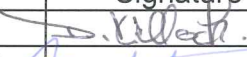
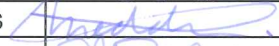

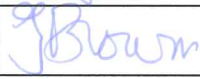
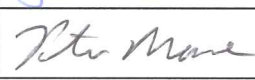


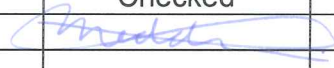
DOCUMENT VERIFICATION

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	Name & Title	Signature	Date
Text Prepared by:	D. Killock		31/01/08
Text Checked:	F.M.Meddens		31/01/08
Graphics Prepared by:	H.Baxter		31/01/08
Graphics Checked by:	J.Brown		31/01/08
Project Manager Sign-off:	P.Moore		31/01/08

Revision No.	Date	Checked	Approved
F.M.Meddens:2	31/01/08		

Pre-Construct Archaeology Ltd
Unit 54
Brockley Cross Business Centre
96 Endwell Road
London
SE4 2PD

**An Archaeological Excavation at Bridge's Wharf, Battersea, London
SW11 3YW, London Borough of Wandsworth**

Site Code: BFQ 06

Central National Grid Reference: TQ 2655 7601

**Written and Researched by Douglas Killock
Pre-Construct Archaeology Limited, January 2008**

Project Manager: Peter Moore

**Commissioning Client: CgMs Consulting Limited on behalf of Weston
Homes plc**

Contractor: Pre-Construct Archaeology Limited

**Unit 54
Brockley Cross Business Centre
96 Endwell Road
Brockley
London
SE4 2PD**

**Tel: 020 7732 3925
Fax: 020 7732 7896
E-mail: pmoore@pre-construct.com
Website: www.pre-construct.com**

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January 2008**

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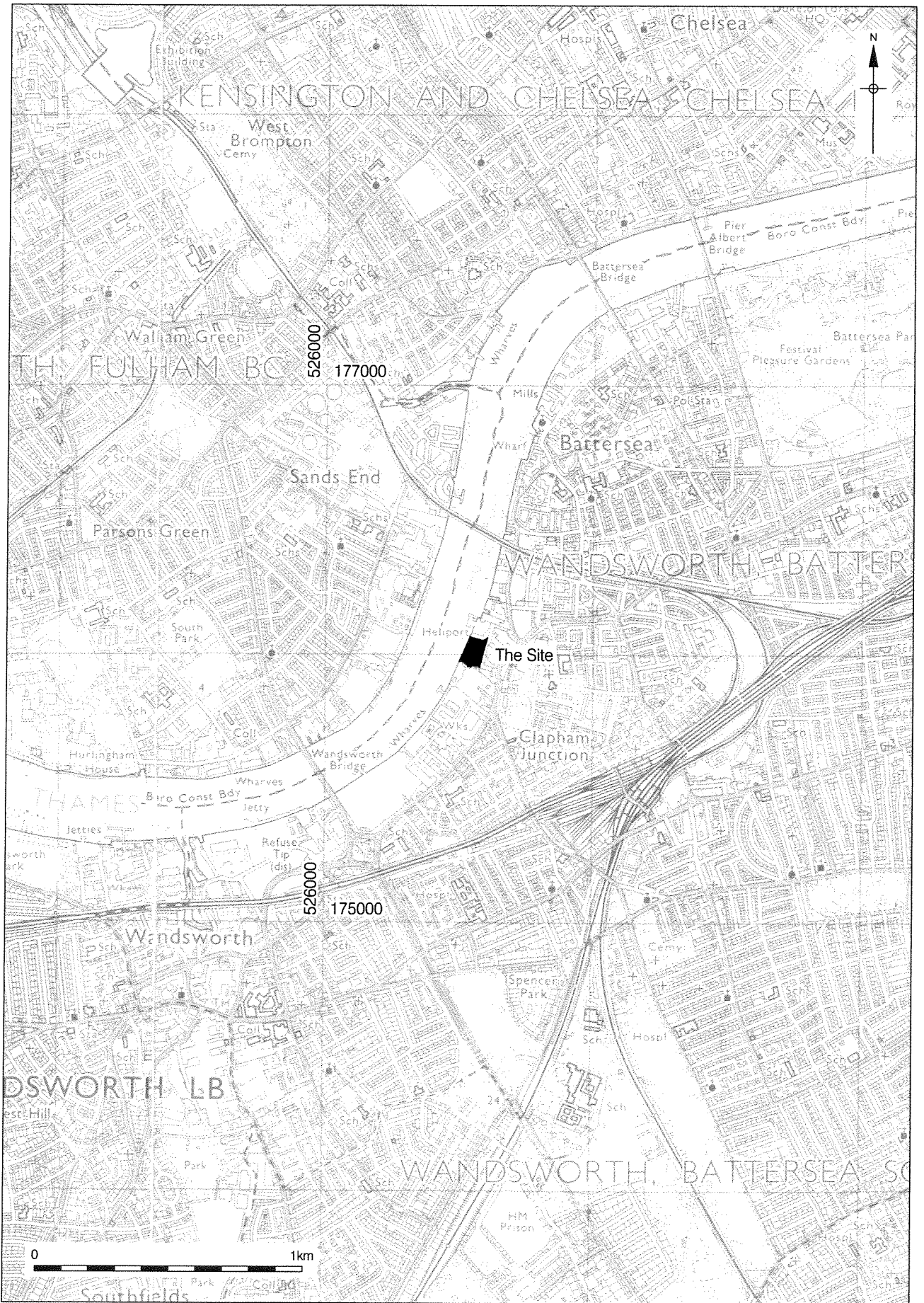
1 ABSTRACT

- 1.1 This report details the results and working methods of an archaeological excavation undertaken at Bridges Wharf, Battersea, London Borough of Wandsworth, SW11 3YW. The site is centred at National Grid Reference TQ 2655 7601 (Fig.1).
- 1.2 The excavation consisted of three evaluation trenches, one of which was extended to provide a larger working area (Fig 2). Trench 1 was located in the southern part of the site and orientated north-south, as designed it was to have measured 10m X 5m but during the evaluation stage it's size was limited by massive modern factory foundations. However, Trench 1 did expose historic timber waterfront structures and it was subsequently expanded to facilitate the recording of these. Trench 2 was orientated east-west and located in the central part of the site. It was designed to measure 20m X 3m but the frequency of modern foundations limited it's size to 11m x 4m. The material surrounding the factory foundations all appeared to consist of industrial backfilling which did not pre-date the 19th century. Trench 3 was orientated east-west and was located in the northern part of the site. It measured 10m X 5m as specified. All of the trenches were broken out and reduced using a 360° mechanical excavator under archaeological supervision until archaeologically sensitive levels, where present, were reached. All further excavation was accomplished using hand tools.
- 1.3 The evaluation took place in advance of the proposed redevelopment of the site. Most of the standing structures had been demolished prior to the commencement of archaeological works. The remnants of some warehouse structures, perimeter walls and small outbuildings were extant in the initial phases of the project, below surface demolition of 19th and 20th century foundations was also being undertaken as the archaeological works progressed. As stated in the Specification (para. 1.7) the redevelopment was "likely to effectively remove any remaining archaeological deposits"¹. The frequency of below-ground obstructions was on such a vast scale that the overall ground level of the site dropped by c. 0.50m as a result of their removal. The 'grubbing out' preceded groundworks for the c. 300 space underground car park, which was proposed for the redevelopment.
- 1.4 The evaluation and excavation found evidence of a series of waterfront timber waterfront structures dating to the early post-medieval period to the mid-18th century. The alignments of these revetments demonstrated that they would have reinforced and managed the northern bank of the Falcon Brook, a tributary of the Thames more recently known as Battersea Creek.

¹ Hawkins, D 2006 Specification of an archaeological evaluation, Land at Bridges Wharf Battersea, Unpublished document for CgMs Consulting Limited

2 INTRODUCTION

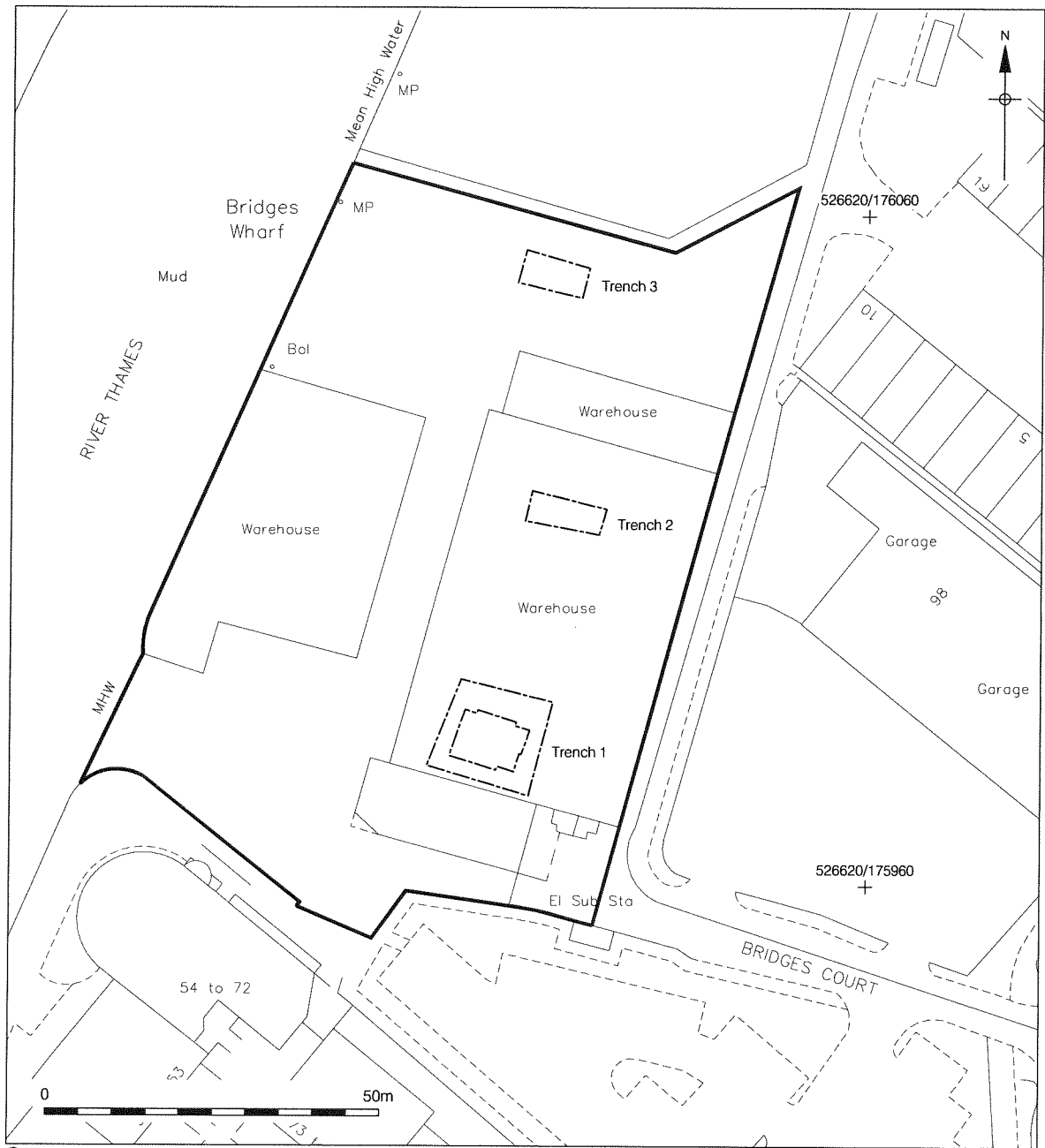
- 2.1 An archaeological evaluation and excavation were undertaken at Bridges Wharf Battersea, London Borough of Wandsworth, SW11 4YW by Pre-Construct Archaeology Ltd between the 29th of October and 21st of November 2006. The site had been occupied by industrial structures used as warehouses and associated offices. The evaluation was designed to consist of three stepped trenches; two measuring 10m x 5m at the top and a third trench measuring 20m X 3m. This constituted approximately 2.11% of the proposed area of the redevelopment.
- 2.2 CgMs Consulting Ltd commissioned the work on behalf of Weston Homes plc. Pre-Construct Archaeology Ltd undertook the evaluation under the supervision of Douglas Killock and the project management of Peter Moore. Neil Hawkins supervised the initial phases of machine excavation.
- 2.3 The site is situated on the Thames waterfront to the west of Bridges Court, Battersea.
- 2.4 The completed archive, comprising written and drawn records, will be deposited at the LAARC under the site code BFQ 06.



