry Gardens Street to the west and Tunnel Road to the east. This encompassed West Lane, Cherry Gardens Street, Dixons Alley, Paradise Street, Cathay Street, Bermondsey Wall East, Fulford Street, Elephant Lane, Mayflower Street, St Marychurch Street, Kings Stairs Close, and Tunnel Road. Some of the work involved open cut trenching generally to a depth of about 1.0m to 1.5m (in Dixons Alley, Paradise Street, Elephant Lane, Kings Stairs Close, Mayflower Street, and some of Cherry Gardens Street), whereas the work in West Lane, Cathay Street, Bermondsey Wall East, Fulford Street, Tunnel Road, St Marychurch Street, and other parts of Cherry Gardens Street was in the form of smaller pits for pipe-bursting.

The watching brief was proposed by the London Borough of Southwark following consultation, and reflected the archaeological potential of this area for a range of prehistoric to post-medieval remains. In particular, this area covers the Scheduled Ancient Monument of the moated manor house of Edward III, a delftware factory, and substantial post-medieval development including both residential and industrial buildings.

Some trenches just exposed modern road make-up layers over services (and associated service backfills), layers of dumping, and 'made ground' layers, with no significant archaeological remains.

Other trenches, however, exposed archaeologically significant deposits and features:

- Alluvial deposits were uncovered which may reflect the medieval episodes of flooding.
- Evidence for the 17th Century delftware pottery factory which functioned in the area was also uncovered, and mainly consisted of substantial quantities of delftware, sagger fragments, and trivet-props.
- Further evidence for 17th Century activity in the area was also uncovered, including brick walls and a possible 17th Century land surface that ran along Paradise Street. This reflects the relatively early development of the area.
- Some of the brick features uncovered during the watching brief could be directly identified. The most interesting of these was the 'Mill Pond Bridge' uncovered at the corner of Paradise Street with West Lane.
- Very little evidence was, however, uncovered concerning Edward III's 14th Century Manor House. No in situ remains relating to this were uncovered, with the only potential evidence consisting of medieval pottery and tiles.

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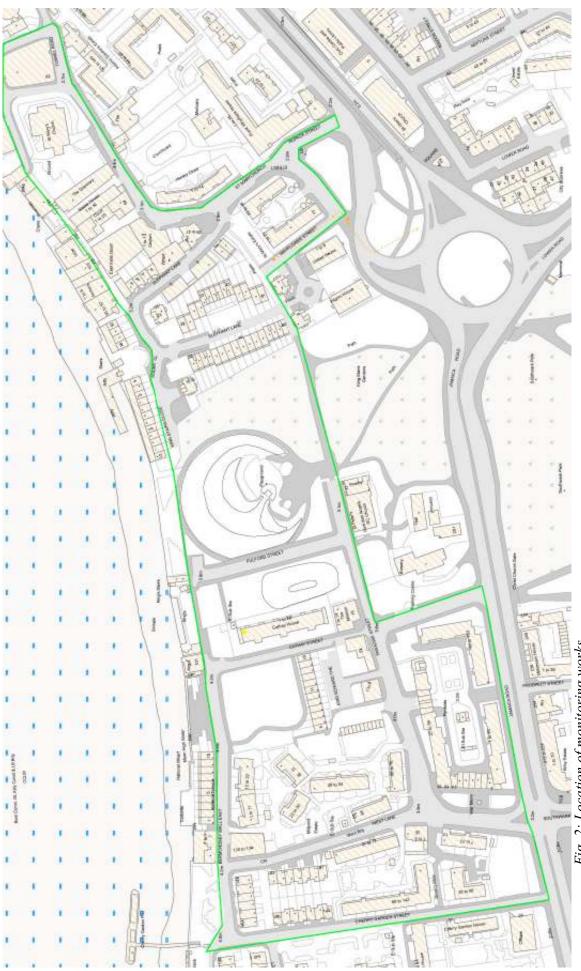
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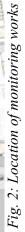
1. Introduction

- **1.1** This report describes the results of an archaeological watching brief carried out during Thames Water water-mains replacement works in the area of north Bermondsey, London Borough of Southwark, SE1, between 28th August 2010 and 18th May 2011.
- **1.2** This area falls within an Archaeological Priority Zone (APZ) 'Borough, Bermondsey and Rivers' as defined in the Southwark Unitary Development Plan (Policy 3.19). The area covered by this Interim Report also includes a Scheduled Ancient Monument: LO163 Edward III's moated manor house at Rotherhithe.
- **1.3** Monitoring was undertaken of contractors trenching between Jamaica Road in the south (NGR TQ 3475, 7955) and the southern bank of the River Thames in the north (NGR TQ 3475, 7975), and between Cherry Gardens Street in the west (NGR TQ 3464, 7962) and Tunnel Road in the east (NGR TQ 3524, 7987) (figs. 1 and 2).



Fig. 1: A-Z Streetmap highlighting the Bermondsey 03 DMA





- **1.4** The archaeological monitoring included an on-site photographic and written record. At a minimum a series of Trench Record sheets were completed for individual excavations or sections of open-cut trench, recording the nature of exposed deposits and details on any archaeological finds and features (including collection of datable finds/ samples). The groundworks were related to local Ordnance Survey grid and level data.
- **1.5** The archaeological work followed consultation and recommendations from Dr Chris Constable, Senior Archaeology Officer of the London Borough of Southwark.

The watching brief was commissioned by Rob Hughes of MGJV (Morrison Utility Services). Further assistance during the fieldwork was given by Tobie MacWilliam (DMA Manager) and by other representatives of the main contractor, Morrison Utility Services, and by the sub-contractors, Instalcom Ltd.

Paul Blinkhorn (Archaeological Consultant) provided fabric and dating information on the pot. John Brown (Archaeological Consultant) provided fabric and dating advice on the ceramic building material.

2. Site Location and Geology

- 2.1 The British Geological Survey *(Sheet 270, 1998)* shows that the natural topography of the area is essentially characterised by low-lying areas intersected by tidal channels and wetlands, with some areas of higher gravel islands or eyots. The DMA is no exception to this as consists of two main gravel eyots (Bermondsey and Rotherhithe eyots), with a tidal channel between the two, and with lower alluvial deposits to the north on the Thames foreshore.
- **2.2** Geoarchaeological research and fieldwork in the 1990s, much of which was in association with LUL's Jubilee Line Extension Project, has created a base model for understanding the geology and topography of north Southwark and areas of the eastern riverine zone in relation to the Holocene evolution of the Thames and has allowed the rich prehistoric and Roman stratigraphy of this area to be broadly mapped and understood in a clearer fashion than many other parts of London. Other archaeological projects have helped to closer define the lithostratigraphy for these earlier deposits, but additionally have been particularly valuable for understanding the later medieval and post-medieval archaeology of the area.
- 2.3 Much of the Bermondsey was affected by well-documented flood events in the 14th century. Thick layers of silty clay deposits indicate that the flood events were significant and can therefore be allied to those documented to have occurred in the area during the late medieval period. These deposits were subsequently cut into to provide drainage or water supply channels it is assumed in what would have been a marshy area.

2.4 The geology of the area has also influenced its social and industrial development and several industries grew up to utilise the river frontage and tidal streams, such as the milling, pottery and tanning industries.

3. Archaeological and Historical Background

3.1 Prehistoric and Roman

Previous investigation in this area has produced some evidence for prehistoric activity. For example, in 1993 UCL recorded prehistoric silts and peats along the Bermondsey foreshore, in which human and animal bones, flints and other artefacts were recovered (BMF93 – LAARC reference). Furthermore, fragments of Iron Age pottery have been recovered at Cherry Gardens Pier, and a ditch with Late Bronze Age - Early Iron Age pottery and 21 Late Bronze Age stakeholes found at Platform Wharf.

Prehistoric activity was often focused on gravel islands or 'eyots'. The DMA itself partly falls on the eastern edge of the 'Bermondsey eyot' (Cherry Gardens Street), and partly on the western edge of the 'Rotherhithe eyot' (east of West Lane), with a natural channel (approximately along the line of West Lane, along the line of the post-medieval millstream) running between the two eyots. The northern-most part of the DMA, furthermore, lies on the Thames foreshore, on a lower bed of alluvium. This suggests that prehistoric activity may have taken place in certain parts of the DMA.

Evidence for Roman activity in this area is, once again, concentrated mainly on the gravel 'eyots', particularly on the Bermondsey eyot. This lies relatively close to the eastern edge of the Roman settlement that grew up around London Bridge and may have been influenced by the Roman road network in the area. For example, three cremation burials and a Roman ditch were uncovered at Cherry Gardens Pier. There is also some evidence for Roman activity on the Rotherhithe eyot, such as the two pits with Roman pottery in which were uncovered at Platform Wharf.

3.2 Saxon

Bermondsey and Rotherhithe were separate parishes, and presumably separate settlements, from the Saxon period. The dividing line between them fell along the line of the 'Mill Stream' (which divided the Bermondsey and Rotherhithe eyots), which ran along the eastern side of West Lane. They were combined in the 20th Century when Rotherhithe was included in the Metropolitan Borough of Bermondsey.

The name 'Bermondsey' may mean 'Beornmund's Island (or 'piece of firm land in a fen' or 'place by a stream or river'). 'Beornmund' is an Old English personal name, and suggests that the place was associated with this individual. The name 'Rotherhithe' derives from 'rethra' (a rower or mariner) and 'hythe' (a landing place or haven). This reflects the early role of Rotherhithe - to act as a landing place for mariners.

Archaeological evidence has been found for Saxon activity in Bermondsey. An archaeological excavation at Cherry Gardens Pier in 1987 by DGLA uncovered a clay-filled channel with a large Saxon timber resting against a wattle structure – possibly the remains of a timber revetment. In contrast, no archaeological evidence has been found for Saxon activity in Rotherhithe.

3.3 Medieval

'Bermondsey' is mentioned in the 1066 Domesday Book, where it appears as 'Bermundsey' and 'Bermundesye'. It was mainly held by King William I at this time, and consisted of 13 hides, a new church, 5 ploughs, 20 acres of meadow, and woodland for 5 pigs. Rotherhithe is not mentioned here, and it seems likely that this was because the area 'Bermondsey' encompassed Rotherhithe in this survey. Nonetheless, Rotherhithe was a separate manor in terms of ecclesiastical parishes and landownership from the Early Middle Ages. Furthermore, Rotherhithe was apparently reserved by William Rufus whereas the rest of Bermondsey went to Bermondsey Priory. It remained as part of the Crown's demesne until the reign of Henry I, when it passed to the Priory.

The riverine area, including that in the DMA itself, was subject to incursions from the Thames at numerous points throughout its history. For example, in 1230 the Annals of Bermondsey mention the repairs of the Breach of Rotherhithe, and there were apparently 13 breaches in the embankment in Bermondsey between 1297 and 1416.

Edward III's Manor House:

The earliest feature/place of historical importance within the DMA itself is the Scheduled Ancient Monument of the moated manor house of Edward III (TQ347879710), known as Platform Wharf, situated south-west of the corner of Cathay Street and Bermondsey Wall East. There is, however, some archaeological evidence for settlement on this site before 1349 when Edward III acquired it. Two $10^{\text{th}} - 11^{\text{th}}$ Century ditched enclosures with associated buildings were uncovered.

The earliest references to a royal manor at Rotherhithe are from 1349, when Edward III acquired it. He then rebuilt the manor-house in 1353-61. The manor comprised of two courts, that to the north being adjacent to the river, and being the principal court, surrounded by a moat and wall. There are references to a hall, a chapel and kitchens. Trial excavation from July 1986 to January 1987 revealed substantial remains of the stone walls of the Inner Court building (a rectangular structure 30m x 20m with walls 1m thick and a tower at the North West corner), surrounded by an 8m wide moat with the remains of a timber bridge. The outer court, in contrast, was not discovered, and it is postulated that it may have been sited under the modern Pynfolds Estate (on the southern side of Paradise Street).

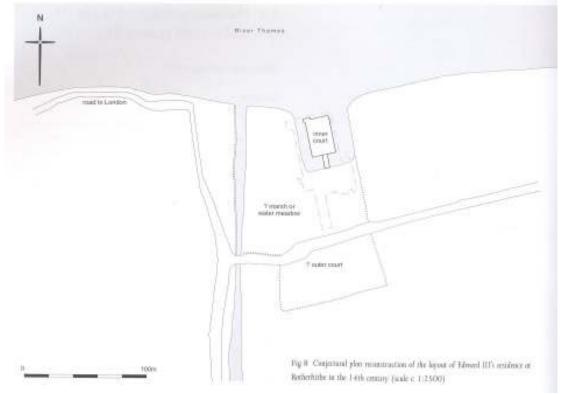


Fig. 3: Conjectural plan reconstruction of the layout of Edward III's Manor House in the 14th Century (MOLAS Monograph 47, 2009)

In 1399 the house passed to Bermondsey Abbey, and the site was fragmented into various smaller properties. A conjectural reconstruction of the site (based on various documentary sources and compiled by the Museum of London) suggests that it was divided into wharfs, gardens, meadows, pastures, tenements, and orchards (fig. 4).

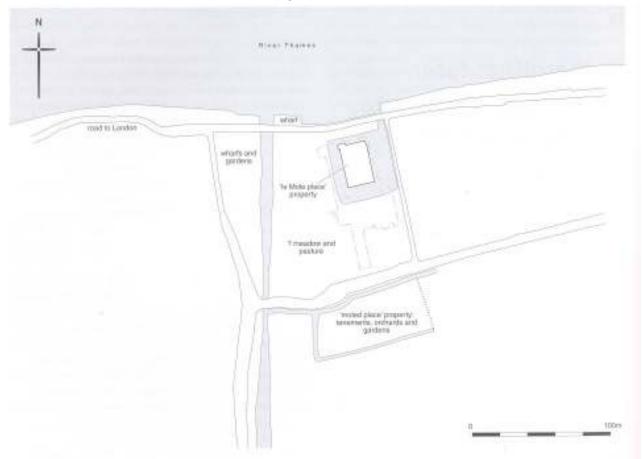


Fig. 4: Conjectural reconstruction of the Manor House in the late 16th Century and early 17th Century (MOLAS Monograph 47, 2008)

3.4 Post-Medieval

The Pothouse:

By the mid-17th Century, however, the site of Edward III's Manor House was owned by potters (Thomas Barnebowe, who founded it, and Joseph Muston from at least 1651), and appears to have been used to produce delftware pottery from approximately 1638 until 1684. This is reflected in the archaeological record, as pits containing mid-17th Century tin-glazed waste and kiln material were uncovered on and around the site. Serious production may, however, have stopped in the late 1660s after Barnebowe and Muston died, as William Fry (who may have been master of the pothouse) moved to a different site at Still Stairs. It is possible, however that production continued at this site under John Townsend, as he was recorded as a potter in Rotherhithe in 1683. At John Townsend's death, in 1684, production presumably ceased at this pothouse. The exact location of the pothouse is unknown as no structural remains have been found. A 1652 Parliamentary Survey, however, describes the pothouse as lying in "a messuage commonlie called or known by the name of King John's house als the Moated place". Furthermore, the 1652 survey describes the pothouse as adjoining, to the south, Back Lane (Paradise Street). Moreover, both William Morgan's survey of London (1682) and Rocque's 1746 Map depict a large open area enclosed by continuous ranges of buildings, suggesting that the pothouse may have been located within this open area. This, combined with the large quantity of pottery wasters and kiln furniture found around the Inner Court, suggests that the pothouse must have been located nearby or even used the buildings that once formed Edward III's Manor House.

Archaeological work between 1986 and 1991 uncovered a large quantity of waste pottery. Some of this was found within the backfill of the moat of the Inner Court and some in a series of pits. Beyond waste pottery, peg tile and pan-tile was found (which may suggest that the pothouse buildings were roofed in both), 17th Century bricks (suggesting that some of the walls of the pothouse were brick built), and worn and burnt floor tile (possibly kiln furniture or part of the structure of the kilns).

More biscuit ware was being discarded than tin-glazed ware (and has consequently been found). Biscuit ware is essentially tin-glazed ware which failed in some way during the production process, such that much of the pottery uncovered during archaeological work was of poor quality, either being made of poor-quality clay, having fractures or fissures, or being deformed. Other waste material showed problems with the glaze. A variety of different types of pottery vessels were, nonetheless, being produced, including the more unusual figurines, candlesticks, and even a colander! The type of kiln furniture used and discovered included girders, saggars, tile and trivets. Some of the pottery appears to have been fired in saggers, with others being fired in stacks set on trivets.

Both biscuit-fired and decorated ceramic tiles were also produced at this site, most of which were designed for floors. The production of the tin-glazed decorated floor-tiles may have been some of the last in Britain, as fashions began to move away from such floor-tiles. Both polychrome tiles with geometric designs (popular in the late 16^{th} – early 17^{th} Century), and pictorial blue on white designs (popular in the late 17^{th} – 18^{th} Century) were produced. Many of the decorative designs used were copies of Dutch designs.

The rest of Bermondsey and Rotherhithe, particularly in the DMA area, remained a relatively rural area until the 16th - 17th Century. Development in the DMA area began along the riverine stretch, and then moved southwards. Parts of Bermondsey included in the DMA developed as a garden suburb attracting the well off, with a 17th Century pleasure garden founded at Cherry Gardens Pier. Both Bermondsey and Rotherhithe also began to develop industrially, with shipbuilding important in Rotherhithe, and the leather industry developing in Bermondsey.

Previous archaeological investigations within the DMA has revealed evidence for development from the 16th Century in this area. For example, a 1992 MOLAS evaluation in Cherry Gardens Street uncovered post-medieval pits, dumps, stakeholes, drains and brick-structures, with the earliest structure consisting of 16th Century bricks.

There was further development in the 18th and 19th Centuries in the DMA, which was particularly sparked by the increase in industrial work in the area. The riverfront began to fill up with warehouses, wharves, mills, and other industrial buildings. The importance of industry to the area is reflected in the 1774 'Ambulator', which describes Rotherhithe as being "chiefly inhabited by masters of ships and other seafaring people". This is further reflected in the early 20th Century photograph of 'The Angel' Public House and riverfront area, which depicts many boats moored there (fig. 5).

This development led to parts of the DMA becoming notorious slums, particularly along the riverside. For example, a passage in Dickens' 'Oliver Twist' describes a section of the present Bermondsey Wall East as a "maze of close, narrow, and muddy streets, thronged by the roughest and poorest of people".

The warehouses and wharves along the riverfront, however, suffered some bomb damage during World War II. They then became redundant in the 1960s because of the collapse in river traffic, and have since been converted into a mixture of commercial and residential properties. For example, Corbett's Wharf (on the northern side of Bermondsey Wall East) was converted into flats in 1983.



