ASSESSMENT OF AN ARCHAEOLOGICAL EXCAVATION AT THE LONDON CITY MISSION, PARADISE STREET, LONDON BOROUGH OF SOUTHWARK

Central National Grid Reference: TQ 34849 79653

Site Code: LCM 04

Written and Researched by Kathelen Sayer,

Pre-Construct Archaeology Ltd

December 2004

Project Manager: David Divers and Jim Leary

Commissioning Client: John Samuels Archaeological Consultants on behalf of Grangewalk Developments Ltd.

Contractor: Pre-Construct Archaeology Ltd,

Unit 54, Brockley Cross Business Centre,

96 Endwell Road,

Brockley,

London SE4 2PD.

Tel: 020 77323925 / 7639 9091 E-mail: info@pre-construct.com

Fax: 020 7639 9588 www.pre-construct.com

CONTENTS

Appendices

Illustrations

1 ABSTRACT

1.1 This report details the results and working methods of an archaeological evaluation and excavation undertaken on land at Paradise Street, London Borough of Southwark, between 16th – 18th June, and 12th July - 23rd July 2004 respectively. The site is centred at National Grid Reference TQ 34849 79653. The archaeological work was commissioned by John Samuels Archaeological Consultants on behalf of Grangewalk Developments Ltd.

1.2 The evaluation comprised one trench, trench 1, which measured 4m x 4m at the base. The evaluation identified the presence of prehistoric and medieval/early post-medieval deposits and post-medieval pits and structures. During the excavation trenches 2 and 3 were excavated to the east and west of trench 1, measuring 5.60m x 4m and 10.30m x 10m respectively, both trenches overlapped with trench 1 (Fig. 2).

1.3 The excavation revealed evidence for a prehistoric soil horizon, a large 16th century EW running ditch, early post-medieval NS gullies and several 18th century rubbish pits. The site was developed in the 18th century when a brick building was constructed, which was modified in the late 18th/early 19th century and a brick lined well was dug. 19th century basemented buildings were constructed in the western half of the site replacing the earlier structures.

2 INTRODUCTION

2.1 An archaeological evaluation and subsequent excavation was undertaken by Pre-Construct Archaeology Ltd at the London City Mission, Paradise Street, Bermondsey, London Borough of Southwark. The evaluation was conducted between 16th –18th June 2004 and revealed medieval and post-medieval remains. The ensuing excavation took place between 12th July and 23rd July 2004. The work was commissioned by John Samuels Archaeological Consultants on behalf of Grangewalk Developments Ltd., in advance of the proposed redevelopment of the site.

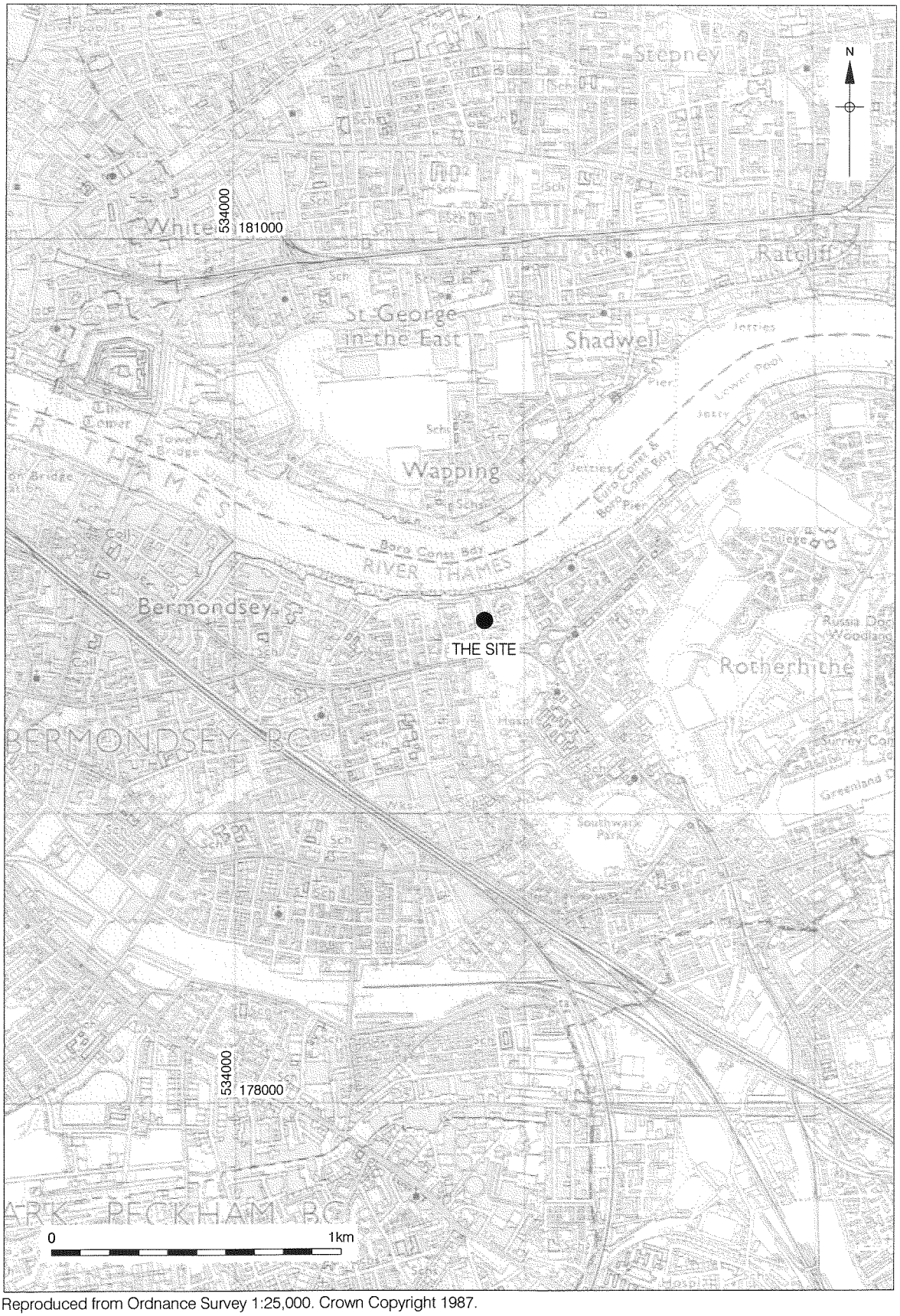
2.2 The site is situated on the junction of Cathay Street and Paradise Street about 120m south of the Thames (Fig. 1). It is bounded by Cathay House to the north, a park to the east, Paradise Street to the south and Cathay Street to the west. The National Grid Reference for the site is TQ 34849 79653.

2.3 The site lies in an Archaeological Priority Area as defined by the London Borough of Southwark.

2.4 The evaluation and excavation comprised three trenches measuring 4m x 4m, 5.60m x 4m and 10.30m x 10m (Fig. 2).

2.5 The site was inspected and monitored by Sarah Gibson (Southwark Council archaeological advisor for the London Borough of Southwark). The evaluation and excavation was project managed by David Divers and Jim Leary and supervised by the Helen Clough and author.

2.6 The completed archive comprising written, drawn and photographic records and artefactual material from the evaluation and excavation will be deposited with the Museum of London (LAARC) under the site code LCM 04.



Reproduced from Ordnance Survey 1:25,000. Crown Copyright 1987.

Figure 1
Site Location
1:20,000

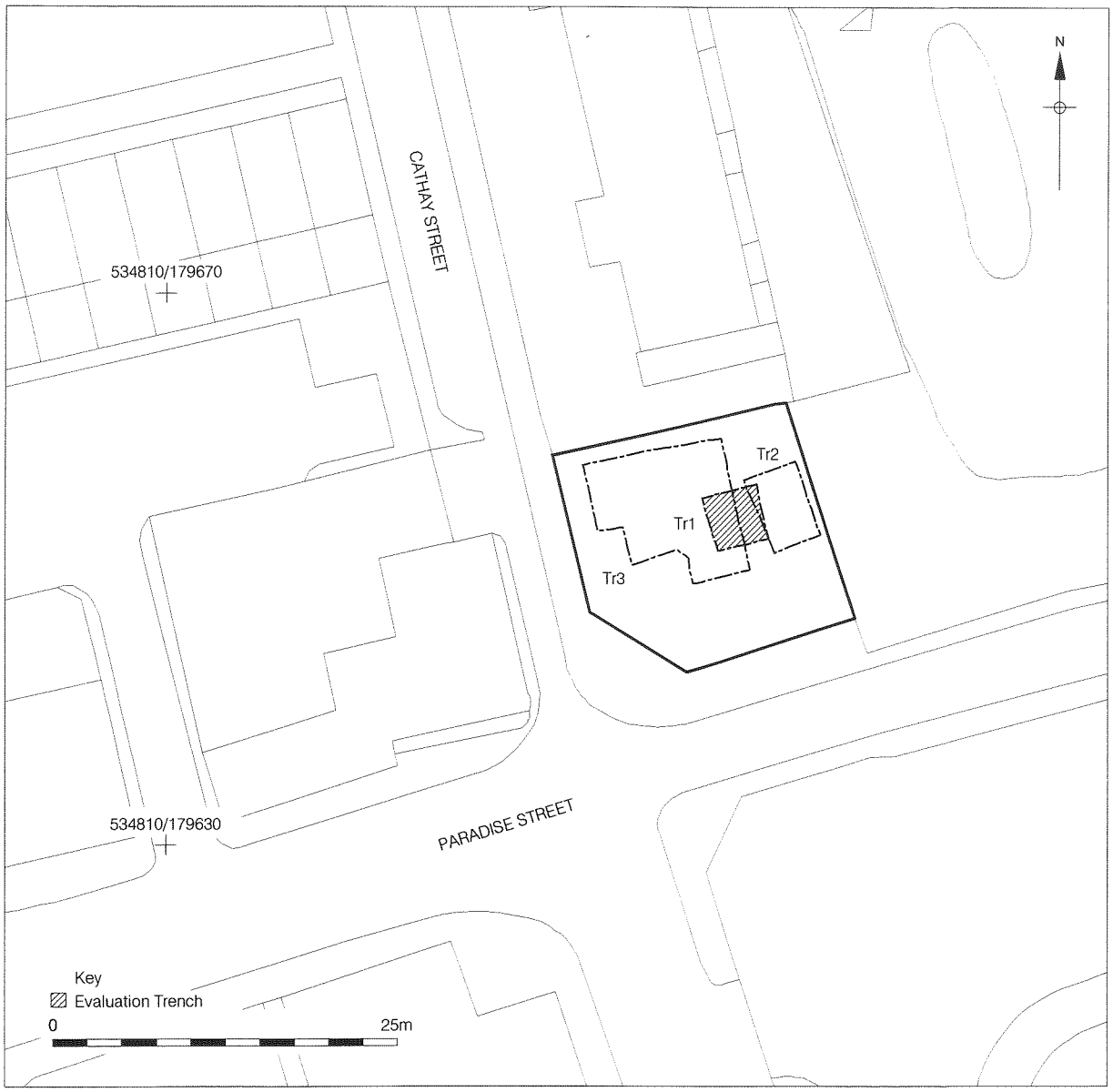


Figure 2
Trench Location
1:500

3 PLANNING BACKGROUND

3.1 Planning Policy Guidance Note 16

3.1.1 In November 1990 the Department of the Environment issued Planning Policy Guidance Note 16 (PPG16) 'Archaeology and Planning'. It provided guidance for planning authorities, property owners, developers and others on the preservation and investigation of archaeological remains.

3.1.2 The advice states 'the desirability of preserving an ancient monument and its setting is a material consideration in determining planning applications whether that monument is scheduled or unscheduled. Developers and local authorities should take into account archaeological considerations and deal with them from the beginning of the development control process' (paragraph 18).

3.1.3 It also states 'where nationally important archaeological remains, whether scheduled or not, are affected by proposed development there should be a presumption in favour of their physical preservation' (paragraph 8).

3.2 Archaeology in Southwark

3.2.1 The site is located within the Archaeological Priority Zone of Borough/Bermondsey/Riverside as defined in the London Borough of Southwark's Unitary Development Plan.

3.2.2 The Council's Archaeology Policy is as follows:

OBJECTIVE E.5: TO ENSURE THE PRESERVATION, PROTECTION, INVESTIGATION, RECORDING AND DISPLAY OF THE ARCHAEOLOGICAL HERITAGE

The archaeological heritage of the borough includes historic centres and ancient monuments, archaeological sites and areas of geology and topography especially attractive for early settlement and is of national and international significance. Many finds and sites in Southwark, particularly those from the Roman, Medieval and Elizabethan periods are very well known, and the Council will do all it can to assist in their preservation, protection and display for all to enjoy.

POLICY E.5.1: The Council will seek to conserve and protect the Borough's archaeological heritage and to enhance the knowledge of its historic development. The Policy will apply to sites of potential archaeological importance where ancient remains are threatened by development.

The Council will expect the applicant to provide information to enable an assessment of the impact of a proposed development on the potential archaeology of the site. This would usually be desk-based information and would be expected prior to the determination of a planning application

Where there is potential for important remains on a site, which may merit preservation *in situ*, then the results of an archaeological field evaluation will, if feasible, be required prior to the determination of a planning application

Where the evaluation reveals important remains their protection and preservation will be the primary objective. This can be achieved by re-designing the proposed development and by foundation modification.

Where important archaeological remains cannot be preserved, or where remains do not merit preservation, then the Council will use planning conditions to ensure excavation and recording of the remains prior to redevelopment i.e. preservation by record.

Archaeological investigations are to be undertaken by a recognised archaeological field unit to a written specification. These will need to be approved by the Council prior to the commencement of any work.

Reason: To protect Southwark's archaeological heritage, which includes remains of national importance. These remains are under constant threat from proposed developments and the Policy will ensure their protection through the planning process. The Council considers that the archaeology of the Borough is a community asset and that its preservation is a legitimate objective, against which the needs of development must be balanced and assessed.

Implementation: By application of the Council's statutory development control powers and by planning and other legal agreements. This policy applies to all sites within the defined Archaeological Priority Zones and, in addition, the Council will apply this policy as appropriate to sites of potential archaeological importance outside the zones. The Department of the Environment has also issued comprehensive guidance (Planning Policy Guidance 16, 'Archaeology and Planning' November 1990). See also POLICY B.3.3: Community Benefit.

The Proposals Map and Schedule identify Archaeological Priority Zones at:

Borough/Bermondsey/Rotherhithe (proposal 1)
Old Kent Road (Proposal 72)
Elephant and Castle/Kennington Park Road (Proposal 85)
Walworth (Proposal 90)
Camberwell (Proposal 144)
Peckham (Proposal 160)
Dulwich Village (Proposal 205)

3.3 A Planning application has been made for permission to develop the land for residential housing.

3.4 The proposed development includes a basement car park and would therefore impact upon the potential archaeological resource. In accordance with PPG 16 and conditions imposed by the planning authority, a program of archaeological works was implemented.

3.5 Sarah Gibson, Senior Archaeological Planning Officer for the London Borough of Southwark inspected and monitored the archaeological works.

3.6 There were no Scheduled Ancient Monuments within the footprint of the development.

4 GEOLOGY AND TOPOGRAPHY

4.1 The site lies approximately 120m south of the River Thames, which prior to embanking in the medieval period would have been much wider than at present. The geology of the Bermondsey area consists of Eocene London Clay overlain by between c4.5 to 6.0m of Pleistocene floodplain sand and gravel deposits. These have been variously eroded by braided channels and tributaries of the Thames, which resulted in a landscape of low-lying gravel islands or 'eyots' separated by tidal watercourses, marshes and mudflats. Two such eyots were the Rotherhithe Eyot and the Bermondsey Eyot. These were separated by The Mill Stream, which may have been navigable for some time [1].

4.2 The area of proposed development lies just on the northern extent of the Rotherhithe eyot, close to the course of the Mill Stream.

4.3 The low lying areas, such as that on which the site lies, would have been particularly prone to the effects of rising sea levels (transgressions), caused during the last 10,000 years by melt water following the end of the last glaciation. Such transgressions have deposited thick layers of fluvial clay in the low-lying parts of Bermondsey, indicating that these regions were either flooded tidally or under standing brackish water [2]. These wet phases have been periodically interspersed by periods of sea level reduction or transgression. Five major transgressions (Tilbury I-V) have been identified from the study of the Thames sediments at Tilbury [3]. However it has been pointed out that work in Bermondsey suggests a more complex local sequence of transgressions and reductions exists within this area [4].

4.4 Previous archaeological work in some areas of Bermondsey, on the high ground of the eyots, has indicated that archaeological deposits can be comparatively shallow for this part of London. Gravels of the Rotherhithe and Bermondsey eyots have been observed at c 2m OD.

---

[1] Heard

[2] Drummond-Murray et al 1994, Thomas & Rackham 1996

[3] Devoy 1980

[4] Drummond-Murray et al 1994, Thomas & Rackham 1996

4.6 Present ground level at the site is approximately 3.20m OD.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 Prehistory

5.1.1 The last twenty years have shown that a rich archaeological resource is preserved underneath the alluvium and evidence of the exploitation of the islands dating from the Mesolithic to the Iron Age has been discovered. The nature of the exploitation is likely to have varied through time and according to local conditions, from sporadic visits to more settled occupation and farming.

5.1.2 To the north-west of the site excavations at Platform Wharf recovered a Mesolithic flint blade, a Neolithic polished stone axe, late Neolithic - early Bronze Age flint knives and implements. A small assemblage of Mesolithic or Early Neolithic struck flints was found during excavations at Bermondsey Wall West and Chambers Street [5]. Burnt and struck flint has been found on the foreshore at Chamber's Wharf [6]. Prehistoric ploughsoil has been identified at Phoenix Wharf, where it sealed a Bronze Age cooking pit [7], and Wolseley Street [8]. Plough or ard marks were recorded in the ploughsoil on both of these sites and abraded sherds of Neolithic pottery were recovered from Wolseley Street.

5.1.3 Neolithic flood deposits, flints and pottery were recorded at Culling Road to the east [9]. The edge of the high ground and the surrounding marsh with associated flint flakes were found to the south-west at St Olave's Hospital and an isolated Neolithic polished axe was found to the north of the site [10].

5.1.4 The excavations at Platform Wharf also identified a large NW/SE ditch associated with a group of stakeholes. Small quantities of post Deverel-Rimbury ware dating to the late Bronze Age/ early Iron Age were found within these features and Iron Age pot sherds were also recovered from the site [11]. To the north at Cherry Garden Pier, pits containing Iron Age pottery and flint flakes were recorded and the remains of flint and pottery fragments were recovered from Rupack Street to the west [12]

5.2 Roman

---

[5] Taylor, Forthcoming
[6] Drummond-Murray *et al* , 1994
[7] *ibid*
[8] Drummond-Murray, 1994
[9] Archaeological Solutions Limited, 2003
[10] *ibid*
[11] *ibid*
[12] *ibid*

5.2.1 No clearly recognisable patterns of land use have been identified for the area during the Roman period, with the majority of the activity concentrated along Borough High Street to the west, although isolated settlements existed during the early Roman period on both Horselydown and Bermondsey Eyots [13].

5.2.2 The activity that has been recognised within the area includes; to the east, two ditches and two wells at Rotherhithe, and a large ditch at Rupack Street, to the north a ditch and three cremations at Cherry Garden Pier, a pottery scatter to the north and to the south-west a refuse pit. [14]

5.3 Saxon

5.3 There is little evidence for Saxon activity within the area of the site. A probable timber revetment for a water channel has been found to the north-west and two scatters of pottery have been found to the north.

5.4 Medieval

5.4.1 To the north of the site is the site of the moated Royal residence known to have been built for Edward III in 1361. Excavations at the site revealed parts of a moat, stone wall and mortared floor, postholes and beamslots.

5.5 Post-medieval

5.5.1 Tanning became a major industry in Bermondsey by the end of the medieval period, probably as a result of a good supply of water, the desire to locate a foul smelling industry on the edge of urban settlement [15] and the proximity to an access route for animals going to the slaughter.