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Figure 1
Site Location
1:20,000 at A4



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Figure 2
Trench Location
1:1,000 at A4

3 PLANNING BACKGROUND

3.1 The site is located within an Archaeological Priority Zone as defined by the London Borough of Wandsworth's Unitary Development Plan, published in 1994. The plan states that 'where development is proposed on sites identified as having significance, the council will require developers to make provision for archaeological investigation. In appropriate cases, preservation *in situ* or excavation and recording may also be required'.

3.2 Following the production of a Desk Based Assessment, which recommended that no further archaeological mitigation measures were necessary, Diane Walls, Archaeology Advisor for GLAAS, English Heritage, decided that an evaluation should be carried out to determine the extent of archaeological survival².

3.3 CgMs Consulting Ltd prepared a written scheme of investigation for the site, which was approved by Ms Walls prior to the beginning of the evaluation³. The general aims of the evaluation were:

- To determine, as far as reasonably possible, the location, form, extent, date, character, condition, significance and quality of any surviving archaeological remains, irrespective of period, liable to be threatened by the proposed development.
- The evaluation should also seek to clarify the nature and extent of existing disturbance and intrusions and hence assess the degree of archaeological survival of buried deposits and any surviving structures of archaeological significance.
- Within these parameters the evaluation the site presented an opportunity to;
- Evaluate the palaeoenvironmental potential of the site.
- Evaluate the presence or otherwise of past activity/occupation and define the date and nature of that activity/occupation.
- Evaluate the environmental context of any past occupation/activity.
- Evaluate the likely impact of past landuse and development.
- Provide sufficient information to construct an archaeological mitigation strategy.

² Meager, R 2002, Archaeological Desk Based Assessment Bridges Wharf Battersea, Unpublished document for CgMs Consulting Limited

³ Hawkins, D 2006

4 GEOLOGY AND TOPOGRAPHY

- 4.1 The site is located on the Thames waterfront at Battersea. The site limits consist of the Thames river wall to the west, the heliport site to the north, Bridges Court to the east and the Cotton Row and Prices Court residential developments to the south.
- 4.2 The British Geological Survey indicates that the drift geology consists of river brickearths, which seal terrace gravels and London clay.
- 4.3 The principal geological feature located on the site consists of the Falcon Brook, a tributary of the Thames more recently known as Battersea Creek. The mouth of the creek was still an open waterway until 1959 and would have formed the effective southern limit of the site. Since that time the watercourse has been managed by canalising it in a covered culvert. This appears to have been effected in stages as the creek mouth is shown as an open watercourse on the 1963 and 1970 Ordnance Survey maps whilst no sign of it is evident on the 1986/7 map.
- 4.4 Modern ground level prior to the removal and demolition of modern obstructions lay at c. 4.50m OD

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 The archaeological background was briefly touched on in the desk based assessment produced by CgMs Consulting Limited⁴. Some of the details produced below summarise those findings and are taken from that document.

5.2 Prehistoric

5.2.1 The riverside location would have presented a wealth of resources for prehistoric settlers. Fish, eels and wildfowl would have provided an abundant source of food and reed beds would have provided raw materials for both building and wickerwork.

5.2.2 Worked flints dating to the Mesolithic, Neolithic and Bronze Age were found at the Watney Distillery (site code JWD 91) site on York Road, located to the south of the study site. More flints were recovered from 73-83 Battersea Church Road but none of these finds were discovered *in situ*. Very little evidence of early prehistoric frequentation of the area has been recovered.

5.2.3 Artefacts dating to the Bronze Age, including a dagger, sword and a hoard, have been recovered from the Thames and the foreshore close to the subject site. These objects do not represent casual loss but were ritually deposited within the river.

5.2.4 A middle Bronze Age ditch was found at the Price's Candle Factory site located immediately to the south of the Falcon Brook⁵. A layer of redeposited brickearth containing 20 sherds of Bronze Age pottery was recorded in the vicinity of the ditch. Unfortunately these features were only recorded in a watching brief monitoring groundworks after the excavation had taken place.

5.2.5 The valley of the river Wandle, which gives it's name to Wandsworth, has one of the richest concentrations of Bronze Age sites in the London area. Archaeological priority zones specifically connected to the Bronze Age can be found in the neighbouring boroughs of Sutton and Merton at the Queen Mary Hospital, Carshalton (Sutton APA3), the Wandle Gravels area (Sutton APA4), the Wandle Valley alluvium, (Merton) and Mitcham Common (Merton). The supposed paucity of Bronze Age finds in the vicinity largely reflects the narrowness of the search area chosen, the high impact of 19th century infrastructure and industrial development of the area and an unwillingness to adequately investigate the archaeology of the area, particularly the deeply stratified foreshore deposits which are likely to contain high quality archaeological remains.

⁴ Meager, R 2002

⁵ Hulka, K 2002 Assessment of an archaeological excavation at the former Prices Patent Candle Factory, York Place, London Borough of Wandsworth, SW11 p9

5.3 Roman

- 5.3.1 The Roman city of *Londinium* was located in what is today the City of London, some five miles to the east of the subject site. None of the known or speculated Roman roads leading to the city passed close to the site or its environs and no signs of Roman occupation have been documented in the area. Evidence of a Roman presence in the vicinity of the Thames in west London is largely confined to the north bank close to the line of the Roman road that passed through Brentford and Staines toward its destination at Silchester.
- 5.3.2 Two pieces of Roman metalwork have been found in Battersea Park but these finds might derive from land reclamation dumps brought into the area to reclaim the former marshland. Residual Roman pottery was also found at the Watney Distillery site on York Road.

5.4 Saxon

- 5.4.1 No finds dating to the Saxon or early medieval period have been made in the immediate environs of the site. However, excavations at Althorpe Grove, Church Road have found evidence of what may be a Saxon manor. This site lies a little to the north of the study area. The foundation of Battersea church is known to pre-date the Norman Conquest⁶. Settlements are historically attested at Battersea and Wandsworth by the mid-Saxon period⁷.

5.5 Medieval

- 5.5.1 Extensive evidence of late medieval development has been recovered from sites located close to the waterfront in this area. The most prominent of these is obviously the Archbishop of York's palace that was located directly to the south of the Falcon Brook below what was until recently Price's Candle Factory⁸. A mansion house was first erected there soon after 1471. In 1474 Lawrence Booth, the bishop of Durham before his promotion to the Archbishopric of York, received license from the king to enclose the new *Bryggecourt* mansion house and to fence off the associated grounds as a hunting park. The construction project begun by Booth was completed by his successor at York Thomas Rotherham. The scale of the construction work was comparable with some of the largest and best endowed secular houses of the day⁹. The embankment of the mouth of the Falcon Brook would almost certainly have formed part of the works associated with the establishment of the manor house.

⁶ Hughes, R 2001 Falcon Wharf Redevelopment, Archaeological Desktop Study

⁷ Phillpotts, C 2004 Archaeological Excavations at Price's Candle Factory and Regent and Grove Wharves, Wandsworth Documentary Research Report Unpublished document for CgMs and Pre-Construct Archaeology Ltd

⁸ Hawkins, D with Douglas, A ,Harris, A and Ridgeway, V 2001, The Archbishop of York's Battersea Mansion in London Archaeologist Vol 9 No 5 129-136

⁹ Phillpotts, C 2004

- 5.5.2 Excavations at Regent's Wharf (site code LMA 02) revealed the remnants of a building constructed in brick and Reigate stone. The earliest part of the building dated to the mid fifteenth century, it continued in use throughout the 17th and 18th centuries. A late medieval boundary ditch was also recorded during the excavation, Regent's Wharf lies a little to the north of the subject site¹⁰.
- 5.5.3 Mills are likely to have been constructed along the course of the Falcon Brook during this period. The higher parts of the brook could have been used in much the same way as the Wandle, a watercourse which presented a combination of power and clean water which supported a fulling mill as early as the 13th century and later attracted industries such as silk printing and calico bleaching. The lower reaches of the stream were more likely to have employed tidal mills closer to the Thames.
- 5.5.4 Apart from harnessing the abundant water power of the area windmills would almost certainly have formed part of the extensive drainage scheme required to maintain the area for agriculture during this period. The cost of repairing bridges over watercourses constantly reappears in manorial accounts relating to this period as does expenditure on riverside defences constructed in the late 13th and 14th centuries. Rising water levels led to flooding in the 15th and 16th centuries which required sections of the river wall to be repaired or rebuilt¹¹.
- 5.5.5 A wharf for the transshipment of Reigate stone to Waltham Abbey was built on the south side of the Falcon Brook and used during the late 12th and early 13th centuries. Reigate stone continued to be shipped through Battersea in the later 13th, 14th and 15th centuries, probably from the mouth of the Falcon Brook in the 13th and 14th centuries. Various dock facilities in the Battersea area were probably employed at later dates¹².
- 5.5.6 The desk-based assessment and the specification produced by CgMs both suggested that the potential for the medieval period was low..