Fig. 5: Photograph of 'The Angel', early 20th Century (from S. Humphrey, 'Southwark, Bermondsey and Rotherhithe in Old Photographs', 1995)

4. Map Regression Exercise

4.1 Early maps, such as the Agas *Civitas Londinum* map of 1562 and the Braun and Hogenberg map of 1572, show that there was some settlement and development by the 16th Century. Faithorne and Newcourt's map of 1658 (fig. 6) shows the area in even more detail. This map depicts a row of houses along the river-front with a road running along behind them, with further houses and gardens just to the south of this. This reflects the early layout of development in this area (along the river), with gardens and so-forth behind this.

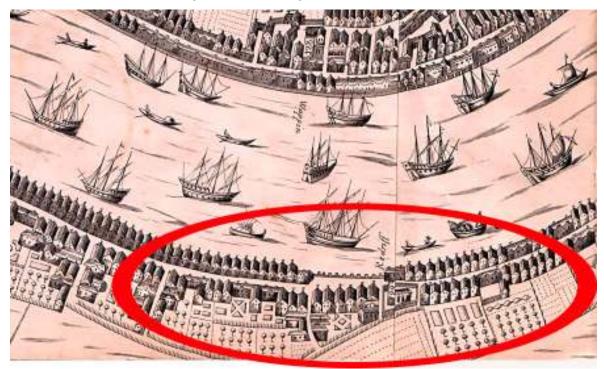


Fig. 6: Newcourt's Map, 1658, with approximate area of archaeological monitoring circled

4.2 John Rocque's map of 1746 (fig. 7) shows the whole river frontage as quite built-up by this time. Many of the plots between the streets have been infilled with buildings. The area south of the line of Paradise Street is, however, generally depicted as open land or market gardens. A mill-stream and mill pond is shown in the area of West Lane, with a *Mill Pond Bridge* also depicted. The mill-stream probably occupied the position of a prehistoric natural channel between Bermondsey and Rotherhithe eyots, which was later canalised and utilised for industrial purposes. Neither Edward III's moated manor house nor the 17th Century delftware pottery buildings can be clearly determined. The Church of St Mary is shown on *Church Lane*, with the '*burying ground*' on the south side.



Fig. 7: Rocque's Map, 1746

4.3 By the time of Horwood's map of *c*.1813 (Faden's edition) (fig. 8) some redevelopment has taken place although the general road layout remains broadly unchanged. The mill-stream is still shown snaking down West Lane and giving the street is distinctive profile with the mill on the river's edge. South of Paradise Street the market gardens of *Calanders Gardens* are clearly shown and garden plots are shown across the DMA. St Mary's Church is shown here as *Rotherhithe Church* with an associated larger churchyard and again the burial ground across the road, and a 'Timber Yard' to the west of the church.

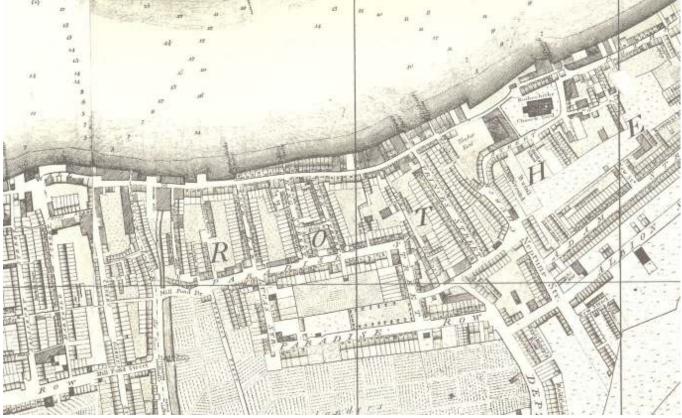


Fig. 8: Horwood's Map, 1813

- **4.4** The Valuation Plans for the Parishes of St Mary Bermondsey (1833-36) and St Mary Rotherhithe (1843) provide far more detailed information concerning the buildings in this area and their functions. Many warehouses, granaries and mills are depicted in the area, along with some shops and residential properties. This information is complimented further by Loveday's London Waterside Survey (1857), which depicts the riverine region in a similar, broadly industrial, way, with some detailed information concerning the specific industries being undertaken, the buildings themselves, and the owners/tenants of the buildings. This reflects the industrial development of the area in the 19th Century.
- **4.5** The Ordnance Survey map series surveyed 1872-78 (fig. 9) show a similar picture to earlier plans discussed above. The mill is shown as a *Flour Mill* and is much extended, with large granaries to the east up to Cathay Street and in the SAM area of Platform Wharf. Much of the riverine zone is made up of warehouses and industries including timber-yards, granaries, wharves and mills, including the 'Tunnel Mill' in the eastern part of the DMA. This map also shows the burial grounds associated with St Mary's Church as much extended.

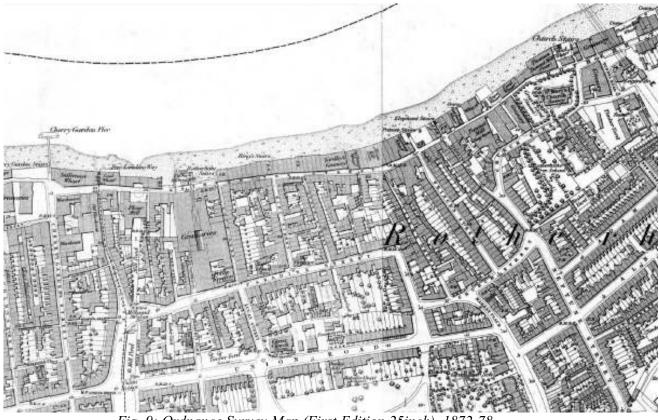


Fig. 9: Ordnance Survey Map (First Edition 25inch), 1872-78

4.6 The subsequent map series after 1878 also informs on development patterns across the study area. For example, the 1897 25inch OS Map depicts the area in a broadly similar way to the 1878 25inch OS Map. The 1916 25inch OS Map is also similar, although it would appear that the 'Mill Stream' had, by this date, been filled in. By 1934, on the 60inch OS Map, the 'Millpond Estate' had been constructed on the site of the former Mill Stream and Warehouse. There was some blast damage during World War II in the area, however there was no serious damage. This meant that the 1950 60inch OS Map depicts the area in a broadly similar way to the 1934 Map – the only major difference being the apparent clearance of the area to the south of Paradise Street before the construction of the Pynfolds Estate. The 1968 1:1250 OS Map depicts the Pynfolds Estate in this area south of Paradise Street, with the rest of the area in a similar way to the 1950 Map. Warehouses are still depicted along the riverfront and in the area to the west of Cathay Street, as this is before residential development exploded in this area. This idea is supported by the 1975 photograph of Platform Wharf (fig. 10), which shows the warehouses and wharves that were found in this area. Furthermore, some of the warehouses found along the riverfront have been converted into residential and commercial buildings, rather than being completely destroyed, such that they are still standing today.



Fig. 10: 1975 photograph of Platform Wharf

5. Archaeological Research Questions

The research objectives of the archaeological watching brief as set out in the preliminary *Specification* (Compass Archaeology August 2010, Section 6), were as follows:

- Is there any evidence for prehistoric to post medieval activity, and what is the nature of this?
- What can this project contribute to current research concerning the topographical and geological models for this area?
- Does the historic street frontage shown on early maps survive under the roadway in this area?
- What is the nature, form, date and extent of these deposits?
- Can the remains of specific historic buildings be pinpointed in the mains work?
- What can this project contribute to our knowledge of the social, commercial, residential and industrial heritage of the area?
- At what level do archaeological deposits survive in the highways across the area?
- At what level do natural deposits and flood deposits survive across the area?
- Can the watching brief works inform on the site-specific research questions of local archaeological sites and archaeological priority areas? Can the watching brief works inform on the research questions of the Museum of London and English Heritage's 'A Research Framework for London Archaeology' publication 2002 in relation to the post medieval social and industrial history of this part of London?

6. The Archaeological Programme

6.1 Standards

The field and post-excavation work was carried out in accordance with current English Heritage guidelines (in particular, *Standards and Practice in Archaeological Fieldwork, Guidance Paper 3)* and to the standards of the Institute for Archaeologists (*Standard and Guidance for Archaeological Watching Briefs*). Overall management of the project was undertaken by a full member of the Institute.

The recording system followed the procedures set out in the Museum of London recording manual. By agreement with MoLA the recording and drawing sheets used were directly compatible with those developed by the museum.

6.2 Fieldwork

The archaeological watching brief took place during contractors' groundworks, and involved generally two archaeologists on site as required monitoring works and investigating and recording any archaeological remains. Close liaison was maintained with the groundworks team to ensure a presence on site as and when necessary.

Where archaeological remains were exposed adequate time was allowed for investigation and recording, although every effort was made not to disrupt the contractor's programme.

6.3 Methodology

Archaeological deposits and features were investigated and recorded in stratigraphic sequence, and where appropriate finds dating and environmental evidence recovered.

Archaeological deposits and features were recorded as appropriate on *pro-forma* context or trench sheets, and if necessary drawn in plan or section. The investigations were recorded on a general site plan and related to the Ordnance Survey grid. The fieldwork record was supplemented as appropriate by photographic images (35mm monochrome print/ digital).

7. **Post-excavation Work**

7.1 Finds and samples

Finds and samples were treated in accordance with the appropriate guidelines, including the Museum of London's 'Standards for the Preparation of Finds to be permanently retained by the Museum of London'. Finds and artefacts were retained and bagged with unique numbers related to the context record.

Assessment of finds and samples was undertaken by appropriately qualified staff.

7.2 **Report Procedure**

Copies of this report will be supplied to the Client, and the London Borough of Southwark and the relevant local studies libraries.

A short summary of the fieldwork is appended using the OASIS Data Collection Form, and in paragraph form suitable for publication within the 'excavation round-up' of the *London Archaeologist*.

8. The Archaeological Watching Brief

This report covers the archaeological watching brief which was undertaken during contractors groundworks along roads between Jamaica Road and the southern bank of the River Thames, and between Cherry Gardens Street and Tunnel Road. The groundworks took place as part of a Thames Water Utilities Ltd scheme of Victorian water mains replacement. Contractor methods included open cut trenching, directional drilling, pipe-bursting and insertion. Archaeological monitoring was undertaken on areas of open-cut trenching, trial pits and in launch pit areas, access pits and exit points of other methods. Approximately 300m of trenching was observed within the study area (an area of approximately 500m²). The results of the archaeological watching brief are discussed below.

Trench	Street/Location	Dimensions (metros)	Context	Cantext Description
Number		(length X width X depth)	Number	
1	West Lane (west side, just south of Dixons Alley)	3.7 (E-W) X 3.9 (N-S) X 1.55 X 1.7		
2	West Lane (west side, just north of Dixons Alley)	1.8 X 0.8 X 2		
3	West Lane (west side, outside No. 35)	3.5 X 0.7 X 0.85		
4	West Lane (west side, outside No. 41)	1.45 X 1 X 2		
5	West Lane (west side, outside No. 43)	1 X 0.45 X 0.95	1	General from trench
9	West Lane (west side, outside No. 45)	1.2 X 0.6 X 1.15	2	General from trench
7	West Lane (west side, outside No. 81)	1.2 X 0.5 X 1.2		
8	West Lane (west side, between Nos. 81 + 83)	1 X 0.45 X 1		
6	West Lane (west side, outside No. 83)	1 X 0.45 X 1		
10	West Lane (west side, outside No. 93)	4.1 X 0.45 X 1.2		
11	West Lane (west side, between trenches 6 and 7)	1 X 0.5 X 1.2		
12	West Lane (west side, between trenches 9 and 10)	1.1 X 0.75 X 0.95		
13	West Lane (west side, just north of trench 10)	2 X 0.4 X 1.45		
14	West Lane (west side, just south of Bermondsey Wall East)	2 X 0.9 X 1.15		
15	Cherry Gardens Street (west side, opposite Dixons Alley)	1.85 X 0.8 X 1.1		
16	Cherry Gardens Street (west side, outside Burton House)	1.6 X 1.6 X 1.35		
17	Cherry Gardens Street (west side, outside entrance to Burton House)	2.3 X 0.65 X 1.25		
18	Cherry Gardens Street (west side, between trenches 17 and 19)	1.1 X 0.6 X 0.8		
19	Cherry Gardens Street (west side, just south of Pottery Street)	2.67 X 1.04 X 1.06	3	Upper clayey-silt layer
			4	Middle gritty layer
20	Cherry Gardens Street (west side, from junction with Jamaica Road up to Dixons Alley)	50 X 0.4 X 1.2		
21	Dixons Alley (centre of Dixons Alley, running from junction with Cherry Gardens Street to junction with West I ane)	22 X 0.7 X 0.95-1.3	5	Lower compacted layer
			39	Upper mixed deposit/made ground

23Paradise Stwith Westwith West24Paradise St24Paradise St	Lane) Lane) Lane) reet (north side, running east from junction with reet (north side, continuation of trench 24 un to	25 X 0.55 X 1.25-1.3 30 X 0.3-0.4 X 1.15-1.55 30 X 0.55 X 1.4	7 8 8 9 9 11 11 12 13 13	Clearance Upper part of bridge-base Lower part of bridge-base Stone filling on eastern side of bridge-base Dark compact silty layer Western brick feature
			8 9 11 12 13 13 13	Upper part of bridge-base Lower part of bridge-base Stone filling on eastern side of bridge-base Dark compact silty layer Western brick feature
			9 10 12 13 14	Lower part of bridge-base Stone filling on eastern side of bridge-base Dark compact silty layer Western brick feature
			10 11 12 13 14	Stone filling on eastern side of bridge-base Dark compact silty layer Western brick feature
			11 12 13 14	Dark compact silty layer Western brick feature
		30 X 0.55 X 1.4	12 13 14	Western brick feature
		30 X 0.55 X 1.4	13 14	• • •
		30 X 0.55 X 1.4	14	Eastern brick feature
25 Paradi junctic				Dark compact silty layer
			15	Eastern brick feature
			16	Western brick feature
26 Paradi junctic	Paradise Street (north side, continuation of trench 25 up to junction with Cathay Street)	27 X 0.4-0.45 X 1.3	17	Dark compact silty layer
			18	Brick feature
27 Paradi Cathay	Paradise Street (north side, running east from junction with Cathay Street)	13 X 0.5 X 1.2-1.3	19	Dark gritty dumped layer
			20	Waterlaid alluvium used as a surface
28 Cathay Paradi	Cathay Street (east side, running south from junction with Paradise Street)	12 X 0.42 X 1.15		
29 Cathay	Cathay Street (east side, just south of trench 28)	1.2 X 0.45 X 1		
30 Cathay	Cathay Street (east side, just south of trench 29)	1.6 X 0.45 X 1		
	Cathay Street (east side, just south of trench 30)	1.2 X 0.45 X 1		
32 Cathay Jamaic	Cathay Street (east side, running north from junction with Jamaica Road)	11 X 0.6-1.09 X 1.4		

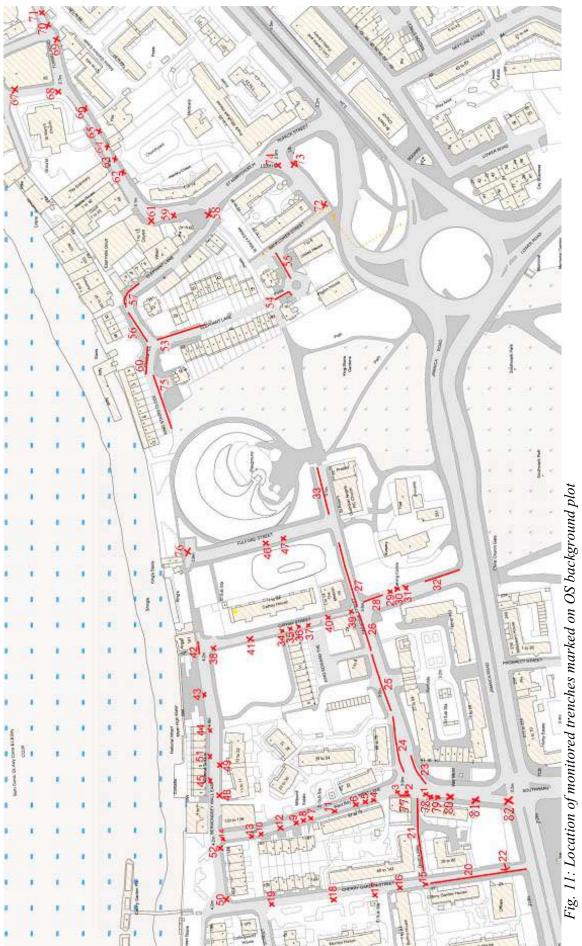
33	Paradise Street (north side, running east from junction with Fulford Street to the end of the road)	25 X 0.45-0.5 X 1.1-1.8	21	Alluvium deposit
34	Cathay Street (central part, opposite northern part of No.9- 16 Cathay House)	1 X 0.5 X 1	22	Spoil heaps
			23	General from trench
35	Cathay Street (central part, opposite central part of No.9-16 1.35 X 0.47 X 1 Cathay House)	1.35 X 0.47 X 1	22	Spoil heaps
			23	General from trench
36	Cathay Street (central part, opposite southern part of No.9- 16 Cathay House)	1.6 X 0.8 X 1.5	22	Spoil heaps
37	Cathay Street (central part, outside gate through to King Edward III Mews)	1.75 X 1.2 X 1.25	24	Base of trench
38	Cathay Street (central part, at junction with Bermondsey Wall East)	2.45 X 1.1 X 1.3		
39	Cathay Street (central part, at junction with Paradise Street)	2.47 X 0.93 X 1.3	25	Basal deposit
40	Cathay Street (central part, 7m north of Paradise Street)	1.4 X 0.65 X 1.3	26	Upper black ash deposit
41	Cathay Street (central part, opposite entrance to No.17-24 Cathay House)	1.3 X 0.4 X 1	27	Brick feature
42	Bermondsey Wall East (north side, opposite junction with Cathay Street)	2.3 X 1.4 X 1.4	28	Base of trench
43	Bermondsey Wall East (north side, opposite remains of King Edward III's Manor House)	1.7 X 0.9 X 1.6	29	Base of trench
44	Bermondsey Wall East (north side, outside No.10)	1.46 X 0.75 X 1.3	30	Base of trench
45	Bermondsey Wall East (north side, outside Nos.2+3)	2.45 X 1.1 X 1.44		
46	Fulford Street (west side, half-way between Paradise Street and Bermondsey Wall East)	2.6 X 0.5 X 1.25		