5.5.2 During this period Rotherhithe saw a rapid growth in the docks and shipbuilding industry. This resulted in the construction of shipyards, landing steps, warehouses, mills, granaries and granary warehouses.

---

[13] Leary, 2004
[14] Archaeological Solutions Limited, 2003
[15] Drummond-Murray *et al*, 1994, 256

5.5.3 The earliest cartographic source for the area from 1544 shows it to be open fields with occasional trees and sparse buildings.

5.5.4 Although maps of 1603 [16] and 1658 [17] show development within the area it is not until Rocque's Map in the 1740's that the site is shown to have been built on. Here it is shown as part of a tenement block. Horwood's map of 1799 shows the site to be two properties within the tenement building fronting onto Love Lane (now Cathay Street).

5.5.5 During the 17th century Edward III's moated building was converted into a Delftware pottery factory. The factory's life was short lived however, a 1641 poll tax records Thomas Barnebowe as an "earthen pot maker" at Rotherhithe but after his death in 1661, when the factory was passed onto his son, the factory seems to have closed with no entries for potters within the area in the hearth taxes of 1666 and 1669 [18].

5.5.6 By 1897 the Ordnance Survey shows Love Lane has been renamed as Cathay Street.

5.5.7 It would appear that the buildings might have been destroyed by explosion or fire as they are shown shaded on the LCC War Damage Map.

5.5.8 The Ordnance Survey of 1967 shows the site to be part of Barclay House, a single square structure with extensions to the north and south.

---

[16] Brett-James
[17] Newcourt
[18] Norton

6 ARCHAEOLOGICAL METHODOLOGY

6.1 The evaluation strategy was designed to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development. The evaluation comprised one trench measuring 4m x 4m at the base.

6.2 The evaluation trench revealed post-medieval deposits, features, brick walls and masonry and it was therefore decided to extend the area of excavation. Two further trenches were excavated, trench two to the east, 5.60m x 4m at the base, and trench three, 10.30m x 10m, to the west of the evaluation trench. A mechanical excavator fitted with a toothless bucket removed the modern overburden until the top of the archaeological deposits and walls were reached. The trenches were then cleaned by hand and all features excavated and recorded on pro-forma context sheets, with plans and sections drawn at 1:20 or 1:10 as appropriate.

6.3 Following the machining, the area was cleaned by hand. All features, where possible, were fully excavated and recorded onto *pro-forma* context record sheets. Contexts were numbered sequentially and are shown in this report within square brackets. Plans and sections were drawn at a scale of 1:10 or 1:20 as appropriate. A general photographic survey of the site and working conditions was undertaken

6.4 A temporary benchmark was established on the site: value 4.27m OD. The mark was transferred from an Ordnance Survey Bench Mark located on the side of The Boatman Pub, Prospect Close, which had a value of 3.35m OD.

6.5 The excavation was carried out in accordance to the Method Statement prepared by David Divers [19] and followed guidelines issued by English Heritage and the IFA.

---

[19] Divers, 2004

7 THE ARCHAEOLOGICAL SEQUENCE

7.1 The site will be discussed as a whole rather than trench by trench. Reference to trench numbers will be made where features were recorded in more than one trench.

7.2 Phase 1: Natural

7.2.1 The natural geology on the site comprised light brownish yellow coarse sand with orange mottling [1]. This was recorded sloping down to the west at a level of 1.19m OD in trench 1, 1.32m OD in trench 2 and 0.54m OD in trench 3. The natural sands have been truncated in the western part of the site by 19th century basements.

7.3 Phase 2: Prehistoric soil horizon

7.3.1 The sand was sealed by a mixed layer of bioturbated orangey brown sand, [34/71/104], which had occasional charcoal and burnt flint inclusions and probably represents a prehistoric plough soil. This was recorded at a height of 1.39m OD in trench 1, 1.76m OD in trench 2 and 0.98m OD in trench 3.

7.4 Phase 3: Late 15thCentury (Figure 3)

7.4.1 A large EW ditch, [31/69/99], was found cutting into the prehistoric plough soil in all three trenches in the northern half of the site, the largest section of which was recorded in trench 3 at 1.71m OD (fig. 5 section 5). The dimensions as seen were c. 7m EW x 3.40m NS and 1.10m in depth, with a rounded terminus in trench 3, the eastern end extended beyond the limit of excavation. The feature had quite steeply sloping sides, an uneven base and was filled by a mid greyish brown silty clay sand with moderate charcoal and occasional oyster shell inclusions, [22/68/98]. The fill contained a residual sherd of Late Bronze Age – Early Iron Age pot, an assemblage of pottery with a date range of 1050 – 1500 AD, fragments of an iron sheet or thin vessel, burnt flint and animal bone. Although there was medieval pottery included within the assemblage the presence of late 14th and 15th century Surrey whitewares suggests it is therefore probably residual and associated with the moated manor to the north-east of the site. As it was dug into sand the very vertical sides of this feature suggest that it was backfilled quite soon after it had been dug, otherwise they would have slumped. A tip line was observed within the sections excavated in trenches 1 and 3. Environmental samples taken from the fill recovered grains of free threshing wheat, charcoal and burnt bone (fig. 5 section 5).

7.4.2 Towards the centre of the site was a pit, [101], that measured 1.64m NS x 0.74m EW x 0.96m in depth at 1.47m OD. It was filled by [100], a moderately loose dark grey silty sand with frequent charcoal fragments. The pottery from the fill dates to the end of the 16th century and consists largely of early post-medieval redware as a carinated dish, a handled jar and jug. A Post-medieval slip coated redware dish is also present as are Border ware small dishes. A few sherds of a Cheam Ware barrel shaped jug, dated to 1440-1500 were also present as residual pottery.

7.5 Phase 4: Mid 17th century (Figure 3)

7.5.1 A posthole [95] cut into the ditch [31/69/99] on the northern edge towards the terminus. It measured 0.32m NS x 0.42m EW x 0.25m in depth at 1.71m OD. The post pipe, [94], was present and measured 0.10m NS x 0.23m EW x 0.12m in depth. The fill of the post pipe was a loose dark brown silt with remnants of wood, [92], and the backfill of the posthole, [93], was a loose mid brown sandy silt with occasional cbm and charcoal fragments. The flint post packing was still in situ. The backfill of the posthole, [93], produced a small sherd of green-glazed Post-medieval slip coated redware, dated to between c. 1480-1650 AD.

7.5.2 To the south-east of this posthole a NS ditch, [21], was also recorded partially cutting into [31/69/99]. It measured 3.30m NS x 1m EW and was 0.30m deep. It was filled by a mid brownish grey sandy silt, [20], with occasional cbm fragments and flakes and very occasional small subangular stones. Three residual sherds of Early medieval sandy ware, dated to 970-1100 AD and a small sherd of Coarse Border ware, dated 1270-1500 AD, were recovered.

7.5.3 To the north of posthole [95] a EW linear feature, [110], was recorded cutting into the bioturbated sand within trench 3 (fig. 5 sections 4 & 5). Unfortunately only the top of the southern edge and a small section of this feature were revealed during excavation, the remainder lay under the northern step of the trench. As seen it measured 0.30m NS x 2.60m EW x 0.20m in depth at 1.06m OD. The southern edge was sloping down towards the north. It was filled by [109], a dark grey sandy clayey silt with sandy lenses and occasional charcoal flecks. There were no finds within the sample examined.

7.5.4 Two stakeholes, [33] and [39], were recorded at 1.42m OD and 1.40m OD respectively, within the central area of the site. To the west, {33] measured 0.10m in diameter x 0.11m in depth, and was filled a light brownish green silty sand, [32], with occasional fragments of charcoal. [39] to the east measured 0.10m in diameter and 0.17m in depth, filled by a

mid to dark brownish green sandy silt , [38]. No finds were contained within either of the stakeholes.

7.5.5 A NS shallow gully, [103], was recorded to the west of the two stakeholes. The gully was filled by a brownish grey silty sand, [102], with frequent charcoal inclusions and measured 0.80m NS x 0.50m EW x 0.35m in depth at 0.79m OD. Burnt flint and a single

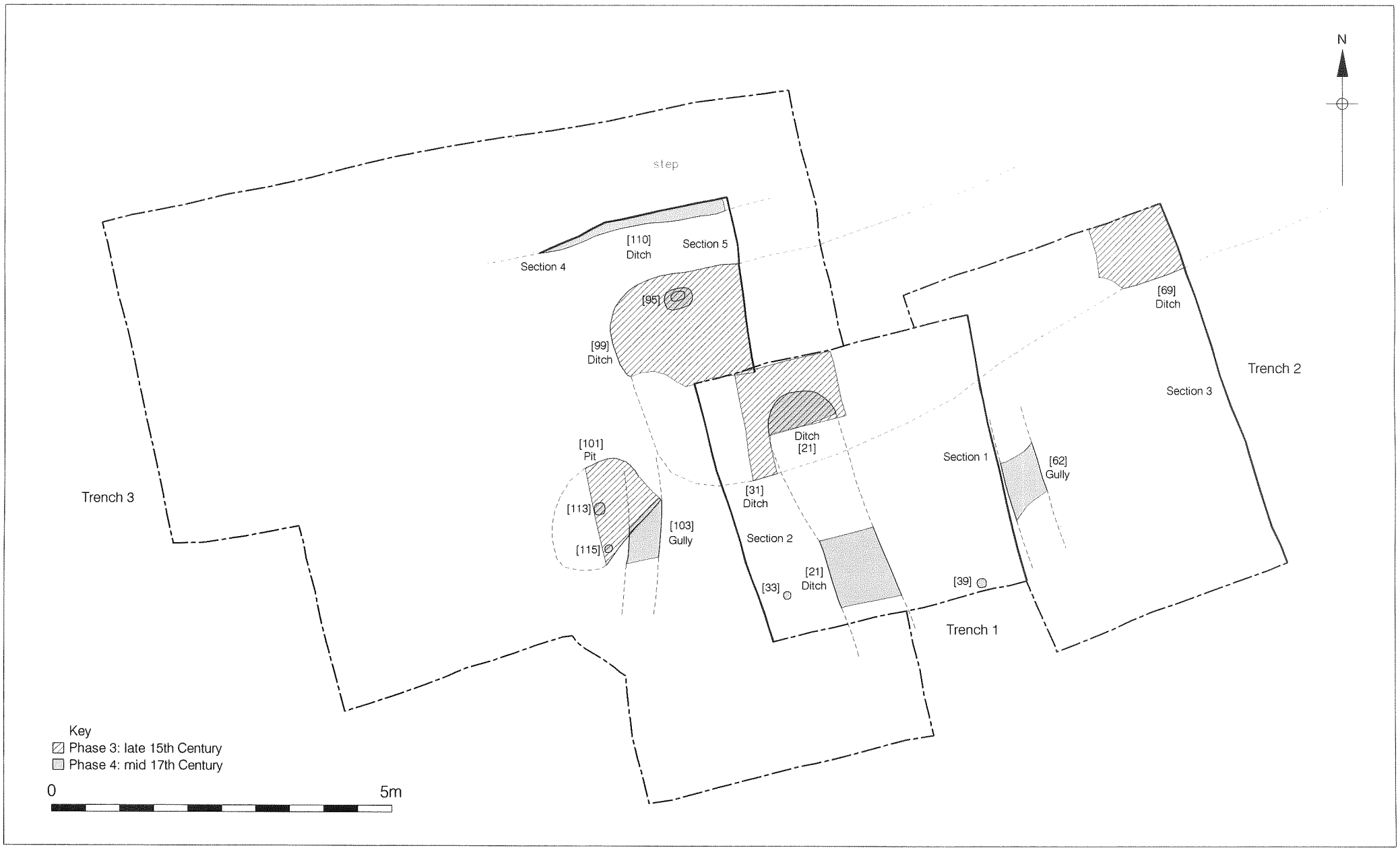


Figure 3
Phases 3 and 4
1:75

redeposited struck flint of prehistoric date were retrieved from the fill. The gully extended beyond the southern limit of excavation and was truncated to the north by later features.

7.5.6 A north-south gully, [62], was recorded towards the east of the site. It measured 0.90m NS x 0.58m EW and 0.16m in depth at 1.71m OD and was filled by a mid greenish brown sandy silt, [61], with occasional charcoal flecks. The fill contained the rim of yellow-glazed Post-medieval coated redware jug rim, the date range for which is 1480-1650 AD, and a small quantity of animal bone. The gully had been truncated to the north and south by later pits.

7.5.7 Two postholes, [113] and [115], were cut into the top pit [101]. They measured 0.18m in diameter x 0.48m in depth and 0.10m in diameter (depth unknown) respectively.

7.6 Phase 5: Late 17th century (Not illustrated)

7.6.1 Towards the end of the 17th century the area saw a period of flooding events represented by a layer of alluvium, [2/56/73] (fig. 5 sections 1-5). The alluvium was a firm dark greenish brown, sandy silt, with occasional charcoal flecks and cbm fragments. It was found within trench 1 at 1.97m OD, 0.50m in depth, in trench 2 at 2.93m OD, 1.10m in depth and in trench 3 at 2.10m OD, 1m in depth. A small assemblage of pottery was recovered from this layer with a wide date range from 1180 – 1650 AD, in addition to this assemblage a residual sherd of Late Bronze Age – Early Iron Age pot was found within this context. A number of small finds also came from this layer. These were; a copper-alloy strip/bracelet with groups of vertical incised lines, five iron nails and a stone hone. A small quantity of animal bone and cbm were also recovered from this layer.

7.7 Phase 6: 18th century (Figure 4)

7.7.1 The 18th century saw the construction of a building in the west of the area and a series of intercutting pits and gullies in the east.

7.7.2 To the south of [101] a structure, represented by walls [88] and [90], was constructed. [88] a sleeper wall constructed of 'Tudor' type red-firing sandy unfrogged bricks measured 1.20m NS x 0.10m EW x ran NS. [89] also ran NS and had two EW returns, the northern most of which was truncated by a later structure. {90] measured 1.42m NS x o.70m EW with three courses surviving to a height of 0.22m.

7.7.3 A small pit was recorded towards the centre of the site, [10], 0.40m in diameter x 0.07m in depth. It was filled by [11], a loose dark orangey black sandy silt with frequent charcoal and very occasional cbm fragments.
To the south-east of this a small pit, [8], measured 0.70m NS x 0.60m EW 0.15m in depth. It was filled by [9], a dark orangey black sandy silt with moderate brick and tile inclusions and occasional charcoal and gravels. The pottery from this feature dates to the early 17th century with sherds of Post-medieval fine redware, delftware and imports including a sherd of a Frechen stoneware bartman, a sherd of Portuguese faience with a blue on white design and a sherd of Italian Montelupo tin-glaze dish with a polychrome leaf design.

7.7.4 To the north of the site pit [108], recorded in section only (fig. 5, sections 4 & 5), measured 1.45m NS x 2.15m EW x 0.50m in depth. It was filled by [107], a loose mottled mid orangey brown and dark greyish brown clayey silt, with occasional charcoal flecks and chalk fragments. The fill contained a fragmentary collection of late medieval Surrey whitewares, Cheam ware and Tudor green ware, local coarse red earthenwares, Early post-medieval redware or post-medieval slip coated redware and a small sherd of Raeren stoneware. Also recovered from the fill was a 13th century 'Westminster' type floor tile and fragments of 18th century wine glass decorated with diamond-point engraving.

7.7.5 Within the eastern area of the site a series of intercutting pits were excavated. Recorded in both trench 1 and 2 was pit [12/48], measuring 1.10m NS x 1.40m EW x 2.10m in depth. This was recorded in trench 1 as possible rubble foundations but this was revealed to be a rubble dump in a larger pit, the majority of which was exposed in trench 2. The primary fill of [48] was [47] a loose black layer of charcoal and slate, measuring 1.10m NS x 0.80m EW x 0.03m in depth. Overlying this burnt deposit was a mid greenish brown clayey sandy silt with occasional rounded stones and charcoal inclusions, [46], this fill was very similar to the alluvial layer [2/56/72]. This secondary fill measured 1.10m NS x 0.90m EW x 0.20m in depth and indicates that the pit had been left open for a while and as a result had silted up. Overlying this was [45], a dark greyish brown sandy silt with frequent small angular stones, cbm and shell fragments and occasional charcoal and sand lenses, 1.10m NS x 1.40m EW x 1.10m in depth. 17th century pottery types such as border ware and mid 17th century delftware were recorded from fills [45] and [46].

7.7.6 To the east of [48] was pit [58], 1.60m NS x 1.50m EW x1.33m in depth, filled by [57] a moderately loose mid greenish brown sandy silt with very frequent small rounded stones and occasional cbm and charcoal fragments. The pottery assemblage from this feature included Early Post-medieval redware, Post-medieval slip-coated redwares, North Kent

Tudor redware, imported Dutch redware and Raeren stoneware, all of which are characteristically 16th century in date. A sherd of a mid 17th century polychrome delftware charger was also present within the assemblage. A number of small finds also came from this context. These were: 23 pieces of copper alloy wire, two iron nails with copper-alloy wire attached to one and a copper-alloy fitting or tube shaped object.

7.7.7 Cutting pit [58] was pit [52], 2m NS x 2.05m EW x 2.90m in depth, filled by primary fill [70], a soft mid greenish brown silty sand with occasional charcoal, 0.50m in thickness and secondary fill [53], a moderately loose light greyish white brick rubble.2.40m in thickness. The secondary fill contained an assemblage of pottery mostly dated to the 17th century, including a fluted green-glazed Border ware dish with a combed wavy line band and a segmented circle stamp decoration, two sherds of Portuguese faience dishes and a sherd of a probable Spanish import with an 'apple-green-glaze. Also present was a fragment of a London stoneware tankard.

7.7.8 Two gullies, [54] and [49], running EW and NE/SW respectively, were also found cutting pit [52] (fig. 5 section 3). The EW gully, [54], was filled by [55] a moderately compact dark grey clayey silt with frequent mortar and cbm inclusions and occasional coal and charcoal. It measured 1.20m EW x 0.50m NS x 0.90m in depth. Tin glazed earthernwares were recovered from the fill of this gully. Gully, [49], measured 3m NE/SW x 0.40m NW/SE x 0.22m in depth; this was also recorded as possibly cutting pit [48] at its south-western end. It was filled by [44] dark grey sandy silt with frequent small angular stones and cbm inclusions. The pottery found within the fill consisted of mostly delftware chargers of a mid 17th century date, including a charger with a purple powdered surface.

7.7.9 Cutting pit [50] and the EW gully [54] was pit [43], also recorded in trench 1 as [7] filled by [5], [24] and [25] (fig. 5, section 1) but was revealed to be two pits in trench 2, this was filled by [42] a moderately loose dark grey sandy silt and rubble, with frequent shell, pot, rounded stones and occasional charcoal inclusions. It measured 1m in diameter with a depth of 1.20m, however the feature was not bottomed during excavation. Three sherds of tin-glazed earthernwares dated to between 1700-20 were found within the fill of this pit.

7.7.10 Cutting this pit was a larger pit, [43], measuring 1.80m NS x 2.20m EW x 1.20m in depth. The pit continued beyond the northern and western limits of the excavation and was not bottomed.

7.8 Phase 7: Late 18th / Early 19th Century (Figure 4)

7.8.1 During this period a levelling layer, [91], was laid down within structure [88]/[90]. This consisted of a mixed black and mid brown clayey silt with very frequent coal, cbm and small angular stones. The layer measured 0.70m NS x 0.92m EW x 0.05m in depth. Overlying this levelling layer a sleeper wall, [89], and a floor, [87], were constructed. The sleeper wall ran EW and measured 1.14m EW x 0.22m NS with two courses surviving to 0.12m in height. The Remnants of the floor measured 0.75m NS x 0.77m EW with a height of 0.10m.

7.8.2 To the north of this structure a well, [78], was constructed. The well measured 1.86m NS x 1.40m EW the full depth of the well is not known. It was recorded in trench 1 as [17] at a height of 1.47m OD (fig.5, section 2). The well was backfilled by the early 19th century.