5.6 Post-Medieval

- 5.6.1 In 1514 Thomas Wolsey became Archbishop of York and his agents continued to maintain and improve his estate at Bridge Court. In October 1515 these works extended to the scouring of the Falcon Brook and rebuilding the bridge over it¹³.
- 5.6.2 Wolsey appears to have used the Bridge Court site principally for the production and transshipment of building materials for his major building projects at York House in Westminster and Hampton Court. Hundreds of thousands of bricks were produced here in 1515 and 1516. The importing of the raw materials to produce the bricks and

¹⁰ LAARC, see bibliography for full web reference

¹¹ Phillpotts, C 2004

¹² Ibid

¹³ Phillpotts, C 2004

subsequent transportation of the finished product and other building materials must have made the creek mouth a very busy part of the Thames waterway at this time.

- 5.6.3 The fortunes of the manor house may have declined somewhat later in the 16th century, the incumbent Archbishop being imprisoned and the house sacked by crown agents in 1554. However, a later archbishop occupied the house when he was in London in the early 1570s. The struggle to maintain the river wall continued throughout the late 16th century and records show that the Commission of Sewers required works to be carried out on the river wall in Battersea during 1570 and again in 1591.
- 5.6.4 The manor house at Bridge Court was extensively remodelled in the 1630s. Smaller tenanted houses were built in the grounds around the main mansion house throughout the later 17th and 18th centuries. By 1750 a mill, Creek Mill, had been built on the Falcon Brook on the north-east corner of the Candle Factory site. In 1753 a Stephen Theodore Janssen had converted part of the main York House mansion into an experimental enamel works. The factory was described as 'most pleasantly situated, with a convenient creek for barges and boats coming up to the house...'¹⁴.
- 5.6.5 The enamel works was a short-lived venture but the continued industrialisation of the area continued with the establishment of a sulphuric acid works and a distillery on the Price's Candle Factory site. Rocque's map shows an 'L' shaped building on the study site close to the waterfront but the nature of this structure is unknown. In the early 19th century the study site formed part of the grounds of a riverside mansion known as Sherwood Lodge. However, by 1862 the site had been acquired and developed as part of Price's Candle Factory.

¹⁴ Ibid

6 ARCHAEOLOGICAL METHODOLOGY

- 6.1 The evaluation was designed to consist of three stepped trenches. Of these two were designed to measure 10m X 5m at the top and one was to have measured 20m X 3m. However, the frequency of underground obstructions prevented the full excavation of Trench 2, and Trench 1 was extended around timber waterfront structures. The maximum dimensions of the trenches as excavated were: Trench 3 10 X 5m, Trench 2 11.5m X 4m and Trench 1 17m X 14m (Fig 2). The trenches were each designated a Trench number. No detailed recording was attempted in Trenches 3 and 2 as none of the deposits exposed were laid down before the 19th century and, in the case of Trench 2, the ground was also contaminated. The Archaeological Advisor to the Borough, Ms Diane Walls of English Heritage, GLAAS, approved these variations to the original programme.
- 6.2 All hard-standing was broken out using mechanical excavators; modern overburden was then removed under archaeological supervision until archaeologically sensitive levels, where present, were reached. In Trench 3 19th century dumped soils mixed with demolition rubble were evident to a level of 1.60m OD, c 2.90m below the ground surface. In Trench 2 a centrally placed machine excavated sondage reached 1.68m OD. The majority of the 'soft' deposits found in this trench comprised industrial landfill dumped between the concrete foundations. The only remains of archaeological interest were located in Trench 1, where timber waterfront structures clearly dating to the late medieval or early post-medieval periods were exposed in the initial machining.
- 6.3 The original evaluation Trench 1 measured 3.5m X 1.5. at base and was inadequate for further investigation of the timber structures. An enlarged stepped trench was opened up around the original sondage which produced a working area c. 10m east-west by 7.5m north-south. Thereafter the excavation strategy focused on exposing the timber structures and collecting dating evidence from either side of the timber river walls.
- 6.4 Trench 1 was photographed using digital; black and white and colour slide formats.
- 6.5 Where relevant phased 'Harris Matrix' stratification diagrams have been produced for individual trenches.
- 6.6 Recording on site was undertaken using the single context recording system as specified in the Museum of London Site Manual. Representative plans and sections were drawn at a scale of 1:10 or 1:20 as appropriate. Contexts were numbered sequentially and recorded on *pro-forma* context sheets. Where referred to in the text context numbers are given in square brackets, i.e. pit [36].

- 6.7 A temporary bench mark (TBM) with a value of 2.49m OD was established on the site. The value was established by transferring a level from the Bench Mark located on the frontage at 114 York Road, the value of which is 4.62m OD.
- 6.8 The site was given the unique code BFQ 06.

7 THE ARCHAEOLOGICAL SEQUENCE

7.1 Phase 1 Late Medieval/Early Post-Medieval Deposits and Structures

- 7.1.1 The layers in this phase did not produce any dating evidence but have been placed in this group as later deposits or structures sealed them. Layer [62] was the most important deposit from this group as it formed the foreshore prior to the building of the earliest revetment structure [14], which has been dated to the early post-medieval period. The stylistic dating of the revetment was based on the materials employed¹⁵. Layer [62] consisted of a light grey-green mix of clay and silt with a notable sand component, the latter distinguished it from the later foreshore layers, which sealed it. The surface of layer [62] was relatively flat in the northeast below the area where the revetment structures were concentrated. It is unclear whether this 'shelf', found at c. 1.20m OD, represented a natural topographical feature or was the result of human intervention. To the west of the 'shelf' layer [61] sloped steeply to the south falling to c. 0.80m OD over a distance of 2.5m.
- 7.1.2 As stated above no datable artefacts were recovered from layer [62] but its deposition clearly pre-dated the construction of the earliest revetment. As the latter dates to the early post-medieval period, layer [62] must have been deposited in the late medieval or early post-medieval periods.
- 7.1.3 The earliest timber revetment structure [14] survived in very fragmentary truncated form (Fig 3). The lower part of a single elm plank was supported by small rounded oak posts with a diameter of c. 10cm, the revetment was orientated northwest-southeast. The rather flimsy structure was unlikely to have been of any appreciable height and probably did not remain in use for very long. The elm planking had been truncated to the north during the construction of the second revetment [55] and to the south by the construction cut [17] for a hollowed-out log drain [54].

7.2 Phase 2 Early-Mid 17th Century Deposits and Structures

- 7.2.1 A much more substantial revetment structure [55] replaced revetment [14] (Fig 4). The new structure was built on large horizontally laid oak sill beams pierced by mortices that would have taken timber uprights. The revetment had, however, been demolished and the uprights and nearly all of the planking had been removed. Only the lowest plank survived, this had been laid on the river side of the baseplate and nailed to it. The plank was a reused piece of elm that had originally been part of a barge hull.

¹⁵ Goodburn, D 2008 Summary assessment of the historic woodwork found at Bridges Wharf, Wandsworth Unpublished document for PCA

- 7.2.2 The full extent of only one of the baseplates could be recorded and recovered as the structure extended beyond the limits of the excavation to both north and south. The complete example, baseplate [53], measured 3.80m long by 0.18m wide and 0.12m thick. It was joined to baseplate [46] to the north with a pegged scarf joint. Both baseplates showed signs of re-use in the form of redundant joints and bolt holes. These indicate that the timbers once had a mechanical function, possibly being employed in a mill¹⁶.
- 7.2.3 The top of the baseplates was recorded at c. 1.40m OD. Given the known tidal range for this period the superstructure of the revetment would have had to have been at least 1.60m high if a new land surface above tidal level was established to the east of the structure. This is certainly possible as this was a much more robust structure than revetment [14] which it replaced. The alignment of the new river wall had altered considerably; the southern part of structure [55] was c. 1.40m further west than its predecessor.
- 7.2.4 Unfortunately the impact of later truncations and the demolition of the structure itself meant that establishing stratigraphic relationships between the revetment and its associated levelling dumps was extremely difficult. However, layers [34] and [44] undoubtedly were deposited when the revetment was constructed. Neither of these layers contained any closely dateable artefacts, both of the pottery assemblages recovered from these layers were dated 1620-1700. The construction of this revetment probably dates to middle of the 17th century but it might be a decade or two later.
- 7.2.5 The only masonry structure found during the excavation consisted of a very short stretch of roughly northwest-southeast aligned wall [66]. This structure was located to the east of revetment structure [55] in the southern part of the trench. The wall was constructed from reddish orange sandy bricks measuring 220mm long x 110mm wide, it was two bricks (laid as stretchers) wide. Only one whole brick was evident in this structure, meaning it was probably not designed to be seen above ground. The full extent of the wall is unknown as it had been truncated to the south by the construction cut [17] for the hollowed out log drain [54].

7.3 Phase 3 Mid-Late 17th Century Deposits

- 7.3.1 Two layers that might have been associated with the construction of structure [55] contained artefacts dated to the mid-late 17th century. The pottery recovered from layer [3] was dated 1640-1660, but no direct relationship could be established with the revetment structure. Layer [18] was undoubtedly later than structure [55] but as planned spilled over the baseplate to the west. It could therefore contain material that dates from the demolition rather than construction of the structure. The pottery recovered from this

¹⁶ Goodburn, D 2008

deposit had a very wide date range, 1500-1650, but the ceramic building materials have a date of 1680-1720. This might suggest that the revetment was built in the late 17th century but the evidence available is not conclusive.

7.4 Phase 4 Early-Mid 18th Century Deposits and Structures

- 7.4.1 Following the demolition of structure [55] a third revetment was constructed c. 0.40m to the west (Fig 5). This revetment was recorded as structure [43] in the north and [67] in the south; the initial machine clearance had truncated the central part of it. The new revetment was a much simpler and more economical, although robust, structure consisting of timber uprights to which plank sheathing was nailed on the river side. The planking recorded in the southern part, [52], was of oak, as were the squared piles which formed the uprights. Some re-used elm barge planks were also used in this structure; these were recorded in the northern part of the structure [43]. The alignment of the new structure followed that of the second revetment.
- 7.4.2 A northeast-southwest aligned timber box drain, [32], had been cut through, or constructed as an integral part of, the northern part of the revetment [43]. The drain discharged onto a horizontally laid plank [35], which was positioned immediately to the west of the revetment (See Fig 5 for the plan and Section 3, Fig 7).
- 7.4.3 A sub-rectangular cut [38] had been excavated in the area immediately to the north of the box drain and to the east of the revetment planking. The cut extended beyond the limit of excavation to the north, its size and function were unclear. The pottery recovered from the fill [36], was dated 1630-1700. The ceramics recovered from a small levelling layer [39] found below drain [32] were dated 1580-1700. Both of these small assemblages are residual, the ceramic building materials from these deposits were also produced in the early post-medieval period but could not be closely dated.
- 7.4.4 Layer [2] was excavated to the west of revetment [67] and represented foreshore accumulation. The pottery from this deposits was dated 1700-1800, the ceramic building materials had an even wider date range. However, the revetment was earlier than layer [37], which sealed both this and a fourth phase of revetting (see below para 7.5.3). Layer [37] produced a much larger pottery assemblage, which has been date to c. 1750 and clay tobacco pipes dated 1730-1740. The construction of the third revetment can therefore be dated to the first quarter of the 18th century.
- 7.4.5 Layer [24] was recorded in Section 2, it was probably associated with the construction of the third revetment, it sealed the baseplate of the demolished revetment [55]. The pottery recovered from this layer was dated 1700-1750, the clay tobacco pipe 1700-1740. These dates are consistent with the construction date for the third revetment proposed above.