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47	Fulford Street (west side inst north of innction with	1 9 X 0 59 X 1 21		
:	Paradise Street)			
48	Bermondsey Wall East (south side)	1.25 X 0.58 X 0.9	31	Layer or pit-fill
49	Bermondsey Wall East (south side, outside entrance to Nos.1-11 Millbond Estate)	2.4 X 1.15 X 1.3	32	Wall in eastern section
	Commence and Annual		36	Wall in north-east corner
			37	Wall in northern section
50	Bermondsey Wall East (south side, east of junction with Cherry Gardens Street)	2.5 X 0.98 X 1.25		
51	Bermondsey Wall East (north side, outside No.6)	1.69 X 1.18 X 1.33	33	Higher wall in eastern section
			34	Lower wall in western section
			35	Clayey layer beneath context 34
52	Bermondsey Wall East (south side, just west of junction with West Lane)	1.35 X 1 X 1.2	38	Brick feature
53	Elephant Lane (east side, south of junction with Kings	25 X 0.45 X 0.95		
	Diallo CIUSE)			
54	Mayflower Street (southern end of Mayflower Street)	11 X 0.4 X 0.85		
55	Mayflower Street (northern side of part that runs east-west)	12 X 0.5 X).65-1.1		
56	Elephant Lane (northern-most part, on north side of road)	26 X 0.45 X 0.8-1.1		
57	Elephant Lane (eastern side, between Nos.10 and 8)	20 X 0.5 X 0.65-1		
58	St Marychurch Street (at junction between Elephant Lane and St Marychurch Street)	8 X 0.5 X 1.05		
59	St Marychurch Street (western side, adjacent to rear of 'The Ship')	2.65 X 0.95 X 1.35	40	Alluvium
			41	Silty-sand deposit
			42	Brick walls
60	Kings Stairs Close (at junction with Elephant Lane)	10 X 0.5 X 1.2		
61	St Marychurch Street (western side, just north of 'The Ship')	11 X 0.6 X 1		

	F			
62	St Marychurch Street (southern side, just after bend round to the east)	1 X 0.5 X 0.5		
63	St Marychurch Street (southern side, opposite Hope Sufferance Wharf)	1 X 0.5 X 0.5		
64	St Marychurch Street (southern side, outside St Mary Rotherhithe Watch House)	1 X 0.5 X 0.5		
65	St Marychurch Street (southern side, just to the east of St Mary Rotherhithe Watch House)	1 X 0.5 X 0.5		
99	St Marychurch Street (southern side, opposite St Mary's Church)	1 X 0.5 X 0.5		
67	St Marychurch Street (eastern side, just south of Rotherhithe Street and north of No.82)	3.5 X 0.75 X 1.25		
68	St Marychurch Street (western side, just north of junction with Tunnel Road)	2.3 X 1.2 X 1.3		
69	Tunnel Road (western side, just south of junction with St Marychurch Street)	2.3 X 0.48 X 1.15		
70	Tunnel Road (western side, opposite junction with part of Tunnel Road which runs east-west)	1.8 X 0.7 X 1.6		
71	Tunnel Road (western side, opposite Brunel Museum)	2.6 X 0.8 X 1.2	43	Clinker layer
			44	Clay layer above context 66
72	Mayflower Street (southern side of part that runs east-west, at junction with part of Mayflower Street that runs north-south)	2.4 X 2.25 X 1.25		
73	Mayflower Street (southern side of part that runs east-west, at junction with Rupack Street)	8.5 X 2.5 X 1.3	45	Brick and mortar layer above alluvium
74	Mayflower Street (northern side of part that runs east-west, at junction with Rupack Street)	6.5 X 0.5 X 1.3		
75	Kings Stairs Close (southern side, between Elephant Lane and Kings Stairs Gardens)	13 X 0.5 X 0.85-1.05		

76	Fulford Street (norther corner, eastern side)	2 X 0.6 X 1.2	
LL	West Lane (western side, just north of Dixon's Alley)	4.1 X 0.9 X 1.3	
78	West Lane (western side, just south of Dixon's Alley)	1 X 0.7 X 0.7	
62	West Lane (western side, outside No.11)	1.3 X 0.75 X 1.1	
80	West Lane (western side, outside No.7)	1 X 0.35 X 1.3	
81	West Lane (western side, outside No.5)	1.9 X 0.35 X 1.3	
81	West Lane (western side, just north of Jamaica Road)	3 X 1.5 X 1.2	





8.1 West Lane:

Trenches 1-14:

A series of fourteen pits were observed on the western side of West Lane, running south from the junction with Bermondsey Wall East down to the junction with Jamaica Road. The size of these varied from approximately 1 - 2m in length, 0.5 - 1m in width, and 1 - 2m in depth. A modern road-base (consisting of tarmac over MOT Type 1 crushed stone or concrete) was exposed in all of these pits. A previous surface of granite setts was also uncovered in the northern end of West Lane. The road base overlay various service trenches and backfills, cut into a generally dark mixed sandy-clayey silt. A range of $17^{\text{th}} - 19^{\text{th}}$ Century finds, including pottery and ceramic building material, was uncovered in this, so it probably represents several reworked deposits. Some pits also revealed brick rubble and demolition debris. A probable brick drain was also uncovered in the western section of pit 6, running into the trench from the north. No significant archaeological finds or features were observed.

Pottery found in one pit (No. 5) included one fragment of English tin-glazed ware (1600-1800) – probably 17^{th} Century in date (see fig. 13). Pottery in pit 6 included eight pieces of Post-medieval redware (1580-1900), two fragments of English tin-glazed ware (1600-1800), two fragments of London Stoneware (1670-1900), one fragment of Staffordshire white salt-glazed stoneware (1720-1780), and two pieces of 'Ironstone' china (1800-1900) – all of which suggests a 19th Century date. This therefore supports the hypothesis that there was $17^{\text{th}} - 19^{\text{th}}$ Century activity in the area, which resulted in reworked deposits from this period.

One brick sample was taken from pit 6. This was identified as fabric-type 3034, with no mortar, and was dated to approximately 1666-1900 (see appendix IV). One pan tile was also recovered from this pit, and was identified as fabric-type 2279, and dated to 1620-1800 (see appendix IV). This therefore further supports the suggestion of $17^{\text{th}} - 19^{\text{th}}$ Century activity in this area, represented by $17^{\text{th}} - 19^{\text{th}}$ Century reworked deposits.

Furthermore, one clay pipe bowl was recovered from trench 6, and probably dates from c.1810-1840 (see appendix V).



Fig. 12: Photo of trench 2, West Lane



Fig. 13: Photo of English tin-glazed ware (Delftware) from trench 5

Trenches 77-82:

Another series of six pits were observed on the western side of West Lane, running south from approximately the junction with Dixon's Alley down to Jamaica Road. The size of these varied from approximately 0.35-4m in length, 0.35-1.5m in width, and 0.75-1.3m in depth. A modern road base (consisting of tarmac over granite setts over concrete) was exposed in all of these pits. The road base overlay various service trenches and backfills, within a general mixed brown silty soil, with flecks of mortar and red brick. No significant archaeological finds or features were observed.

9.2 Cherry Gardens Street:

Trenches 15-19:

Five pits were observed on the western side of Cherry Gardens Street, running south from Pottery Street to opposite Dixons Alley. The size of these varied from 1m - 3m in length, by 0.5 - 1.5m in width, and 0.8 - 1.4m in depth. A road-base consisting of tarmac road-surface over granite setts over concrete was observed in all of these pits. This overlay a general mid-dark brown silty-soil, with gravel inclusions and ceramic building material, and other finds including pottery. In some pits (such as pit 19), this deposit could be distinguished into separate parts: an upper clayey-silt layer, over a gritty layer, over a darker cleaner band. This may have represented layers of 'made ground'. This overlay a mid-dark brown-grey-green clean sandy-silt alluvium, with pieces of coal and charcoal in it (the 'natural', with the upper level disturbed possibly by root action). No significant archaeological finds or features were observed.

Pottery was found in pit 19 from both the upper clayey-silt layer, and the middle gritty layer. Four pieces of Post-medieval redware (1580-1900) – probably 17^{th} Century in date – were recovered in the upper clayey-silt layer. One fragment of English tin-glazed ware (1600-1800) and one fragment of London Stoneware (1670-1900) were recovered in the middle gritty layer. This all suggests a late 17^{th} Century date for deposits in this area.



Fig. 14: Photo of trench 19, Cherry Gardens Street

Trenches 20 and 22:

Another long open-cut trench was observed on the western side of Cherry Gardens Street, running south from the junction with Dixons Alley up to the junction with Jamaica Road. The trench measured approximately 50m X 0.45m X 1.2m. Tarmac over granite setts over concrete was observed, for a total depth of c.0.36m beneath the present ground-surface. There was also a 15m stretch of crushed red brick deposit beneath the concrete at the northern end of the trench, which was probably an earlier road consolidation layer. This overlay 0.17m of dirty gravelly-silty sub-soil, overlying 0.7m of mid-brown sandy-clayey alluvium (the 'natural' – at a depth of 1.57mOD). This was clean with no obvious inclusions, and was generally uniform for the whole length of the trench – it was possibly a flood deposit.

One red brick wall was observed in this trench, in the eastern section just north of Jamaica Road and opposite the driveway to Cherry Gardens House. This consisted of five rough courses of brickwork, set on a rubble base. Two brick samples were taken. These were identified as fabric-type 3033 and 3032, one of which was frogged and one was unfrogged. They were set within a grey-brown lime/sand mortar with frequent charcoal inclusions, and a light grey-yellow mortar with charcoal, shells, lime and quartz inclusions, respectively. They were dated to 1450-1700 and 1690-1730 respectively. The wall measured approximately 0.39m in width at the base

(0.25m at the top), stretched into the trench by approximately the width of one brick, and was uncovered 0.86m beneath the present ground-surface (1.24mOD). Clean alluvium was observed on the southern side of the wall, with modern backfill on the northern side associated with an adjacent inspection chamber. The cut for the construction of the wall, and another cut for the robbing-out of the wall, was observed. A dark-brown silty-sand with brick and mortar rubble was observed in the cut for the robbing-out of the wall, which was the backfill from this.

Pottery recovered in association with the robbing of the brick wall included a fragment of Post-Medieval redware (1580-1900), two fragments of English tin-glazed ware (1600-1800), one fragment of Creamware (1740-1880), and two fragments of 'Ironstone' china (1800-1900) – all of which attribute a possible 19^{th} Century or early 20^{th} Century date to the trench.

This trench was therefore useful in providing information about a number of different historical events in this area. The probable flood deposit at the base of the trench (1.57mOD) reflects the topography of the area, and the fact that documented flooding events took place in this area in the medieval period. The brick wall may have dated from the late 17th Century, and reflects development in this area around this date. It may have been a wall associated with one of the terraced houses which lay on the site. These are depicted on Horwood's 1813 Map (fig. 16) (the earliest Map where they can definitively be identified, although Rocque's 1746 Map depicts buildings along the western side of Cherry Gardens Street which were probably these), and existed on the site until some point between 1934 and 1950 (seen on OS Maps). The existence of 19th Century pottery, furthermore, reflects the continued use of this area into the 19th Century. This is also reflected in the 1934 photograph of the terraced houses on the western side of Cherry Gardens Street, which, although not in the specific area in which the wall was found (the photograph depicts the area running north from Cranbourne Place), still shows the type of properties in existence in the road. (fig. 17)



Fig. 15: Photo of brickwork in trench 20/22, Cherry Gardens Street

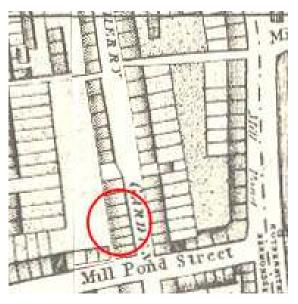


Fig. 16: Row of terraced houses along western side of Cherry Gardens Street on Horwood's 1813 Map



Fig. 17: Photograph of terraced houses on western side of Cherry Gardens Street, running north from Cranbourne Place, 1934 (from S. Humphrey, 'Southwark, Bermondsey and Rotherhithe in Old Photographs', 1995)

9.3 Dixons Alley:

Trench 21:

One long open-cut trench was observed running east-west along the centre of Dixons Alley, virtually along the whole length from the junction with Cherry Gardens Street to the junction with West Lane. This measured 22m in length, by 0.7m wide, and 0.95-1.3m deep. Dry-laid bricks formed the ground surface, and overlay a green service pipe which ran along the majority of the trench length. This meant that mixed service fills were uncovered throughout the trench. The western end of the trench, in particular, was very disturbed, with no archaeological features being observed. A series of deposits were, however, observed in the eastern end of the trench. This consisted of a dark black-mixed soil flecked with mortar and brick, overlying a compacted tile and mortar layer (possibly a pit as it only stretched for a width of 2m and for a depth of 0.25m). This overlay the probable 'natural' soil: a mid-brown-orange sandy-silt in the eastern part, and a more organic deposit to the west. Pottery was found in all of these deposits. No significant archaeological finds or features were observed.

One tile sample was taken from the lower compacted layer of this trench. This was identified as a peg-tile, fabric-type 2276, and was dated to approximately 1500-1900 (see appendix IV). Similar tiles were discovered during the 1986-1991 excavations of the Rotherhithe pothouse, where they may have been used to roof buildings associated with the pothouse.

One part of a clay pipe bowl was also uncovered. This probably dates from the late 17^{th} – early 18^{th} Century (see appendix V).

A large amount of pottery was uncovered in this trench. The pottery from the lower compacted tile layer consisted of two sherds of Border ware (1550-1700), four sherds of Post-Medieval redware (1580-1900), one piece of Kiln prop (1550+), four sherds of English tin-glazed ware (1600-1800), four sherds of Staffordshire-type Mottled Brown-Glazed Ware (1650-1800), and one sherd of London stoneware (1670-1900) – with the pottery specialist suggesting an overall date of the late 17^{th} Century. The trivet prop fragment (fig. 19) is particularly interesting as evidence for the Tin-Glazed Earthenware Manufacture. The pottery from the upper dark brown mixed deposit consisted of one sherd of Border ware (1550-1700), three sherds of Post-Medieval redware (1580-1900), one sherd of English tin-glazed ware (1600-1800), and one sherd of Chinese porcelain (1580 – 1900) – giving an overall date of the 17^{th} Century. This trench is therefore particularly interesting in relation to the mid-late 17^{th} Century pottery manufacture that was presumably taking place, particularly because of the pieces of kiln prop, trivet prop fragment, English tin-glazed ware, and the peg-tile.



Fig. 18: Photo of trench 21, near the eastern end of Dixon's Alley



Fig. 19: Photo of trivet prop fragment from trench 21

9.4 Paradise Street:

Trench 23:

One long trench was observed on the southern side of Paradise Street, running from the south-eastern corner of the junction with Paradise Street. This measured 25m in length by 0.55m by 1.25-1.3m. A modern road-surface (tarmac over granite cobbles over concrete) was observed to a depth of 0.45m.

A huge masonry foundation, probably part of the western foundation for the Mill Pond Bridge or the sluice associated with it, was then uncovered. Deep dumping was also observed either side of this, which was mid-brown and cleaner to the west (possibly land fills), and darker-brown/black to the east (possibly river fills).

The bricks in this masonry structure were well-made handmade red and redorange bricks (and the occasional yellow brick), measuring approximately 110mm X 60mm X 21mm. Fourteen courses to the limit of excavation were observed, in a mainly header bond. There was a slight difference between the construction of the foundation in the upper and lower half of the structure, with the lower seven courses having more purple bricks and stretchers and a greener sandier mortar, than the upper half which had more stretchers and which was set within a white chalky lime mortar.

Three brick samples were taken from the lower part of the bridge-base. These were identified as fabric-type 3032, and had early shallow frogs. They were set within a light grey-yellow mortar with frequent lime, shell, charcoal and quartz inclusions. They were dated to approximately 1690-1730 (see appendix IV).

Two brick samples were taken from the upper part of the bridge-base. These were identified as fabric-type 3035 and 3032 respectively. They were both frogged, and set within a white lime/sand mortar with quartz and charcoal inclusions. They were dated to approximately 1780-1850 (see appendix IV).

A total of 2.43m length of wall was recorded, with a maximum width of 0.66m (running into the section to the north), and a height of 1.05m (starting at 0.45m beneath the ground-surface, 3.35mOD, down to 1.5m beneath the ground-surface, 2.3mOD). Large stones were rammed into the ground adjacent to the eastern edge of the foundation, at a depth of 1.46m beneath the ground-surface (2.34mOD). This may have been to protect the bridge/sluice from the water.

The foundation was located approximately 12.4m east of the western end of the trench (i.e. 12.4m east of the junction with West Lane). It was also approximately 3m north of the southern kerb line of Paradise Street).

One sherd of 19^{th} Century 'Ironstone' china (1800-1900) was uncovered during cleaning up of this area. Another piece of Westerwald-type stoneware (1590-1800) was uncovered from the upper part of the bridge-base, probably from the 17^{th} Century. Two pieces of Post-Medieval redware (1580-1900), one piece of English tin-glazed ware (1600-1800), three sherds of Chinese porcelain (1580 –1900), and twenty-two sherds of Creamware (1740-1880) – all of which suggest a mid-18th Century date – were uncovered in the lower part of the bridge-base. Furthermore, part of a clay pipe bowl was recovered from the lower part of the bridge-base, which probably dates to the late 17^{th} – early 18^{th} Century (see appendix V). Another piece of Post-Medieval redware (1580-1900) and 'Ironstone' china (1800-1900) were uncovered in the stone filling on the eastern side of the bridge-base, probably both of 19^{th} Century date.

The 'Mill Pond Stream' ran along the eastern side of West Lane, and is depicted on the earliest maps such as Rocque in 1746 (fig. 26). It is likely that this followed the route of a natural channel (which existed in the prehistoric period as a

channel between Bermondsey and Rotherhithe gravel 'eyots'). This was probably canalised and utilised at a later date (by at least the mid-18th Century).

This mill-stream was utilised for industrial purposes by at least the mid-18th Century. Many historic maps give this impression, such as Horwood's 1813 Map which depicts the stream running into a 'Hoziers Mill' at its northern end, the 1843 Valuation Plan of St Mary's Parish Rotherhithe which depicts the stream running into a 'Mill', and the First Edition 25inch OS Map which depicts the stream as running into a flour mill at its northern end (fig. 28). Loveday's London Waterside Surveys (1857) (fig. 27) provides a detailed indication of later industrial activity at the northern point of the mill stream. The stream runs into Perks's Steam Flour Mill (labelled H – Q), occupied by Messrs. Perks (millers). By this date the mill was clearly steam driven, as the stream is described as "Formerly a Mill Stream", and a stoke hole is depicted.

The First Edition 25inch OS Map is particularly useful in giving a more detailed indication concerning the layout and possible role of the bridge itself (fig. 26). Here the mill pond is depicted as being far wider south of the bridge, before it narrows just before it reaches the bridge and continues in a narrow channel northwards. A line is drawn across the stream just south of the bridge, and labelled 'sluice'. The sluice itself is not depicted on the 1897 OS Map, although the stream gets substantially slimmer to the north of the bridge, suggesting that the sluice was still in operation. There is no definitive evidence for the existence of the sluice before the late 19th Century, however both the 1843 Valuation Plan of St Mary's Parish Rotherhithe and Horwood's 1813 Map depict the stream as substantially slimmer to the north (fig. 26). It is therefore possible that the sluice was constructed in the mid-late 18th Century or early 19th Century, possibly when the stream was first utilised for industrial purposes and there was a need to control the water-flow.