7.9 Phase 8: 19th century (Figure 4)

7.9.1 During the 19th century basements were constructed in the western half of the site as walls [74], [79], [80], [81], [82] and [84]. The back wall of these basements, [81], truncated the earlier structure [90] but it seems that the later floor, [87] was repaired with 19th century bricks and the back wall bonded in with this floor. The internal walls are represented as [74], [80] and [82]. The basements appear to belong to two properties, with the northern most divided into two rooms, measuring 4m NS x 4 EW and 4m NS x 1m EW as exposed and composed of [74], [79], [80] and [81]. The eastern room has a fireplace [84]. Only one room has been partially exposed in the southern area, measuring 2m NS x 4m EW, composed of [81] and [82].

7.9.2 To the east of the building 19th century levelling layers [18], [41], [72], [106] and pits [63], [65] and [111] were recorded overlying the site

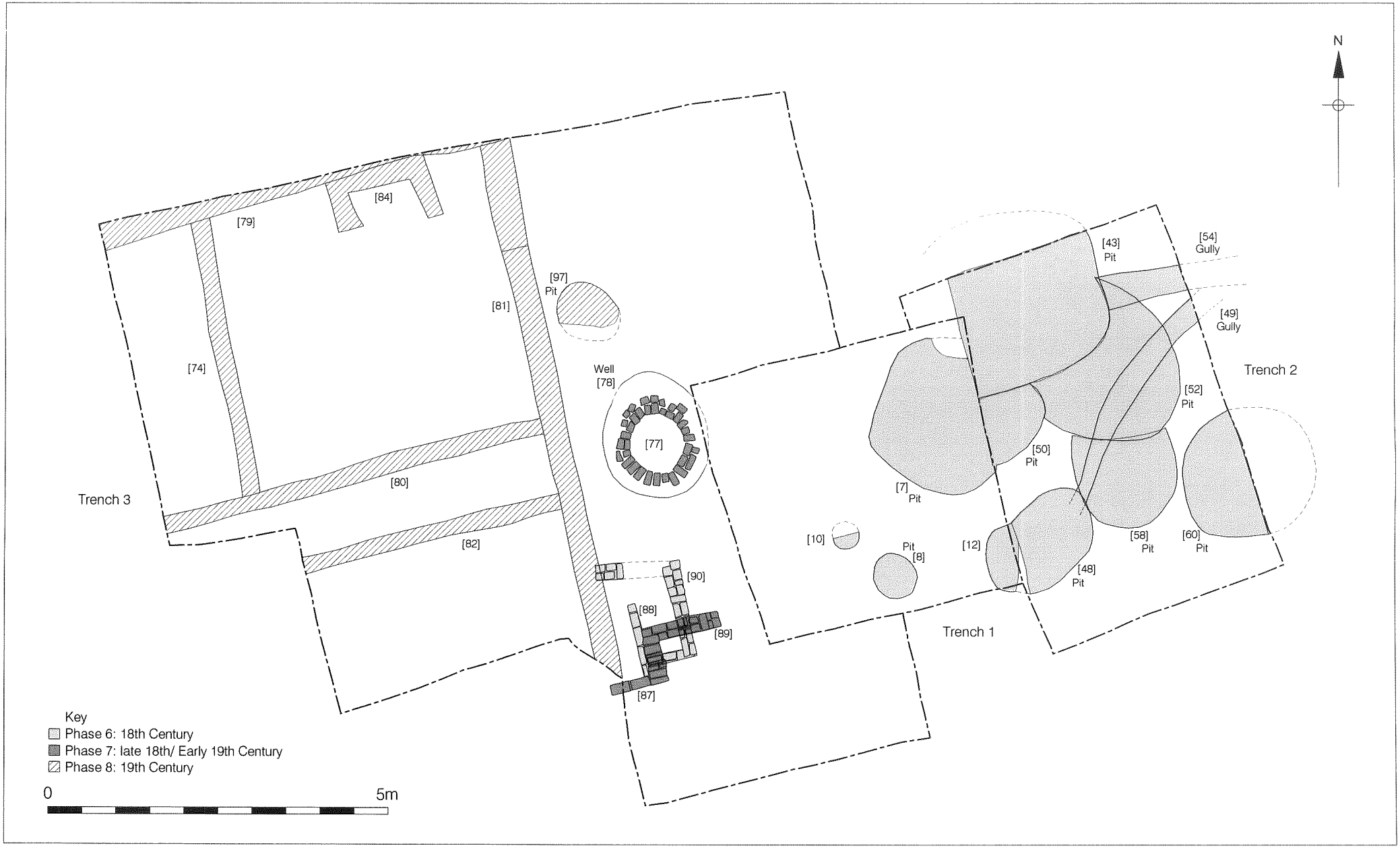
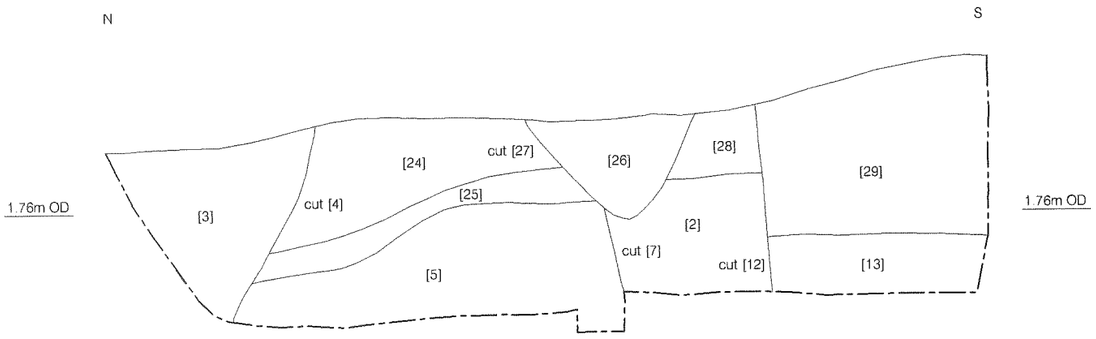
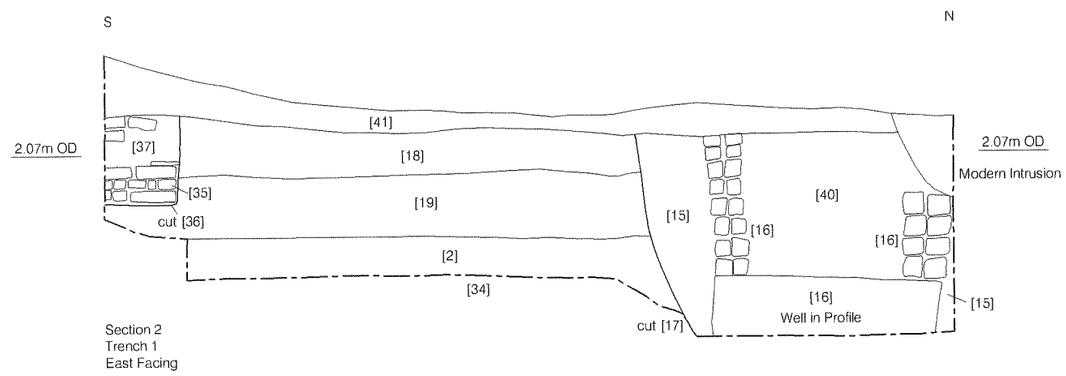


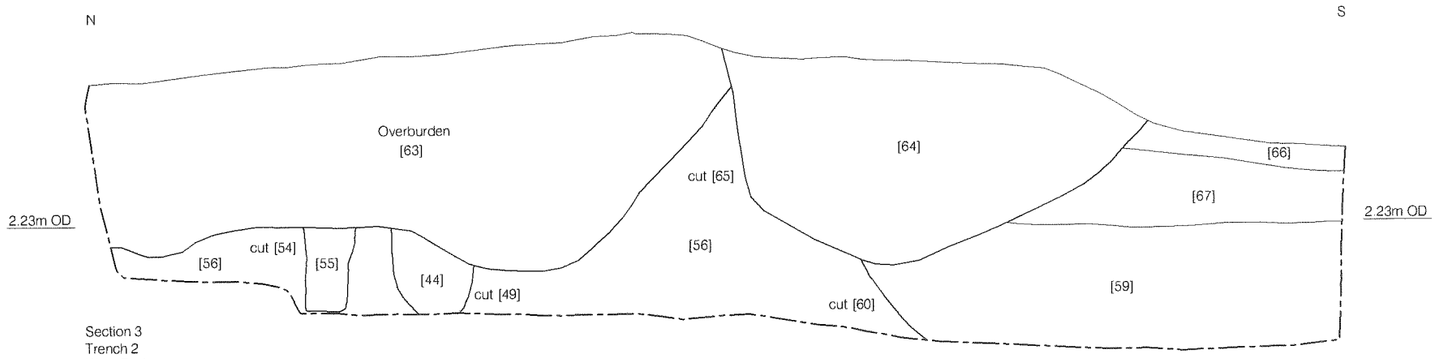
Figure 4
Phases 6, 7 and 8
1:75



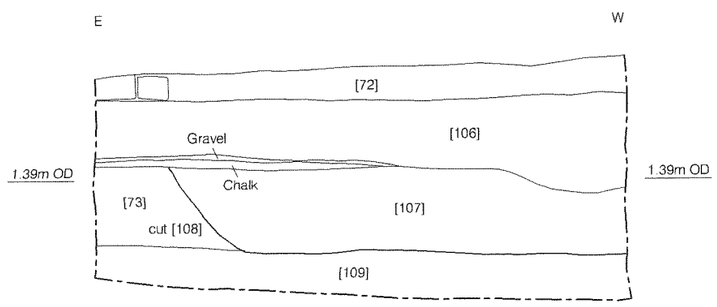
Section 1
Trench 1
West Facing



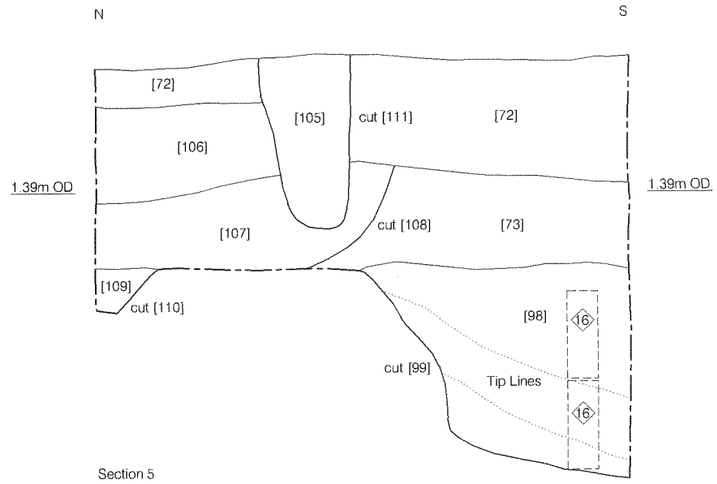
Section 2
Trench 1
East Facing



Section 3
Trench 2
West Facing



Section 4
Trench 3
South Facing



Section 5
Trench 3
West facing

0 2m

Figure 5
Sections 1 - 5
1:30

8 ORIGINAL AND ADDITIONAL RESEARCH OBJECTIVES.

8.1 The original objectives of the excavation, as set out in the method statement are listed below.

- **Establish the presence of environmental and topographical data which may inform on the nature of the land use and early human exploitation, and identify the presence and nature of prehistoric features and/or artifacts on the site.**

The excavation identified evidence of prehistoric activity on the site in the form of a single struck flint flake, two sherds of Late Bronze Age – Early Iron Age pot and a prehistoric soil horizon containing occasional charcoal and burnt flint inclusions, which is compatible with the findings from other locations on the Rotherhithe eyot. An environmental sample taken from the prehistoric soil horizon contained a single charred grain of wheat and occasional fragmented wood. The residue produced fish bone, charcoal and potsherds. The flint and pot sherds mentioned above were redeposited in later features and the deposits of prehistoric date have been largely truncated by later post-medieval activity. As such, little can be said concerning the nature or chronology of any such prehistoric activity.

- **Establish the presence of medieval archaeology; including evidence of activity relating to the nearby Edward III moated manor house.**

No evidence of occupation contemporary with the Edward III moated manor house was found on the site. However a number of finds from later features can be dated to this period. Pottery dating between 1050-1350 was recovered residually in later features. A large ditch with a rounded western terminus ran EW through the site. The ditch had vertical sides and was backfilled soon after it was dug in the late 15th century.
A small quantity of medieval roof and floor tiles were recovered, although the roof tile fragments are undiagnostic they are likely to be mainly from peg tiles, made in fabrics that are typical of those used in the Greater London area. One small fragment of tile in a distinctive shelly fragment is indicative of the earlier medieval period (1130-1280). The floor tiles were recovered from the alluvium and a number of 18th century pits and included a 13th century 'Westminster' type floor tile, with a glazed and decorated surface and 'Flemish' plain-glazed tiles. These tiles could be associated with the manor house, or a nearby building such as Bermondsey Abbey, as they are normally indicative of high status buildings. The 'Westminster' type floor tiles were used in tile 'mosaic' floors in buildings such as churches, abbeys or manorial houses. However the fashion for

decorated tiles was replaced in the late 14th century by the use of plain-glazed tiles often arranged in chequerboard fashion.

- **Establish the presence of post-medieval remains, such as evidence for Delftware pottery production which has been found in the area. Post-medieval housing may also be present.**

It seems the land was probably open during the early Post-medieval period with a NS ditch with a northern terminus, flanked by a gully on each side. A post-built structure was installed in the 17th century and a single posthole with packing was found to the north and the edge of a large EW ditch also dated to the 17th century.
A small quantity of delftware wasters almost certainly relates to the tin-glaze production identified on the site on the manor house to the west
By the 18th century several large rubbish pits were dug in the east end of the site and brick structures including a well were constructed to the west. The brick structures probably relate to the two tenement buildings identified on a map dated to the 1740's. These were shown to front onto Love Lane (now Cathay Street) and the well and rubbish pits recorded within the excavation would have been situated to the rear of the buildings.
During the late 18th or early 19th centuries the buildings on the site appear to have been rebuilt or refurbished resulting in two 19th century basemented buildings fronting onto Cathay Street. By this time the well was out of use and backfilled, and the area to the rear of the properties have been leveled.

8.2 Additional Research Questions

- **What can be learnt about the status of the local inhabitants from the finds?**

The changing status of the local area may be reflected in the finds assemblages recovered. It might be possible to link the presence of medieval and Post-medieval Kentish wares, unusual in this part of London, to the owners of the manor house during this period, who may have also held land elsewhere. The 18th century pit group assemblages should be assessed to inform on the nature of the nearby buildings and the status of their inhabitants.

- **What can be learnt about the local industries within the area from the finds?**

Further research and discussion of a stone hone and copper-alloy wire might provide information on production and manufacture in Southwark in the 15th and 16th centuries. The presence of a number of nails originally used within the construction of boats suggests that boat timbers were reused on the site either for structural or fuel purposes a practice quite commonly found in Southwark from the late medieval period onward. Ship, boat and barge breaking were local recycling industries particularly active from c. 1600 onward providing cheap constructional materials for low status work such as drainage works.

- **How do the delftware wasters on the site compare to those of the Rotherhithe pothouse?**

  A comparison of the two delftware pottery assemblages could be made to establish whether the wasters from the London Mission site were from this kiln.

- **Can documentary and cartographic sources inform on the nature of the sites activities and its inhabitants?**

  Documentary sources can be consulted to find the identity of the inhabitants of the 18th-19th century buildings. Electoral rolls, Census returns, Hearth Tax and the register for the Tithe Map may also help elucidate the nature of the buildings and on site activities. Documentary and cartographic sources may also inform on any property boundaries associated with the site.

9 IMPORTANCE OF RESULTS AND PUBLICATION OUTLINE

9.1 The archaeological investigations on land at the former City Mission, Paradise Street, London Borough of Southwark, demonstrated the presence of prehistoric, medieval and post-medieval archaeological deposits and structures. A large EW ditch was excavated in the late 15th century, further research may identify what purpose this had. The occupation of the site from the 17th century onwards should be studied for associations with local industries such as the Delftware pothouse at Rotherhithe.

9.2 It is proposed that LCM 04 will be published as a note in an appropriate local publication such as the *Surrey Archaeological Collections* or the *London Archaeologist*. The publication will detail the evidence for the medieval and post-medieval activities on the site and their local significance.

9.3 The publication report will include the following topics:

- The background to the archaeological investigations.
- The geology and topography of the area.
- The archaeological and historical background.
- The archaeological evidence

  This will include a description of the archaeological remains, the location of the site within Bermondsey and comparisons of the site with nearby excavations.

Specialist reports which will be integrated into the text include:

- The buildings and their constituent materials

  It is recommended that the form and sequence of construction of the brick structures are noted in the publication. Further archival research into the uses of the basemented buildings will also be included.

- The pottery assemblage

  The pottery assemblage should be discussed with a focus on the 16th –17th century wares and relating to the documented activities on the site and the Rotherhithe pothouse.

- The glass

  The glass recovered on site will be described and any indication of status discussed.

- The small finds

  The small finds provide an insight into the material culture of the early post-medieval period in the area. A number of objects identified in the small finds report should be drawn and discussed in the publication. The presence of ship's nails on the site is indicative of the area's maritime traditions.

- The clay tobacco pipes

  The clay tobacco pipes should be included in the publication discussing the types of pipes and how they relate to the socio-economic status of the site.

- The lithics

  The presence of the struck flint flake should be mentioned in the publication.

- The environmental samples

  The plant macrofossils from three medieval and post-medieval features will be analysed to provide information on the economy and diet of the local inhabitants.

- The animal bone

  The faunal assemblage is small and no further analytical work is necessary.

10 CONTENTS OF THE ARCHIVE

10.1 PAPER RECORDS

Contexts	115
Plans	45
Sections	5

Photographs:

Colour Slides (35mm)	77
Black and White Prints (35mm)	95
Colour slide (medium format)	20
Black and White (medium format)	20

10.2 THE FINDS

	No. of Boxes
Pottery	13
Struck flint	1
Bone	7
Clay tobacco pipe	2
Glass	2
CBM	7
Fe & Cu Alloy	1

11 ACKNOWLEDGMENTS

Pre-Construct Archaeology Ltd would like to thank Dan Slatcher for commissioning the work on behalf of David Johnston of Grangewalk Developments Ltd. who generously funded the project.

The author would like to thank David Divers and Jim Leary, the project managers and Lorraine Darton, the publication manager, for all their advice and assistance. Thanks to the excavation staff: Mary-Ellen Crothers, Streph Duckering, Denise Mulligan, Alexis Hasslam and Ireneo Grosso, also thanks to Fiona Keith-Lucas for the surveying work. Finally, thanks to all the finds specialists for their individual contributions and to Hayley Baxter for the illustrations.

12 BIBLIOGRAPHY

London City Mission, Paradise Street, Bermondsey, London SE6. An Archaeological Desk-Based Assessment. 2003 .Archaeological Solutions Limited

Bowsher, J.M.C. 1991 A Burnt Mound at Phoenix Wharf; South-East London: A Preliminary report in Hodder and Barfield (eds) *Burnt Mounds and Hot Stone Technology* 11-19. Sandwell Borough Pub.

Devoy, R.J. 1980 Post-Glacial Environmental Change and Man in the Thames Estuary in Thompson (ed) *Archaeology and Coastal Change* pp 134-148. Society of Antiquaries Publication.

Divers, D 2004 *Method Statement for an Archaeological Excavation at Paradise Street, London Borough of Southwark* Unpublished PCA Report

Drummond- Murray, J. *et al* 1994 Recent archaeological work in the Bermondsey district of Southwark. *London Archaeologist* 7(10): 251-257

Drummond-Murray, J. 1994 *Wolsey Street, Southwark, an Archaeological Evaluation.* MoLAS Rep.

Heard, K. 1996 The Hinterland of Roman Southwark part 1. *London Archaeologist* Vol 8 (3): 76-82

Norton, E. 1988 The moated manor house at Platform Wharf, Rotherhithe. *London Archaeologist* Vol 5, No 15.