7.4.6 A second drain made from a hollowed out elm tree trunk [54] was recorded in the southern part of the trench. The log had been passed under the baseplate [53] of the earlier revetment structure [55], which was presumably easier than cutting through the seasoned oak. The drain extended to the third line of revetting, plank [52]. A 'gully' [17], which followed the same alignment, was recorded above it. This feature was almost certainly the construction cut for the log drain. The pottery recovered from the fill [16] dated to 1700-1725 and the clay tobacco pipes 1730-1740. These dates show that the log drain was probably laid between 1725-1735. The drain appeared to be contemporary with the building of the third phase of the timber river wall, if this interpretation is valid this event apparently occurred at the end of the first quarter of the 18th century.

7.5 Phase 5 Mid 18th Century Deposits and Structures

- 7.5.1 The northern part of the third revetment projected even further west when a localised 'dog-leg' structure [33] was added in the vicinity of the outflow for the box drain [32] (Fig 6). The southern part of the third revetment structure [67] continued to form the river wall. The northern extent of the latest structure was not established as it extended beyond the limit of excavation to the north. The extension might have been associated with the drain and limited to the area around its outflow. The dog-leg consisted of horizontal plank sheathing supported by squared uprights. Most, if not all of the timber employed in this phase of construction was re-used, consisting principally of old barge timbers. Plank [33] was a very complex composite piece made up of narrow oak planks joined over tarred hair and patches to cover gaps that had appeared during seasoning¹⁷.
- 7.5.2 It is unclear whether the drain [32] continued in use after the dog-leg extension was added. It is possible that the new structure served principally to maintain the outflow of drain [32] and prevent it from silting up, or at least provide a solid structure that could be easily cleaned and maintained. As found the new structure [33] was only 0.40 high and might not have been a true river wall. However, none of the revetment structures recorded survived to a much greater level, either due to collapse or deliberate demolition.
- 7.5.3 Layer [37] represented the major foreshore accumulation, which occurred whilst the third and fourth phases of revetting were in use. As mentioned above the finds recovered from this layer date it very firmly to the mid 18th century. The largest and probably most representative assemblage of animal bone was also recovered from this layer. The normal domestic food animals such as cattle and sheep or goats were well represented, as were horse and possibly a donkey. Notable quantities of dog bones were also evident, four individuals being represented in this assemblage. This gave a reminder of the more unsavoury aspects of the 18th century waterfront, as did a butchered cat bone

¹⁷ Goodburn, D 2008

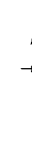
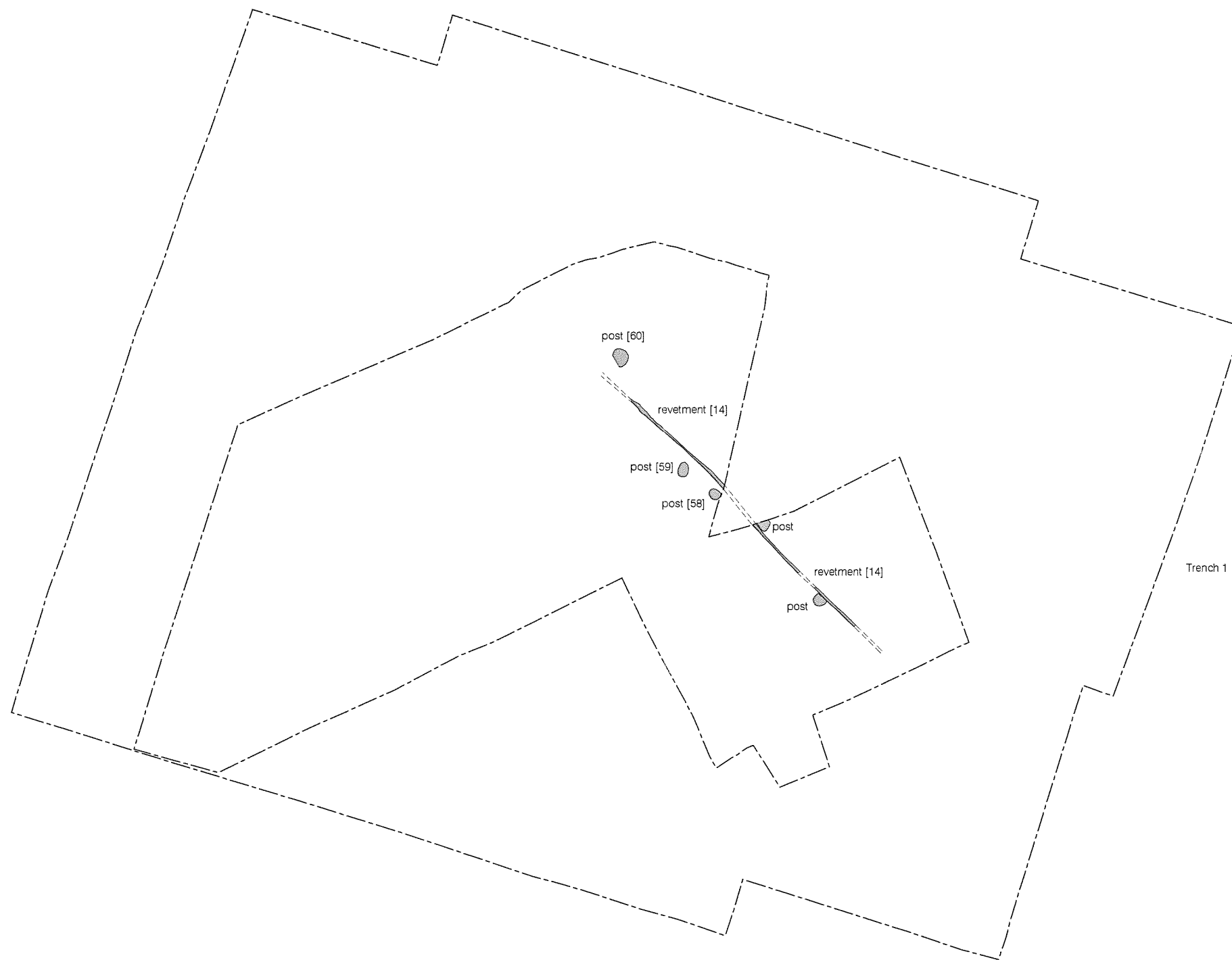
recovered from layer [23]. The high frequency of dog bones found in layer [37] was not unrepresentative of the overall assemblage.

7.6 Phase 6 Mid-Late 18th Century Deposits and Features

7.6.1 It is not proposed to discuss the features and layers placed in this phase in detail as they do little to contribute to the dating or development of the sequence. No new structures were built within the area of excavation in this period. Layers [23], [20], [19] and [15] accumulated on the foreshore in this period, all of them probably date to the period after the river wall collapsed or was demolished. However, all of the pottery recovered from these layers was residual. The question of when the last alignment of the timber river wall fell into disuse was therefore left unanswered.

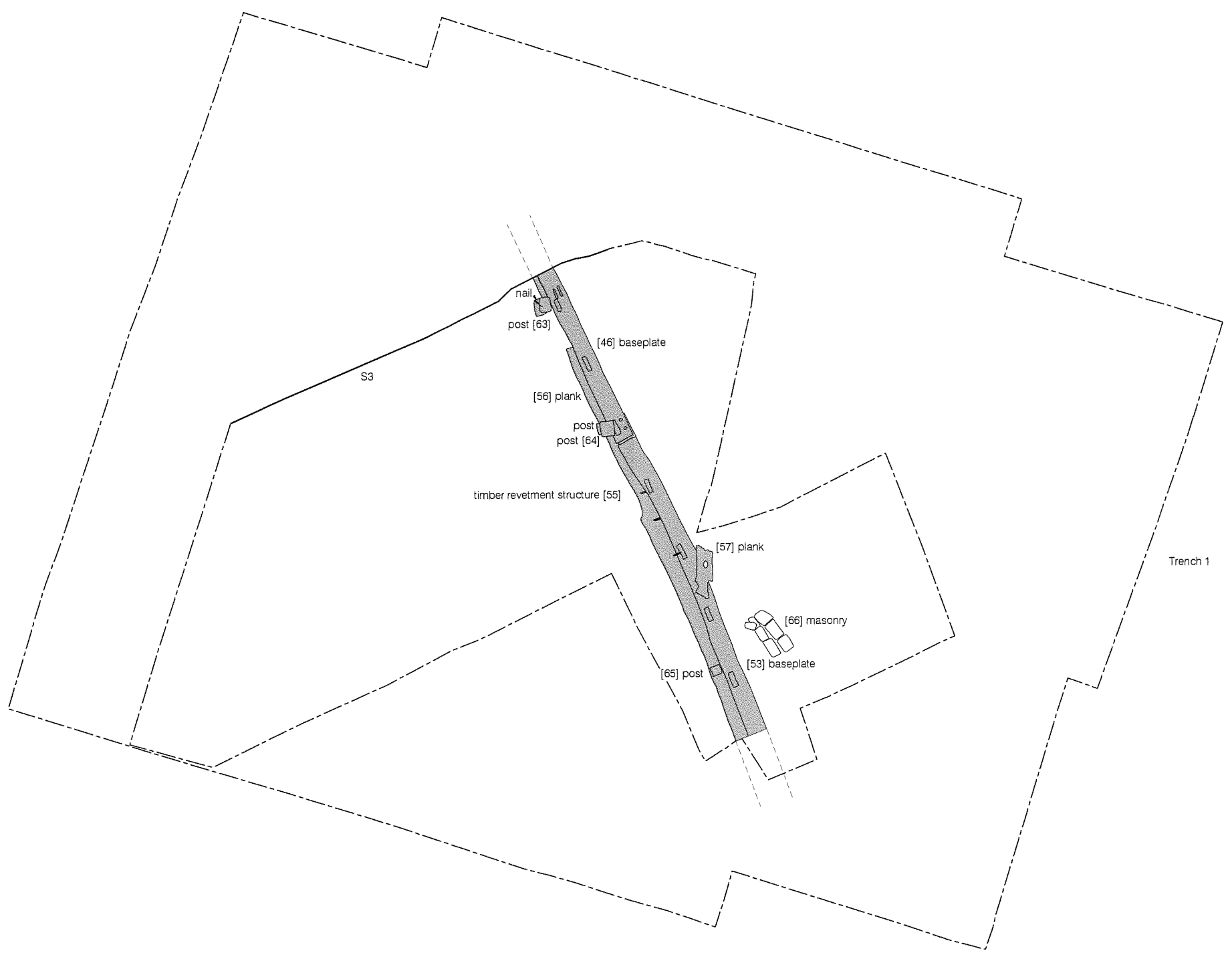
7.7 Phase 7 19th Century Industrial Features and Deposits

7.7.1 A group of 19th century brick and concrete foundations with associated landfill formed the upper part of the sequence in Trench 1 and was recorded in section only. These industrial features and deposits are not discussed in detail here.