Some artistic representations of the bridge exist. For example, Buckler's 1826 drawing (fig. 24) depicts the bridge as consisting of a single arch over the stream. The c.1902 watercolour of the Mill Pond in Paradise Street (fig. 25) also depicts the bridge in this way, but with the level of water in the mill-pond apparently far higher, possibly because of the actions of the sluice.

The 1902 watercolour states that the Mill Pond was infilled in 1902. It is possible that the cartographic evidence supports this. It is difficult to judge whether or not the stream is depicted on the 1916 25inch OS Map, but by 1934 it had definitely been infilled and built over (with the 'Millpond Estate' to the north of Paradise Street).

The bridge-base uncovered in trench 23 appears to have been made in two stages – the lower dating to the late 17^{th} – early 18^{th} Century, and the upper dating to the late 18^{th} – early 19^{th} Century. This suggests that the bridge may have been rebuilt in the late 18^{th} – early 19^{th} Century. It could be postulated, furthermore, that this rebuild was associated with the construction of the sluice and intensified industrial use of the stream. The upper part of the structure uncovered in the trench may therefore have been part of the sluice.

It is difficult to ascertain exactly which bit of the bridge was uncovered in trench 23. Nonetheless, it seems most likely that this formed the western side/south face of the bridge/sluice. It seems surprising that the eastern side was not uncovered, however it may have only just been missed, or been just beneath the excavated depth of the trench.



Fig. 20: Photo of Mill Pond Bridge, trench 23, Paradise Street, looking approximately east. The stream would have flowed from right to left across the upper part of this picture, with the main section of brickwork forming the south face of the bridge/sluice abutment.



Fig. 21: Photo of Mill Pond Bridge, trench 23, Paradise Street



Fig. 22: Photo of Mill Pond Bridge, trench 23, Paradise Street, looking west

Fig. 23: Photo of Mill Pond Bridge, trench 23, Paradise Street





Fig. 24: 1826 Painting of Mill Pond Bridge, John Buckler (Southwark Local Library, P131068)



Fig. 25: 1902 watercolour of the Mill Pond, Paradise Street (Southwark Local Library, P22635)

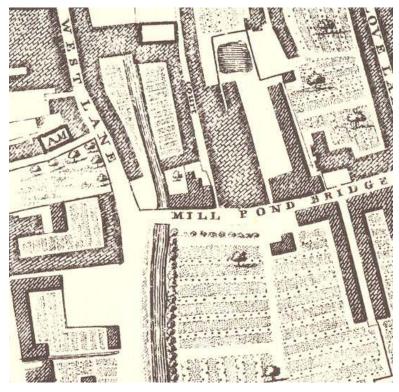


Fig. 26: Depiction of 'Millpond Bridge' on Rocque's 1746 Map

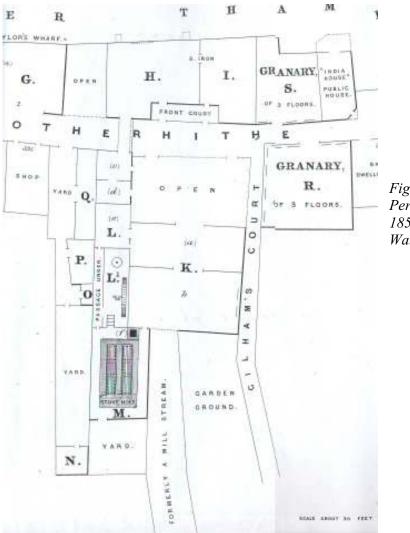


Fig. 27: Depiction of Perks's Flour Mill on 1857 Loveday's London Waterside Surveys



Fig. 28: Depiction of 'Millpond Bridge' on OS First Edition 25inch Map

Trench 24:

One trench on the northern side of Paradise Street, running east from the junction with West Lane, was observed. This measured 30m X 0.3-0.4m X 1.15-1.55m. This revealed a modern road-surface (tarmac over concrete) for a depth of 0.4m. This overlay a stony-gravelly silty-sand, which varied from a dark-brown to yellow-brown colour, with ceramic building material inclusions, down to a depth of 1.2-1.3m. This overlay a dark compact silty layer (c.1.94mOD), with lots of pottery – probably a 17th Century ground-surface. This overlay the 'natural', observed in the eastern end of the trench at a depth of 1.55m (1.64mOD), which was a yellow-brown alluvium.

Two brick features were exposed in this trench. One of these consisted of two sections of walls running out of the northern section, and may have formed the southeast corner of a building. Two brick samples were taken. They were identified as fabric-type 3032, and were unfrogged bricks with sunken margins, and set within a vellow-grey lime/sand mortar with lime and quartz inclusions. One of these was over-fired and one was a misshapen waster. They were dated to approximately 1630-1730 (see appendix IV). This wall corner was located 3.6m east from the wall at the eastern end of Millpond Estate. The two walls were positioned at an angle of approximately 80° from each-other, in a similar way to the depiction of the buildings in this location on the 1st Edition 25inch OS Map and 1843 Valuation Plan for the Parish of St Mary Rotherhithe (fig. 30). This angle can be identified in cartographic evidence up to the 1934 OS Map, when the 'Millpond Estate' had been constructed. The western-most of these two walls had good-facing bricks, so may have been the exposed face at the level of the 17th Century ground-surface. The western-most of these walls had a rubble foundation, whereas there was a slab at the base of the eastern wall.

The second brick feature was located 3.15m east of the first brick feature. This consisted of a brick wall running out of the southern section at an angle. It was truncated to the west, and runs into the section in the east. The base of this was not reached. Approximately 2.5m of this was observed in length, and 0.45m in width. Three brick samples were taken. These were identified as fabric-type 3046 and were unfrogged bricks, two of which had sunken margins. They were set within a yellow-grey lime/sand mortar with frequent lime inclusions, and dated to approximately 1630-1700. They were also identified as clamp wasters, misshapen, and with stack marks visible on one of the bricks (see appendix IV). The brickwork probably represents the front wall of another building facing onto the northern side of Paradise Street, in this case looking at the inside face of the structure.

In the dark compact silty layer a large amount of pottery was uncovered. This consisted of one piece of Romano-British pottery (residual), one piece of Border ware (1550-1700), two pieces of Post-Medieval redware (1580-1900), four pieces of Kiln prop (1550+), fifty-five pieces of English tin-glazed ware (1600-1800), two pieces of Metropolitan slipware (1630-1700), and one piece of Staffordshire-type Mottled Brown-Glazed Ware (1650-1800). The overall dating of these is postulated to be the early 18th Century – suggesting that this layer may have formed a mid-17th – early 18th Century land surface. Interestingly, this layer, with similar pieces of pottery, was found in trenches all along the northern side of Paradise Street. Furthermore, the pieces of kiln prop discovered in this trench, including two trivet-props (fig. 32) and a two probable saggar fragments, along with the sheer quantity of English tin-glazed ware, act as evidence for the mid-17th Century delftware production which was taking place nearby.

The dating of these walls to the mid-late 17th Century/early 18th Century supports the idea that this area was developed in the 17th Century – as is reflected in early maps such as Newcourt's 1658 Map. This idea is further supported by the amount of 17th Century pottery found, and the possible 17th Century land surface. It is possible that the walls in this trench were built on this land surface. It is, furthermore, possible that the close proximity of these walls to the presumed location of the 17th Century pothouse means that these buildings could have been part of this pothouse.



Fig. 29: Photo of western brick feature, trench 24, Paradise Street, looking north

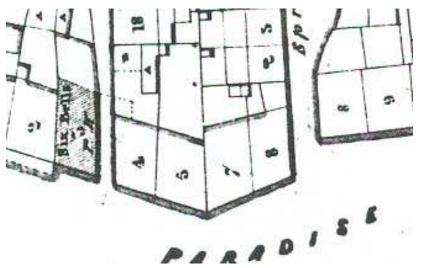


Fig. 30: Depiction of buildings on 1843 Valuation Plan of the Parish of St Mary Rotherhithe. The south-east corner of No.5 is probably the western brick feature in trench 24



Fig. 31: Photo of eastern brick feature, trench 24, Paradise Street, looking south



Fig. 32: Photo of trivet-prop from trench 24

Trench 25:

Another trench was observed on the northern side of Paradise Street, running east of the previous trench along to the junction with King Edward III Mews. This measured 30m in length, 0.55m in width, and 1.4m in depth. A modern road-surface (tarmac over concrete) was observed for a depth of 0.36-0.38m. This overlay a darkbrown silty sand with gravel and ceramic building material inclusions for a further 0.45-0.5m, over a dark black layer with pottery which was 40-70mm thick (at a depth of c.2.33mOD) – apparently a continuation of the 17th Century ground-surface recorded in the previous trench (fig. 34). The surface sealed a smooth clayey deposit with chalk flecks (at a depth of 2.26mOD, down to the base of the trench at 0.53mOD). This was possibly a waterlain deposit, and may reflect one of the recorded episodes of flooding in this area. A modern brick drain was observed in the western part of the trench.

Two brick walls were observed running north-south across the trench approximately 1m from the eastern end of the trench. These were built on top of the thin black layer. The eastern one of these consisted of red-orange bricks, roughly coursed, and set within a yellow-mortar. Three brick samples from this wall were taken. They were identified as fabric-type 3032, and were all unfrogged bricks with sunken margins. They were all set within a yellow-grey lime/sand mortar with frequent lime inclusions, and dated to approximately 1630-1700 (see appendix IV). Three courses of this survived on the southern side, and it was approximately 2 bricks wide (0.55m). It measured 0.22m in height, with its base at a depth of 0.89m (2.32mOD).

The second brick wall was 1m west of the first, and consisted of red bricks, roughly coursed, and set within a white mortar. Three brick samples from this wall were taken. They were identified as fabric-type 3065, and were all unfrogged bricks,

one of which had sunken margins, and one of which was over-fired. They were all set within a white lime/sand mortar with charcoal and brick dust inclusions, and dated to approximately 1600-1750 (see appendix IV). More of this survived, with approximately 7 courses on the southern side, and it being approximately 4 bricks wide (0.35m). This measured 0.55m in height, and descended to a depth of 0.95m (2.26mOD). Between these two walls was a substantial amount of brick-rubble with lots of pottery, set within a clayey soil.

These brick walls, along with those noted in other trenches along the northern side of Paradise Street, appear to date from the mid-late 17th Century. This reflects the relatively early development of this area, as is depicted on Rocque's 1746 Map which depicts a completely developed Paradise Street. The buildings may have been associated with, or part of, the 17th Century pothouse which was operating in this area. Furthermore, it seems likely that the walls in this trench were built on the 17th Century dark black surface-layer.

More pottery was uncovered in the continuation of the compact dark layer in this trench. This consisted of one Post-medieval saggar (1550+), seventeen fragments of English tin-glazed ware (1600-1800), and one fragment of London stoneware (1670-1900). These suggest an overall date of the late 18^{th} Century – and that this context was a continuation of the land surface seen in the previous trench. The Post-medieval sagger would have been used to fire pottery, and is further evidence for pottery manufacture in this area.

Further pottery was also uncovered in this trench, and although it is recorded as being in association with the eastern brick feature, it was probably also part of the dark layer. This consisted of 'Tudor green' ware (1380-1550), two pieces of Post-Medieval redware (1580-1900), fourteen Post-medieval saggars, (1550+), and ten fragments of English tin-glazed ware (1600-1800). These give a general date of 17th - 18th Century, and provides further evidence for the mid-17th Century delftware production in the area.

Moreover, one piece of tin-glazed ware recovered from this trench (fig. 35) can be directly identified as a floor-tile with a polychrome design, and as part of Rotherhithe design 14, style 1. A direct parallel to this was uncovered during the 1986-1991 excavations of the pothouse (fig. 36). This appears to have directly used a Dutch design, as a Dutch tile (1620-1650) with this design also exists.



Fig. 33: Photo of brick features, trench 25, Paradise Street



Fig. 34: Photo showing black 'surface' layer, trench 25, Paradise Street (running approximately midway across the scale)



Fig. 35: Photo of English tin-glazed ware from trench 25



Fig. 36: Floor tile with polychrome design (Rotherhithe design 14, Style 1), found during the 1986-1991 excavations of the pothouse (Tyler et al, 2008)

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Trench 26:

Another trench was observed on the northern side of Paradise Street, continuing east from the previous trench from the junction with King Edward III Mews up to the junction with Cathay Street. This measured 27m in length, by 0.4-0.45m in width, by 1.3m depth. A modern road-surface (tarmac over concrete) was observed. This overlay a dark black clayey deposit, with pottery in it, presumably a continuation of the 17th Century ground-surface. Greeney-clay was observed at the base of the trench. A large number of services were revealed at the far eastern end of the trench, at the junction with Cathay Street.

Brickwork was revealed in both sections approximately 11m from the western end of the trench. Only a few bricks survived, up to a width of approximately 0.6m, and an observed depth of *c*.0.5m (2.88mOD) (but continuing beneath the base of the trench for at least one course). The bricks were roughly coursed, and set within a weak green mortar. Two brick samples were taken. They were identified as fabrictype 3033, and were unfrogged bricks, one of which had sunken margins. They were set within a yellow-grey lime/sand mortar with frequent lime inclusions, and dated to approximately 1630-1700. One of them was slightly vitrified and misshapen (see appendix IV). To the east of this brickwork was a rubbley-backfill, consisting of a light brown soil with brick rubble and gravel inclusions. This may have been a basement fill. The approximate location of this on Rocque's 1746 Map places it on the western corner of the large building situated on the corner of Love Lane (now Cathay Street) and Mill Pond Bridge (now Paradise Street) (fig. 37). The fact that the bricks uncovered in this trench run into the northern section suggests that they may have formed the corner/west wall to this building.

Pottery from the dark compact layer in this trench (a continuation of the 17^{th} Century ground-surface) consisted of one sherd of Border ware (1550-1700), two sherds of English tin-glazed ware (1600-1800), and one sherd of Staffordshire-type Mottled Brown-Glazed Ware (1650-1800) – all of which suggest a mid- 17^{th} Century date, and support the dating evidence gleaned from the bricks. A clay pipe bowl was, however, also uncovered from this layer, and appears to date *c*.1840-1880 (see appendix V). This may represent later interference in this context.

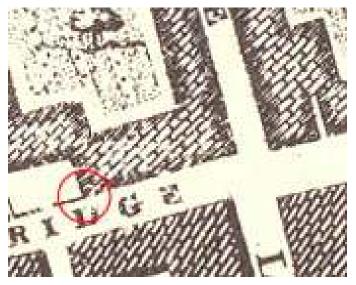


Fig. 37: Depiction of large building at corner of Paradise Street and Cathay Street on Rocque's 1746 Map

Trench 27:

A further trench was observed on the northern side of Paradise Street, continuing east from the junction with Cathay Street. This measured approximately 13m X 0.5m X 1.2-1.3m. A modern road-surface (tarmac over concrete) was observed for a depth of approximately 0.3-0.35m. This overlay a wet black siltygritty soil with pot, for c.0.55m (at a depth of 3.15mOD). This overlay a cleaner green wet sandy-silt, with lots of fragmented roof tile, observed at a depth of 0.9-0.95m beneath ground-surface (2.6mOD). This may have been a waterlaid alluvium, possibly associated with one of the historical episodes of flooding in the area. Tile was found on the top of this layer, and may have been used to firm it up as a surface. It is possible that this was the layer/surface that was observed in trenches to the west of this along Paradise Street, although this is difficult to confirm. One peg-tile was recovered, and was identified as fabric-type 2271, and dated to 1180-1550 (see appendix IV). This suggests that this layer may have been used as a surface in the medieval period, and followed a medieval episode of flooding. Below this was a cleaner alluvium deposit (presumably 'natural'), over a gravelly-soil at the base of the trench.

Pottery was uncovered in the dark silty-gritty soil. This consisted of one sherd of English tin-glazed ware (1600-1800) – probably of 17th Century date.



Fig. 38: Photo of trench 27, Paradise Street

Trench 33:

One more trench was observed on the northern side of Paradise Street, at its far eastern end running east from the end of the previous trench, across the junction with Fulford Street, and up to the eastern end of the road. The section which ran east from the junction with Fulford Street was recorded, and measured 25m X 0.45m-0.5m

X 1.1-1.8m. A modern road-surface (tarmac over concrete) was uncovered for a depth of 0.37-0.38m. This overlay a number of dumped layers: a mixed light compact soil with ceramic building material and gravel for a depth of 0.24m, over a band of black soil for 0.2-0.25m, over an alluvium type silty-sand with numerous finds (from a depth of c.0.85m beneath the ground-surface). This overlay mid-olive-green silty-sand alluvial deposits uncovered at the very bottom of the trench in the western end of the trench (c.1.5m beneath ground-surface) – which may have been related to the historical episodes of flooding observed in the previous trench.

Pottery from the alluvium silty-sand deposit was uncovered, and consisted of two fragments of Spanish Tin-glazed ware (1480 - 1700) (fig. 39), one fragment of Border ware (1550-1700), and one fragment of Post-Medieval redware (1580-1900). These gave an overall date of the late 16th Century. Furthermore, a clay pipe bowl was also recovered from this deposit, and dates to *c*.1600-1640 (see appendix V). Two tiles were also recovered from this deposit (one of which was a curved tile), and were identified as fabric-type 2276, and was dated to 1500-1900 (see appendix IV). It is possible that these may have been produced in the pothouse nearby.



Fig. 39: Photo of Spanish Tin-Glazed Ware from trench 33

9.5 Cathay Street:

Trench 28:

One trench was observed on the eastern side of Cathay Street, running south from the junction with Paradise Street. This measured 12m in length, by 0.42m in width, by 1.14m in length. A modern road-surface (tarmac over concrete) was observed over relatively modern disturbed ground, consisting of brick rubble, mortar patches, and services and associated service backfills. No archaeological finds or features were observed.

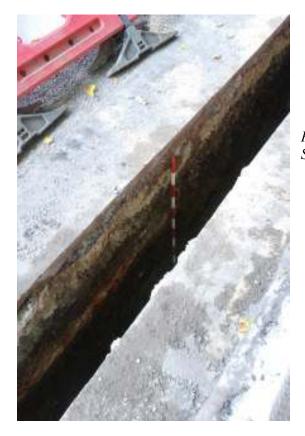


Fig. 40: Photo of trench 28, Cathay Street

Trenches 29-31:

Three further trial pits were observed on the eastern side of Cathay Street south of Paradise Street. These measured approximately $3m \times 1m \times 1m$. A modern road-surface (tarmac and concrete) was observed for a depth of 0.4m, overlying a dark brown-black silty soil, with some clay and sand, flecked with small zones of chalk, mortar deposit, and tile and brick fragments (at a depth of *c*.2.92mOD). This may be an alluvial or flood deposit, and may represent marshy land and episodes of flooding in the historic periods.