Leary, J. 2004 285-291 Tooley Street: further evidence for late Iron Age/ early Roman Settlement in Bermondsey. *London Archaeologist* Winter 2004.

Taylor, J. 2003 *Assessment of an archaeological excavation at Bermondsey Wall West,* unpublished Pre-Construct Archaeology Ltd. report.

Thomas, C. and Rackham, J. 1996 Bramcote Green, Bermondsey: a Bronze Age trackway and palaeo-environmental sequence. *Proceedings of the Prehistoric Society* 61, 221-253

APPENDIX 1: Context Index

Context	Type	Description	Phase	Plan	Section	Sample No.	Photo	Trench No.	Same as
1	Layer	Natural Sand	1	*	*	*	*	1, 2 & 3	*
2	Layer	Alluvium	5	2	1	4	*	1	[56] & [73]
3	Fill	Sandy fill of pit [4]	6	*	*	*	*	1	*
4	Cut	Cut of pit, function unclear	6	*	1	*	*	1	*
5	Fill	Fill of pit [7]	6	*	1	*	*	1	[42] & [51]
6	Fill	Primary fill of pit [7], natural silting?	6	*	*	*	*	1	[43] & [50]
7	Cut	Cut of large 18th century pit (quarrying?)	6	7	*	*	*	1	*
8	Cut	Cut of shallow 18th century pit	6	8	*	*	*	1	*
9	Fill	Fill of pit [8]	6	*	*	*	*	1	*
10	Cut	Cut of post-hole/pit 18th century?	6	10	*	*	*	1	*
11	Fill	Fill of [10]	6	*	*	*	*	1	*
12	Cut	Originally recorded as construction cut for foundation [14] see [48]	6	12	1	*	Y	1	[48]
13	Fill	Fill of [12] Interpretation altered in Tr 2 see [45], [46], [47] & [48]	6	*	1	*	*	1	[45]

14	Masonry	Recorded as rubble foundation but reinterpreted in Tr 2 see [45]	6	12	1	*	*	1	[45]
15	Fill	Fill of construction cut [17]	7	17	2	*	*	1	{76]
16	Masonry	Post-med well	7	17	2	*	Y	1	[77]
17	Cut	Construction cut for well [16]	7	17	2	*	Y	1	[78]
18	Layer	18/19th century levelling layer/ground make up	6	*	2	*	*	1	*
19	Layer	Possible redeposited/reworked alluvium	6	*	2	*	*	1	[73]
20	Fill	Fill of post-med gully [21]	4	*	*	1	N	1	*
21	Cut	North south post-med ditch	4	21	*	*	Y	1	*
22	Fill	Fill of large linear early post-med? feature [23]	3	*	*	*	*	1	[68] & [98]
23	Cut	Recorded as re-cut of large early post-med linear feature in Tr 1	3	23	*	*	Y	1	[69] & [99]
24	Fill	Final fill of pit [7]	6	*	1	*	*	1	*
25	Fill	Tertiary fill of pit [7]	6	*	1	*	*	1	*
26	Fill	Fill of pit [27]	6	*	1	*	*	1	*
27	Cut	Cut of pit	6	*	1	*		1	*
28	Layer	Overburden	6	*	1	*	*	1	*
29	Fill	Secondary fill of pit [12]	6	*	1	*	*	1	*

30	Fill	Fill of linear feature [31]	3	*	*	3	*	1	[68] & [98]
31	Cut	Cut of large east west linear feature	3	31	*	*	Y	1	[69] & [99]
32	Fill	Fill of stakehole	4	*	*	*	*	1	*
33	Cut	Cut of stakehole	4	33	*	*	*	1	*
34	Layer	Sandy interface between alluvium and natural sand	2	34	*	2	Y	1	[71] &[104]
35	Masonry	Wall built with reused tudor bricks?	6	*	2	*	Y	1	[89]
36	Cut	Construction cut for wall [35]	6	*	2	*	Y	1	*
37	Fill	Backfill of construction cut [36]	6	*	2	*	Y	1	*
38	Fill	Fill of stakehole [39]	4	33	*	*	*	1	*
39	Cut	Cut of stakehole associated with [33]	4	33	*	*	*	1	*
40	Fill	Fill of well [16]	8	*	2	*	*	1	[75]
41	Layer	19th century? Overburden	8	*	2	*	Y	1	*
42	Fill	Fill of large post-med pit [43]	6	43	*	*	Y	2	[5]
43	Cut	Cut of large post-med pit	6	43	*	*	*	2	[7]
44	Fill	Fill of gully [49]	6	*	*	*	Y	2	*
45	Fill	Tertiary fill of pit [48]	6	*	*	*	Y	2	[13]
46	Fill	Secondary fill of pit [48]	6	*	*	10	Y	2	*
47	Fill	Primary fill of pit [48]	6	*	*	*	Y	2	*

48	Cut	Cut of deep post-med pit	6	48	*	*	Y	2	[12]
49	Cut	Cut of drainage? Gully	6	49	*	*	*	2	*
50	Cut	Cut of post-med pit	6	50	*	*	*	2	[7]
51	Fill	Fill of [50]	6	50	*	*	*	2	[5]
52	Cut	Cut of post-med pit	6	52	*	*	*	2	*
53	Fill	Secondary fill of pit [52]	6	52	*	*	*	2	*
54	Cut	Cut of post-med gully	6	54	3	*	*	2	*
55	Fill	Fill of gully [54]	6	*	3	*	*	2	*
56	Layer	Alluvium	5	56	3	*	Y	2	[2] & [73]
57	Fill	Fill of post-med pit [58]	6	*	*	12	Y	2	*
58	Cut	Cut of pit	6	58	*	*	*	2	*
59	Fill	Fill of probable natural feature [60]	6	*	3	11	Y	2	*
60	Cut	Cut of probable natural feature	6	60	3	*	*	2	*
61	Fill	Fill of shallow gully [62]	4	*	*	13	Y	2	*
62	Cut	Cut of shallow gully	4	62	*	*	*	2	*
63	Layer	Overburden	8	*	3	*	*	2	?
64	Fill	Demolition fill of modern pit [65]	8	*	3	*	*	2	*
65	Cut	Cut of modern pit	8	*	3	*	*	2	*

66	Layer	Dump layer	8	*	3	*	*	2	*
67	Layer	Modern dump layer	8	*	3	*	*	2	*
68	Fill	Fill of linear feature [69] early post-med?	8	69	*	*	*	2	[22] [30] & [98]
69	Cut	Cut of linear feature	8	69	*	*	*	2	[23] [31] & [99]
70	Fill	Primary fill of Post-med pit [52]	6	*	*	*	*	2	*
71	Layer	Sandy interface between alluvium and natural sand	2	71	*	*	y	2	[34] & [104]
72	Layer	Overburden	8	*	4 & 5	*	*	3	[41]
73	Layer	Alluvium	5	73	4 & 5	*	*	3	[2] & [56]
74	Masonry	18th century? Cellar wall	8	74	*	*	Y	3	*
75	Fill	Fill of well [77]	8	*	*	*	Y	3	[40]
76	Fill	Backfill of construction cut [78]	7	*	*	*	Y	3	[15]
77	Masonry	18th century? well	7	77	*	*	Y	3	[16]
78	Cut	Cut of well [77]	7	78	*	*	Y	3	[17]
79	Masonry	EW external wall of cellar	8	74	*	*	Y	3	*
80	Masonry	EW wall of cellar	8	74	*	*	Y	3	*
81	Masonry	Cellar wall	8	74	*	*	Y	3	*
82	Masonry	Cellar wall	8	74	*	*	Y	3	*
83	Masonry	Cellar floor	8	74	*	*	y	3	*

84	Masonry	Internal brick structure	8	74	*	*	Y	3	*
85	Fill	Fill of posthole [86]	6	*	*	*	*	3	*
86	Cut	Cut of posthole	6	85	*	*	*	3	*
87	Masonry	Floor	7	87	*	*	Y	3	*
88	Masonry	NS sleeper wall for floor [87]	6	87	*	*	Y	3	*
89	Masonry	EW sleeper wall for floor [87]	7	87	*	*	Y	3	*
90	Masonry	Wall built with reused tudor bricks?	6	90	*	*	Y	3	*
91	Layer	Levelling layer	7	91	*	*	Y	3	*
92	Fill	Fill of post pipe [94]	4	*	*	*	*	3	*
93	Fill	Fill of post hole [95]	4	*	*	*	*	3	*
94	Cut	Cut of post pipe	4	95	*	*	*	3	*
95	Cut	Cut post hole	4	95	*	*	*	3	*
96	Fill	Fill of post pit [97]	6	*	*	*	*	3	*
97	Cut	Cut of post pit	6	97	*	*	*	3	*
98	Fill	Fill of early post-med? EW linear feature [99]	3	*	5	14, 15, 16	Y	3	[22] [30] & [68]
99	Cut	Cut of early post-med? EW linear feature	3	99	5	*	Y	3	[23] [31] & [69]
100	Fill	Fill of post-med rubbish pit [101]	6	*	*	*	*	3	*
101	Cut	Cut of post-med rubbish pit	6	101	*	*	*	3	*

102	Fill	Fill of gully/boundary ditch [103]	4	*	*	*	*	3	*
103	Cut	Cut of gully	4	103	*	*	*	3	*
104	Layer	Sandy interface between alluvium and natural sand	2	104	*	*	*	3	[31] & [71]
105	Layer	Dumped burnt waste	8	*	5	*	*	3	*
106	Layer	Levelling layer	8	*	4 & 5	*	*	3	*
107	Fill	Fill of large post-med pit [108]	6	*	4	*	*	3	*
108	Cut	Cut of large post-med pit	6	*	4	*	*	3	*
109	Fill	Fill of linear feature [110]	4	*	4 & 5	*	*	3	*
110	Cut	Cut of EW linear feature	4	*	5	*	*	3	*
111	Cut	Cut of small pit	8	*	5	*	*	3	*
112	Fill	Fill of post hole [113]	6	*	*	*	*	3	*
113	Cut	Cut of post hole	6	113	*	*	*	3	*
114	Fill	Fill of post hole [115]	6	*	*	*	*	3	*
115	Cut	Cut of post hole	6	115	*	*	*	3	*

APPENDIX 2

Pottery assessment

Chris Jarrett

INTRODUCTION

A medium sized assemblage of pottery was recovered from the site (12 boxes). Most sherds are in a good condition, small to large in size, indicating that they had not been subject to much redeposition and discarded soon after breakage. There are relatively very few vessels with complete profiles. Most individual contexts produced small groups of pottery (under 30 sherds), except for seven contexts, [5], [42], [45], [53], [96], [98] and [100] which produced a medium sized group of pottery (31-100 sherds).

All the pottery (832 sherds, of which 204 sherds are unstratified) was examined macroscopically and microscopically using a binocular microscope (x20), and recorded in an ACCESS 2000 database, by fabric, form, decoration, sherd count and estimated number of vessels, using standard Museum of London Specialist Services codes for fabric, form and decoration. Its types and distribution discuss the pottery.

POTTERY TYPES

The dating of the pottery as recorded consists of two sherds of prehistoric date, 95 sherds of medieval and 735 sherds post-medieval wares.

Prehistoric pottery

There are two sherds of residual prehistoric pottery, firstly as a small abraded flint-tempered sherd from context [2] and secondly as a base sherd of a vessel in a flint-tempered ware with spalled surfaces recovered from deposit [98].

Medieval

Medieval pottery is present as 95 sherds and dates from 1050-1500.

Early medieval hand made coarse wares

There are five sherds of early medieval pottery, firstly as Early medieval sandy ware (EMS) dated 970-1100 and presumably form jar-shaped vessels, but there are also two sherds from Early medieval chalk-tempered ware (EMCH) and are dated 1050-1150 and includes a jar-shaped vessel. All these pottery types are residual with later wares.

Surrey whitewares

A total of 54 sherds of Surrey whiteware pottery (Pearce and Vince 1988) are present. Coarse Border ware occurs as eleven sherds and can be mostly dated to between 1270-1500 but is rare before 1350. It is in the form of a small dish and jug fragments, but present in context [98] is the base of a large rounded jug (CBW LGR) dated 1340-1500. Cheam ware (CHEA), dated 1350-1500, accounts for 21 sherds and is unusually more common than Coarse Border ware by sherd count on this site. The forms in Cheam ware consist of sherds from jugs, but large fragments of a barrel-shaped jug (CHEA BAR) dated 1430-1500was recovered from deposit [100], but is residual in this late 16th-century dated context. Tudor Green (TUDG) pottery accounts for 22 sherds of pottery but it is restricted to only one form, a lobed cup and all the sherds found in three contexts; [98], [100] and [107] may come from a single vessel.

Local glazed wares

Medieval London-type ware (LOND) (Pearce et al 1985) is present as fourteen sherds and most sherds are dated 1080-1350 and are mostly recognised as jug forms, but one sherd from context [22] has slip and pellet decoration and is either in the Rouen or Highly decorated styles and so dates to between 1180-1350, while one sherd from context [5] is decorated with white-slip (LOND WSD) and is dated 1240-1350. There are also two sherds of London-type ware with Early style decoration (LOND EAS) with red-slip lines and are dated 1140-1200. There are also two fragments of baluster jugs (LOND BAL) and this is dated 1180-1350. Late London ware (LLON) dated to the 15th-century is present as four sherds and includes two handles from jugs.

Wheel thrown coarse wares

A total of thirteen sherds of pottery fit into this class and include four sherds of South Hertfordshire greyware (SHER), dated 1170-1350, but the forms are difficult to distinguish. There is also a Sandy Shelly ware (SSW) flared bowl present, dated 1140-1220 and it is of interest for having combed wavy line decoration covering the whole of the inside wall of the vessel. One other sherd of pottery is of a Kentish source, but needs further identification and is a small calcareous-tempered sherd from a probable jug with an external green-glaze and an internal white slip.

Imported pottery

The main type of imported medieval pottery present on the site is French Saintonge pottery, either as green-glazed (SAIG) and unglazed (SAIU) and is dated 1250-1650 and present mostly in the form of jugs but there is also the handle of a possible cup. The other medieval

vessel is the base of an unglazed Siegburg stoneware (SIEG) drinking jug and it is dated 1300-1500.

Post-medieval

There are a total of 739 sherds of post-medieval pottery dating to betweem 1480-1900.

Delftware

Tin-glazed earthenware or delftware accounts for 294 sherds of pottery. The site is located very close to the Rotherhithe pot house established within the medieval moated manor house of Edward III and was operating between c.1636-63 (Norton 1988) and a small number of vessels indicate that they were wasters from this pothouse. There are six sherds of Biscuit ware (BISC) mostly present as fragments of chargers besides a type B porringer and one kiln furniture vessel, a type 1 sagger (with U-shaped cut-outs).

Three sherds can be classed in style A (TGW A) dated 1612-50 and two sherds have Wanli style decoration either on a medium rounded bowl with a Wanli border or as a charger base with a 'bird on rock' design. The third vessel has been classified as style A because of the poor quality white and blue coloured tin-glaze and this is in the form of a bowl with bosses on the rim and a geometrical design and could be a second. Style B (TGW B), dated 1630-80 is typified as having a purple powdered surface and is present as four sherds, typically in the form of a rounded mug, but very unusually as three sherds from a charger (Britton's (1987) shape C). Plain whitewares (TGW C) are dated 1630-80 and occur as 72 sherds and are present in the form of rounded and flared bowls, chamber pots, a small cylindrical jar, ointment pots, and porringers (shapes A, B and C). The plain blue wares only occur as eleven sherds in the form of chamber pots and a plate, and are dated as for the whitewares but much more common in the 18th-century. Style D, with geometrical or polychrome designs date mostly to the mid 17th-century, but included here are some chargers of a late 17th and early 18th-century date. As 82 sherds of delftware in style D, besides a small number of bowl fragments, the main form represented are chargers usually with blue and white or polychrome geometrical designs, but one has a chequer pattern and another a polychrome tulip design. Of interest is a base sherd of a charger with a male head wearing a lion's skin, the symbolism of which is associated with superhuman strength, and incorporated in royal and aristocratic emblems, besides biblical references; Samson and David. The head has a beard in the style of Charles I, 1625-49 and this polychrome dish may be a representation of him, perhaps in a religious scene.

The 'Chinamen in grasses' decorative style (TGW F) is represented as sixteen sherds and are dated 1670-90 and are in the form of a charger, parts of a rather fine fluted dish and plates. Persian Blue wares (TGW E) are dated 1680-1710 and the two sherds recorded here include

part of a carinated lid. There are 43 sherds decorated in style H (dark blue designs on a paler blue background) and are dated 1690-1800 and are in the form of bowls, a capuchine, dishes, including fluted examples, a teapot lid, but mainly as plates with a wide range of designs, either geometrical, or in a Chinese style but mostly with floral depictions. There are also five sherds with sponge decoration (TGW SPNG) all from plates usually with trees and are dated 1700-40. Of interest are two gaming counters that have been shaped from wall tiles in style H.

Fifty sherds have been broadly classified under the TGW category, but include mostly blue and white wares dating to the late 17th and early 18th century and include an albarello, medium and large rounded bowls, dishes, plates, saucers, a tazza and a tea bowl. There are also vessels decorated in style H but with the addition of purple and are in the form of a dish, and mid to late 18th-century polychrome wares as a rounded bowl, plate and tea bowl.

Local coarse earthenwares

The London post-medieval redware industry developed out of the earlier medieval 15th-century industry and Early Post-medieval redware (PMRE) is dated 1480-1600. This ware as 56 sherds is in the form of bowls, a cauldron, jars, jugs, lids of a conical and a pierced carinated shape, probably for a fuming pot and a pipkin. Early post-medieval redware with a metallic glaze (PMREM) is present as a single cauldron represented by three sherds. There is one sherd with a white-slip painted line (PMSL) while green and yellow-glazed slip-coated redware (PMSRG and PMSRY) occurs as fourteen sherds in the form of bowls or dishes, including a carinated dish and jugs. This ware is dated 1480-1650 and is found on the better-fired and glazed Post-medieval redware (PMR), dated 1580-1900. The latter is present here as 127 sherds. Forms in Post-medieval redware include various shapes and sizes of bowls, type two chamber pots (with a flat rim), dishes, a flower pot, rounded jars, pipkins, a carinated porringer and a stool pan of the type used with a commode.

Surrey-Hampshire Border wares

Post-medieval white (BORD) and red (RBOR) earthenwares made at several locations on the Surrey-Hampshire border (Pearce 1992) are present as 86 sherds. The white earthenware dates to between 1550-1700 and here it is either green (BORDG) or yellow-glazed (BORDY) as 24 and 32 sherds respectively. The forms recorded are as bowls or dishes, chamber pots a pipkin and a carinated porringer. Three vessels are worthy of comment because of their decoration and these include two dishes, on of each glaze colour with combed wavy lines and the third vessel is a fluted dish decorated on the base with a concentric band of combed lines and a band of segmented stamps and one of these stamps is at the centre of the dish. Red Border ware (RBOR), dated 1580-1800 is present as thirty sherds, but six sherds are brown-glazed (RBORB) and two are green-glazed (RBORG). The forms in Red Border ware are bowls, a chamber pot (RBOR and RBORG), dishes, jars, paint pots, and pipkins (RBORB).

Imported pottery

There are 52 sherds of imported pottery, with ten sherds of Chinese porcelain, mostly with blue and white designs (CHPO BW) dating to the 18th century and includes a rounded dish with an incised floral design, a plate, saucers (including one with a reign or commendation mark) and a tea bowl. Three of the Chinese porcelain sherds are decorated with *Famille Rose* enamels (CHPO ROSE), dated 1720-80 and theses vessels are a saucer, with part of a human figure design and two tea bowls. Of particular interest for its rarity in London is the base of a Kutayha ware tea bowl, probably made in Turkey and late 17th-early 18th century in date. The tea bowl has an internal flower painted as a silhouette in thick blue glaze and the underside has a mark, possibly derivative of a Chinese character. There are also two blue bands at the junction of the footring and the bowl base.