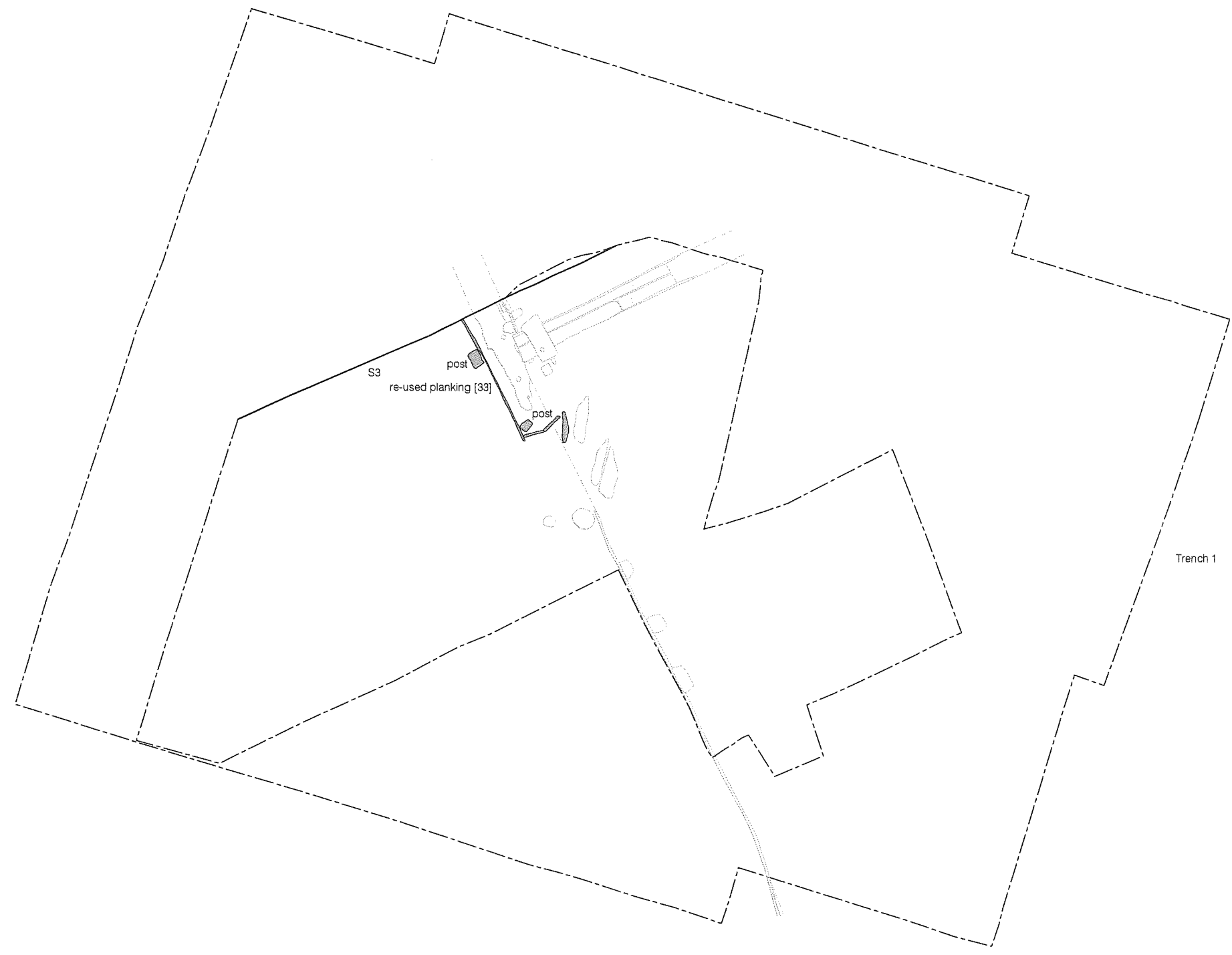
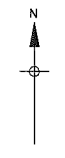
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Figure 3
Phase 1
Early Post-Medieval features
1:50 at A3



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Figure 4
Phase 2
17th Century features
1:50 at A3

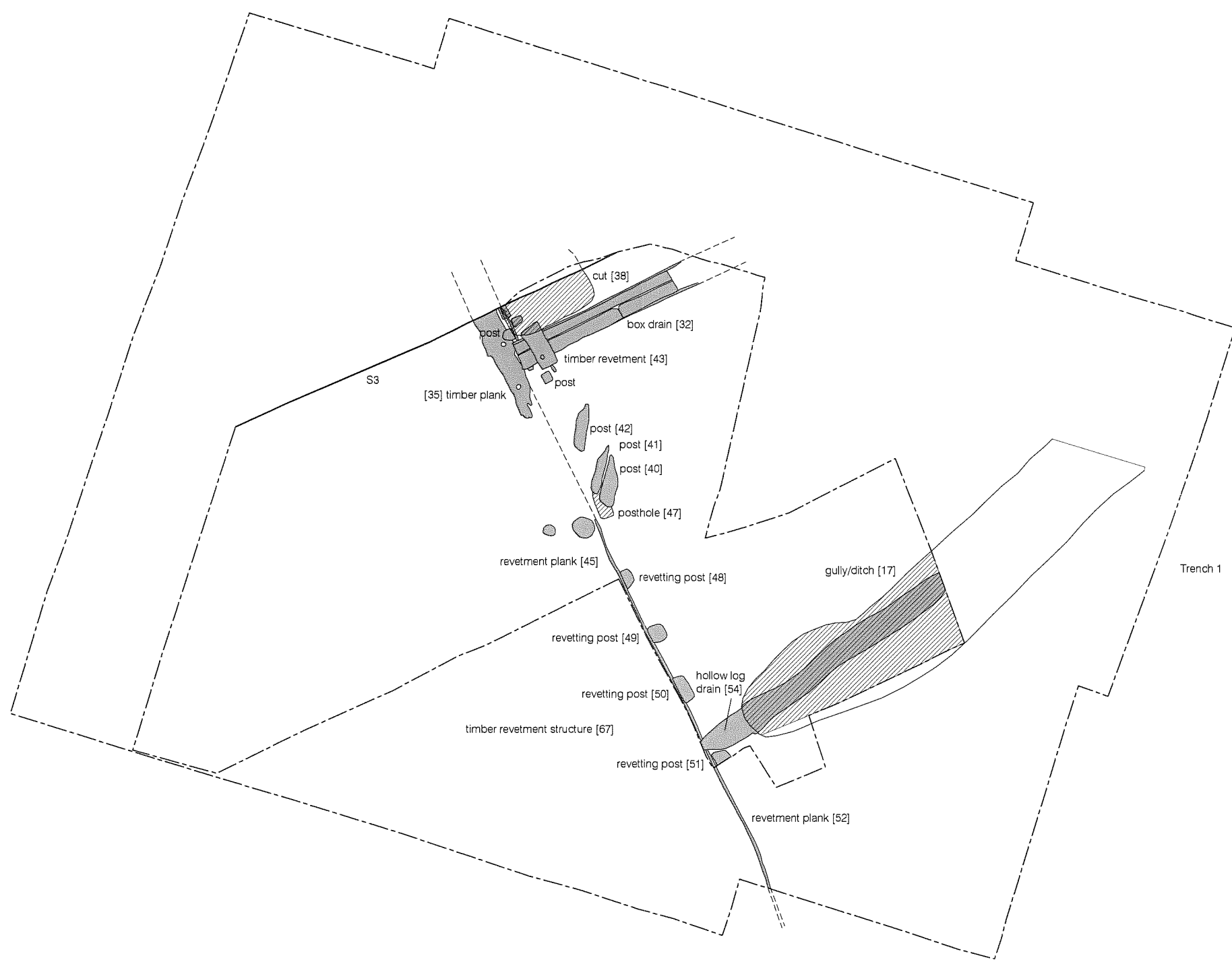


□ Phase 4 retained features
■ Phase 5 features



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Figure 6
Phase 5
Mid 18th Century
1:50 at A3

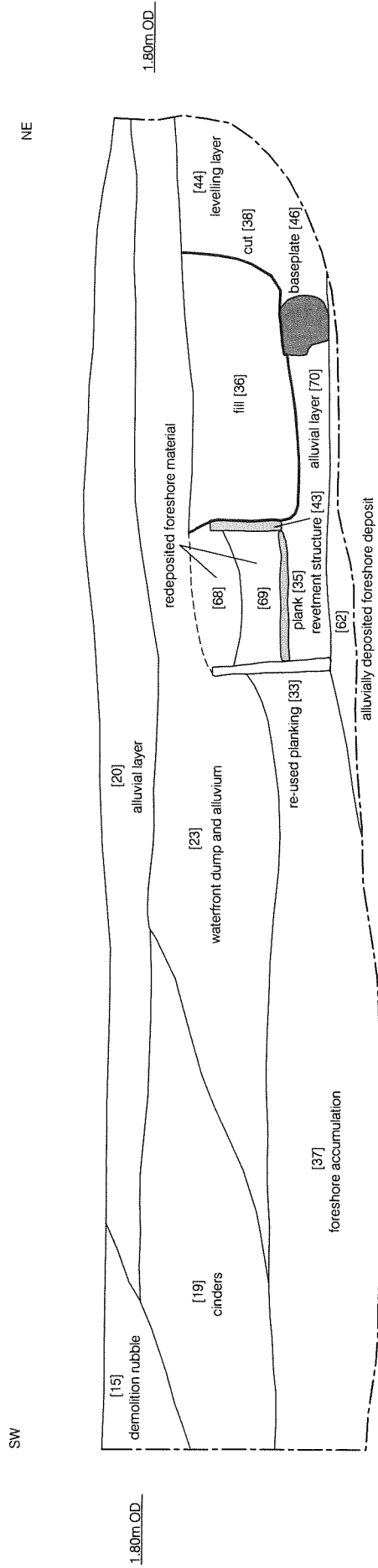


- Timber features
- ▨ Excavated cut features






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Figure 5
Phase 4
Early to Mid 18th Century
1:50 at A4