Trench 32:

One further trench was observed on the eastern side of Cathay Street, south of Paradise Street running north from the junction with Jamaica Road. This measured 11m in length, by 0.6m, by 1.4m (depth). A modern road-surface (tarmac and

concrete) was observed for a depth of 0.4m, overlying a dark brown-black silty soil, with some clay and sand, flecked with small zones of chalk, mortar deposit, and tile and brick fragments (similar to that in the previous three trial pits). This deposit had an alluvial feel to it, and may also have been an alluvial or flood deposit.

<u>SAM – King Edward III's Manor House:</u>

The northern half of Cathay Street (north of Paradise Street), and the part of Bermondsey Wall East which runs west from the junction of Cathay Street for approximately 60metres, is designated as a 'Scheduled Ancient Monument' (fig. 41). This refers to King Edward III's Moated Manor House (LO164), as discussed above. Scheduled Ancient Monument Consent was gained before work took place in this area, at least one archaeologist was present at all times during work in this area, and all trenches were carefully monitored.



Fig. 41: Plan of the Scheduled Ancient Monument Area in Cathay Street and Bermondsey Wall East (English Heritage)

Trench 39:

One pit was observed on the western side of Cathay Street, at the northern corner of Paradise and Cathay Street. This measured 2.47m X 0.93m X 1.3m. Tarmac over cobbles over concrete was observed to a depth of 0.35m. This overlay a layer of mottled red brick and mortar to a depth of 0.55m, over a mottled black ash silty-clay deposit with mortar and tile inclusions to a depth of 0.86m (2.64mOD), over a greener mixed clay deposit. At 1.22m beneath the ground surface (2.28mOD) there was a small patch of puddled chalk, overlying a sandy orange-brown mottled clay. This may have been some form of earlier land surface. The earlier tile, and flint from this deposit, combined with the deeper level at which it was found, suggests that this may have been a land surface earlier in date than the 17th Century land surface found along Paradise Street. Instead, it may have been a 16th Century surface.

Pottery from the basal deposit here included one fragment of Border ware, (1550-1700), and one fragment of Post-Medieval redware (1580-1900) – which suggest a late 16th Century date. Tile from this deposit was identified as fabric-type 2271, and dated to approximately 1180-1550 (see appendix IV). Flint from this deposit was knapped, and presumed to be from the medieval period (see appendix IV). IV.

No significant *in situ* deposits were therefore noted in this trench. The possible Medieval finds, including the knapped flint and tile, may, however, reflect some of the earlier activity that took place in this area – possibly in relation to King Edward III and his Manor House.



Fig. 42: Photo of trench 39, Cathay Street

Trench 40:

Another pit was observed on the western side of Cathay Street, *c*.7m north of the junction with Paradise Street. This measured 1.3m X 0.65m X 1.3m. Tarmac over granite cobbles over concrete was observed to a depth of 0.35m. This overlay a mixed black deposit with ash, mortar, brick, tile, and pebble inclusions, which was probably a reworked made-ground deposit. At 0.55m a greener mixed clay deposit was observed, which may have been an alluvium-type deposit, possibly a flood deposit. At 1.3m a mottled orange clay and sand deposit was observed, however this was not undisturbed as lumps of concrete were still uncovered in this deposit.

No significant archaeological features or deposits were therefore uncovered. Instead, the majority of the trench appeared to have been disturbed in more modern times, as witnessed by the lumps of concrete at the base of the trench.



Fig. 43: Photo of trench 40, Cathay Street

Trench 37:

A further pit was observed in the northern part of Cathay Street, opposite the entrance to Nos. 1-8 Cathay House. This measured 1.75m X 1.2m X 1.25m. A modern road-surface (tarmac over concrete) was observed. Services ran east-west across the eastern section, with associated backfills. Layers of mortar, brick rubble, and green-alluvium-type deposits were observed in the eastern section – similar to those observed in other pits in Cathay Street.

A brick wall was uncovered on the western side of the pit. This ran northsouth and was located 2.97m east from the western wall of King Edward III Mews. It was located 0.35m beneath the ground-surface (3.39mOD), and ran down into the base of the trench (2.49mOD) (and continued beyond the base of the trench). The middle part of it was cut more deeply by two large services that ran east-west. It was a regularly coursed wall, with six courses down to where it was truncated by the services, and a further five courses down to the limit of excavation. The bricks were mainly red in colour, although there were some darker purple and yellow bricks. They were set within a hard grey coarse mortar. It measured approximately 0.46m in thickness, and 0.8m in height. Its construction trench appears to have been cut into the earlier deposits.

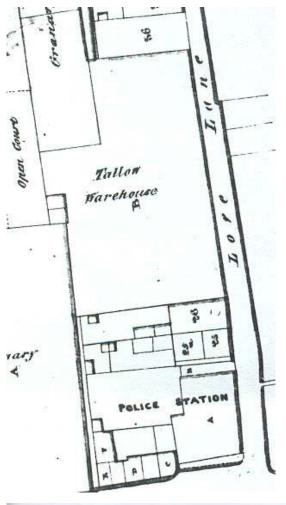
A large warehouse was constructed in this location in the mid-19th Century (but not depicted on Horwood's 1813 Map). The 1843 Valuation Plans of St Mary's Parish Rotherhithe first depict this (fig. 45) as a 'Tallow Warehouse' (tallow is a rendered form of beef or mutton fat which was often used to make soap and candles). Loveday's 1857 Waterside Surveys just describe it as a 'Warehouse', but by 1878 (First Edition 25inch OS Map) it is described as 'Granaries'. Later, in the 1934 OS Map, it is described as a 'Tobacco Warehouse'. Some form of warehouse or large building was depicted on all maps up to and including 1968. Furthermore, the 1937 photograph of Cathay Street (fig. 46) depicts the warehouse along the western side of the street, with terraced houses along the east. The wall uncovered in this trench was probably a basement wall associated with this large building/warehouse.

The existence of this large warehouse, furthermore, may explain why the Museum of London's excavations in 1985-1994 in the area around King Edward III Mews found a series of truncated and disturbed deposits. The highest archaeological deposits in this area were uncovered at c.1.65mOD (c.2m beneath the present ground-surface) because of the existence of this later warehouse.

One sherd of English tin-glazed ware (1600-1800) was uncovered in this trench, and was probably of 17^{th} Century date and related to the mid- 17^{th} Century pottery factory.



Fig. 44: Photo of trench 37, Cathay Street



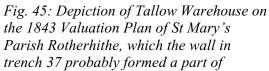




Fig. 46: Photograph of warehouse and terraced houses in Cathay Street, 1937 (from S. Humphrey, 'Southwark, Bermondsey and Rotherhithe: A Second Selection', 1997)

Trench 36:

Another pit was observed in the northern part of Cathay Street, directly on line with the northern frontage of the present terraced houses facing onto the open area of King Edward III's Manor House. This measured $1.6m \times 0.8m \times 1.5m$. A modern road-surface (tarmac over concrete) was uncovered, over various layers of 'dumping' and made-ground deposits. For example, layers of light brown gritty soil, darker black deposits, and mid-brown soil with CBM inclusions were observed. These overlay a yellow-brown silty-clay with pieces of chalk and shell, from a depth of c.1m beneath the ground-surface to the base of the trench.

A north-south brick wall was uncovered in the eastern section. This was located 1.55m from the eastern kerb and c.0.43m beneath the ground-surface (3.41mOD). It consisted of red bricks set in courses, within a grey lime mortar, and was c.0.46m thick. It is possible that this was part of the same wall as uncovered in the previous pit (opposite the entrance to Nos. 1-8 Cathay House), particularly because it was found at a similar sort of level (3.41mOD in this trench, and 3.39mOD in trench 37), and that it therefore formed part of the wall of the warehouses/granaries.

Pottery was recovered from the spoil heaps adjoining this trench (and trenches 34 and 35 – the exact provenance is unknown), although all the exposed deposits consisted of made-ground into which the brick wall was cut. The pottery consisted of one fragment of Early Surrey Coarseware (mid 11th – late 12th Century), one fragment of Kingston-type ware (1230-1400), one fragment of Border ware (1550-1700), ten fragments of Post-medieval redware (1580-1900), fifteen fragments of English tinglazed ware (1600-1800), one fragment of Chinese porcelain (1580 -1900), one fragment of Staffordshire slipware (1650-1800), and three fragments of London The earlier pieces of pottery (pre-15th Century) are stoneware, (1670-1900). interesting here, and reflect medieval activity on the site – possibly related to King Edward III's Manor House. Despite this, the general date for this context based on the pottery evidence was attributed to the late 17th Century. A peg tile was also recovered from these spoil heaps, and was identified as fabric-type 2276, and dated to 1500-1900 (see appendix IV). It is possible that this may have been roofing, possibly for the 17th Century pothouses (as similar pieces were found during the 1986-1991 excavations of the pothouse). Furthermore, a clay pipe bowl dating to c.1730-1780was recovered from the spoil heaps, and reflects the continued use of the area into the 18th Century (see appendix V).

Trench 35:

Another pit just to the north of the previous pit, in the northern part of Cathay Street, was observed. This measured 1.35m X 0.47m X 1m. A modern road-surface (tarmac over concrete) was observed, overlying layers of 'dumping' and made-ground deposits. For example, a light brown-yellow gritty soil with gravel and CBM inclusions was observed, over a thin dark black layer, over a thick mortar layer with brick and chalk inclusions, over a darker brown cleaner soil that ran to the base of the pit.

Pottery from this trench (and trench 34 – the exact provenance is unknown) consisted of one fragment of Green-glazed post-medieval slip-coated redware (1480-1650), two fragments of Border ware (1550-1700), two fragments of Post-medieval redware (1580-1900), three fragments of English tin-glazed ware (1600-1800), one fragment of Staffordshire-type Mottled Brown-Glazed Ware (1650-1800), and one fragment of London stoneware (1670-1900). This gave an overall date of the late 17th

Century, and further reflects the activities of the 17^{th} Century pottery factory. Furthermore, part of a clay pipe bowl was recovered, and approximately dated to the late 17^{th} – early 18^{th} Century (see appendix V).

Trench 34:

A further pit was observed just to the north of the previous pit, in the northern part of Cathay Street. This measured 1m X 0.5m X 1m. A modern road-surface (tarmac over concrete) was observed, over layers of 'dumping' and made-ground deposits. For example, a thin dark black layer was observed, over a dark brown silty-sand with CBM inclusions, and a lighter layer with tile, CBM, chalk, and brick inclusions.

See above for pottery evidence.

Trench 41:

Opposite the entrance to Nos.17-24 Cathay House, near the northern end of Cathay Street, another trench was observed. This measured 1.3m X 0.4m by 1m. A modern-road surface was revealed (tarmac over concrete), which stretched down to a depth of 0.5m in the eastern section, and down to the base of the trench in the western section. Below the concrete in the eastern section was a mid-brown silty-sand with pebbles, mortar, chalk and brick rubble down to the base of the trench, all of which was very disturbed.

A brick wall was observed in the base of the trench. This ran north-south along the trench, and was approximately 0.23m wide. Near the northern end of the trench this formed a junction with an east-west wall that ran into the western section. The wall consisted of red bricks and yellow stock bricks. Three brick samples were taken. They were identified as fabric-types 3033, 3032, and 3035 respectively, and were all unfrogged bricks set within a light grey lime/sand mortar with moderate lime, quartz and charcoal inclusions. They were dated to approximately 1780-1850 (see appendix IV). The wall consisted of nine courses, from c.0.55m beneath the groundsurface (3.5mOD), down to c.1.05m beneath the ground-surface (3mOD). It is possible that the wall forms a junction with the bricks that run into the western section 0.25m from the northern end of the trench. This may form the building frontage of a line of terraced houses. These are depicted on Horwood's 1813 Map, and all subsequent maps up to the 1950s (fig. 48), when the large warehouse extended to cover this area. The bricks running into the western section were possibly part of an internal wall.



Fig. 47: Photo of trench 41, Cathay Street

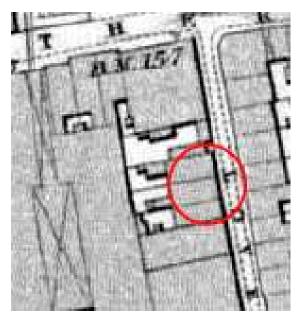


Fig. 48: Depiction of terraced houses in First Edition 25inch OS Map, which the wall in trench 41 possibly formed a part of

Trench 38:

One more trench was observed in the northern part of Cathay Street, in the centre of the road at the junction with Bermondsey Wall East. This measured 2.45m X 1.1m X 1.3m. A modern road-surface, consisting of cobbles over concrete, was observed. The eastern section was heavily disturbed, however various layers of made-ground and dumping were observed in the Western section. A mid-light brown silty-sand with pebble inclusions was observed, overlying a thin band of black soil, over a creamy-white mortar layer with chunks of brick rubble, over a layer of brick rubble and pebbles and CBM in yellowy soil, over a light brown silty-sand with chalk flecks and pebble inclusions.



Fig. 49: Photo of trench 38, Cathay Street

9.6 Bermondsey Wall East:

Trench 42:

One trench was observed on the northern side of Bermondsey Wall East, opposite the junction with Cathay Street and directly outside 'The Angel' Public House. This measured $2.3 \text{ m} \times 1.4 \text{ m} \times 1.4 \text{ m}$. A modern road-surface, consisting of cobbles over two layers of concrete (one above and one below a plastic layer), to a maximum depth of 1m in the southern and western sections. Many pipes and services ran through this trench, one in the northern trench at a depth of 0.55m beneath the ground-surface, and one in the southern section 0.92m beneath the ground-surface. These were surrounded by a dark brown-grey silty sand with frequent pebble inclusions and occasional CBM – a probable made-ground deposit. A large lump of yellow stock brick was also uncovered in the northern section towards the western end of the trench. A cleaner sandy-gravelly soil was uncovered nearer the base of the trench, with bits of CBM, oyster shell, and pottery in it. Below this was a darker silty soil, possibly some form of dumped layer, with a layer of oyster shell beneath this (which may have been laid on as a surface).

Pottery from the dumped layers at the base of the trench consisted of one fragment of Kingston-type ware (1230-1400), three fragments of Post-medieval redware (1580-1900), and one fragment of London stoneware (1670-1900). This gave an overall date of the late 17th Century. One floor-tile was also recovered from this deposit, which was identified as fabric-type 1811, heavily abraded, had a lead glaze residue, and was dated 1340-1390 (see appendix IV). The earlier pieces of pottery and tile give an indication of the medieval activity in this area associated with Edward III's Manor House. Most interesting is the floor-tile which is dated 1340-1390, as Edward III supposedly rebuilt the Manor House in 1353-61. It is possible that the tile may have been part of this rebuild.



Fig. 50: Photo of trench 42, Bermondsey Wall East



Fig. 51: Photo of Post-Medieval Redware sherd from trench 42

Trench 43:

Another trench was observed on the northern side of Bermondsey Wall East, between 'The Angel' Public House and the buildings to the west, opposite the remains of King Edward III's Manor House (still within the SAM area). This measured 1.7m X 0.9m X 1.6m. A modern road-surface (cobbles over concrete, both above and below a layer of plastic) was uncovered to a depth of 0.7m. This overlay a mortary brick rubble layer down to a depth of 1.06m beneath the ground-surface, over a mixed dark silty-sand with bits of chalk, mortar, and CBM in it.

Pottery from the mixed layer at the base of the trench consisted of one fragment of Border ware (1550-1700), one fragment of Post-medieval redware (1580-1900), two fragments of Werra Slipware (1580-1650) (fig. 53), and one fragment of Chinese porcelain (1580 -1900) – all of which gave an overall date of the late 16th Century, and therefore reflects later activity on the site rather than any medieval activity associated with Edward III.



Fig. 52: Photo of trench 43, Bermondsey Wall East



Fig. 53: Photo of Werra Slipware from trench 43

<u>SAM – King Edward III's Manor House:</u>

The area monitored which fell within the SAM Area associated with King Edward III's Manor House did not, therefore, reveal any substantial or significant remains associated with this. The occasional piece of medieval pottery and tile uncovered does, however, reflect some form of medieval activity in the area. In general, the archaeological evidence encountered in this area mainly consisted of post-medieval buildings cut into made-ground deposits.

Trench 44:

A further trench was observed on the northern side of Bermondsey Wall East, outside the eastern-most of the National Terrace (No.10). This measured 1.46m X 0.75m X 1.3m. A modern road-surface (tarmac over concrete) was observed to a depth of 0.45m, overlying several layers. For example, there was a light mortary layer, over a dark silty layer, over a layer of brick rubble, measuring 0.25-0.35m thick in total. This overlay a mid-brown gravelly-silty-sand, with occasional pockets of clay, CBM, and finds down to the base of the trench (and which continues beneath the limit of excavation). This was probably a made-ground deposit.

Pottery was recovered from the gravelly-silty sand at the base of the trench. This consisted of one fragment of English tin-glazed ware (1600-1800) (of probable 17th Century date). Two tiles were also recovered from this deposit, one of which was a peg tile, both of which were identified as fabric-type 2276, and both of which were dated 1500-1900 (see appendix IV). This therefore represents post-medieval activity in the area, including pottery manufacture, with it being possible that the peg tile acted as roofing for buildings associated with the pothouse.

Trench 51:

Another trench was observed on the northern side of Bermondsey Wall East outside No.6 National Terrace. This measured 1.69m X 1.18m X 1.33m. A modern road-surface (tarmac over cobbles over concrete) was observed overlying a mixed dark-brown silty-sand with pebbles and CBM inclusions.

One brick wall was observed in the northern and western section. This consisted of red brick, and was regularly coursed (mainly in stretchers) for six courses, and set within a cream lime mortar. Three brick samples were taken from the lower part of this wall. These were identified as fabric-type 3032, and were set within a white lime/sand mortar with quartz and charcoal inclusions. They were dated to approximately 1780-1850 (see appendix IV). The top of this was 0.76m beneath the present ground-surface (3.47mOD), and it stretched to 1.24m beneath the ground-surface (2.99mOD). It was 0.66m in width, and stretched for 1.06m from the western end of the trench (and continued into the western section). A robbing cut was observed above this, consisting of a lighter sandier looser deposit with lots of pebbles and CBM.

Beneath the wall in the western section was a clayey level – in which was some brick. One sample was taken, and was identified as fabric-type 3036. This was identified as a Dutch paving brick, and dated to approximately 1600-1800 (see appendix IV).

Another brick wall was observed in the northern section, in the eastern end of the trench. This consisted of red bricks, roughly coursed and set within a yellow lime mortar. Three brick samples were taken. They were identified as fabric-type 3032, and 3046, and were set within a yellow-grey lime/sand mortar with lime and quartz inclusions, and dated to approximately 1600-1730 (see appendix IV). The top of this wall was approximately 0.44m beneath the present ground-surface (3.79mOD), and it continued down to a depth of 0.66m beneath ground-surface (3.57mOD). It stretched for 0.6m from the eastern end of the trench. Directly beneath this was a dark black deposit, to a depth of 0.9m beneath the ground-surface (3.33mOD), overlying a lighter green clayey layer for 0.16-0.17m, over a layer of chalk. This wall may have been earlier than that in the northern and western section (as it used earlier bricks), with the wall to the west built against this, and subsequently partially robbed out.