There are ten sherds of German Frechen stoneware (FREC), dated 1550-1700 in the form of jugs and include five sherds from bartmans. Other German stonewares include two sherds of Raeren stoneware (RAER), dated 1480-1610, with unusually a possible lid represented and there are five sherds of Westerwald stoneware (WEST), dated 1590-1900 and include fragments from a chamber pot and jug.

Pottery from the Low Countries is present as six sherds and Dutch redware (DUTR), as four sherds, include the rim sherd of a bowl or dish of 16th-century date. There are also two sherds of a Dutch tin-glazed earthenware (DTGW) dish, decorated in blue and white with Wanli panels on the rim and dates to the third quarter of the 17th-century.

Italian wares include three sherds of North Italian marbled slipware (NIMS), dated 1600-1750 and present in the form of bowls and a dish. There are also two sherds from a Montelupo Tin-glazed earthenware (MLTG) dish and this is decorated with a polychrome leaf design dating to the early and mid 17th century.

Spanish pottery accounts for seven sherds, three of which come from olive jars (OLIV) dated 1550-1750 and includes a collared rim. There is also a single sherd of Spanish Tin-glazed earthenware (STGW) dated 1480-1700, as the rim of a carinated dish and there is evidence of splashes of lustre paint. Three other sherds of pottery are probably of a Spanish origin (SPOW) and have a light pink, fine sandy fabric with an 'apple' green glaze and include sherds of a bowl or dish with a foot ring and a body sherd on another vessel with an external clear-glaze. There is also the base of a candlestick in a highly micaceous Spanish fabric (SPOW). Interestingly there are also six sherds of Portuguese faience (POTG), an uncommon imported ceramic in England, but when found in the capital it is usually on Thames riverside locations in east and south east London. All the sherds of Portuguese faience would appear to come from plates or dishes and one rim sherd has a Wanli panel on its rim dating to the second quarter

of the 17-th century. The other sherds have more European influenced floral design often using purple and so indicates a late 17th century date.

Industrial finewares

Pottery types made on a factory scale, dating from c.1740 and mostly associated with the Staffordshire potteries, but made elsewhere, account for 41 sherds of pottery. These Industrial finewares are present as eight sherds of Developed Creamware (CREA DEV) in the shape of a small rounded bowl and a strainer and are dated 1760-1880. There is a single sherd of Pearl ware with blue and white under-glazed painted decoration (PEAR BW) as a small rounded bowl with a landscape design and is dated 1770-1820. Refined white earthenware (REFW) dates from 1800 and as six sherds it is in the form of a medium sized rounded bowl and two plates. Transfer-printed whitewares (TPW), dated 1780-1900 are present as nineteen sherds, most with blue designs including the Willow pattern, but there is also a single tea-cup with a brown-transfer (TPW 3) of two girls playing with a wreaths, dated after 1810 and two sherds with a green or red transfer (TPW 4) dated after 1825. Four sherds are of the Flow Blue type (TPW FLOW), dated from 1830. The transfer-printed forms consist of bowls, a rectangular dish, plates, saucers and teacups. Yellow ware (YELL), dated 1800-1900 is present as six sherds and includes bowls with mocha decoration and banded slip decoration on a chamber pot, dish and two jugs. Finally there is an uncoded fabric as a late 19th-century hard, yellow earthenware teapot lid with moulded decoration and a brown-glaze.

Stonewares

There are 29 sherds of stoneware from a number of sources. London stoneware (LONS), dated 1670-1900 is present as ten sherds and all of an 18th century date, firstly as a jug rim with a rilled deep collar and as a number of tankard fragments, one of which has a WR ale mark (dated c.1701-1824) and part of an incised inscription with only the letter 'g' surviving and possibly denotes a tavern or its owner. Nottingham or Crich stoneware (NOTS), dated 1700-1800 is present as one sherd and this is similar in appearance to Derby Stoneware (DERBS) dated 1700-1900, which is present as three sherds from small bowls with rouletting and a cup. Staffordshire-type white salt-glazed stonewares (SWSG) is recorded as six sherds in the form of bowls and saucers and is dated 1720-80, but another bowl sherd has scratch blue decoration (SWSG SCRB) and is dated 1740-80. The inferior White dipped stoneware (SWSL) is present as the footring of a small bowl and was made between 1710-60. The generic English stoneware (ENGS) is present as five sherds and come from a 19th-century dated toilet bowl and a possible drainage pipe. There is also a single sherd from the moulded base of a Blue coloured stoneware (BLUE) vessel and is 19th-century in date. An earlier Midlands purple ware (MPUR) butter potsherd is also present and is dated 1580-1750.

Non-Local wares

Non-local pottery to London accounts for 24 sherds and surprisingly nine sherds of the pottery are of a Kentish source. Seven sherds are in North Kent Tudor ware (NKNT), dated 1500-1600 and identifiable forms include a jar and a bunghole jar. There are single sherds of Medway hard silty sandy ware (CLM34B) dated 1450-1525/50 and Calcareous 'peppered' smooth ware (CPM64), dated 1550-1650. Two collared rim sherds of Midlands orange ware (MORAN) butter pots are present and are dated 1580-1700. Staffordshire-type products include nine sherds of Combed slipware (STSL) dishes, dated 1680-1870 and the complete profile of an 18th-century cup, besides a mid 18th-century, hard yellow earthenware tankard with a brown glaze (no code available). Sunderland coarse ware (SUND) is dated 1800-1900 and is here in the form a bowl rim and part of a late 19th-early 20th century baking dish with slip-trailed decoration.

Essex fine red earthenwares

There are a total of seven sherds of Essex Post-medieval fine redware (PMFR) dated 1580-1700 and are present in the forms of a rounded cup, a cauldron or pipkin base and the rim of a jar. Metropolitan slipware (METS) dated 1630-1700, is present solely as the base of a dish used for cooking as it has an external soot deposit.

DISTRIBUTION

The pottery is present in phases 3 to 8 and Table 1 shows the contexts the pottery was found in, the size of the group, date range of the pottery types and the latest type and a suggested deposition date.

Phase 3

The linear feature [31/69/99] produced in its fill [22/30/68/98] a wide range of pottery with two sherds of Early medieval chalk-tempered ware (EMCH), dated 1050-1150 and two sherds from London-type ware jugs dated c.1080-1350. However the majority of the pottery consists of late 14th and 15th-century Surrey whitewares: Coarse Border ware (CBW), including the base of a large rounded jug (CBW LGR), Cheam ware (CHEA) and a Tudor Green (TUDG) lobed cup. There are also two sherds of imported French Saintonge (SAIG and SAIU) jugs and a small sherd of Early Post-medieval redware (PMRE), possibly intrusive, but otherwise this would indicate a final deposition date of c.1480-1500 for this feature.

Context	Phase	Size	Date range of pottery types	Latest pottery type	Deposition date
2	5	S	1350-1500	1400-1500	1400-1500
5	6	M	1080-1900	1690-1900	1730-1740
9	6	S	1500-1700	1630-1700	1630-1650
13	6	S	1550-1800	1690-1800	1700-1720
15	7	S	1480-1900	1800-1900	1800-1900
20	4	S	970-1500	1270-1500	1270-1500
22	3	S	1080-1350	1080-1350	1180-1350
30	3	S	1050-1150	1050-1150	1050-1150
42	6	M	1480-1900	1800-1900	1700-1720
44	6	S	1570-1900	1630-1900	1630-1680
45	6	S	1480-1900	1780-1900	1700-1720
46	6	S	1550-1900	1630-1900	1630-1680
50	6	S	1570-1900	1690-1900	1700-1720
53	6	M	1480-1900	1700-1900	1700-1720
55	6	S	1570-1900	1690-1900	1700-1720
56	5	S	1080-1350	1180-1350	1180-1220
57	6	S	1300-1900	1630-1900	1580-1600
59	6	S	1080-1350	1170-1350	1170-1350
61	4	S	1480-1800	1690-1800	1480-1650
68	8	S	1050-1150	1050-1150	1050-1150
73	5	S	1080-1900	1600-1900	1600-1650
75	8	S	1080-1900	1800-1900	1780-1800
76	7	S	1300-1630	1480-1630	1480-1600
91	7	S	1630-1680	1630-1680	1630-1680
93	4	S	1480-1650	1480-1650	1480-1650
96	6	M	1550-1900	1780-1900	1800-1880
98	3	S	1080-1650	1480-1650	1480-1500
100	6	M	1270-1700	1550-1700	1550-1600
107	6	S	1350-1900	1480-1900	1480-1550

Table 1. Distribution of pottery showing the size of the group, the date range of the pottery and the latest pottery-type in the context and the deposition date. S: small (1-30 sherds), M: medium (31-100 sherds), L: large (over 101 sherds).

Phase 4

The shallow gully [62] produced in its fill [61] the rim of a yellow-glazed Post-medieval slip-coated redware (PMSRY) jug rim and so dates the feature between 1480-1650, but a very small sherd of delftware in style H (TGW H) is probably intrusive.

Truncating the fills of the linear feature [31/69/99] was a gully [21] and a post-hole [95]. The gully [21] has recorded in its fill [20] three sherds of Early medieval sandy ware (EMS), dated 970-1100 and a small sherd of Coarse Border ware (CBW) and therefore these sherds appear to be residual. The post-hole [95] produced in its fill [93] a small sherd of green-glazed Post-medieval slip-coated redware (PMSRG) and so indicated a deposition date of c.1480-1650.

Phase 5

Sealing these features the alluvial layer [2/56/73] contained a total of 47 sherds of pottery with a varied range of pottery dates ranging from an abraded prehistoric flint-tempered sherd, to medieval London-type ware (LOND, LOND EAS, LOND BASE SHERD), South Hertfordshire greyware and the Sandy shelly ware bowl with internal incised wavy line decoration. Later medieval pottery consists largely of Surrey whitewares; Coarse Border ware and Cheam ware, besides Late London ware (LLON). 16th-century pottery consists of early Post-medieval redware (PMRE) as a jug and a yellow-glazed Post-medieval slip-coated redware bowl or dish. Imported pottery is present as Dutch redware (DUTR) and the Miscellaneous Spanish ware (SPOW) lamp. The latest pottery is 17th-century in date and was identified as Post-medieval redware (PMR), Post-medieval fine redware (PMFR) as a rounded cup and North Italian marbled slipware (NIMS) while the base of a Biscuit ware (BISC) sagger probably comes from the Rotherhithe pothouse and so indicates deposition between c.1636-63.

Phase 6

A number of features containing pottery truncated the alluvial layer [2/56/73]. Firstly fill [59] of the naturally made feature [60] produced two sherds of medieval pottery as a small sherd of a green-glazed London-type ware jug and a sooted sherd of South Hertfordshire grey ware (SHER) and are almost certainly residual. The large post-medieval pit [108] produced in its fill [107] a fragmentary collection of pottery either as late medieval Surrey whitewares, such as Cheam ware and Tudor green ware (as three sherds in total) or local coarse red earthenwares, Early post-medieval redware or Post-medieval slip coated redware, besides a small sherd of Raeren stoneware, suggesting a deposition dated of c. 1480-1550. Pit [58] produced in its fill [57] 27 sherds of pottery and is mostly characteristic of the 16th-century as Early Post-medieval redware, Post-medieval slip-coated redwares and North Kent Tudor redware (NKNT) which is well represented, but also sherds of other Kentish wares are present; (CLM34B and CPM64). Imported pottery consisted of Dutch redware and Raeren stoneware and there is only one sherd of a mid 17th-century date, a polychrome delftware charger.

The rubbish pit [101] produced in its fill [100] a pottery group that would appear to date to the end of the 16th-century as it is largely composed of Early post-medieval redware as a

carinated dish, handled jar, jug while the lids are of a conical shape and the pierced carinated example probably for a fuming pot. Post-medieval slip-coated redware occurs as a dish, but Border wares also are well represented and include yellow-glazed (BORDY) small dishes and a larger example with combed decoration. Also of note in this fill, but residual are large parts of a Cheam ware barrel-shaped jug (CHEA BAR), dated 1440-1500.

The shallow pit [8] produced a pottery group of early 17th-century pottery (c.1625-50) with a sherd of Post-medieval fine redware (PMFR), a delftware bowl with bosses on the rim and a blue on white geometrical pattern besides a charger with a blue chequer pattern. The imports include a sherd from a Frechen stoneware bartman, but more importantly is a sherd of Portuguese faience (POTG) with a blue on white design and a sherd of Italian Montelupo tin-glaze (MLTG) dish with a polychrome leaf design.

Truncating pit [58] pit [52] contained in its fill [53] a group of 59 sherds of pottery with much of the pottery indicating a 17th-century date. Notable is the fluted green-glazed Border ware (BORDG) dish with a combed wavy line band and segmented circle stamp decoration, two sherds from Portuguese faience dishes and a sherd of the probable Spanish import with an 'apple green-glaze'. The delftware largely consists of mid 17th-century chargers in style D and includes a sherd possibly showing the head of Charles I wearing a lion's skin, but later wares include a sherd of Persian Blue (TGW E) and a sponge decorated (TGW SPNG) plate and indicates deposition between c.1700-20. There is also present part of a London stoneware (LONS) tankard that would coincide with this date.

The deep post-medieval pit [12/48] produced mostly 17th-century pottery types in its fills [13], [45] and [46], such as Border ware and mid 17th century delftware. Imported pottery consists of Frechen stoneware (FREC), North Italian marbled slipware (NIMS), Westerwald stoneware (WEST) and the Dutch Tin-glazed (DTGW) dish decorated with Wanli panels and dating to c.1650-75. The latest delftware pottery in this feature is in style H and a sherd of sponge decorated tin-glazed earthenware, but with the absence of Staffordshire-type white salt-glazed stoneware a deposition date of 1700-20 is suggested. A sherd of Transfer-printed ware is probably intrusive.

Truncating pit [12/48] the drainage cut or gully [49] produced a pottery group that contained mostly delftware chargers of a mid 17th century date and includes the charger with the purple powdered surface (TGW B). Pit [50] and the gully [54] have suggested deposition dates from the pottery groups in their fills to between c.1700-20 by the evidence of the tin-glazed earthenwares.

The quarry [7/43] produced a combined total of 128 sherds of pottery from its fill [5/42] and pottery types are mostly of a 17th and early 18th-century date. Of note are two sherds of Portuguese faience decorated with blue and purple bands and so dating to c.1650-1700, a

Midlands purple ware butter pot rim and two delftware vessels, firstly as a fluted dish decorated in the 'Chinamen in grasses' style and a rounded bowl with blue and purple random splodges on a light blue background. The latest delftware plate designs suggest deposition between c.1730-50.
The post pit [97] produced 19th-century pottery types such as Transfer-printed ware and Develop Creamware as the latest wares amongst a rather eclectic group of earlier 17th and 18th-century ceramics.

Phase 7

The well [17/78] also produced a wide range of pottery types datable to the 17th and 18th century and of note are the imports as sherds of a medieval Siegburg stoneware (SIEG) drinking jug, a post-medieval Olive jar (OLIV) and Spanish Tin-glazed ware (STGW) dish, but the latest pottery types in fills [15] and [75] are of a 19th-century date as Sunderland coarse ware, Refined whiteware and Transfer-printed ware.

SIGNIFICANCE OF THE COLLECTION

The pottery assemblage from the site is of local importance and reflects activity possibly associated with the medieval manor house and the sites location close to the Thames riverfront.

Medieval

Although there is evidence for Saxo-Norman activity in the vicinity of the site from the pottery, all the material of this date is residual. The small amounts of 13th to early 14th-century pottery probably represents activity associated or relating to activity associated with the moated manor house, but again it is residual with later pottery. This is also largely true of the late medieval pottery sherds, which makes up the bulk of pottery dating to between c.1350-1500.

Post-medieval

The chronology of the pottery for the post-medieval period fits with the accepted ceramic sequence for London. Contemporary stratified deposits are mostly datable to the 16th-century onwards and probably relate to activity associated with the manor house, either mural or extra mural. The presence of Kentish wares is also somewhat unusual, as these pottery types do not usually occur within the inner London area. The small amount of delftware wasters almost certainly relates to tin-glaze production at the manor house between 1636-63, despite evidence for the dumping and use of debris from this industry being found at some distance from its production sources. A comprehensive survey of delftware production at the

Rotherhithe Manor House pottery has been undertaken (Stephenson et al forthcoming), so there is little need to comment on the waster material form these excavations, except to mention its presence and the more unusual possible products, such as the chargers of unusual decoration, i.e. the sherd with Charles I and the powdered purple ground. The other aspect of interest for the post-medieval pottery on the site is the presence of rare imported pottery types, such as the Montelupo tin-glazed earthenware and the Portuguese faience. However, their presence here is to be expected because of the sites Thames riverside location and its port and maritime associations. Several continental tin-glaze vessels were recovered from the excavation of the Rotherhithe manor house site and were interpreted as either inspiration for the Delftware decorators or items to be sold in the pothouses 'shop (Stephenson 1998/99).

POTENTIAL

The pottery has the potential to date the contexts in which they were found and provide a sequence for them, and a number of vessels merit illustration. The ceramic sequence allows for comparison with known documented activity on the site, either relating to the manor house or settlement focused on it.

Medieval

The medieval pottery has little merit because it is largely residual and fragmentary. However a small number of sherds are Kentish in origin and this may possibly relate to the owners of the manor house who may have held land in Kent.

Post-medieval

For this period the interest of the pottery is mostly the 16th and 17th-century ceramics. Again for this period it is unusual to find Kentish wares in this area of London and it may also be related to the owners of the Manor house and where else they had manorial residences. The late 16th and early 17th-century Border wares will also add to the corpus of decorated forms in this industry as yet unpublished. The imported pottery is of interest for why it is there, i.e. whether this is because of the pothouse or purely for its location on the Thames or is the local inhabitants documented has having maritime professions or connections. The small amount of delftware production wasters has little potential too add to our knowledge of what was being made at the Rotherhithe pothouse, but a comparison should be made to see if the wasters from the site are within the repertoire of this kiln.

RESEARCH AIMS

A number of research aims can be identified from the pottery assemblage

- Can the presence of medieval and post-medieval Kentish wares on the site be correlated to the land held by the owners of the Rotherhithe manor house?
- Is the medieval and post-medieval pottery associated with the Rotherhithe Manor House or do they come from separate activities?
- What are the documented occupations of the local inhabitants during the 17th-century and can they be related to the presence of the imported pottery?
- How do the delftware wasters on the site compare to those of the Rotherhithe pothouse?

RECOMMENDATIONS FOR FURTHER WORK

A publication report should be written detailing the pottery assemblage from the site and concentrating on the 16th- and 17th-century wares. The report should be related as far as possible to the documented activities on the site whether or not it is related to the Rotherhithe moated manor house.

Twenty-one vessels require illustration, because they are unusual forms or have interesting decoration. The illustrations are shown in Table 2.

FABRIC	form	CONTEXT
BORDG	Dish, fluted	53
BORDY	Dish, rounded	100
CBW	Dish, small	100
CHEA BAR	Jug, barrel-shaped	100
KUTA	Tea bowl	0
MLTG	Dish	0
MLTG	Dish	9
NKNT	Jar	57
PMR	Bowl, deep, rounded	55
POTG		9
POTG	Plate	42
POTG	Plate	42
POTG	Plate	53
POTG	Plate	53
SPOW	Lamp	73
SSW	Bowl, flared	56
STGW	Dish	15
TGW B	Charger	45
TGW C	Bowl, medium rounded	0
TGW D	charger	53
SPOW	Bow or ldish	0

Table 1. LCM 04, pottery vessels required for illustration of publication text.

BIBLIOGRAPHY

Pearce, J. 1992. Border Wares, Post-medieval Pottery in London, 1500-1700. Vol. 1.London HMSO.

Pearce, J. and Vince, A. 1988. A dated type-series of London medieval pottery Part 4: Surrey Whitewares. London and Middlesex Archaeology Society Special Paper 10. London.

Pearce, J., Vince, A. G. and Jenner, A. 1985. A dated type-series of London medieval pottery Part Two: London-type ware. London and Middlesex Archaeology Society, Special Paper No. 6.

Stephenson, R. 1998-99. Platform Wharf imported pottery: potters' inspiration or stock-in-trade? Medieval Ceramics, Volumes 22-23, 152-3.