Section 3
South East facing
Trench 1

-  Part of phase 2 revetment structure
-  Part of phase 4 revetment structure
-  Part of phase 5 revetment structure



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8 CONCLUSIONS

- 8.1 The excavation demonstrated that timber waterfront structures dating from the early post-medieval period to the eighteenth century were still extant along the banks of the Falcon Brook, a tributary of the Thames later known as York Place Creek and subsequently Battersea Creek. Remains of earlier periods would have been extant below the levels investigated during the excavation.
- 8.2 The earliest Phase 1 timber river wall could not be closely dated but the re-use of elm barge planking suggested an early post-medieval rather than medieval date. The remains of this structure were fragmentary but it appeared that the original arrangement had never been particularly robust and may not have been in use for very long. However, the mere presence of this revetment indicates that management and maintenance of the creek banks was being carried out in this period. This is hardly surprising as the mouth of the brook was used as a transshipment point from the late medieval period onwards.
- 8.3 The second river wall was a far more robust structure than that which preceded it and would have been built by professional carpenters rather than labourers. The sill beams had been thoroughly prepared to receive uprights, joined to each other and anchored in place with location piles prior to the erection of the revetment. Although a great deal of the materials were re-used, considerable expense must have been lavished on the construction of this river wall as it would have extended onto the main Thames embankment and possibly as far east as the bridge on York Road.
- 8.4 The construction of the second river wall might have occurred as early as 1620 but the pottery assemblages associated with it are very small and potentially unrepresentative. Two layers that are probably but not definitively associated with the building of the second waterfront contained small assemblages of pottery and ceramic building materials dated to the mid-late 17th century. A construction date in this period is equally plausible.
- 8.5 It is improbable that a building project of this nature would have been initiated during the turbulent years prior to the Civil War or in the uncertain times of the Commonwealth. The construction of the second waterfront might be linked to the presence at York House of Sir Edward Wynter. There is little doubt that improvements to the banks of the watercourse that formed the northern boundary of the York House plot were well within Wynter's means. He might have held the land on the north side of the creek but the maintenance of one side of a watercourse is in itself a fairly futile exercise.
- 8.6 The timbers used in the construction of the second watercourse came from a variety of sources. The barge timbers, together with the preponderance of other timbers of the types recovered from all four river walls recorded, probably indicate that a barge building or repair yard was located in the near vicinity. The baseplates were sawn to size from

elements that had once had a mechanical function, possibly deriving from a mill. The one complete baseplate recovered measured 3.80m long, the mechanical device of which it had once been part was clearly of considerable size. A mill is known to have existed nearby by c. 1740 at the latest. The timbers used in the second river wall might have come from an earlier mill on the site. Numerous mills were also in use on the watercourse of the Wandle and windmills were very probably employed to power the local drainage system, which maintained the marshland.

- 8.7 A third timber river wall was built on the same alignment as the second in the first half of the 18th century, probably towards the end of the first quarter. The second revetment was demolished to the level of the sills before the third was erected. The new timber structure consisted of a simple but robust feature composed of uprights with sheath planking nailed onto the river side. As mentioned above a mill is known to have existed a short distance to the east at this time. This is likely to have harnessed tidal power and the maintenance of the watercourse leading up to it would have been essential.
- 8.8 Timber drains fed down to and discharged through the new river wall. The drains must have served buildings located both outside the area of excavation and on a higher ground surface that had not survived modern intrusions. The third river wall and the dog-leg extension to it continued in use through the mid 18th century and possibly later.
- 8.9 The date at which the latest river wall went out of use was not established as the deposits that sealed the truncated or demolished remains of it only contained residual artefacts.
- 8.10 The excavation, though limited in scope, gave a very valuable insight into the maintenance of the river wall on this stretch of the Thames. This subject has been very poorly documented on the upper reaches of the river and although historic documents clearly refer to the upkeep of the banks, vital in a low-lying area such as Battersea, very few of the river walls have been archaeologically recorded. The identification of the sources of the re-used timbers employed in the building of the river walls also gave valuable information on the riverside communities, which were once found along the Thames waterfront.

- 8.11 **Research questions and publication**
- 8.12 The waterfront sequence uncovered at the Bridges Wharf site is almost certainly related to the contemporary developments on the York House plot immediately to the south and the findings should be analysed and published in context with the archaeological sequence uncovered there.
- 8.13 By 1750 Creek Mill is known to have been in existence on the Falcon Brook. An unidentified predecessor may have been the source of the possible re-used mill timbers identified in the second revetment construction. These and the re-used barge elements deserve description and inclusion in the publication of the archaeological sequence.
- 8.14 None of the tops of the revetments survived nevertheless it will be worthwhile to include a summary discussion of the implications of the waterfront sequence with respect to historic tidal movements on this section of the Thames.
- 8.15 Historic documentation relevant to the development of the post-medieval waterfront should be reviewed to establish whether the uncovered waterfronts can be related to known historic waterfront management activities.
- 8.16 Relevant summaries of the pottery, clay tobacco pipe, small find and animal bone assemblages should be included in the publication of the site archaeology.
- 8.17 Because the waterfront developments discussed here are directly tied in to the history of the adjoining York House site, it is proposed that the archaeological sequence uncovered at Bridges Wharf is included as a special section in the planned monograph publication of the Prices Candle Factory project.

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Unpublished document for CgMs and Pre-Construct Archaeology Ltd

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- Dave Harris and Hayley Baxter for the illustrations
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Appendix 1 OASIS Form

OASIS DATA COLLECTION FORM: England

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Printable version

OASIS ID: preconst1-36607

Project details

Project name Bridges Wharf, Battersea

Short description of the project Field evaluation with some mitigation revealing post-medieval waterfront structures along the mouth of the Falcon Brook or Battersea Creek, a tributary of the Thames

Project dates Start: 29-10-2006 End: 21-11-2006

Previous/future work No / No

Any associated project reference codes BFQ 06 - Sitecode

Type of project Field evaluation

Site status Local Authority Designated Archaeological Area

Current Land use Industry and Commerce 4 - Storage and warehousing

Monument type RIVER WALL Post Medieval

Significant Finds POT Post Medieval

Significant Finds BRICK Post Medieval

Significant Finds TILE Post Medieval

Significant Finds GLASS Post Medieval

Project location

Country England

Site location GREATER LONDON WANDSWORTH BATTERSEA Bridges Wharf

Postcode SW11 4YW

Study area 7572.00 Square metres

Site coordinates TQ 2655 7601 51.4683880809 -0.177863392737 51 28 06 N 000 10 40 W
Point

Project creators

Name of Organisation Pre-Construct Archaeology Ltd

Project brief originator CgMs Consultants Ltd

Project design originator CgMs Consultants Ltd

Project director/manager Peter Moore

Project supervisor Douglas Killock

Type of sponsor/funding body Private company

Name of sponsor/funding body Weston Homes plc

Project archives

Physical Archive recipient LAARC

Physical Contents 'Animal Bones','Ceramics','Glass','Metal'

Digital Archive recipient LAARC

Digital Media available 'Images raster / digital photography','Survey'

Paper Archive recipient	LAARC
Paper Media available	'Context sheet', 'Drawing', 'Matrices', 'Photograph', 'Plan', 'Report', 'Section', 'Unpublished Text'
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Excavation at Bridge's Wharf, Battersea, London SW11 3YW, London Borough of Wandsworth
Author(s)/Editor(s)	Killock, D.
Date	2008
Issuer or publisher	PCA Limited
Place of issue or publication	Brockley
Description	A4 Blue Cover
Entered by	Douglas Killock (dkillock@pre-construct.com)
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Appendix 2 Context Register

Context No	Trench	Grid Sq	Plan	Section / Elevation	Type	Description	Interpretation	Phase
1	Tr1	110/210	-	1	Layer	Thick layer of modern overburden	-	7
2	Tr1	110/210	2	-	Layer	Machined out, observed in N facing section of original eval trench/pit. See also [36]. Sealed knocked over revetting timbers [40], [41], [42] (parts of structure [43])	Waterfront dumping behind the original timberwork exposed during machine trenching (which one?)	4
3	Tr1	110/210	-	1	Layer	Firm light yellowish brown silty clay	Dumped waterfront material	3
4	Tr1	110/210	-	1	Layer	Firm light yellowish brown silty clay	C19th dumped material between factory walls	7
5	Tr1	110/210	-	1	Layer	Friable mid brown sandy gravelly silt	C19th dumped material between factory walls	7
6	Tr1	110/210	-	1	Layer	Loose dark greyish brown and blackish brown	Rubble and cinders dumped against wall [10]	7
7	Tr1	110/210	-	1	Fill	Loose mid greyish brown	Rubble and sandy silt backfill of barrel [8]	7
8	Tr1	110/210	-	1	Timber	Barrel	C19th barrel set in the ground, function unknown	7
9	Tr1	110/210	-	1	Cut	Construction cut for barrel [8]	-	7
10	Tr1	110/210	-	1	Masonry	Wall	C19th factory wall	7
11	Tr1	110/210	-	1	Masonry	Wall	C19th factory wall	7
12	Tr1	110/210	-	1	Masonry	Factory floor slab?	According to the context sheet this is a wall but the area labelled [12] on the section drawing is horizontal.	7
13	Tr1	110/210	-	1	Layer	Friable mid brown sandy gravelly silt	Some sort of C19th industrial filth dumped around factory walls shown on S1	7
14	Tr1	105/205 110/205	14	1	Structure	Remnant of revetment	Medieval revetment (1st phase of revetting) consisting of plank remnant [14] and posts [58], [59] and [60]	1
15	Tr1	105/200 105/205	-	15	Layer	Loose light grey and light brownish green	Demolition rubble mixed with some alluvial material on the foreshore	6
16	Tr1	110/205	-	-	Fill	Soft dark greyish brown sandy clay silt	Fill of [17]	4
17	Tr1	110/205	17	-	Cut	Linear cut	This cut seems to be directly above the log drain [54], which is associated with/part of revetment structure [55]. May not have been fully excavated at first as not all of log drain was exposed but seems very unlikely that the two were not associated.	4
18	Tr1	110/205	18	2	Layer	Firm light reddish brown sandy clayey silt	Dump layer	3
19	Tr1	105/200 105/205	19	3, 4	Layer	Loose, mixed but generally dark grey/black silt cinders and sand	Dumped material on the riverward side of all revetment structures	6