Buildings in this location are first definitively depicted on Rocque's 1746 Map and are continuously depicted from this date. One large building, running east-west at this location, is depicted on Rocque's Map (fig. 55). It is possible that the wall in the northern section (dated by brick samples from 1600-1730) may be the remains of this building. By the mid-19th Century, on the 1843 Valuation Plan for St Mary's Rotherhithe a series of warehouses, mills, wharfs, and dwelling houses are depicted along the northern side of Bermondsey Wall East, with the building in this location described as a 'warehouse'. A dividing wall, separating the warehouse from a 'dwelling' to the west, is depicted on this map (fig. 56). It is possible that the wall in the western section of trench 51 (dated to the late 18^{th} – early 19^{th} Century) may represent this wall. Similar buildings are depicted on later maps in this location.

Drawings and photographs provide further evidence for the industrial focus of Bermondsey Wall East from the 19th Century. For example, George Scharf's 1827 drawing 'On the River Thames, Bermondsey' (fig. 57) shows the industrial development along the river. A 1975 photograph of Bermondsey Wall East (fig. 58) shows a series of large warehouses along the riverfront, which clearly existed up to this recent date.



Fig. 54: Photo of brickwork in trench 51, Bermondsey Wall East

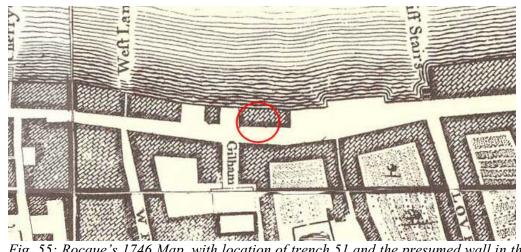
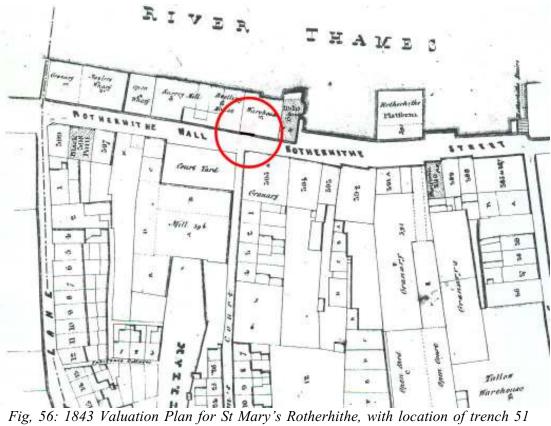


Fig. 55: Rocque's 1746 Map, with location of trench 51 and the presumed wall in the northern section marked



and the presumed walls marked



Fig. 57: George Schardf, 1827, 'On the River Thames, Bermondsey'. Location uncertain, but the open riverfront in the right foreground suggests that this may be taken just to the east of the present No.10 National Terrace



Fig. 58: 1975 photograph of Bermondsey Wall East, with Cherry Gardens Street in the foreground

Trench 45:

Another trench was observed on the northern side of Bermondsey Wall East, outside Nos.2 + 3 National Terrace. This measured 2.45m X 1.1m X 1.44m. A modern road-surface (tarmac over concrete) was observed for a depth of 0.31-0.33m. The northern section was heavily disturbed, consisting of a mixed backfill. Layers of made-ground deposits/dumped deposits/possible surfaces were observed. A layer of brick rubble and mortar was observed, over a darker black gravelly layer, over a lighter sandy-silt layer etc. A more compact green wet clay layer with chalk flecks was observed at the base of the trench, from c.1.05m beneath the ground-surface. It is possible that the higher deposits were occupation layers (as they were clearer and more clearly stratified), whereas the bottom layers were less clear and may have been dumped or made-ground layers.



Fig. 59: Photo of trench 45, Bermondsey Wall East

Trench 49:

A trench on the southern side of Bermondsey Wall East, outside the entrance to No1-11 Millpond Estate, was observed. This measured 2.4m X 1.15m X 1.3m. A modern road-surface (tarmac over concrete) was observed for a depth of 0.45m. This overlay a dark brown mixed soil with pieces of brick rubble and mortar, overlying a lighter sandier soil also with mortar and brick rubble.

A large brick wall was observed running north-south in the eastern section. This consisted of red bricks regularly coursed in an English bond, nicely finished, and set within a cream lime mortar. Seven brick samples were taken. They were identified as fabric-type 3033 and 3046, and were set within a light grey lime/sand mortar with lime, charcoal and quartz inclusions. They were dated to approximately 1450-1700 (see appendix IV). The wall was 12 courses deep, with the top being approximately 0.39m beneath the ground surface (3.84mOD), and continuing beneath the base of the trench (beneath 2.93mOD). The recorded north-south measurement of the wall was 2m (although it definitely continued), and the width 0.47m. This may have been part of a cellar wall.

Another brick feature was observed in the north-eastern corner of the trench, running east-west. It consisted of three courses, and was built on a timber baseplate. Two brick samples were taken. They were identified as fabric-type 3032, and were set within a light grey lime/sand mortar with lime, charcoal and quartz inclusions, and with a timber impression. It was dated to approximately 1780-1850. The top of the wall was approximately 0.43m beneath ground-surface (3.8mOD), and it continued to a depth of 0.73m beneath ground-surface (3.5mOD). It was 0.38m in width. It would have abutted the eastern face of the deeper wall that was in the eastern section (described above).

A further brick wall was observed running east-west along the northern section. Eleven courses were recorded, regularly coursed in an English bond. One brick sample was taken. It was identified as fabric-type 3034, set within a light grey lime/sand mortar with lime, charcoal and quartz inclusions. It was dated to approximately 1780-1850 (see appendix IV). The top of the wall was 0.41m beneath the present ground-surface (3.82mOD), and stretched down to a depth of approximately 1.21m beneath the ground-surface (3.02mOD). The recorded east-west

length of the wall was 1.8m (although it definitely continued to the west), and the width of the wall was unknown. This wall appears to abut the wall in the eastern section, and the dating of the bricks suggest that this wall was later than that in the eastern section.

Another brick feature was observed in the western section – apparently a north-south wall base. This consisted of red bricks and some yellow stock bricks, not so finely finished, but set within a cream lime mortar. Three courses were observed in the southern part, with five courses in the northern section, with it starting approximately 0.5m beneath the present ground-surface (3.73mOD), and continuing down to approximately 0.95m beneath ground-surface (3.28mOD). This appears to abut the wall which runs along the northern section, and is at a higher level, so is presumably later in date than this.

The suggested phasing of these walls is therefore as follows: the wall in the eastern section was earliest (bricks are dated 1450-1700), and was later abutted by the east-west walls in the northern section (on both sides) (bricks are dated 1780-1850). The western of the two east-west walls was later abutted by the wall in the western section. It seems likely that these all formed parts of buildings constructed at differing dates.

Cartographic evidence shows development along the southern side of Bermondsey Wall East from an early date (buildings are depicted on Rocque's 1746 Map). Trench 49 is located on the approximate site of the Flour Mill, into which the Mill Stream ran. This is clearly depicted on both Horwood's 1813 Map (fig. 62), and Loveday's 1857 Survey (fig. 63). It is unclear precisely which parts of the mill the walls in trench 49 represent, however it seems clear that the walls found were part of this structure. Interestingly, it appears that the walls in trench 49 may have formed an external wall at the edge of the 'Open' area of the 'Mill' itself (labelled 'K' on Loveday's Survey). This mill existed until the construction of the Mill Pond Estate (by 1934).



Fig. 60: Photo of brickwork in eastern section and north-eastern corner, trench 49, Bermondsey Wall East



Fig. 61: Photo of brickwork in western section, trench 49, Bermondsey Wall East

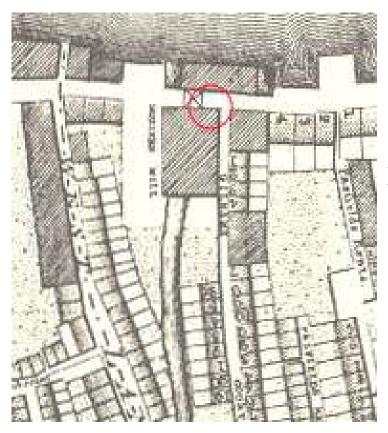


Fig. 62: Horwood's 1813 Map, with approximate location of trench 49 marked

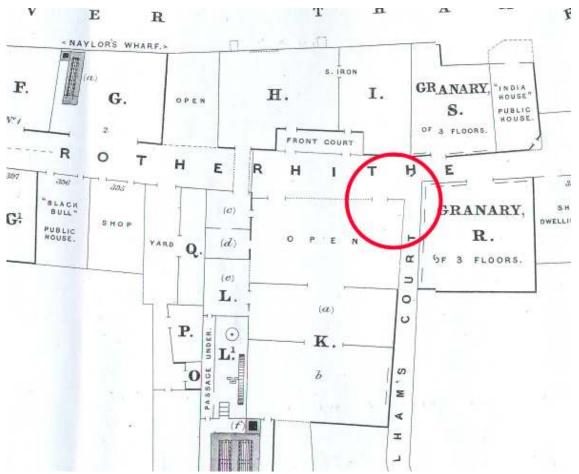


Fig. 63: Southern side of Bermondsey Wall East, on Loveday's 1857 London Waterside Survey with approximate location of trench 49 marked

Trench 48:

Another trench was observed on the southern side of Bermondsey Wall East, at the western end of Millpond Estate. This measured 1.25m X 0.58m X 0.9m. A modern road-surface (tarmac over concrete) was observed, with a North-South cable trench with crushed stone backfill in the western end of the trench. A layer, or possibly a fill of a large pit, containing a large quantity of pot, oyster shell, and clay pipe, was observed, within a loose dark sandy fill.

A large quantity of pottery was recovered from the layer or pit-fill. This included nine sherds of Post-medieval redware (1580-1900), one sherd of Chinese porcelain (1580 –1900), two sherds of Nottingham stoneware (1700-1800), six sherds of Creamware (1740-1880), and twenty-nine sherds of 'Ironstone' china (1800-1900). This gave an overall date of the 19th Century. A clay pipe bowl dated to *c*.1810-1840, was also recovered from this feature (see appendix V). This suggests that the layer or pit-fill was probably some form of 19th Century feature, such as a rubbish-dump.



Fig. 64: Photo of trench 48, Bermondsey Wall East

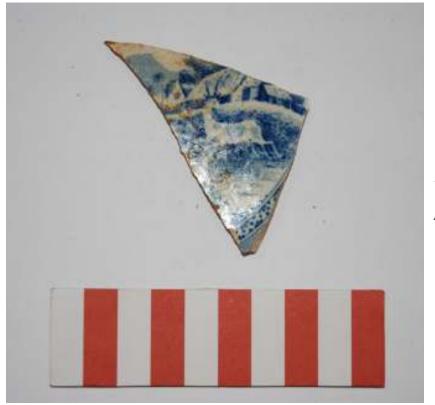


Fig. 65: Photo of 19th Century transferprinted 'Ironstone' China from trench 48

Trench 52:

A further trench was observed on the southern side of Bermondsey Wall East, immediately west of the junction with West Lane. This measured approximately 1.35m X 1m X 1.2m. A modern road-surface (tarmac over cobbles) was observed, overlying a mixed mid-brown silty-sand with pebbles and chunks of brick rubble.

A brick feature was observed in the western section. This consisted mainly of red brick, with some darker purple bricks, in thirteen courses and set within a lime cream mortar. Four brick samples were taken. They were identified as fabric-types 3032, 3033 and 3065, set within a white lime/sand mortar with quartz, shell and coal inclusions. The dates of these bricks varied, from 1450-1700, 1630-1900, and 1630-1800 (see appendix IV). The feature stretched across the whole width of the trench. Its top was at *c*.0.46m beneath the modern ground-surface (3.64mOD), and went down to the base of the trench (2.88mOD) and continued beyond the limit of excavation. It curved out into the middle of the trench towards the bottom, although it appears to straighten out beneath the base of the trench. This was probably part of an arched drain or vault. The mixture of bricks from various dates suggests that numerous different types of bricks were probably reused in this structure, and that the structure itself probably dates from the 19th Century.



Fig. 66: Photo of trench 52, Bermondsey Wall East

Trench 50:

Another trench on the southern side of Bermondsey Wall East, just to the east of the junction with Cherry Gardens Street, was observed. This measured 2.5m X 0.98m X 1.25m. A modern road-surface (tarmac over granite cobbles over concrete) was observed for a depth of 0.35-0.4m. Two services ran north-south through the centre of the trench. A mixed dark-brown silty-sandy soil was recorded, which may have been a basement fill. This was relatively compact with lots of small pieces of brick rubble/mortar/charcoal/pebbles in the upper half, but was far looser with bigger chunks of brick rubble in the lower half. The base of the trench was far more compact again.

9.7 Fulford Street:

Trench 46:

One trench was observed on the western side of Fulford Street, approximately 50m north of the junction with Paradise Street. This measured 2.6m X 0.5m X 1.25m. Granite setts over a concrete base were observed for a depth of 0.55m. This overlay a grey-brown sandy-silt with frequent inclusions of CBM, pebbles, sandy patches, and mortar. This was a very mixed made-ground deposit. Two large iron pipes ran through the trench north-south. No archaeological features or deposits were observed.



Fig. 67: Photo of trench 46, Fulford Street

Trench 47:

Another trench was observed on the western side of Fulford Street, approximately 30m north of the junction with Paradise Street. This measured 1.9m X 0.59m X 1.21m. Granite setts over a concrete base were also observed, again for a depth of approximately 0.5m. This also overlay a mixed made-ground deposit, with two large iron pipes also running north-south through the trench. No archaeological features or deposits were observed.

Trench 76:

One further trench was observed on the eastern side of Fulford Street, right in the northern corner of Fulford Street. This measured 2m X 0.6m X 1.2m. Granite setts over a concrete base were observed, over a number of services and associated service backfills. No archaeological features or deposits were observed.

9.8 Elephant Lane:

Trench 53:

One trench was observed on the eastern side of Elephant Lane, running south from the junction with Kings Stairs Close. This measured 25m X 0.45m X 0.95m. A modern road-surface (tarmac over MOT Type 1 crushed stone) was observed, overlying a mid-dark brown silty-sand 'made ground' deposit, with pebbles and brick rubble. A patch of Victorian mortared brick rubble was also observed in the northern part of the section. No significant archaeological features or deposits were observed.



Fig. 68: Photo of trench 53, looking south-east, Elephant Lane

Trench 56:

Further trenching was observed on the northern-most part of Elephant Lane, on the north side of the road. This measured approximately $26m \times 0.45m \times 0.8$ -1.1m. A modern road-surface (tarmac over MOT Type 1 base, for approximately 300mm) was observed, overlying a mixed dark brown silty made-ground, with frequent pebbles, gravel, and CBM fragments. The majority of the trench came down to solid concrete at *c*.0.6-0.65m beneath the present ground-surface. No archaeological features or deposits were observed.



Fig. 69: Photo of trench 56, Elephant Lane

Trench 57:

Another stretch of trenching was observed on the eastern side of Elephant Lane, running south from the eastern end of trench 56. This measured 20m X 0.4-0.5m X 1m. A modern road-surface (tarmac over concrete, c.0.56m thick) was observed overlying mid-brown silty-sand with pebbles and CBM, and with chunks of modern concrete in it. No archaeological features or deposits were observed.

It should be noted that relatively modern development and buildings surround Elephant Lane. It therefore seems likely that the deposits encountered in these trenches are related to the modern, post-war, development of this area – which explains the lack of significant archaeological features.

9.9 Mayflower Street:

Trench 54:

Eleven metres of trenching was observed on the eastern side of Mayflower Street, just south of Elephant Lane. This trench was 0.4m in width and 0.85m deep. A modern paved surface consisting of purple herringbone-patterned brick, set in a flint-sand bedding (for a thickness of 0.26m) was observed, overlying MOT Type 2 chippings to a depth of 0.5m. This overlay a dark silty soil to the base of the trench – with a modern cellophane wrapper observed right at the base of the trench – clearly showing that this deposit was a reworked modern deposit, and that there were no archaeological finds or features.



Fig. 70: Photo of archaeologist monitoring trench 54, Mayflower Street

Trench 55:

Trenching was also observed on the northern side of Mayflower Street, in the part of Mayflower Street which runs east-west. This measured $12m \times 0.5m \times 0.65$ -1.1m. A modern road-surface (tarmac or cobbles over concrete, for a thickness of 0.25m) was observed, over MOT Type 1 material (for 0.15m), over mixed modern backfill – with a concrete surface at 0.65m beneath the ground-surface. No archaeological features or deposits were observed.

Trench 72:

A pit was observed on the southern side of Mayflower Street, in the part of Mayflower Street which runs east-west just north of Brunel Road, on the western side. This measured approximately 2.4m by 2.25m by 1.25m in depth. A modern road-surface (tarmac over concrete) was observed for c.0.34m, over a loose yellow lean mix for c.0.3m. This overlay a dirty grey gravel deposit, with lots of pebbles, down to the base of the trench. No archaeological features or deposits were observed.

Trench 73:

Another pit was observed on the southern side of Mayflower Street, in the part of Mayflower Street which runs east-west just north of Brunel Road, on the eastern side at the junction with Rupack Street. This measured approximately 8.5m by 2.5m, by 1.2-1.3m in depth. A modern road-surface (tarmac over concrete) was observed for c.0.5m. A large concrete drain and watermain was observed in the southern section, with associated mid-brown service backfills. In some areas, however, a series of post-medieval deposits were observed overlying the alluvium (c.1.15m beneath the modern ground-surface). This included a brick and mortar layer directly overlying the

alluvium, an orange gravel layer above this, and a charcoal layer over this, with a redeposited alluvium over this (for c.0.3m). Pottery recovered from the brick and mortar layer, directly overlying the alluvium, was dated to the mid-17th Century. This trench was, therefore, essentially, a series of post-medieval deposits overlying the natural alluvium – and no other significant archaeological features or deposits were observed.

Trench 74:

One further pit was observed on the northern side of Mayflower street, in the part of Mayflower Street which runs east-west just north of Brunel Road, on the eastern side at the junction with Rupack Street. This measured 6.5m by 0.5m by 1.3m in depth. A modern road-surface (tarmac over concrete over a sand-gravel make-up) was observed for c.0.75m. This overlay a dark grey-brown sandy-clay, with frequent gravel and occasional CBM inclusions. No archaeological features or deposits were observed.