Stephenson, R., Betts, I., Tyler, K. and Wheeler, L. forthcoming. "Earthenware in the manner of fiansa": the tin-glazed ceramics industries of Southwark and Lambeth, MoLAS Monograph series.

APPENDIX 3: PREHISTORIC POTTERY ASSESSMENT

Louise Rayner

INTRODUCTION

Two sherds of prehistoric date were recovered from the site LCM04. The sherds are from two separate contexts: [56] a layer of alluvium and [98] fill of an east-west linear. Both features were provisionally dated to the late medieval/post-medieval period on the basis of the pottery present. The prehistoric material therefore appears residual in these contexts.

SUMMARY

Both sherds have flint-tempered fabric. The sherd from [56] is a plain body sherd (4g) in an abraded condition. The sherd from [98] is a fragment of everted rim (7g), likely to derive from a bipartite jar. The date of these sherds is likely to fall in the Late Bronze Age – Early Iron Age period, early in the 1st millennium, although due to the limited material recovered, this dating is tentative.

However material of this date is previously known from the Southwark area and certainly fits with a picture of increased activity on the islands that formed the area south of the River Thames from the Later Bronze Age. It seems likely that any structural remains or cut features associated with this activity may have been removed by the later more substantial features of medieval and post-medieval date.

SIGNIFICANCE OF THE ASSEMBLAGE

Although a useful additional find spot in the overall study of Bronze Age activity in the Southwark area, the two sherds themselves are of little intrinsic significance. Any publication prepared for this site would not require any further work on the prehistoric sherds and a short note could be included based on the records created during assessment.

APPENDIX 4: ASSESMENT OF THE CLAY TOBACCO PIPES

Chris Jarrett

INTRODUCTION

A small sized assemblage of clay tobacco pipes was recovered from the site (1 box). Most fragments are in a fairly good condition, indicating that they had not been subject to much redeposition or were deposited soon after breakage. Clay tobacco pipes occur as small groups in contexts and always as under five fragments.

All the clay tobacco pipes (178 fragments, of which 35 are unstratified) were recorded in an ACCESS 2000 database and classified by Atkinson and Oswald's (1969) typology (AO) and 18th-century examples by Oswald's (1975) typology (OS). The pipes are further coded by decoration and quantified by fragment count. The tobacco pipes are discussed by their types and distribution.

THE CLAY TOBACCO PIPE TYPES

The clay tobacco pipe assemblage from the site consists of 76 bowls, four nibs and 98 stems. The clay tobacco pipe bowls range in date between 1640 and 1880.

1640-1660

A single spurred AO 9 bowl is present, but is a slightly taller variant than usual. It is of a good quality and has three quarters milling around the rim.

1660-1680

There are a total of six AO 15 bowls all of a fair quality and variable milling from half to fully rouletted around the rim. The main type of bowl for this period is AO 18 as sixteen examples and three variants. The first variant has a narrow bowl, the second squat and broad and the third is tall and broad. All the AO 18 bowls are of a fair quality and the milling on the whole is poor and mostly restricted to half of the bowl.

1680-1710

There are six examples of the OS 20 bowl, mostly fair, but one is of a good quality. Two bowls are of the AO 21 type and are of a fair quality while fourteen bowls are of the straight-sided AO 22

bowl and three variants are recognised. First as a narrow bowl with a deeper heel, second as a broad bowl with a short heel and third also with a broad bowl but a deeper heel. All the AO 22 bowls are of a fair quality. One heel probably dates to this time and is initialled S N, possibly for Samuel Nodwell but the bowl type could not be identified.

1700-1770

There are four AO 25 bowls recognisable as heels and therefore they could not be divided into Oswald's 18th-century series. Only one heel is initialled with the family name C, the forename being illegible. One other heel probably of an 18th-century date is initialled P ? the family being illegible.

1700 - 1740

Twelve bowls are of the 0S 10 type and four are initialled on the heels but there are no obvious repeats. A B may relate to Andrew Barton, 1708 and another bowl is marked I W with several possible makers having these initials but none are known to be local (see Oswald 1975, 148). One heel has the forename R but the family name is illegible. The final initialled bowl is marked A ?H, but the family name is unclear, but it could also be A B as this bowl does occur.

1730-1780

A single heeled OS 12 bowl is present and is marked R P, probably for Richard Pattison, 1755, Gould Street, Bermondsey. The only spurred OS 23 bowl is also the only armorial bowl found on the site and although damaged it clearly shows the Hanoverian Coat of Arms and has a tulip on the front of the bowl.

1760-1780

A single OS 23 bowl is present with an idiosyncratic thick spur.

1780-1820

The AO 27 type bowl is present as a single example decorated with an oak leaf border on the front and back of the bowl and wreaths on the heel.

1840-1840

A decorative AO 29 bowl occurs in the shape of an acorn with the heel also moulded as an acorn while the front and back of the bowl have leaf borders.

DISTRIBUTION

The clay tobacco pipes were present in phases 2, as one context and thirteen contexts in phase 3. Table 1 shows the distribution of the tobacco pipes in each context, the size of the group, the date range of the pipes and the latest bowl type or datable part.

Context	Phase	Size	Date range of pipe bowls	Latest tobacco pipe bowl date
5	6	S	1660-1740	1700-1740
9	6	S	1640-1660	1640-1660
13	6	S	1700-1770	1700-1770
15	7	S		19th-century stem
42	6	S	1660-1770	1700-1770
44	6	S	1660-1680	1660-1680
45	6	M	1660-1770	1700-1770
46	6	S		17th-century stem and c.1660-80 heel
50	6	S	1700-1770	1700-1770
53	6	S	1680-1710	1680-1710
73	5	S	1660-1680	1660-1680
75	8	S	1660-1680	1660-1680
91	7	S		17th-century stem
96	6	M	1680-1880	1840-1880

Table 1. LCM 03, contexts containing clay tobacco pipe fragments, the size of the group, the date ranges of the pipes and the latest datable bowl type or fragment. S: small (1-30 fragments), M: medium (31-100 fragments).

Phase 5

The layer of alluvium [73] produced two AO 15 bowls (one fragmentary) and dated to 1660-80.

Phase 6

Truncating the phase 2 alluvial layer, cut [8] produced in its fill [9] the earliest bowl on the site as a taller version of the spurred AO 9 type, dated 1640-60 and it was solely present with three stems. Pit [52] produced in its fill [53] eight stems and all the bowls were dated to 1680-1710 as two AO 20 bowls, one AO 21 bowl and four AO 22 bowls with equal numbers of both the second (broad bowl and short heel) and third variants (broad bowl and deeper heel).

The deep post-medieval pit [12/48] produced two fills with clay tobacco pipes; the earliest [46] produced a fragmentary bowl (probably an AO 18 bowl dated 1660-80) and a 17th-century stem. The latest fill [13/45] produced a medium sized group of tobacco pipes with 1660-80 pipes as two AO 15 bowls and nine AO 18 bowls including all the variants, while 1680-1710 bowls are present as a single AO 20 bowl and three AO 22 bowls of variants the first and second kinds. The latest pipes are fragmentary AO 25 bowls as two heels and two OS 10 bowls dated 1700-40, one of which is initialled I W.

Truncating pit [12/48] are two features; [50] and [49] recorded with only pipes of type AO 18, dated 1660-80, firstly pit [50] produced a single bowl and secondly the gully [49] has two bowls. Truncating the latter features a large pit [7/43] produced in its fill [5/42] two each of AO 15, AO 20 and AO 22 bowls, whilst the latest pipes are two AO 25 fragments (one heel with the family name C being legible) and two OS 10 bowls, one of which is initialled A B, possibly for Andrew Barton, 1708.

Phase 7

The levelling layer [91] contained a single stem of a 17th-century date.The masonry well [16/77] produced in its fill [15] a stem of probable 19th-century date.

The post pit [97] contained in its fill [96] a rather fragmentary collection of pipes with a wide date range. The more complete bowls consist of an AO 22 bowl, dated 1680-1710 and a heel of this date is initialled S N, while an 18th century heel is marked P ?. The latest bowl is an AO 29 type, dated 1840-80 and moulded in the shape of an acorn.

Phase 8

Fill [75] produced two 1660-80 AO 18 bowls which seem to be residual, but stems and a nib in this fill appear to be of 19th-century date.

SIGNIFICANCE OF THE COLLECTION

The clay tobacco pipes are only significant at a local level for showing what pipes are marketed to the area and from the 18th-century what makers are appearing locally. It is also interesting that for the period 1660-80 the AO 18 bowls are more common, as they are at Narrow Street, Limehouse on the north side of the Thames waterfront (Jarrett forthcoming) and contrasts with Southwark where the AO 15 bowl is by far the commonest type. The majority of the pipes are fairly ordinary in

their quantity and therefore do not correlate with the high or middle class status of the adjacent Rotherhithe manor house.

POTENTIAL

The main potential for the tobacco pipes here is as an aide to dating the contexts in which they were found.

RESEARCH AIMS

- Do the quality of the clay tobacco pipes correlate with the documented inhabitants of the site?

RECOMMENDATIONS FOR FURTHER WORK

A brief publication report should be written for the clay tobacco pipes from the site concentrating on the types of pipes found and how they relate to the socio-economic status of the site. Nine illustrations are required to consist of the AO 9, AO 18 and AO 22 variants and the AO 29 acorn moulded bowl.

BIBLIOGRAPHY

Atkinson D. and Oswald. A. (1969), London clay tobacco pipes. Journal of British Archaeology Association, 3rd series, Vol. 32, 171-227.

Jarrett, C. (forthcoming/2005). The clay tobacco pipes in Killock, D. and Meddens, F. Pottery as plunder: a 17th-century maritime site in Limehouse, London. Post-medieval archaeology, Vol. 39.

Oswald, A. (1975). *Clay pipes for the Archaeologist*, British Archaeological Reports, British series, No.14.

APPENDIX 5: ASSESSMENT OF THE BUILDING MATERIALS

JOHN BROWN

1.0 METHODOLOGY

1.1 The building materials were examined using the London system of classification. A fabric number is allocated to each object, specifying its composition, form, method of manufacture and approximate date range. The material was examined under magnification (x20), quantified and weighed. A description of the fabrics appears at the end. Examples of the fabrics can be found in the archives of PCA and/or the Museum of London.

1.2 Quantification of items was undertaken and the data entered onto a computer database (Microsoft Access 2000). After analysis the common fabric types were discarded, with a type sample kept for archive. Unusual pieces or uncommon fabrics were also kept for archive.

1.3 Due to time limitations, not all of the CBM assemblage was assessed, however those contexts not assessed were scanned and seen to contain material largely typical of London assemblages.

2.0 QUANTITY AND CONDITION

2.1 Total No. CBM boxes: 9

2.2 Building material was assessed from 26 contexts weighing 43.994kg, 79 individual pieces were assessed/analysed. The majority of the material was fragmentary, although 11 complete pieces were noted. These were all from masonry samples (11 contexts). In addition several pieces showed at least two quantifiable dimensions.

3.0 DATE RANGES

3.1 There now follows a list of possible dates for the material within the contexts. The **Date range** is the earliest date for the earliest CBM within the context and the latest date of the latest material in the context. The **Latest Date** is the range for the latest dated CBM type and the **Best-fit date** compares the latest date for the earliest material and the earliest date for the latest material. The **Deposition Date** is the suggested date of deposition for

the materials in the context. Also noted is the number of sherds present in each context (**Size**) and the weight of all sherds examined. Groups are determined as (S)mall (1-30 sherds), (M)edium (31-100 sherds) or (L)arge (over 100 sherds).

3.2 CBM BY CONTEXT WITH SIZE/WEIGHT AND DATE RANGES

Context	Size	Wght	Date range		Latest date		Best-fit date		Context Date
0	2	98	1510	1800	1620	1800	1620	1660	modern
2	3	150	1180	1800	1180	1800	1180	1800	1180 to 1800
5	3	1864	1180	1900	1630	1850	1630	1800	1630 to 1800
9	1	154	1480	1900	1480	1900	1480	1900	1480 to 1900
13	1	270	1480	1900	1480	1900	1480	1900	1480 to 1900
16	***2***	***3788***	***1666***	***1900***	***1666***	***1900***	***1666***	***1900***	***1700 to 1830***
20	8	186	200	1900	1480	1900	1480	1220	1480 to 1900 [R]
22	3	96	1180	1800	1180	1800	1180	1800	1180 to 1800
30	2	94	1180	1800	1180	1800	1180	1800	1180 to 1800
35	***3***	***3628***	***1450***	***1900***	***1480***	***1900***	***1480***	***1700***	***1480 to 1700***
53	4	2380	1480	1900	1666	1900	1666	1660	1666 to 1900
55	1	18	50	1950	50	1950	50	1950	1600 to 1830
74	***3***	***3336***	***1450***	***1900***	***1666***	***1900***	***1666***	***1700***	***c. 1729 to 1830***
75	1	460	50	1950	50	1950	50	1950	Uncertain
77	***2***	***4050***	***1666***	***1900***	***1666***	***1900***	***1666***	***1900***	***1700 to 1830***
79	***2***	***4845***	***1450***	***1900***	***1666***	***1900***	***1666***	***1700***	***1666 to 1900***
81	***2***	***2782***	***1666***	***1900***	***1666***	***1900***	***1666***	***1900***	***c. 1729 to 1830***
84	***2***	***2694***	***1450***	***1900***	***1666***	***1900***	***1666***	***1700***	***1666 to 1900***
85	1	330	1480	1900	1480	1900	1480	1900	1480 to 1900
87	***1***	***2115***	***1770***	***1940***	***1770***	***1940***	***1770***	***1940***	***1770 to 1940***
88	***1***	***1758***	***1450***	***1700***	***1450***	***1700***	***1450***	***1700***	***1450 to 1700***
89	***1***	***2525***	***1666***	***1900***	***1666***	***1900***	***1666***	***1900***	***c.1770 to 1830***
90	***2***	***3999***	***1450***	***1700***	***1450***	***1700***	***1450***	***1700***	***1450 to 1700***
93	1	218	1480	1900	1480	1900	1480	1900	1480 to 1900
100	10	1024	1180	1900	1480	1900	1480	1700	1480 to 1700
107	17	1132	1180	1900	1480	1900	1480	1275	1480 to 1900 [R]

Contexts in italic are samples from masonry contexts.

[I] Possibly inclusive material

[r] Residual material

4.0 DISCUSSION

4.1 The majority of the material assessed consisted of post-medieval ceramic building materials. The remainder of the material was comprised of generally residual fragments of medieval roof tile and some glazed and/or decorated floor tiles. Materials of different periods and forms are discussed below. Fabrics that appear both in Medieval and Post Medieval forms are described in the first instance and noted in the second. No Roman period materials were observed.

4.2 **Medieval roof tile** fabrics: 2271, 2272, 2586

4.3 Small amounts of (generally abraded) medieval roof tiles were recovered, generally in fabrics that are typical of those used in the Greater London area. Fragments were generally non-diagnostic, but likely to be mainly from peg tiles. These rectangular, flat tiles usually have two holes at the top edge of the tile for wooden pegs (later iron nails were used) and were hung, rather than affixed, to horizontal roof beams in overlapping rows. Often they would be mortared together. One example of a curved tile (possibly a ridge tile) was found in fabric 2271. Ceramic roof tiles are known to have been employed in London from the mid-12th century, where they are mentioned in legislation during the reign of King Stephen as necessary for the prevention of fires. One small fragment of tile in a distinctive shelly fragment is indicative of the earlier medieval period (1130-1280). One or two examples show indications of lead 'splash-glazing' on the outer face, a practice that seems to have gone out of vogue by the end of the 14th century.

4.4 **Medieval floor tile** fabrics: 2199 (Westminster), not assessed (Flemish)

4.5 Two types of ceramic medieval floor tiles were noted. One example of a 13th century 'Westminster' type floor tile, with a glazed and decorated surface, was recovered from [107], and may indicate the presence of a high-status building in the vicinity. Typically these types of tile were used in tile 'mosaic' floors in buildings such as churches, abbeys or manorial houses. The name is derived from the use of similar tiles at Westminster Palace, and a probable kiln source may be a 13th century tile kiln discovered at Farringdon Road.

4.6 The second group of floor tiles is represented by 'Flemish' plain-glazed floor tiles, not assessed but observed during scanning, in contexts [42], [45], [55], [73]. In the late 14th century the fashion for decorated tiles was replaced by the use of plain-glazed tiles often arranged in chequerboard fashion. Again these tiles are indicative of high-status buildings, particularly during the late medieval/Tudor period.

4.7 **Post-medieval roof tile** fabrics: 2276 (peg), 2279 (pan)

4.8 Peg tile forms continued in use up until the 19th century, when they were gradually superseded by the use of Welsh slate. Fabric 2276 represents the common type of peg tile produced during the post-medieval period, using similar clay sources as fabrics 2271 and 2586.

4.9 During the 17th century a new form of roofing tile was introduced from the Netherlands, generally appearing first in the Eastern counties of England, but in use in London from at least the 1630's. These pan tiles (fabric 2279) were larger and covered a greater surface area than peg tiles, also requiring a shallower pitch in the roof. Pan tiles present an S-shape, laid on side, in profile, the downward curve of one tile overlapping with the upward curve of its' neighbour. From the 18th century they were typically used in lower status buildings or ancillary structures.

4.10 **Tin-glazed floor/wall tiles** fabrics: ?3064, ?2189

4.11 Three fragments of decorated tin-glazed tiles were recovered. Two examples (contexts [0], [53]) were of polychrome floor tiles, and probably of Dutch/Flemish origin. Floor tiles of this type were imported from the mid 16th century, and produced in London from the early to mid 17th century following the arrival of immigrant potters from the Netherlands. The third tile (context [0]) may be a floor or wall tile, with blue decoration on white ground, probably dating to the 17th century. Tin-glaze is unsatisfactory for floor tiles due to rapid wearing, and tin-glazed floor tiles went out of favour by the late 17th century, although wall tiles continued in use up to the early 19th century.

4.12 **Medieval/post-medieval brick** fabrics: 3033, 3046, 3065, 3032, 3034, 3035

4.13 These fabrics are all common in the Greater London area. Fabric 3035, a yellow brick, is known as 'London stock', and was produced in great numbers from brickfields in Northwest Kent. The reddish purple fabrics 3032 and 3034 represent an evolved form of local 'Tudor' type red sandy fabrics 3033 and 3046, where combustible materials, known as 'Spanish' were added to counteract dwindling clay supplies. This practice, at first legislated against, actually produced a harder firing brick. All of the brick fabrics were of early post medieval date or later, with the majority in fabrics 3033 and 3032/3034. Most of the bricks assessed were taken as masonry samples from two buildings (A and B), and a

well of probable 18th century date. Some bricks had frequent calcium carbonate inclusions.

4.14 Brick fabrics from masonry samples with dimensions (mm)

Structure	Fabric	Type	Suffix	Number	Min Length	Max Length	Min Width	Max Width	Min Depth	Max Depth
A	2276	TP	rh	1			153	153	12	12
	3032	BU		1	235	235	101	101	68	68
	3033	BM		1	222	222	105	105	51	51
	3033	BU		2	214	218	102	104	53	55
	3033	BU	snm	2	214	223	98	106	56	56
	3035	BF	si	1	227	227	105	105	63	63
B	3032	BU		3			100	110	58	64
	3033	BU		2			100	104	50	63
	3033	BU	snm	1	230	230	110	110	60	60
	3034	BU		3	210	210	102	105	60	63
WELL	3034	BU		3	222	226	102	104	60	65
	3046nr3034	BU		1	220	220	105	105	60	60

BU – unfrogged brick, BF – frogged brick, BW – wirecut brick, BWF wirecut frogged brick, BP – paving brick
suffix: ib = indented borders ub = uneven base snm = sunken top margin ibub = indented borders and uneven base

4.15 Discussion of extant Masonry

4.16 Building A is thought to be stratigraphically earlier than building B. There are possibly two phases. The first phase is represented by a sleeper wall [88], and a NS wall [90] and its' truncated EW return. Brick samples from these fabrics were all of 'Tudor' type red-firing sandy unfrogged bricks. A second phase is suggested by another sleeper wall [89], and a floor [87], running across the earlier NS wall [90]. The floor contained a probable mid-late 19th century addition to floor [87] in fabric 3035, the 'London stock' type brick. The initial building is likely to have been altered during the construction of building B, as the cellar wall [81] appears to overlay the EW return of [90].