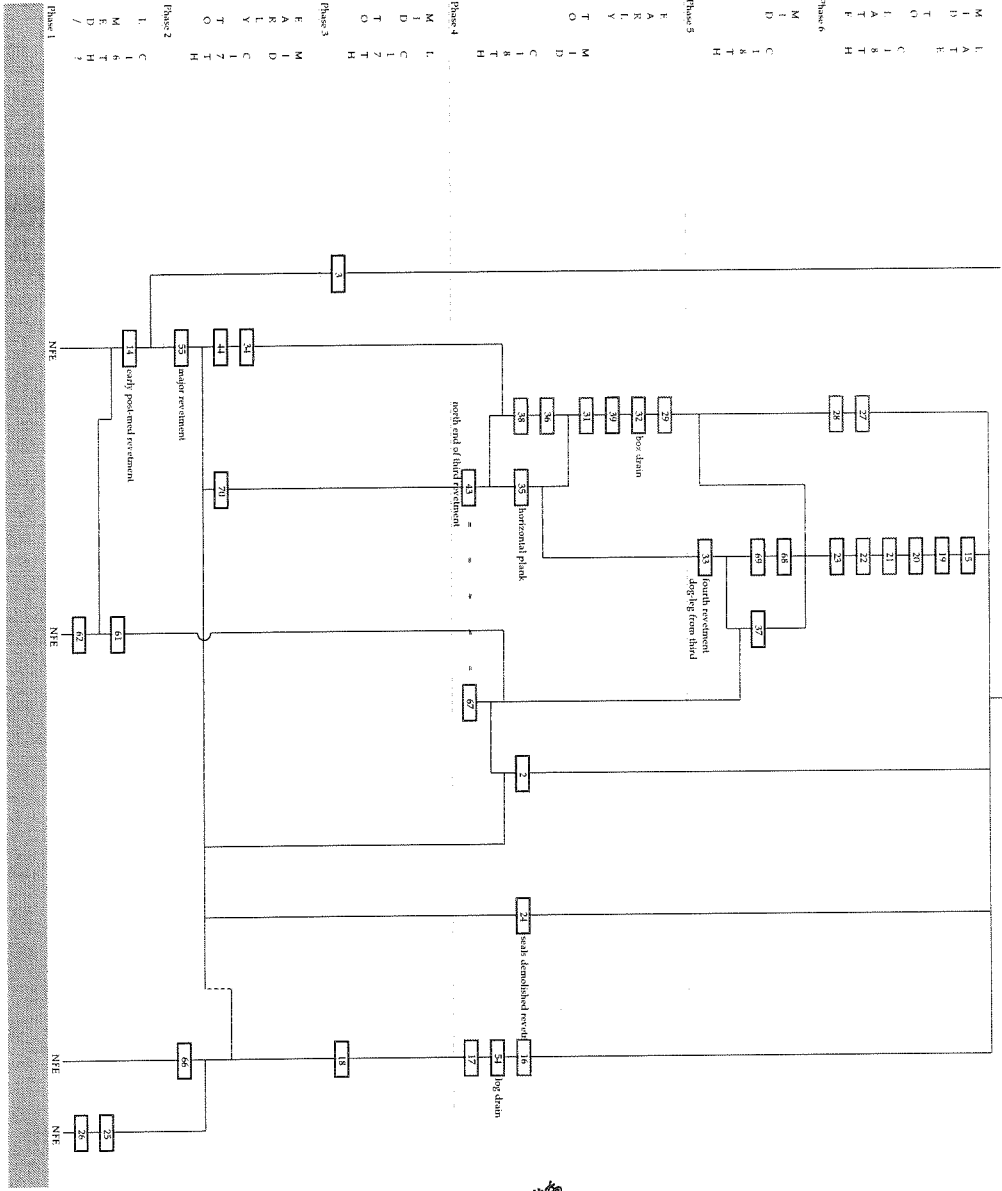
20	Tr1	105/205	20	-	Layer	Soft and spongy mid orangish brown peaty clay silt	Decayed roots and alluvial material	6
21	Tr1	105/205	-	-	Fill	Soft light greyish yellow clayey silt	Fill of pit [22]	6
22	Tr1	105/205	22	-	Cut	Small irregularly shaped pit	Remnant of small pit, Truncated by machined eval trench. Function unknown	6
23	Tr1	105/205	-	3, 4	Layer	Firm mid-dark greyish brown sandy silty clay	Mixed waterfront dump and alluvium. Seals the dog-leg addition (33) to the third phase waterfront [67], which it abuts.	6
24	Tr1	110/205	-	2	Layer	Firm mid greenish grey clayey sandy silt	Layer recorded in S2 only. Lies directly above sill [53] indicating that it post-dates the demolition of that structure	4
25	Tr1	110/205	-	2	Layer	Firm mid orangey brown clayey sand	Possible naturally deposited layer	1
26	Tr1	110/205	-	2	Layer	Firm mid greenish blue clay	Natural alluvial layer	1
27	Tr1	105/205 110/205 110/210	-	-	Fill	Soft light yellowish green silty clay	Fill of [28]	6
28	Tr1	105/205 110/205 110/210	28	-	Cut	Demolition trench	Cut which seems to follow the line of timber-lined drain [32] possibly indicating that it was dismantled to the north of revetment structure [43]	6
29	Tr1	105/205 105/210	-	-	Fill	Soft dark brownish grey sandy clay silt	Fill of box drain [32]	4
30	-	-	-	-	-	VOID	-	-
31	Tr1	105/205 105/210	31	-	Cut	Construction cut for box drain [32]	-	4
32	Tr1	105/205 105/210	32	-	Structure	Box drain	Planking forming base and sides of small timber box drain which extended to line of third revetment structure [43].	4
33	Tr1	105/205	33	3	Timber	Horizontal planking	Re-used planking. Very probably part of a boat. Composite formed from smaller planks joined together as part of a hull? Part of latest 4th phase dog-leg revetment	5
34	Tr1	105/205 105/210	34	-	Layer	Soft light reddish brown sandy clayey silt	Recorded as probably being alluvially deposited but this material is very definitely on the landward side of revetment structure [55] so more likely to be a redeposited waterfront dump/ground-raising layer	2
35	Tr1	105/205	35	3	Timber	Plank	Plank laid flat on river (south) side of revetment structure [43] below drain box drain structure [32]. Almost certainly associated with box drain which outflows at this point	4
36	Tr1	105/205	-	3	Fill	Soft dark brownish grey sandy clay silt	Fill of pit [38]	4

37	Tr1	105/205	37	3, 4	Layer	Dark greenish grey clayey silt. Contained a band of massively concentrated snail shells around half way down	Foreshore accumulation, a combination of natural alluvial deposition and dumping on the river side of both waterfront structures [33] and [67].	5
38	Tr1	105/205	38	3	Cut	Sub-rectangular pit?	Pit? located immediately to the south of waterfront structure [43]. Extends beyond e.o.e to the north. Full extent and function unknown	4
39	Tr1	105/205	39	-	Layer	Light brownish green clayey sandy silt	Possibly a bedding layer for drain [32] but unlikely as that was cut from higher up. Waterfront dump?	4
40	Tr1	105/205	40	-	Timber	Driven upright post	Part of revetment structure [43]. For some reason [43] has been used for both planks and uprights in the northern part of the structure	4
41	Tr1	105/205	40	-	Timber	Driven upright post	Part of revetment structure [43]	4
42	Tr1	105/205	40	-	Timber	Driven upright post	Part of revetment structure [43]	4
43	Tr1	105/205	43	3	Structure	Revetment	Third phase of revetting. Structure [43] is the northern part of this structure, recorded to the south as structure [67].	4
44	Tr1	105/205 110/205 105/210 110/210	44	3	Layer	Dump/levelling layer	Levelling/ground-raising dump on landward side of second-phase revetment structure [55].	2
45	Tr1	105/205	45, 52	4	Timber	Horizontal planking	Part of structure [67], third phase of revetting. Recorded to the south of S4 as plank [52]	4
46	Tr1	105/205	55	3	Timber	Sill	Baseplate, one of the major elements of second phase revetment structure [55]. Joined to baseplate [53].	2
47	Tr1	110/205	47	-	Cut	Posthole	Double posthole, formed by [40], [41] being driven into the foreshore then pulled out during machining. Effectively part of revetment structure [43]	4
48	Tr1	110/205	48	-	Timber	Driven upright post	Part of revetment structure [67]	4
49	Tr1	110/205	48	-	Timber	Driven upright post	Part of revetment structure [67]	4
50	Tr1	110/205	48	-	Timber	Driven upright post	Part of revetment structure [67]	4
51	Tr1	110/205	48	-	Timber	Driven upright post	Part of revetment structure [67]	4
52	Tr1	110/205	48	-	Timber	Decayed horizontal planking	Part of revetment structure [67]	4
53	Tr1	105/205 110/205	55	-	Timber	Sill	Major baseplate, joined to [46] to the north	2

54	Tr1	110/205	54	-	Timber	Hollowed out log drain	Elm log hollowed out for use as a drain pipe. Laid below timber baseplate [53] so that it projected onto the waterfront side. However, probably a later addition as almost certainly associated with linear cut [17] which was cut through the waterfront dumps associated with the revetment	4
55	Tr1	105/205 110/205	55	-	Structure	Timber revetment structure	C17th revetment structure consisting of baseplates [53] and [46], planks [56] and [57], posts [63], [64], [65].	2
56	Tr1	105/210 110/210	55	-	Timber	Waterfront horizontal plank	Part of revetment structure [55], nailed to baseplate [46] and [53]. Reused elm plank from a barge.	2
57	Tr1	110/205	55	-	Timber	Fragmentary plank	Part of revetment structure [55], remnant of a discarded demolished waterfront	2
58	Tr1	110/205	58	-	Timber	Driven upright post	Part of revetment structure [14]	1
59	Tr1	110/205	58	-	Timber	Driven upright post	Part of revetment structure [14]	1
60	Tr1	105/205	60	-	Timber	Driven upright post	Part of revetment structure [14]	1
61	Tr1	105/205	-	4	Layer	Dark grey clayey silt	Alluvially deposited foreshore deposit. Excavated only in a small sondage excavated for column sample. Exposed as the foreshore pre-dating the timber structures	1
62	Tr1	105/205 110/205	-	3, 4	Layer	Light grey-green clay, silt and sand	Alluvially deposited foreshore deposit	1
63	Tr1	105/205	PX	-	Timber	Driven upright post	Part of revetment structure [55]	2
64	Tr1	105/205	PX	-	Timber	Driven upright post	Part of revetment structure [55]	2
65	Tr1	110/205	PX	-	Timber	Driven upright post	Part of revetment structure [55]	2
66	Tr1	110/205	PX	-	Masonry	Small red brick structure found adjacent to log drain [54], cut by [17].	Remnant of a masonry structure, possibly an early drainage feature which pre-dated log drain [54]	2
67	Tr1	110/205	48, 52	-	Structure	Revetment structure, third phase, consisting of timbers [48], [49], [50], [51], [52]-[45]. Structure [43], recorded in S3 and immediately to the south of it, also forms part of this structure.	Mid C18th revetment	4
68	Tr1	105/205	-	3	Layer	Deposit located between waterfront structures [33] and [43]. Very similar to [23]. Recorded only in S3	Dump located between the two waterfronts, probably redeposited foreshore material	5
69	Tr1	105/205	-	3	Layer	Fine/soft light brownish yellow sandy clay & silt with occ gravels. Deposit located between waterfront structures [33] and [43]. Recorded only in S3	Dump located between the two waterfronts [33] and [43], probably redeposited foreshore material	5