9.10 St Marychurch Street:

Trench 58:

One trench was observed on the northern side of St Marychurch Street, directly south of 'The Ship' Public House, at the junction between Elephant Lane and St Marychurch Street. This measured approximately $8m \times 0.5m \times 1.05m$. A modern road-surface (granite setts over concrete over MOT Type 1 material) was observed for c.0.77m. Five distinct layers were then observed. The uppermost was a compact black silty-sand with charcoal, CBM fragments, and oyster shell (observed at 0.75m beneath the surface); overlying a mortary-silty-sand with chalk fragments (observed at c.0.92m beneath the surface) – possibly some sort of land surface; over a medium-fine gravel-layer in a silty-sand matrix (observed at c.1m beneath the surface); over a stiff mid-green-brown silty layer (at 1.12m beneath the surface); overlying a clean orange sandy-gravel (c.1.24m beneath ground-surface). A stiff clayey-silt alluvium was observed at the base of the trench (c.1.4m beneath the modern ground-surface) – probably waterlain. This is, therefore, essentially a series of post-medieval deposits overlying the natural alluvium – as in trench 73.



Fig. 71: Photo of layers in trench 58, St Marychurch Street

Trench 59:

A pit was observed on the western side of St Marychurch Street, adjacent to the rear of 'The Ship' Public House. This measured $2.65m \times 0.95m \times 1.35m$. A modern road-surface (tarmac over MOT Type 1 material) was observed for *c*.0.6m, overlying a silty-sand mid-brown matrix, over a waterlain alluvium at the base of the trench.

Interestingly, the pottery recovered from the alluvium (context 40) was dated to the 15^{th} Century – essentially because of the presence of the Kingston-type ware (1230-1400). This suggests that the alluvium may have been waterlain during the 15^{th} Century – possibly during one of the historical episodes of flooding. The pottery from the silty-sand (context 41), in contrast, was dated to the mid- 18^{th} Century – suggesting that it was a post-medieval deposit representing post-medieval activity.

A series of brick walls were also observed in this pit. One was observed in the western section, running from the southern end of the trench into and behind the western section, for an observed distance of 2.2m. The base was at the base of the trench (c.1.19m) beneath the ground-surface, and appears to have been cut into the alluvium. The wall was regularly coursed, four courses up from the base – followed by a step back westwards (for c.0.15m) – and then another course of bricks on top of this. The top was observed c.0.78m beneath the ground-surface. The wall consisted of red-orange bricks, set within a course grey mortar, with the bricks set on their side in the bottom courses, and set in an English bond in the upper courses. On top of the wall was a brick and chalk rubble deposit, stretching up to c.0.36m beneath the ground-surface.

Another brick wall was observed running east-west for 0.63m in the northern section. The base of this was observed at c.1.17m beneath the ground-surface, and cut into the alluvium. The wall was regularly coursed in an English bond, with five courses observed. The top was c.0.72m beneath the ground-surface. The wall consisted of red-orange bricks, within a coarse grey mortar, and brick and chalk rubble over this to a depth of c.0.48m beneath the ground surface.

These two walls meet just behind the north-west corner of the trench – at approximately 1.2m south of the projected back-wall of 'The Ship'; 0.95m east of the kerb; and approximately 0.2m south of the southern end of the trench.

Buildings have been located in this position since at least the mid-18th Century (Rocque's Map, fig. 73). The bricks themselves were dated to the late 17th Century (see brick report), such that it seems likely that these walls were part of these early buildings. The line of the building frontage along this part of St Marychurch Street was clearly far further forward than it is today.

A large quantity of chalk and brick rubble was also observed in the eastern section, from approximately 0.5m beneath the ground-surface for a thickness of c.0.3m.



Fig. 72: Photo of brick walls in trench 59, St Marychurch Street

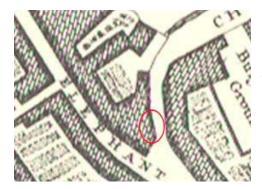


Fig. 73: Approximate location of the walls in trench 59 on Rocque's 1746 Map

Trenches 61-66:

A series of pits were observed along St Marychurch Street, between 'The Ship' Public House and the junction with Tunnel Road. These generally measured approximately 1m X 0.5m X 0.5m. Cobbles and road make-up layers were observed, to a depth of c.0.5m, overlying service fills within dark black silty deposits. The odd orange-red brick was observed, along with flecks of chalk. No archaeological features or deposits were observed.

Trenches 67 and 68:

Two further pits were observed on St Marychurch Street, in the part of St Marychurch Street that runs north-south – one pit on the eastern side of the road at the junction with Rotherhithe Street – and one on the western side of the road opposite The Picture Archives. A modern road-surface (granite cobbles over a lean mix) was observed for c.0.3-0.38m, overlying a mid-dark brown silty-sand ('made ground') with CBM and pebbles – with some brickwork observed in the northern section of trench 67. No archaeological features or deposits were observed.

St Marychurch Street is, itself, a historic street, and is clearly depicted on Rocque's 1746 Map, where both St Mary's Church and the associated burial ground are depicted. The 17th Century wall in trench 59 and other post-medieval deposits act as evidence for this.

9.11 Kings Stairs Close:

Trench 60:

10m of trenching was observed on the northern side of Kings Stairs Close, running west from Elephant Lane. This measured c.0.5m in width and c.1.1m in depth. A modern road-surface (tarmac over concrete) was observed overlying mixed 'made ground' and service backfills. No archaeological features or deposits were observed.

Trench 75:

Another 13m of trenching was observed on the southern side of Kings Stairs Close, running east-west between Kings Stairs Gardens and Elephant Lane. This measured 0.4-0.5m in width, and 0.85-1.05m in depth. Paving slabs overlying various road make-up layers, including MOT Type 1 material, lumps of concrete, and gravel road make-up layers, were observed for a depth of 0.48m. This overlay a very mixed and disturbed subsoil, with chunks of yellow stock brick, pipes with associated service backfills, and concrete lumps towards the base of the trench – all within a mid-brown silty-sand matrix.

A brick wall was also observed in the western part of the trench, approximately opposite the junction between Nos.8 and 9. This ran north-south across the trench, and was observed in the base of the trench and both sections. Eight courses were observed (with five courses = 0.37m height), with the top at 0.5m beneath ground-surface, and the base at 1.08m beneath ground-surface (although it may have continued beneath the base of the trench). It was 0.56m in width (eastwest), and was observed for 0.56m north-south (continuing under both sections). It consisted of red-purple brick within a coarse grey mortar, and is considered to be relatively modern in date.

Furthermore, a compact dark soil with chunks of brick rubble was observed in the deeper pit at the western end of the trench. It was not possible to investigate this due to the depth of the pit, however it is possible that this may have formed an earlier land surface. This was observed at c.1.05m beneath the present ground-surface.



Fig. 74: Photo of brick wall in trench 75, Kings Stairs Close

9.12 Tunnel Road:

Trenches 69-71:

Three trenches were observed on the western side of Tunnel Road, approximately opposite 'The Brunel Museum'. These measured 1.8-2.6m in length, by 0.5-0.8m in width, and 1.2-1.6m in depth. A modern road-surface was observed in all of these – consisting of tarmac over concrete, for a thickness of c.0.48m. A series of layers were then observed (most clearly observed in trench 71): a pebble matrix for c.0.18m; over a mid-brown silty-sand matrix with pebbles and CBM for c.0.08m; over an orange-yellow-brown sandy layer with pebbles for c.0.05m; over a thin brick layer for c.0.02m; over a black clinker layer for c.0.2m. This overlay a compact greenbrown clay at the base of the trench, c.1m beneath the ground-surface, which is probably alluvium. These layers represent a series of post-medieval deposits/'made-ground' deposits, which overly the natural alluvium – like in trenches 58 and 73. The pottery from both the clinker and clay layer in trench 71 was dated to the 17th Century – showing that it was a post-medieval deposit.

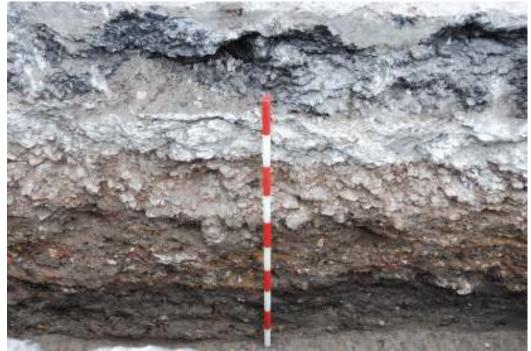


Fig. 75: Photo of trench 71, Tunnel Road

9. Summary and Conclusions

Archaeological monitoring undertaken during Victorian water mains replacement works between Jamaica Road and the River Thames in the area of Bermondsey, London Borough of Southwark, recorded a variety of different archaeological features.

Many trenches just exposed modern road make-up layers over services (and associated service backfills), layers of dumping, and 'made ground' layers. The trenches in Fulford Street are particular examples of this, as had services running through them and mainly consisted of a mixed made-ground deposit.

Some trenches exposed possible flood or alluvial deposits, and may therefore reflect the historical episodes of flooding that are known to have taken place in this area in the Medieval Period. Such deposits were encountered in Cherry Gardens Street, Paradise Street, Cathay Street, Mayflower Street, St Marychurch Street, and Tunnel Road. They were found at a variety of depths, from 1.57mOD in Cherry Gardens Street (trench 20), to 2.92mOD in the southern part of Cathay Street (trench 30). The piece of 15th Century pottery from the alluvium in trench 59 in St Marychurch Street (context 40) further supports the suggestion that this alluvium was laid during one of the historical episodes of flooding.

Evidence was also recovered of the 17th Century delftware pottery factory, which functioned from approximately 1638-1684 (with serious production probably having stopped in the late 1660s), probably sited in the Inner Court of Edward III's Manor House. Evidence for this mainly consists of substantial quantities of delftware, such as in trench 24 in Paradise Street (context 11). Furthermore, the sagger fragments (clay boxes in which pottery was stacked in kilns) and trivet-props (on which pots were placed in the kilns) were also

found. Examples of these were also found in trench 24 (context 11). The evidence for such delftware manufacture was concentrated in Paradise Street (particularly trenches 24 and 25), with some evidence also being uncovered in Cathay Street and Dixons Alley. This is in contrast to the relatively little evidence for such manufacture (with no saggers or trivet-props) in Fulford Street, Cherry Gardens Street, or West Lane. This therefore broadly supports other archaeological investigations which suggest that the focus of the pottery factory was in the Inner Court of the remains of Edward III's Manor House. Furthermore, it is possible that some of the remains of 17th Century buildings along Paradise Street, for example, were related to, or possibly part of, the pothouse itself.

Related to the evidence for 17th Century pottery manufacture in this area is the 'thin black compact' layer observed running along the northern side of Paradise Street approximately 1m or slightly more below the present ground level. Large quantities of pottery were uncovered from this layer, much of which was dated to the 17th Century and possibly associated with the pottery factory. The fact that this layer was so distinct from the surrounding deposits suggests that it may have been some form of actual land surface or track, dating from the 17th Century.

A number of brick features were uncovered in the trenches, particularly in Paradise Street, Cathay Street, and Bermondsey Wall East. Some of these can be identified on maps, such as the two walls at an 80° angle from each-other in trench 24 (Paradise Street) and the basement walls of the granaries/warehouses in Cathay Street (trench 37).

Many of these walls and brick features have been dated to the 17th Century, such as the walls in trench 20/22 (Cherry Gardens Street), 24 (Paradise Street), 25 (Paradise Street), 26 (Paradise Street), 51 (Bermondsey Wall East), and 59 (St Marychurch Street). This acts as evidence for the early development of the area. This early development is also depicted in the early maps, such as Newcourt's 1658 Map, which shows general development in the area, such that by 1746 (Rocque's Map), the area is substantially developed. Interestingly, however, no 17th Century features were uncovered in the eastern part of the DMA, despite the fact that this area was similarly developed, with the only real evidence for early development in the eastern part taking the form of post-medieval deposits. Furthermore, it is possible that the concentration of 17th Century brickwork along Paradise Street may reflect an earlier development of this specific area associated with the pothouse itself, although this cannot be definitively proven (as it may instead reflect the chance finding of walls).

The most interesting brick feature uncovered during this watching brief was the remains of the 'Mill Pond Bridge' on the corner of Paradise Street and West Lane (trench 23). The uncovered section of the bridge was probably the western side and south face. The bridge-base uncovered during the watching brief appears to have been made in two stages – the lower dating to the late 17^{th} – early 18^{th} Century, and the upper dating to the late 18^{th} – early 19^{th} Century, suggesting that the bridge may have been rebuilt in the late 18^{th} –

early 19th Century, possibly when the stream had a more industrial purpose and when the sluice was constructed.

The area investigated during this watching brief had potential for finding archaeological evidence relating to King Edward III's 14th Century Manor House. No *in situ* remains relating to this were, however, uncovered. The only possible evidence for this consisted of medieval pottery and tiles uncovered in Cathay Street, Paradise Street, and the eastern end of Bermondsey Wall East.

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APPENDIX I: Oasis Data Collection Form

OASIS ID: compassa1-90592

Project details	
Project name	Archaeological Watching Brief of Thames Water Mains Replacement in Bermondsey 03
Short description of the project	An archaeological watching brief was undertaken during Thames Water mains replacement works between 28th August and 18th May 2011. The works were located to the north of Jamaica Road up to the southern bank of the River Thames, and between Cherry Gardens Street to the west and Tunnel Road to the east. Many trenches just exposed modern road make-up layers over services (and associated service backfills), layers of dumping, and 'made ground' layers, with no significant archaeological remains. Other trenches, however, exposed archaeologically significant deposits and features. This included alluvial deposits reflecting the 14th Century episodes of flooding, evidence for the 17th Century delft- ware pottery factory, and evidence for 17th Century development in the area. Some brick features could be directly identified, including the 'Mill Pond Bridge' at the corner of Paradise Street with West Lane. Very little evidence was, however, uncovered concerning Edward III's 14th Century Manor House. No in situ remains relating to this were uncovered, with the only evidence relating to this consisting of medieval pottery and tiles.
Project dates	Start: 28-08-2010 End: 18-05-2011
Previous/future work	No / No
Type of project	Recording project
Site status	Area of Archaeological Importance (AAI)
Site status	Scheduled Monument (SM)
Current Land use	Transport and Utilities 1 - Highways and road transport
Monument type	WALL Post Medieval
Monument type	LAND SURFACE Post Medieval
Monument type	FLOOD DEPOSIT Medieval
Significant Finds	POTTERY Medieval
Significant Finds	POTTERY Post Medieval
Significant Finds	BRICK Post Medieval
Significant Finds	CLAY PIPE Post Medieval
Significant Finds	IRON NAIL Post Medieval
Investigation type	'Watching Brief'
Prompt	
Frompt	Water Act 1989 and subsequent code of practice

Project location

Country	England
Site location	GREATER LONDON SOUTHWARK BERMONDSEY ROTHERHITHE AND SOUTHWARK Bermondsey 03

Postcode	SE1
Study area	500.00 Square metres
Site coordinates	TQ 3475 7962 51.4989351795 -0.05848803631990 51 29 56 N 000 03 30 W Point

Project creators

Name of Organisation	Compass Archaeology
Project brief originator	London Borough of Southwark
Project design originator	Compass Archaeology
Project director/manager	Geoff Potter
Project supervisor	Emma Jeffery
Type of sponsor/funding body	Morrison Utility Services

Project archives

Physical Archive recipient	Museum of London Archive
Physical Contents	'Ceramics','Metal'
Digital Archive recipient	Museum of London archive
Digital Media available	'Images raster / digital photography','Text'
Paper Archive recipient	Museum of London Archive
Paper Media available	'Context sheet','Drawing','Map','Photograph','Plan','Report','Unpublished Text'

Project bibliography 1

	Grey literature (unpublished document/manuscript)
Publication type	
Title	THAMES WATER MAINS REPLACEMENT BERMONDSEY 03 REPORT
Author(s)/Editor(s)	Jeffery E
Date	2011
Issuer or publisher	Compass Archaeology
Place of issue or publication	5-7 Southwark Street, London
Description	Report for the watching brief undertaken in Bermondsey 03 from August 2010 to May 2011. Includes discussion of historical and archaeological background, trenches monitored, photographs, historic maps, and any conclusions reached.

Entered byEmma Jeffery (emma@compassarchaeology.co.uk)Entered on23 May 2011

APPENDIX II: London Archaeologist Summary

Site Address:	Thames Water Replacement Wo Southwark (SE1)			Victorian ey 03, Lond	 Main ough of
Project type:	Watching brief				
Dates of Fieldwork: Site Code: Supervisor:	28 th August 2010 - TZX10 Emma Jeffery	– 18 th May	2011		
NGR:	TQ 3475 7962				
Funding Body:	Thames Water Ut	ilities Ltd			

An archaeological watching brief was undertaken during Thames Water mains replacement works from the 28th August 2010 to the 18th May 2011. The works were located to the north of Jamaica Road up to the southern bank of the River Thames, and between Cherry Gardens Street to the west and Tunnel Road to the east.

Many trenches just exposed modern road make-up layers over services (and associated service backfills), layers of dumping, and 'made ground' layers, with no significant archaeological remains.

Other trenches, however, exposed archaeologically significant deposits and features. This included alluvial deposits reflecting the 14th Century episodes of flooding, evidence for the 17th Century delftware pottery factory, and evidence for 17th Century development in the area. Some brick features could be directly identified, including the 'Mill Pond Bridge' at the corner of Paradise Street with West Lane.

Very little evidence was, however, uncovered concerning Edward III's 14th Century Manor House. No *in situ* remains relating to this were uncovered, with the only evidence relating to this consisting of medieval pottery and tiles.

Appendix III: Pottery from Rotherhithe site TZX10

Paul Blinkhorn

The pottery assemblage comprised 325 sherds with a total weight of 7,596g. It comprised mainly post-medieval and modern wares, along with a small assemblage of residual Romano-British and medieval material. A number of contexts produced fragments of saggars and trivet kiln-props, which were waste from Tin-Glazed Earthenware manufacture.