4.17 Of the in situ contexts, most in building B were of brick fabrics 3032/3034 or 3032 and 3033 (reused?) combined, dating from the second half of the 18th century to the 19th century. Building B is thought to represent the remains of an 18th to 19th century cellar. The multi-context plan of trench 3 suggests that one room had a hearth [84]. This is supported by the presence of soot on one of the brick samples from the adjacent wall [79]. The well [16]/[77] is likely to date from the same period, as it contains similar fabrics.

4.18 **Stone** fabrics: ?3107 (Reigate Stone), 3120 (?granite)

4.19 One small fragment of a micaceous, glauconitic Greensand similar to that quarried at Reigate in Surrey was recovered from [20]. Reigate stone was used as building material during the later Roman period in Southwark, but more widely used during the medieval period in London. It is a soft malmstone and was commonly used for architectural details such as window tracery because it was easy to carve. It generally weathers badly however and was not often used for exterior work, especially after the 16th century. One other fragment of stone ?paving in a hard highly micaceous granular stone (possibly granite?) was recovered from [75].

5.0 CONCLUSIONS

5.1 Generally the ceramic building material recovered from LCM04 is typical of the Greater London area.

5.2 Small fragments of 'high-status' building material may indicate the presence of a significant building of medieval date in the vicinity. The site is close to the Manor House of Edward III, which was used for the production of tin-glazed wares in the 17th century.

5.3 In situ masonry contexts represent the cellars of two buildings, dating from the early post-medieval period (probably no earlier than the 16th century). Building A is stratigraphically earlier than building B, and the fabric evidence supports this. Building A seems to have been altered, presumably during the construction of building B.

6.0 RECOMMENDATIONS

6.1 Examples of medieval decorated floor tiles and tin-glazed floor/wall tiles should be drawn for archive. The tin-glazed tiles may represent products of the tin-glazed pottery and should be included in any further publication document.

6.2 No further work is recommended on the loose material from the site.

7.0 FABRICS

Brick:

3032	Usually hard fabric with a surface very resistant to damage by abrasion. Less well fired examples can be brittle. Yellow and white calcium carbonate specks and iron oxide show throughout the fabric. Both stock moulded and machine examples occur. Some machine-pressed bricks have shallow frogs, stock moulded are usually unfrogged.
3033	Some bricks have moderate coarse quartz <0.8mm, otherwise moderate quartz <0.5mm. Occasional black iron oxide <0.8mm, yellowish white silty inclusions <4mm, occasional fine stones & pebbles. Individual bricks have a high degree of uniformity of texture & colour. Soft texture crumbles easily if scratched. Stock moulded bricks, often frogged, often indented borders.
3034	Most obvious inclusions are calcium carbonate and clinker. The matrix is streaky, fabric fairly hard and sandy. Stock moulds and wire-cut machine-pressed bricks occur. The latter usually have shallow frogs. Apart from lensing this fabric is very similar to 3032.
3035	Inclusions are frequent fine specks of ash and charcoal. The fabric is riddled with tiny air pockets where organic matter has burned out during firing. The fabric is hard, with both machine pressed wire cuts and stock moulded examples. Shallow frogs are moderate.
3046	Sandy fabric with frequent coarse quartz <1mm in sandy clay matrix. Soft texture crumbles easily if scratched. Iron oxide moderate, occasional fine stones & pebbles. Stock moulded bricks, often frogged, often indented borders.
3065	Extremely Sandy fabric with abundant coarse quartz <0.8mm in sandy clay matrix. Soft texture crumbles easily if scratched. Occasional dark red iron oxide <3mm, white flint/shell inclusions. Occasional fine stones & pebbles. Stock moulded bricks, often frogged, often indented borders.

Floor tile:

2199	Little visible quartz, occasional muscovite, moderate-frequent black iron oxide <0.01mm, moderate-frequent red iron oxide <1.0mm. similar to [2505]

Tile:

2271	Hard, well fired fabric with fine texture, occasional coarse quartz <0.6mm, occasional calcium carbonate and red iron oxide <0.5mm, occasional muscovite mica <0.05mm.
2272	Distinct shelly fabric, frequent shell/calcium carbonate inclusions <5mm. Abundant coarse quartz <1mm. Occasional iron oxide <2mm.
2276	Hard, well fired fine texture with few visible inclusions - occasional quartz <0.6mm, occasional calcium carbonate and red iron oxide <0.5mm, muscovite mica <0.05mm. Same as [2271] except with fine moulding sand.
2279	Fine well fired texture, sandy fabric with moderate quartz <1.0mm, occasional black/red iron oxide & calcium carbonate inclusions <1mm.
2586	Fine clay matrix with moderate quartz inclusions <0.5mm, occasional red & black iron oxide <1mm; amount of quartz can vary, sandy version of

	fabric 2271

Stone Fabrics:

3107	Reigate Stone	Malmstone, variations: Firestone beds - silaceous sandstone with some micritic calcerous cement. Hearthstone Beds - soft, friable, greenish grey calcerous sandstone to silaceous limestone. Both contain varying amounts Glauconite inclusions <0.1mm and mica flakes. hardens on exposure, weathers badly (Reigate Stone)
3135	Granite	quartz rich, acid igneous rock with granular, porphyritic texture, coarse to very coarse grained, minerals include feldspars, biotite and hornblende. Cornish- usually light silver-grey

Additional fabric codes:

Wall tile fabrics (TGW, BISC)

2189	Two clay types, one orangey pink fairly sandy fabric with some silty bands & lenses, occasional iron oxides; pink fairly sandy fabric with moderate quartz, red and black oxides, moderate red clay lenses, rounded cream silty inclusions and occasional calcium carbonate specks.
3064	Sandy fabric with moderate quartz, occasional light red iron oxide, occasional clay lenses

APPENDIX 6: THE METAL AND SMALL FINDS FROM PARADISE STREET

Märit Gaimster

Some 40 metal and small finds were retrieved from the excavations at Paradise Street; they include iron, copper and bone objects. Numerous of the finds consisted of iron nails; some of these could be identified as boat nails and are discussed elsewhere (Goodburn, this report). The majority of finds where retrieved from Phase 6 features, but Phases 4, 5, 6, 7and 8 – including possible residual medieval finds – are also represented. For all contexts good pottery dates were available.

PHASE 3

Phase 3 was represented by a large linear feature, filled by contexts [22], [30] and [98]; pottery indicates a final date in the late 15th century for this feature.

Context	SF no	Description	Pot date	Date	Recommendations
22	19	iron sheet or thin vessel; two pieces	1180-1350		
30		Slag	1050-1150		
98	14	iron nails; three; one complete; L 140mm	1480-1500		

Phase 3 finds from Paradise Street

Phase 4

The linear feature was truncated by a gully [21] and a posthole [95].

Context	SF no	Description	Pot date	Date	Recommendations
93	11	iron nail; L 50mm	1480-1650		

Phase 4 finds from Paradise Street

Phase 5

These features were sealed by an alluvial layer consisting of contexts [2], [56] and [73] and it was from this layer that the more diagnostic and interesting finds came from. These include a decorated copper-alloy strip or bracelet, a complete iron rove nail and a stone hone. Pottery suggests a date in the early 17th century for the formation of this layer; however, there may be residual medieval finds as indicated in particular by the pottery from context [56].

Context	SF no	Description	Pot date	Date	Recommendations
56	1	copper-alloy strip/bracelet; L 70mm W 20mm; decorated with groups of vertical incised lines	1180-1220		draw for publication
73	24	iron rove nail; complete; L 40mm	1600-1650		draw for publication
73	25	iron nails; three; heads only	1600-1650		
73	9	iron nail; incomplete; L 47mm	1600-1650		
73	8	stone hone; L 75mm W 35-45mm; groups of long grooves from sharpening/pointing objects	1600-1650		further analysis and drawing for publication

Phase 5 finds from Paradise Street

Phase 6

In Phase 6 numerous rubbish and other pits produced evidence of activities ranging from the late 15th-16th centuries, the 17th century and later. Again, a majority of finds, unsurprisingly, consist of iron nails; one of these, an incomplete rove nail <32> from pit [108], suggests the reuse of ship timbers on site in the Tudor period (cf. Goodburn, this report). Another early context in this phase is represented by [57], where the pottery indicates a late 16th-century date. Finds include an assemblage of cut copper-alloy wire <4> as well as an as an object <6> of copper-alloy sheet. The incomplete object is tube-shaped with a narrow hinge or swivel along the body; it may be part of a small padlock or a fitting yet to be identified. The probable 17th-century context [44] produced a bone comb <2>, while early 18th-century pottery was accompanied by part of a gypsum vessel or figurine <34> and a possible iron door hinge <22>.

Context	SF no	Description	Pot date	Date	Recommendations
5		iron nail; L 80mm	1730-1740		
42	20	iron nails; two; incomplete; L 50 and 75mm	1700-1720		
44	2	bone comb; incomplete; W 60mm; 4 coarse and	1630-1680		draw for publication

		8 fine teeth per 10mm			
44	3	iron nail; L80mm	1630-1680		
45	21	iron ?boat nail; incomplete; L 55mm	1700-1720		
45	22	iron ?rod-pivoted hinge; L 115mm W 35mm; x-ray suggests one nail present	1700-1720		**Re-x-ray to fully identify; if hinge to draw**
55	34	gypsum ?vessel/figurine; incomplete; ht 50mm	1700-1720		identify and draw for publication
55	23	small metal tube or object; two pieces	1700-1720		
57	4	copper-alloy wire; 23 pieces; L 15 to 230mm; all ends straight-cut	1580-1600		
57	5	iron nail; incomplete; L 65mm	1580-1600		
57	6	copper-alloy fitting or part of object; tube-shaped; diam 23mm ht 62mm	1580-1600		identify and draw for publication
57	7	iron nail; L 35mm; copper-alloy wire attached	1580-1600		
96	33	copper-alloy object(s) or coins fused to stone; diam 22mm; iron also present	1800-1880		
96	27	iron nails; four; L 45-90mm	1800-1880		
100	28	rectangular metal bar with iron screw; L 50mm	1550-1600	modern?	
107	29	iron nail; incomplete; L 20mm	1480-1550		
107	30	rectangular iron object; L 33mm W 20mm	1480-1550		
107	31	iron nail; incomplete; L	1480-1550		

		40mm			
107	32	iron rove nail; incomplete; L 30mm	1480-1550		draw for publication

Phase 6 finds from Paradise Street

Phase 7

Finds associated with the construction of well [77], dating from the 18th century, included another bone comb.

Context	SF no	Description	Pot date	Date	Recommendations
15	17	copper-alloy fragment; L 23mm	1800-1900		
15		iron nails; two: L 57 and 75mm	1800-1900		
76	10	bone comb; incomplete; W 43mm; 11 coarse and 16 fine teeth per 10mm	1480-1800		draw for publication
76	12	copper-alloy sheet waste; *c.* 25 x 60mm	1480-1800		
76	26	thin iron lid or vessel; diam 90mm	1480-1800		

Phase 7 finds from Paradise Street

Phase 8

The backfill of the well contained a number of iron nails.

Context	SF no	Description	Pot date	Date	Recommendations
75		iron nails; *c.* 20; L 35-70mm	1780-1800		

Phase 8 finds from Paradise Street

UNSTRATIFIED FINDS

Among the unstratified finds from Paradise was a complete copper-alloy thimble of a probable 18th-century date.

Context	SF no	Description	Pot date	Date	Recommendations
0	13	copper-alloy coin; Queen Anne?		pmed	
0	15	copper-alloy thimble; complete; ht 22mm diam 12mm		pmed	draw for publication
0	16	copper-alloy pin; incomplete; L 17mm			
0		iron ?binding; L 180mm W 30mm			
0	18	iron nail; L 105mm			

Unstratified finds from Paradise Street

SIGNIFICANCE OF THE ASSEMBLAGE

The metal and small finds from Paradise Street constitute a small and varied assemblage of objects. Nevertheless, they are significant reflections of settlement in Southwark in the early modern period. Of particular interest are finds from the c. 16th-century contexts, spanning the transition from the Middle Ages into the early modern period; the significance of this transition period is reflected in recent research (Egan forthc,; Gaimster and Stamper 1997). At Paradise Street, finds include a stone hone with distinct use-marks and an assemblage of copper-alloy wire, both additionally important indications of manufacture at this time. However, the assemblage also gives a valuable insight into material culture in the 17th and 18th centuries, providing comparative data for further study of the early modern period.

RECCOMENDATIONS

Identified objects, including two iron rove nails, should be drawn and included in any future publication of the Paradise Street finds. Some objects require further identification; they include the decorated copper-alloy strip <1>, which may be medieval in date; the unidentified late 15th-/16th-century copper-alloy object <6>; and the gypsum vessel or figurine <34>. The iron fitting <22>, if possible to identify, should also be drawn. In addition, the stone hone <8> and the copper-

alloy wire <4> should be further discussed in the context of production and manufacture in Southwark in the 15th and 16th centuries.

REFERENCES:

Egan, G., forthc. *The Transformation of Material Culture, Tudor and Stuart Finds form Bermondsey*

Gaimster, D. and Stamper, P. (eds.), 1997. *The Age of Transition. The Archaeology of English Culture 1400-1600.* The Society for Medieval Archaeology Monograph 15, Oxbow Monograph 98. Exeter.

APPENDIX 7: NOTES ON NAILS OF PROBABLE NAUTICAL ORIGIN

DM Goodburn BA Phd AIFA Ancient Woodwork Specialist

Museum of London Specialist Services

BACKGROUND

The remains of whole ships, boats and barges of Roman and later date have been found at several sites bordering watercourses in London and elsewhere in SE England. The remains of reused sections of boats, barges and ships have also been found reused on a large number of sites sometimes at some distance from waterfront locations. Many years of intermittent study has produced a corpus of evidence of changes in the types of construction used through time including the diagnostic forms of nails (Goodburn in Milne, McKewan and Goodburn 1998 etc). Nails and related metalwork have also been found on a number of excavations of both 'wet' and 'dry' sites which have indicated that ship, boat and barge building, breaking or repair took place there or close by. Recent finds of this type have been made at New Romney (PCA excavation) in Kent where a whole sequence of medieval nautical nails were found.

Clinker rove nails

The use of iron rivet-like 'rove nails' has been documented in England from the Pagan Anglo-Saxon period to the 19th century, but there were subtle changes in their form, size and method of fitting during that long period. They are mainly associated with fastening together the boards of clinker built vessels (see cover diagram.). They were used by shipwrights to fasten the overlaps and end to end joints ('scarfs') and also sometimes for repair patches. However, in Anglo-Saxon times they were also used in a few high status buildings, but by the later medieval period their use was restricted to some high status doors such as those in churches. Documents suggest that even in these non-nautical uses they were fastened by shipwrights.

Some nail forms, such as plain iron nails, were used by shipwrights ('dead nails', or 'spikes' if large) but they overlapped in form with those used by other woodworkers such as carpenters. Small nails used with the tips turned over were also used by shipwrights and a wide variety of other woodworkers such as joiners, coopers, and bentwood box makers etc. Thus, both the later are not generally so diagnostic.

Methodology

The rather corroded iron nails found at LCM04 were briefly examined, but it was found that the X ray plates were far more informative.

LIST OF THE IRON NAILS FROM LCM 04 WITH POSSIBLE NAUTICAL LINKS

Context	Finds No.	Comment
22	19	2 objects, 1 a square rove other possible nail head.
45	21	Possible boat spike or dead nail, but could be carpenters nail.
73	24	Complete rove nail, with rect rove max dimen 35mm x 3mm nail shank rect 6-7mm wide, head 15mm wide, shank 35mm between head and rove.
73	25	3 broken nail heads 4mm square shanks, poss dead nails?
96	33	Poss corroded small rove nail X ray end-on.
100	28	50mm long x 6mm dia. frag with screw thread – Post-Med or even 19th century?
107	29	Small nail, 3mm shank, with tip bent over twice, for timb 14mm thick. Possible scarf end nail 16th century or later, of repair patch ('tingle') nail Saxon-19th century.
107	31	Possible cut off nail tip, typical debris of riveting rove nails?
107	32	Clear small corroded rove nail, nail shank 5mm across, no head, rove diamond shaped 35mm max dimen.

KEY FEATURES

Unfortunately, the particular forms of nails found in this assemblage are not closely datable without the originally associated woodwork. However, in general terms we can say that the most diagnostic rove nails are relatively small compared to most in medieval ship nail groups in

England eg at New Romney. They appear to derive from either boards from a medium sized clinker boat or possibly scarfs or repair patches from a larger boat such as a clinker river barge. The other nails might derive from the same woodwork but might also be of other origin. The evidence suggests that boat timbers were reused on the site either for structural or fuel purposes a practice quite commonly found in Southwark from the late medieval period onward. Ship, boat and barge breaking were local recycling industries particularly active from c. 1600 onward providing cheap constructional materials for low status work such as drainage works.

Bibliography

Milne, G., McKewan, C. and Goodburn, D. 1998 Nautical Archaeology on the Foreshore. RCHM

APPENDIX 8: LITHIC ASSESSMENT

Barry John Bishop

Introduction

Excavations at the above site recovered a small quantity of burnt flint and a single struck flint flake. This report quantifies and describes the material, offers some comments on its significance and recommends any further work required.

All metrical descriptions follow the methodology of Saville (1980).

Burnt Flint

Burnt flint was recovered in small quantities from a number of features, all of which dated to the Medieval or Post-medieval periods (*see* Table 1). It is indicative of hearth use or the disposal of hearth waste, although after removal from the ground is undateable. It is therefore uncertain whether it relates to contemporary Medieval or Post-medieval activity or was redeposited from the prehistoric deposits that the features, in which in was contained, truncated.

Context	Date	Burnt Flint (wt.)	Burnt Flint (No)
02	Post-medieval	13g	1
20	Post-medieval	38g	2
30	Post-medieval	36g	3
55	Post-medieval	7g	1
73	Post-medieval	12g	1
75	Post-medieval	34g	1
96	Post-medieval	6g	2
102	Post-medieval	65g	3
107	Post-medieval	91g	6

Table 1: Burnt Flint by Context

Struck Flint

A single struck flint in slightly chipped condition was recovered during the excavations. This consisted of a flake manufactured from translucent black flint with an edge trimmed striking platform 8mm wide, a pronounced bulb of percussion and a feathered distal termination. It had several unidirectional dorsal flake scars and retained *c* 30% thin, weathered chalky cortex. It measured 48mm X 37mm X 10mm and weighed 19g. It was almost certainly of prehistoric date and, although recovered from 16th century cut feature [99], had presumably been redeposited from the prehistoric soil / sub-soil layers that the feature cut.

Discussion

Burnt flint, indicative of hearth use, was recovered from a variety of features dateable to the Medieval or Post-medieval periods. A single struck flint flake of prehistoric date, but redeposited into a later feature, was also recovered. This does indicate prehistoric activity at the site and is compatible with the findings from other locations on the Rotherhithe eyot; although it would appear that here, deposits of prehistoric date had largely been truncated by later Medieval and Post-medieval activity. As such, little can be said concerning the nature or chronology of any such prehistoric activity.

Recommendations

Due to its size and lack/paucity of chronologically diagnostic artefacts, this report is all that is required of the material for the purposes of the archive and no further analytical work is proposed. The single struck flake is of some significance in that it demonstrates prehistoric activity at the site, complementing the more-extensive evidence recorded in the vicinity. As such, a reference should be made to it in the local Sites and Monuments/Historic Environment Record and it should be mentioned in any published account of the fieldwork.

Bibliography

Saville, A. 1980 On the Measurement of Struck Flakes and Flake Tools. *Lithics* 1, 16-20.