The material was recorded using the fabric codes of the Museum of London post-Roman type-series (eg. Vince 1985), as follows:

BORD:	Border ware, 1550-1700. 11 sherds, 120g.
BORDY:	Yellow-glazed Border ware, 1550-1700. 1 sherd, 2g.
CHINA:	'Ironstone' china, 1800-1900. 35 sherds, 381g.
CHPO:	Chinese porcelain, 1580 - 1900. 9 sherds, 307g.
COLS:	Colchester slipped ware, 1400-1550. 1 sherd, 7g.
CREA:	Creamware, 1740-1880. 32 sherds, 409g.
ESUR:	Early Surrey Coarseware. Mid 11 th – late 12 th century. 1 sherds, 4g.
KING:	Kingston-type ware, 1230-1400. 3 sherds, 17g.
LLON:	Late London ware, 1400-1500. 2 sherds, 32g.
LONS:	London stoneware, 1670-1900. 10 sherds, 339g.
METS:	Metropolitan slipware, 1630-1700. 2 sherds, 10g.
NOTS:	Nottingham stoneware, 1700-1800. 2 sherds, 30g.
PMR:	Post-medieval redware, 1580-1900. 56 sherds, 3,634g.
PMSRG:	Crean glazed next mediaval alin aparted reducers 1480 1650 1 short
I MSKG.	Green-glazed post-medieval slip-coated redware, 1480-1650. 1 sherd,
I MSKG.	15g.
PROP:	
	15g.
PROP:	15g. Kiln prop, 1550+. 5 sherds, 145g.
PROP: SAGG:	15g. Kiln prop , 1550+. 5 sherds, 145g. Post-medieval saggar , 1550+. 15 sherds, 336g. Spanish Tin-glazed ware , 1480 – 1700. 2 sherds, 123g.
PROP: SAGG: STGW:	15g. Kiln prop, 1550+. 5 sherds, 145g. Post-medieval saggar, 1550+. 15 sherds, 336g.
PROP: SAGG: STGW:	 15g. Kiln prop, 1550+. 5 sherds, 145g. Post-medieval saggar, 1550+. 15 sherds, 336g. Spanish Tin-glazed ware, 1480 – 1700. 2 sherds, 123g. Staffordshire-type Mottled Brown-Glazed Ware, 1650-1800. 7 sherds, 49g.
PROP: SAGG: STGW: STMO:	 15g. Kiln prop, 1550+. 5 sherds, 145g. Post-medieval saggar, 1550+. 15 sherds, 336g. Spanish Tin-glazed ware, 1480 – 1700. 2 sherds, 123g. Staffordshire-type Mottled Brown-Glazed Ware, 1650-1800. 7 sherds, 49g. Staffordshire slipware, 1650-1800. 1 sherd, 3g
PROP: SAGG: STGW: STMO: STSL:	 15g. Kiln prop, 1550+. 5 sherds, 145g. Post-medieval saggar, 1550+. 15 sherds, 336g. Spanish Tin-glazed ware, 1480 – 1700. 2 sherds, 123g. Staffordshire-type Mottled Brown-Glazed Ware, 1650-1800. 7 sherds, 49g. Staffordshire slipware, 1650-1800. 1 sherd, 3g Staffordshire white salt-glazed stoneware, 1720-1780. 1 sherd, 1g.
PROP: SAGG: STGW: STMO: STSL: SWSG:	 15g. Kiln prop, 1550+. 5 sherds, 145g. Post-medieval saggar, 1550+. 15 sherds, 336g. Spanish Tin-glazed ware, 1480 – 1700. 2 sherds, 123g. Staffordshire-type Mottled Brown-Glazed Ware, 1650-1800. 7 sherds, 49g. Staffordshire slipware, 1650-1800. 1 sherd, 3g Staffordshire white salt-glazed stoneware, 1720-1780. 1 sherd, 1g. English tin-glazed ware, 1600-1800. 124 sherds, 1497g.
PROP: SAGG: STGW: STMO: STSL: SWSG: TGW: TUDG:	 15g. Kiln prop, 1550+. 5 sherds, 145g. Post-medieval saggar, 1550+. 15 sherds, 336g. Spanish Tin-glazed ware, 1480 – 1700. 2 sherds, 123g. Staffordshire-type Mottled Brown-Glazed Ware, 1650-1800. 7 sherds, 49g. Staffordshire slipware, 1650-1800. 1 sherd, 3g Staffordshire white salt-glazed stoneware, 1720-1780. 1 sherd, 1g. English tin-glazed ware, 1600-1800. 124 sherds, 1497g. 'Tudor green' ware, 1380-1550. 1 sherd, 2g.
PROP: SAGG: STGW: STMO: STSL: SWSG: TGW:	 15g. Kiln prop, 1550+. 5 sherds, 145g. Post-medieval saggar, 1550+. 15 sherds, 336g. Spanish Tin-glazed ware, 1480 – 1700. 2 sherds, 123g. Staffordshire-type Mottled Brown-Glazed Ware, 1650-1800. 7 sherds, 49g. Staffordshire slipware, 1650-1800. 1 sherd, 3g Staffordshire white salt-glazed stoneware, 1720-1780. 1 sherd, 1g. English tin-glazed ware, 1600-1800. 124 sherds, 1497g.

A single sherd (32g) of residual Romano-British pottery was also noted. The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*. The range of fabric types is typical of post-medieval sites in London, consisting of mainly English wares of local and regional manufacture, along with smaller quantities of imported wares from Spain and Germany.

Given the history of pottery-making in this area of London, it perhaps no surprise that a number of contexts produced waste from the manufacture of Tin-Glazed Earthenware. For example, large dumps of tin-glazed wasters are known from sites such as Mark Brown's Wharf near Tower Bridge (Orton 1988, 307-35). Here, contexts [14] and [15] produced fragments of saggars in a friable, coarse fabric, and showed evidence of being made from both red- and white-firing clays, which were badly mixed in one case. The majority were in a buff-white fabric with variable amounts of red and black rounded ironstone up to 10mm, and angular white clay fragments of the same size. The fabric is similar to tin-glazed earthenware, albeit much coarser. This association is strengthened by the fact that on of the larger base fragments from context [15] has a deposit of pale green glaze. The colour is far closer to that which is sometimes noted on the exterior of tin-glazed earthenware vessels than the deeper greens of medieval pottery, PMR, Border Ware or 'Tudor Green' wares. Context [14] also produced a fragment of English Stoneware of probable late 17^{th} – early 18^{th} century date. The only pottery from context [15], apart from two sherds of PMR and a small fragment of TUDG, consisted of ten sherds of unglazed pale pinkish-orange earthenwares, with few visible inclusions other than very rare fine angular white clay fragments and the occasional small rounded fragment of ironstone. There were two bases, one a flat pedestal form and the other with a foot-ring, with the latter having splashes of what appears to be the same pale green glaze noted on the saggar. On form and fabric grounds, these are almost certainly 'biscuit'-fired Tin-Glazed Earthenware kiln waste. Saggars of a similar form and fabric to those from context [15] were noted at Mark Brown's Wharf (ibid.).

Further evidence of Tin-Glazed Earthenware manufacture came from context [11], in the form of a fragments from two trivet-props and a two probable saggar fragments. They were stratified with a fairly large assemblage of mainly biscuit-fired Tin-Glazed Earthenware, along with a small quantity of other material which suggests a *terminus post quem* of the late-17th century. Just five of the sherds of TGW were glazed. Two were badly over-fired, one had blue-painted decoration and another had a sponged purple exterior. Sponged ware is generally given a date of the first half of the 18th century in London. Biscuit-fired, presumably waster sherds of Tin-Glazed Earthenware were also noted in context [22], and a trivet prop fragment in [5].

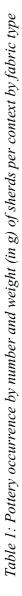
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21											7	12 3	1	3	1	98																	92
19																									1	53							
17													1	2											2	31							
15							1	2							2	42					14	32 6			10	19 0 0							
14																					1	10			17	18 8							
11	1	32											1	6	2	15							4	92	55	27 7	2	10					
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6															2	6 6									1	9 3			3	9 6 7			
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	RB		ESUR		KING		dut G		PMSR G		STG W		BOR D		PMR		WER R		WEST		SAGG		PROP	·	TGW		METS		CHPO		STSL		

																		M17
																1	2	17
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								3	18									M18
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																		17
				2	30			9	149	29	335							19
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		1	50															L17
																		17
																		L16
																		17
-	2	1	18															L17
		3	77															L17
																		L16
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4	27	1	26		-		-					┢	┝	-	┢		┝	L1 1 7
		1	30 2															L1 1 7
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		2	8 8			-	1			7	8							19
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No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date (Centu ry)
STM 0		TONS		NOTS		SWS G		CREA		CHIN A		COLS		LLON		BOR DY		



1		F abric	Period	Form	Weight (in grams)	Dimensions (in mm)	Date	Other comments
	16	3065	Post-	Unfrogged brick	910	110 X 64 (width	1630-1730	Over-fired; mortar (white
			Medieval			by depth)		lime/sand with quartz, charcoal,
								brick-dust inclusions)
2 1	16	3046	Post-	Unfrogged brick, sunken	804	112 X 60 (width	1600-1700	Under-fired; mortar on break
			Medieval	margins		by depth)		(white lime/sand with quartz,
								charcoal, brick-dust inclusions)
3 1	16	3046	Post-	Unfrogged brick	1242	104 X 63 (width	1600-1700	Mortar on break (white lime/sand
			Medieval			by depth)		with quartz, charcoal, brick-dust
								inclusions)
4 1	15	3032	Post-	Unfrogged brick, sunken	680	104 X 65 (width	1630-1700	Mortar (yellow-grey lime/sand
			Medieval	margins		by depth)		with lime and quartz inclusions)
5 1	15	3032	Post-	Unfrogged brick, sunken	1630	230 X 65 (length	1630-1700	Mortar (yellow-grey lime/sand
			Medieval	margins		by depth)		with lime and quartz inclusions)
6 1	15	3032	Post-	Unfrogged brick, sunken	1240	108 X 65 (width	1630-1700	Mortar (yellow-grey lime/sand
			Medieval	margins		by depth)		with lime and quartz inclusions)
7 1	13	3046	Post-	Unfrogged brick, sunken	1616	108 X 63 (width	1630-1700	Mortar (yellow-grey lime/sand
			Medieval	margins		by depth)		with lime and quartz inclusions)
8	13	3032	Post-	Unfrogged brick, sunken	2710	250 X 104 X 66	1630-1700	Clamp waster, misshapen, iron
			Medieval	margins				nail attached, stack marks visible
								on stretcher; mortar (yellow-grey
								lime/sand with lime and quartz
								inclusions)

APPENDIX IV: Brick Report (John Brown and Sue Pringle)

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700 Clamp waster, misshapen; mortar (yellow-grey lime/sand with lime and quartz inclusions)	700 Misshapen, slightly vitrified; mortar (yellow-grey lime/sand with lime and quartz inclusions)	700 Mortar (yellow-grey lime/sand with lime and quartz inclusions)	730 Early shallow frog in top surface; mortar (light grey-yellow lime/sand with lime, shell, charcoal and quartz inclusions)		730 Shallow frog in top surface; mortar (light grey-yellow lime/sand with lime, shell, charcoal and quartz inclusions)	850 Mortar (white lime/sand mortar with lime and quartz inclusions)	850 Mortar (white lime/sand mortar with lime, quartz and charcoal inclusions)	850 Mortar (white lime/sand mortar with lime and quartz inclusions)	850 Misshapen; mortar (white lime/sand mortar with lime and
1630-1700	1630-1700	1630-1700	1690-1730	1690-1730	1690-1730	1780-1850	1780-1850	1780-1850	1780-1850
104 X 63 (width by depth)	232 X 106 X 63	230 X 109 X 59	228 X 104 X 62	224 X 104 X 63	226 X 102 X 63	106 X 68 (width by depth)	103 X 65 (width by depth)	220 X 104 X 60	225 X 88 X 65
1672	2300	2730	2435	2170	2360	1440	2240	1960	1754
Unfrogged brick	Unfrogged brick	Unfrogged brick, sunken margins	Frogged brick, sunken margins	Frogged brick	Frogged brick	Frogged brick	Brick	Brick	Brick
Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval
3032	3032	3033	3032	3032	3032	3035	3032	3032	3032
13	18	18	6	6	6	8	8	34	34
6	10	11	12	13	14	15	16	17	18

idth by 1450-1700 Mortar (light-grey lime/sand with lime, charcoal and quartz	inclusions)	1630-1900 Mortar (white lime/sand with lime,	shell, quartz and coal inclusions)	idth by 1450-1700 Worn – possible paving brick		1630-1800 Mortar (white lime/sand with lime,	shell, quartz and coal inclusions)	? Brickearth fragment		66 1780-1850 Mortar (white lime/sand with lime,	shell, quartz and coal inclusions)	63 1780-1850 Mortar (white lime/sand with lime,	shell, quartz and coal inclusions);	timber impression survives;	misshapen brick; heavily mortared	63 1780-1850 Mortar (white lime/sand with lime,	shell, quartz and coal inclusions)	idth by 1630-1730 Mortar (yellow-grey lime/sand	with lime and quartz inclusions)	idth by 1450-1700 Mortar (yellow-grey lime/sand	with lime and quartz inclusions)	idth by 1600-1700 Mortar (yellow-grey lime/sand	with lime and quartz inclusions)	1600-1700 Underfired; mortar (white	lime/sand with lime, shell, quartz	(mailing)
5 104 X 60 (width by depth)				100 X 55 (width by	depth)	Fragments				5 220 X 105 X 66) 235 X 100 X 63) 225 X 102 X 63		102 X 65 (width by	depth)	106 X 64 (width by	depth)	106 X 64 (width by	depth)	t [63 (depth)		
1156		378		762		190		26		2885		3460				3180		736		626		904		1394		
Unfrogged brick		Brick		Unfrogged brick		Brick		Brick		Brick		Brick				Unfrogged brick		Brick		Brick		Brick		Brick		
Post- Medieval		Post-	Medieval	Post-	Medieval	Post-	Medieval	Post-	Medieval	Post-	Medieval	Post-	Medieval			Post-	Medieval	Post-	Medieval	Post-	Medieval	Post-	Medieval	Post-	Medieval	-
3033		3032		3033		3065		3033		3034		3032				3032		3032		3046		3046		3046		
32		38		38		38		38		37		36				36		33		33		33		32		
27		28		29		30		31		32		33				34		35		36		37		38		

Underfired; mortar (white lime/sand with lime, shell, quartz	and coal inclusions) Mortar (white lime/sand with lime, shell, quartz and coal inclusions)	Irregular thickness; mortar (white lime/sand with lime, shell, quartz and coal inclusions)	Mortar (grey-brown lime/sand with charcoal inclusions)	Shallow frog; mortar (light grey- yellow lime/sand with lime, shell, charcoal and quartz inclusions)	Overfired; mortar (yellow-grey lime/sand with lime and quartz inclusions)		Waster, misshapen; mortar (yellow-grey lime/sand with lime and quartz inclusions)	Mortared on break		Knapped for face-work			
1600-1700	1450-1700	1450-1700	1450-1700	1690-1730	1630-1730		1630-1730	1500-1900	1180-1550	Medieval	1180-1550	1620-1800	1500-1900
61 (depth)	110 X 63 (width by depth)	110 X 65 (width by depth)	102 X 60 (width by depth)	218 X 105 X 63	104 X 63 (width by depth)		270 X 108 X 63 (width by depth)	158 X 16 (width by depth)	11 (depth)				
778	922	890	1540	2170	1100		2605	382	36	402	554	130	290
Brick	Brick	Brick	Unfrogged brick	Frogged brick	Unfrogged brick, sunken margins	Unfrogged brick, sunken margins	Unfrogged brick, sunken margins	Peg-Tile	Tile	Flint	Peg-Tile	Pan-Tile	Peg-Tile
Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval	Post- Medieval	Medieval	Medieval	Medieval	Post- Medieval	Post- Medieval
3046	3046	3046	3033	3032	3032	3032	3032	2276	2271	Flint	2271	2279	2276
32	32	32	6	9	12	12	12	S	25	25	20	2	22
39	40	41	42	43	44	45	46	47	48	49	50	51	52

1500-1900 Over-fired) Probable ridged tile) Heavily abraded; lead glaze	residue) Slightly indented margin) Grass marks on top of surface) Grass marks) Burnt and misshapen; vitrified;	contains large flint pebble
1500-1900		1500-1900		1500-1900		1500-1900		1340-1390		1600-1700	(probably	later 1 /	Century)	1600-1700	(probably	later 17 th	Century)	1600-1700	(probably	later 17 th	Century)	1650-1700	
								24 (depth)		101+X 50+X 60				140+ X 106 X 65				122+ X 103 X 65				180+ X 96 X 63	
188		104		172		09		156		523				2087								1376	
Tile		Curved-Tile		Tile		Peg-Tile		Floor-tile		Brick				Brick				Brick				Brick	
Post-	Medieval	Post-	Medieval	Post-	Medieval	Post-	Medieval	Medieval		Post-	Medieval			Post-	Medieval			Post-	Medieval			Post-	Medieval
2276		2276		2276		2276		1811		3039				3033				3033				3032	
21		21		30		30		28		42				42				42				42	
53		54		55		56		57		58				59				60				61	

Appendix V: Clay Pipe Report

Context	Stem?	Bowl?
2		
5		1
6		1
10	1	
11	1	
14	1	
15	1	
17		
19	1	
21	4	1
22	5	1
23		1
26	1	
29	2	
30	10	
31	8	1
43	2	

Bowl from context 2 – Oswald's type 24 (Oswald, 1975) – spurred pipe; smaller narrower bowl; thin walled; small narrow spur; thin stem – *c*.1810-1840

Part bowl from context 5 – difficult to identify – possibly Oswald's type 9 or something similar (Oswald, 1975) – long bowl with curved sides – c.1680-1710

Part bowl from context 9 – difficult to identify – possibly Oswald's type 20 or something similar (Oswald, 1975) – small square base; very vertical bowl – late 17 th – early 18 th Century? – with stamp 'T' 'K' on stem (maker's initials)
Bowl from context $17 - Oswald's$ type 15 (Oswald, 1975) – forward drooping bowl; smaller spur – c. 1840-1880
Bowl from context $21 - 0$ swald's type 4 (Oswald, 1975) – smallish bowl ; pedastal foot; pronounced swelling on back of bowl; narrow stem; rim of bowl often rouletted – c . 1600-1640
Bowl from context $22 - Oswald's$ type 12 (Oswald, 1975) – fairly wide mouth; medium to tall; walls and stems become thinner with time; bases become smaller and squarer with time – c . 1730-80 – with stamp 'R B' on bowl (2 other clay pipes with 'RB' stamp on the bases of their stems have been found in London, they date to $1640-1660$, and this refers to either the pipe-maker Robert Baxter or Richard Bassett; and one further dated to $1600-1640$ and refers to Robert Burn – however it is unlikely that they refer to the same maker as the pipe from Bermondsey appears to be much later in date)
Part bowl from context 23 – difficult to identify – possibly Oswald's type 9 or something similar (Oswald, 1975) – relatively wide square base – late 17 th – early 18 th Century?
Bowl from context 31 – Oswald's type 24 (Oswald, 1975) - spurred pipe; smaller narrower bowl; thin walled; small narrow spur; thin stem – <i>c.</i> 1810–1840 – heavily decorated with flower-pattern – stamp on stem '1' 'S' (probably) (other clay pipes with 'IS' stamp have been found in London e.g. 2 from Wapping which date from 1580-1610, and one from Bankside which dates from 1640-1669 and possibly refers to either the pipe-maker John Smith or John Stevens – however it is unlikely that they refer to the same maker as the pipe from Bermondsey is much later in date)
Bibliography Oswald, A, 1975, 'Clay Pipes for the Archaeologist', British Archaeological Reports 14

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Museum of London Clay Tobacco Pipe Makers' Marks from London Database - http://www.museumoflondon.org.uk/claypipes/index.asp