APPENDIX 9: ASSESSMENT OF THE ANIMAL BONE FROM PARADISE STREET

Lisa Yeomans

INTRODUCTION

The animal bone from the evaluation and subsequent excavation at Paradise Street was generally well preserved. A few bones displayed signs of significant weathering but the majority of the material had not suffered extensively from degradation.

METHODOLOGY

The animal bone was identified to species/taxonomic category where possible and to size class in the case of unidentifiable bones such as ribs, fragments of longbone shaft and the majority of vertebra fragments. Recording follows the established techniques whereby details of the element, species, bone portion, state of fusion, wear of the dentition, anatomical measurements and taphonomic including natural and anthropogenic modifications to the bone were registered.

ASSEMBLAGE SIZE AND BASIC CHARACTERISTICS

The total assemblage of animal bone comprised of 256 fragments with the majority (67.6%) deriving from phase 6 features dated to the 18th century. The archaeological sequence comprised of post-medieval deposits spanning the 16th to the 19th century but only a minimal quantity of animal bone derived from the earlier or later features in this date range.

More than half (54.7%) of the fragments could be identified to species (Table 1) and these indicated the presence domestic food animals as well as occasional bones of dogs and cats. The character of the assemblages from phases 3, 4, 5, 7 and 8 are difficult to interpret because of the low fragment count but the remains would not be inconsistent with general household waste. Those of phase 6 are clearly the remains of meals consumed by occupants of buildings in the vicinity of the site.

Species/Animal Size Class	3	4	5	6	7	8
Cattle (Bos taurus)	1	2	4	37		
Pig (Sus scrofa)	1	1	2	9		
Sheep (Ovis aries)	1		3	20		1
Sheep/Goat (Ovis aries/Capra hircus)	4	1	8	37		
Cat (Felis catus)				2		
Domestic Fowl (Gallus gallus)	1		1	2	1	
Goose (Anser anser)		1				

Indeterminate (horse/cattle size)	6	2	3	38	3	1
Indeterminate (pig size)		2	7	10	1	1
Indeterminate (sheep/goat/dog size)	8		2	18	10	3
Indeterminate bird		1				
Fragment Count	**22**	**10**	**30**	**173**	**15**	**6**

Table 1: Species presence by phase.

The most informative aspect of the phase 6 assemblage is the quantity of animal bone discarded in the different contexts. Figure 1 shows the number of bones by context and demonstrates that the much of the bone originated from a few, bone rich features. The most productive context (13/45) was the tertiary fill of a deep pit; this yielded 38.7% of all the bone from phase 6. The cattle bones in this feature were mostly the main meat producing elements of the skeleton whereas the sheep/goat bones also comprised of metapodials in addition to a few meat-bearing bones of the hind leg. Perhaps this suggests that the primary butchery of the sheep took place in the vicinity of the site whereas the beef was processed elsewhere and prepared joints of meat brought in. The only pig bones present were not from the extremities of the skeleton suggesting only sheep were butchered on the site

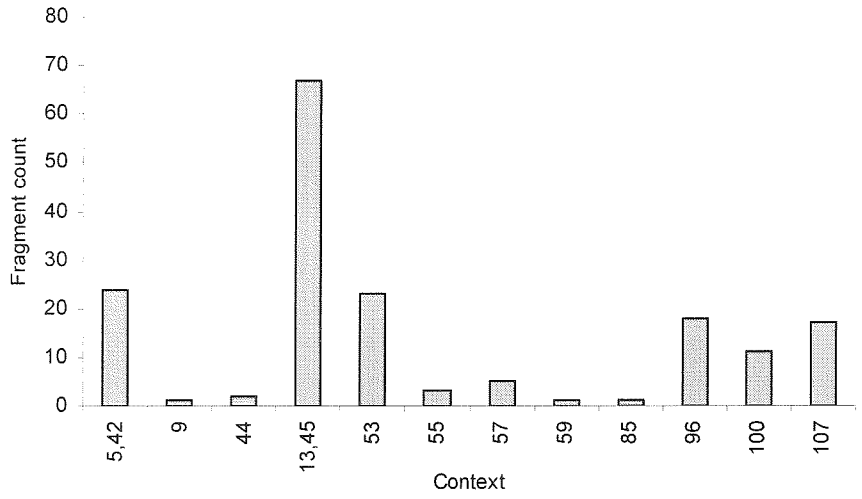


Figure 1: Frequency of bone fragments by context (phase 6 only) with equivalent contexts grouped together; contexts yielding no bone have been omitted from the graph.

CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER WORK

The size of the faunal assemblage is small making more detailed analysis and interpretation not possible; therefore no further work is recommended for this material.

APPENDIX 10: GLASS ASSESSMENT, EXCAVATIONS AT PARADISE STREET

Sarah Carter

Number of boxes: 3
Number of fragments: 42
Number of contexts: 9

Of the 42 glass fragments recovered from the excavation, 34 (81%) were from identifiable vessels, 3 (7%) were from unidentifiable vessels and 5 (12%) were window glass. Of the identifiable vessel glass fragments the majority (23 fragments or 68%) were from utilitarian vessels, mostly wine bottles but also other types of bottles and phials. The remaining 11 fragments (32%) were from tablewares.

The wine bottles date from the 17th and 18th centuries apart from the few fragments found in the topsoil, as do the other bottles and the phials. One fragment of opacified glass which appears to be from a pedestal bowl is difficult to date but may be as early as the 16th century. The 10 fragments from wine glasses are all from the same vessel which is a mid 17th century, small glass decorated with a complex, if rather crudely executed, diamond-point engraved design.

CATALOGUE

BOTTLES AND FLASKS

Context +: 1 fragment from the base of a wine bottle in natural green glass with a high kick and a sagged base. Mid 19th century.

Context +: 2 fragments from the base of a straight-sided wine bottle in natural green glass with a kick. Late 18th-19th century.

Context +: 1 fragment from the base of a globular wine bottle with a shallow kick and a visible pontil scar with surface weathering. Late 17th century.

Context +: 1 fragment from the neck and rim of a bottle in natural green glass with a short neck and an uneven out-turned rim. Has surface weathering. 17th century.

Context 13: 1 fragment of natural green glass from the base of a wine bottle. 17th-18th century.

Context 42: 1 fragment from the shoulder, neck and rim of a wine bottle in natural green glass with some surface weathering. With a short, conical neck and an applied string rim. Late 17th- Early 18th century.

Context 42: 1 fragment from the base of a wine bottle in natural green glass with a kick and a visible pontil scar. Some surface weathering. Early 18th century.

Context 42: 2 body fragments of natural green glass from wine bottles with surface patina. 17th-18th century.

Context 46: 2 adjoining fragments of thin pale green glass with elongated bubbles from the neck of a bottle or flask. 17th-early 18th century. Bed arch journal 13, 1979.

Context 96: 1 fragment from the base of a wine bottle in natural green glass with a kick and a visible pontil scar. Late 17th – early 18th century.

Context 96: 2 fragments of natural green glass from the body of a wine bottle. 17th-18th century.

Context 96: 1 fragment of natural green glass with surface weathering from the base of a square-sectioned bottle. 18th century.

Context 96: 1 fragment of colourless glass with a grey tint from the shoulder of a square-sectioned bottle, possibly a gin bottle. 18th century.

PHIALS AND OTHER MEDICINAL BOTTLES

Context +: 1 fragment from the everted and flattened rim of a phial in natural pale green glass with some surface weathering. Mid 17th- mid 18th century.

Context 5: 1 fragment of natural pale blue-green glass from the rim, neck and shoulder of a phial with a short neck and an everted rim. 17th century.

Context 42: 3 adjoining fragments from the base of a phial in natural pale blue-green glass with a high conical kick and a visible pontil scar. Has some surface patina. Late 17th-18th century.

Context 55: 1 fragment from the base and body of a phial in natural pale green, slightly bubbled glass with a very shallow kick and a visible pontil scar. 18th century.

WINE GLASSES AND BEAKERS

Context 107: 10 adjoining fragments of thin colourless glass from the rim and body of a wine glass with a round funnel bowl, decorated with diamond-point engraving. The design consists of a band of stylised foliage above two horizontal lines encasing a band of running scrollwork which itself is above two more horizontal lines and above a more complicated trefoil plant design. Mid 18th century. Illustrate.

Miscellaneous

Context 55: 1 fragment of colourless glass with opaque surface patina from the base and part of the pedestal of an open pedestal bowl or tazza. The pedestal part is cone-shaped and is decorated with incised vertical lines. 16th-17th century.

INDETERMINATE VESSELS

Context +: 1 fragment of thin colourless glass with a green tint from an indeterminate vessel.

Context 45: 2 fragments of very thin colourless, slightly bubbled glass from an indeterminate vessel. Are they Roman??

WINDOW GLASS

Context 30: 2 fragments of pale green window glass with surface patina. One has evidence of grozing along two edges and marks showing where the cames were attached.

Context 96: 3 fragments of colourless window glass with a green tint and some surface weathering.

POTENTIAL AND RECOMMENDATIONS

The fragment of opacified colourless glass from a pedestal bowl and the fragments from the engraved wine glass could both be further researched to attempt to find parallels and closer dates.

REFERENCES

Barrington Haynes E. Glass Through The Ages. Pelican 1948
Bickerton I.M. English Drinking Glasses. Shire 1984
Willmott H. Early Post-medieval Vessel Glass in England. CBA 2002

APPENDIX 11: ENVIRONMENTAL ARCHAEOLOGICAL ASSESSEMENT

C.P. Green, A. Vaughan-Williams and N.P. Branch

Department of Geography, Royal Holloway University of London, Egham, Surrey, TW20 OEX, UK

INTRODUCTION

This report summarises the findings and recommendations from the environmental archaeological assessment of nine bulk samples and two column samples taken from Paradise Street, London Borough of Southwark. The nine bulk samples were taken from Phases 2 to 6. The two column samples were obtained from Trench 3 and from the fill of a Phase 3 linear feature (context (98), cut [99]). The main aim of this assessment was to ascertain the potential of the samples for enhancing our knowledge and understanding of the broad environmental context of human activities at the site, and also the nature of these activities i.e. evidence for the utilisation of plants in the economy and diet.

METHODS

The lithostratigraphic sequences captured within column sample <16> (Trench 3) were described using standard procedures for recording unconsolidated sediment, noting the physical properties (colour), composition (gravel, sand, clay, silt and organic matter), context (unit) boundaries and inclusions (e.g. artefacts). All the descriptions are based on examination of the sediments in the laboratory. The descriptions are summarised in Tables 1 and 2.

Pre-Construct Archaeology Ltd processed the nine bulk samples by flotation, using a 300- micron mesh sieve. A 20-litre sub-sample was processed from each bulk sample. The flots were scanned using a low-power stereo-zoom microscope and the residues were sorted 'by eye'. Recommendation for further analysis was based on the density (concentration), diversity and standard of preservation of plant macrofossils, in addition to the importance of the context to the overall project aims. Plant nomenclature follows Stace (1997). The results are summarised in Table 3.

RESULTS OF THE ASSESSMENT

The whole sediment sequence in column sample <16> is substantially contaminated with anthropogenic material, including charcoal, pottery/CBM, remains of edible Mollusca and fragments of bone. The matrix supporting this material is essentially uniform throughout the sequence and consists of a mixture of darker and paler, more or less clayey sand. Towards the base of the sequence, this mixture is intimate but towards the top, the paler material occurs in well-defined irregular patches. Layering of the sediment is apparent in terms of the abundance of anthropogenic material, especially the amount of charcoal, with the greatest diversity of

anthropogenic material associated with the main concentrations of charcoal at 24-35cm and 39-42cm in the lower column. There is no obvious evidence of sustained pedogenic (soil formation) processes throughout most of the sequence, and a network of root pores is present only in the lowest 5cm of the lower column. At this level a network of open pores is present, some of which are in-filled with dark coloured peaty material. Above this level discontinuous pores occur patchily and may represent the remains of continuous networks that have been largely destroyed by compaction.

The results of the plant macrofossil assessment indicate:

Phase 2 – Prehistoric soil horizon

Sample <2> was taken from interface layer, context (34). It produced a small flot consisting of a single charred grain of wheat (*Triticum* sp.) and occasional fragmented wood. The residue produced fish bone, charcoal and potsherds.

Phase 3– 16th century

Sample <3> was taken from the fill of a linear feature (context (30)), as were samples <14> and <15> (context 98)). A possible wheat grain was recovered along with occasional charcoal from the assemblage of context (30). Charcoal, bone and pottery were recovered from the residue. Context (98) produced very different results in the two samples. The assemblage in sample <14> produced occasional but moderately preserved grains of free-threshing wheat plus occasional weed seeds. The residue contained burnt bone and a nail. In contrast, sample <15> was barren.

Phase 4 – Mid 17th century

Two gully fills were also sampled – contexts (20) and (61). These both contained occasional fragmented charcoal in addition to vitrified material. Occasional charred seeds / grains were present in context (20). Animal bone and pottery were recovered from both residues. CBM was also present in context (20).

Phase 5 – Late 17th century

Sample <4> from context (2) produced a moderate number of cereal grains. However, these are unidentifiable due to their poor preservation. The abundance of clinker and vitrified items suggests the assemblage underwent extremely high levels of heat that caused extensive damage to the cereals grains. Charcoal was occasional in the residue.

Phase 6 – 18th century

Three fills were sampled from this phase. Sample <10> from pit fill (46) produced a moderate number of charred items along with frequent waterlogged grass-like material. This is likely to be modern. Charcoal was occasional but of moderate preservation. The residue contained molluscs, pottery, cbm, glass, nails and animal bone (including fish). Sample <12> from pit fill (57) produced only occasional charcoal. Sample <11> was taken from fill (59) of a natural feature. This produced a moderate assemblage of charred grains of barley (*Hordeum* sp.), wheat and grasses (Poaceae spp.). The residue contained animal bone. Charcoal was occasional.

CONCLUSIONS

The sequence contained in column sample <16> seems most likely to be the fill of a well-drained depression formed in sandy sediment. A phase of ground stability and soil formation is indicated at the base of the sequence, possibly following directly on the formation of the depression. Subsequently the depression was in-filled, probably mainly as a consequence of natural degradation of the sides of the depression, although episodes of human activity in or near the depression are indicated by layers rich in anthropogenic material and these have contributed to the infill process and to the compaction of the fill. The plant macrofossil assessment has provided evidence for domestic occupation in all of the Phases represented. This included the utilisation of cereals (wheat and barley), woodland and animals.

RECOMMENDATIONS

It is recommended that the following samples be subject to more detailed environmental archaeological investigations:

1. Medieval and early Post-medieval
   Plant macrofossil analysis of samples <14> and <15> from context (98)
2. 17th and 18th centuries
   Plant macrofossil analysis of sample <11> from context (59)

These samples should be fully processed by flotation to recover charred plant remains. These remains will provide useful information on the economy and diet of the local inhabitants.

REFERENCES

Stace, C. 1997, *New Flora of the British Isles (2nd ed),* Cambridge University Press

Table 1: Lithostratigraphic description of column sample <16> upper, Trench 3, Paradise Street, Southwark

Depth (cm)	Context Number	Phase	Description
000-050	98	2	10YR4/4 dark yellowish brown with irregular inclusions of 10YR5/8 yellowish brown (large inclusion between 010 and 020, mainly 10YR5/8 but with patchy inclusions of 10YR4/4); moderately sorted medium to coarse slightly clayey sand with clasts up to 10mm (10YR5/8 material is less clayey and lacks granule/fine gravel content); unstructured; no root channels but some discontinuous pores; charcoal; no acid reaction.

Table 2: Lithostratigraphic description of column sample <16> lower, Trench 3, Paradise Street, Southwark

Depth (cm)	Context Number	Phase	Description
000-002			Void
002-024	98	2	Downward continuation of Sample 16 (upper); 10YR4/4 dark yellowish brown with inclusions of 10YR5/8 yellowish brown; medium to coarse slightly clayey sand with clasts up to 10mm; unstructured; discontinuous pores; charcoal; two pieces of burnt flint (20mm, 35mm) between 014 and 018; no acid reaction; well-marked transition to underlying:
024-032	98	2	10YR4/4 dark yellowish brown with inclusions of 10YR5/8 yellowish brown; medium to coarse slightly clayey sand with clasts up to 10mm; unstructured; discontinuous pores; small pieces of mollusc shell (?Common Mussel); fragments of bone (up to 25mm); large amounts of charcoal; small particles of pottery/CBM; no acid reaction; well marked transition to underlying:
032-045	98	2	Intimate mixture of 10YR4/4 dark yellowish brown and 10YR5/8 yellowish brown; clayey medium to coarse sand with clasts up to 10mm; unstructured; discontinuous pores; a few particles of mollusc shell (? Common Mussel) mainly at 039-041; charcoal (less common than in overlying unit) concentration at 041-042; no acid reaction; gradual transition to underlying:
045-050	98	2	Intimate mixture of 10YR4/4 dark yellowish brown and 10YR5/8 yellowish brown; clayey medium to coarse sand with clasts up to 45mm, including chalk (45mm); unstructured; root channels with peaty infill; charcoal (more common than in overlying unit but not as common as in 024-032), no acid reaction.

Table 3: Summary of the bulk sample assessment, Paradise Street, Southwark

Context	Sample	Phase	Feature	Sample Vol. (l)	Flot Vol. (ml)	Content Charred	Content Pres.	Wood Charred	Mollusca	RESULTS	Residue
34	2	2	Layer	20	1	*	+	O		Grain	Bone, pot, charcoal
30	3	3	Linear	20	3.5	*	+	O		Grain	Bone, pot, charred wood
98	14	3	Linear	20	5	*	++	F		Grain	Burnt bone, Fe
98	15	3	Linear	20	20	-		-			
20	1	4	Gully	20	9	*	+	O			Bone, pot, cbm
61	13	4	Gully	20	9	-		O	O		Bone, pot
2	4	5	Layer	20	5	**	+	O		Grain	Charcoal
46	10	6	Pit	20	7	**	++	O			Bone, pot, cbm, glass, nails

57	12	6	Pit	20	2	-		O			Bone, pot, Fe
59	11	6	Nat. F	20	3.5	**	++	O		Grain	Bone

Key:

-	= Absent	+	- poor		O	= Occasional	
*	= Occasional		++	- moderate		F	= Frequent
**	= Frequent		+++	- abundant		A	= Abundant
***	= Abundant						

APPENDIX 12: OASIS FORM

Project details

Project name AN ARCHAEOLOGICAL EXCAVATION AT PARADISE STREET, LONDON BOROUGH OF SOUTHWARK,

Short description of the project

An archaeological excavation was undertaken on land at Paradise Street, London Borough of Southwark, between 12th July - 23rd July 2004. The excavation revealed evidence for a prehistoric soil horizon, a large 16th century EW running ditch, early post-medieval NS gullies and several 18th century rubbish pits. The site was developed in the 18th century when a brick building was constructed, which was modified in the late 18th/early 19th century and a brick lined well was dug. 19th century basemented buildings were constructed in the western half of the site replacing the earlier structures.

Project dates Start: 12-07-2004 End: 23-07-2004

Previous/future work Yes / No

Any associated project reference codes LCM 04 - Sitecode

Type of project Field evaluation

Site status Local Authority Designated Archaeological Area

Current Land use Community Service 1 - Community Buildings

Methods & techniques 'Environmental Sampling','Targeted Trenches'

Development type Urban residential (e.g. flats, houses, etc.)

Prompt Direction from Local Planning Authority - PPG16

Project location Country England Site location GREATER LONDON SOUTHWARK BERMONDSEY ROTHERHITHE AND SOUTHWARK London City Mission, Paradise Street, Southwark

Study area 110.8 Square metres

National grid reference TQ 34849 79653 Point

Height OD Min: .54m Max: 1.32m

Project creators Name of Organisation Pre-Construct Archaeology Ltd Project

Brief originator John Samuels Consultants Project

Design originator David Divers

Project director/manager David Divers / Jim Leary Project

Supervisor Helen Clough / Kathelen Sayer

Sponsor or funding body Developer

Project bibliography 1

Publication type An article in published serial

Entered by Pre-Construct Archaeology (archive@pre-construct.com) Entered on 8 December 2004