70	Tr1	105/205	-	3	Layer	Alluvial layer, very similar to [37] but from a different phase.	Deposit located to the south of the waterfront structure [55], probably a natural alluvial layer. Recorded only in S3	2
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Appendix 3 Stratigraphic Matrix



30 ph out
V100

Elements of Structure (7)

48	post
49	post
50	post
51	post
52	planking
45	post

Elements of Structure (4)

40	post
41	horizontal over plate
42	horizontal over plate
47	post

Elements of Structure (2)

57	plank
46	bill
53	bill
56	plank
61	post
62	post

Elements of Structure (4)

58	post
59	post
60	post
63	post



Appendix 4 Animal Bone Assessment and Catalogue
by F.M.Meddens

This relatively small assemblage (56 bone elements) of Post-medieval date would normally be considered too insignificant to be included in any further work. Considering the comparatively high frequencies of horse and dog in this group of material which render it uncommon, it is recommended that the material is reviewed and described in more detail for any planned publication of the archaeology.

Bridges Wharf Wandsworth BFQ 06

Ctxt	Nr	Species	Anatomy	Part	frag	ageing	Condition	Butchery	Comments
2	1	Lar	Lbone	Frg	<25	*	Stained; gnawed	Chop repeat	*
2	1	Lar	Scull	Frg	<25	*	Stained	*	*
2	1	Sar	Radius	Ms	<25	*	Stained	*	*
2	1	Sar	Radius	Ms	<40	*	Stained; gnawed	*	*
2	1	Sar	Ulna	Ms	<25	*	Stained	*	*
16	1	Equus	epistropheus	CMC	70	CFCF	Stained	*	*
16	1	Lar	Scull	Frg	<25	*	Stained	*	*
16	1	Lepus	Humerus	DM	90	DF	Stained	*	*
16	1	S+G	Metatarsus	PMD	100	PFDf	Stained	Dist Chop Lat	*
16	1	Sar	Rib	Frg	<25	*	Stained	*	*
18	1	Dog	Humerus	DM	<80	DF	Stained	*	*
19	1	Dog	Femur	DM	<80	DF	Stained, worn eroded; gnawed	*	Small, lapdog size?
19	1	Dog	Humerus	PMD	100	PFDf	Stained, worn eroded; gnawed	*	Small, lapdog size?
19	1	Dog	Pelvis	Ms	<60	F	Stained, worn eroded; gnawed	*	Small, lapdog size?
20	1	Sar	Frg	Frg	<25	*	Eroded	*	*
23	1	Bos	Ilium	C	<25	F	Stained	*	*
23	1	Cat	Humerus	PMD	<90	PFDf	Stained	Prox chop right through	*
23	2	Dog	Tibia	PMD	90	PFDf	Stained	*	*
23	1	Sar	Pelvis	Ms	<25	*	Stained	Mid Shaf Chop repeat	*
24	1	Bos	Humerus	DM	<30	DF	Stained	Cut Mid Sha Lat	*
36	1	Dog	MCIII	PMD	100	PFDf	Stained	*	*
36	1	S+G	Tibia	DM	<40	DF	Stained	*	*
36	1	S+G	Tibia	Ms	<25	*	Stained	*	*
37	3*		Frg	Frg	<25	*	Stained	*	*
37	1	Bos	Ilium	C	<60	F	Stained	*	*
37	1	Bos	Molar	All	100	K	Stained	*	*
37	1	Bos	Ulna	Ms	<50	*	Stained	*	*
37	1	Dog	Canine	All	100	*	Stained	*	Probably goes with maxilla
37	1	Dog	Femur	PMD	<100	PFDf	Stained	*	Moderate, collie sized
37	1	Dog	Femur	PMD	100	PFDf	Stained	*	Small, terrier sized

37	1	Dog	Maxilla	Ms	<40	M1,M2, M3,PM 1,PM2, PM3 (M1,M2 very worn)	Stained	*	Mature / old, moderate, collie sized
37	1	Dog	Pelvis	Ms	<70	F	Stained	*	Small, terrier size
37	1	Dog	Radius	DM	90	PF	Stained	*	*
37	1	Equus	Mandible	P	<30	PF	Stained	*	*
37	3	Equus	Metacarpus	PMD	<80	PFDF	Stained	*	Small, donkey?
37	1	Equus	Metatarsus	PM	90	PF	Stained	*	*
37	1	Equus	Radius	DM	<40	DF	Stained		Cut Ant Lat repeat
37	1	Equus	Radius	P	<25	PF	Stained		Chop Split Marrow removal ?
37	1	Lar	Frg	Frg	<25	*	Stained	*	*
37	2	Lar	Rib	Frg	<25	*	Stained	*	*
37	1	Lar	Scull	Frg	<25	*	Stained	*	*
37	1	S+G	Femur	PMD	100	PFDF	Stained	*	*
37	1	S+G	Humerus	DM	<60	DF	Stained	*	*
37	1	S+G	Metacarpus	DM	<60	DF	Stained	*	*
37	1	S+G	Metatarsus	PF	<90	PF	Stained; Distal gnawed	*	*
37	1	S+G	Tibia	P	<25	PNF	Stained	*	*
37	1	Sar	Frg	Frg	<25	*	Stained	*	*
37	1	Sar	Humerus	Ms	<60	*	Stained	*	*
37	1	Sar	Rib	Frg	<25	*	Stained	*	*
37	1	Sar	Rib	Frg	<50	*	Stained	*	*
Total bone frags			56						
Unide ntified	1								
Bos	5								
Equus	8								
S+G	11								
Lar	6								
Sar	9								
Dog	13								
Cat	1								
Lepus	1								

Appendix 5 Pottery Assessment
By Chris Jarrett

POST-ROMAN POTTERY ASSESSMENT

Chris Jarrett

INTRODUCTION

A small sized assemblage of pottery was recovered from the site (three boxes). Very little of the material shows evidence for abrasion and the sherds were probably deposited fairly rapidly after breakage. The fragmentation of the pottery varies from sherd material to identifiable forms, some with complete profiles, while a small number of vessels are intact or nearly so. Pottery was recovered from fourteen contexts and individual deposits produced small to large groups of pottery (under 30 to over 100 sherds).

All the pottery (314 sherds and none are unstratified) was examined macroscopically and microscopically using a binocular microscope (x20), and recorded in an ACCESS database, by fabric, form, decoration, sherd count and estimated number of vessels. This process was undertaken by B. Sudds. The classification of the pottery types is following the Museum of London Archaeological Service system. The pottery is discussed by types and distribution.

THE POTTERY TYPES

The pottery consists entirely of Post-medieval fabric types. The majority of the assemblage is 16th-18th century in date and the dominant source of pottery is local, mostly comprising London area post-medieval coarse red earthenwares.

Post-medieval

Surrey-Hampshire Border wares

Surrey-Hampshire border whiteware (BORD), 1550-1600, one sherds, form: unidentified.

Surrey-Hampshire border whiteware with brown glaze (BORDB), 1620-1700, five sherds, forms: bowls and dishes and mug; rounded.

Surrey-Hampshire border whiteware with green glaze (BORDG), 1550-1700, four sherds, forms: unidentified.

Surrey-Hampshire border green-glazed whiteware flat-rimmed chamber pot (BORDG CHP2), 1550-1750, seven sherds.

Surrey-Hampshire border whiteware with olive glaze (BORDO), 1550-1700, seven sherds, form: dish; flared.

Surrey-Hampshire border whiteware with clear (yellow) glaze (BORDY), 1550-1700, eleven sherds, forms: bowls or dishes; rounded.

Surrey-Hampshire border redware (RBOR), 1550-1900, four sherds, forms: bowl; flared, dish.

Surrey-Hampshire border redware with brown-glaze (RBORB), 1580-1800, five sherds, form: unidentified.

Surrey-Hampshire border redware with green glaze (RBORG), 1580-1800, two sherds, form: unidentified.

Local coarse red earthenware

London-area early post-medieval redware (PMRE), 1480-1600, 95 sherds, form: possible industrial vessel.

London-area post-medieval redware (PMR), 1580-1900, eighty sherds, forms: bowl; handled, flared, dish, possible industrial vessels, lid; flattop, sugar mould.

Essex fine red earthenwares

Metropolitan slipware (METS), 1630-1700, three sherds, form: dish; rounded.

Post-medieval fine redware (PMFR), 1580-1700, fifteen sherds, forms: bowl; rounded.

Delftware

English tin-glazed ware (TGW), 1570-1846, 20 sherds, forms: bowl or dish, jar: straight-sided, plates; Britton's types I and K.

Tin-glazed ware with external lead glaze/Wan Li/blue/yellow decoration (Orton type A: TGW A), 1612-50, one sherds, form: unidentified.

Tin-glazed ware with plain white glaze (Orton type C; TGW C), 1630-1846, two sherds, form: bowl or dish.

Tin-glazed ware with pale blue glaze and dark blue decoration (Orton style H), 1680-1800, two sherds, form: jar: straight-sided.

Non-local earthenwares

Blackware (BLACK), 1600-1900, nine sherds, form: unidentified.

Midlands orange ware (oxidised Midlands purple ware), 1480-1820, five sherds, form: unidentified.

Staffordshire-type mottled brown-glazed ware (STMO), 1650-1800, three sherds, form: unidentified.

Staffordshire-type red-slipped glazed ware (STRSB), 1750-1800, one sherd, form: dish; rounded.

Combed slipware (STSL), 1660-1870, one sherd, dish.

Stonewares

London stoneware (LONS), 1670-1926, 47 sherds, forms: industrial vessel, tankard

Midlands purple ware (MPUR0, 1480-1750, eight sherds, form: unidentified.

Nottingham stoneware (NOTS), 1700-1800, six sherds, form: bowl.

White salt-glazed stoneware (SWSG), 1720-1780, eighteen sherds, forms: plate; octagonal, saucer.

Dipped white salt-glazed stoneware (SWSL), 1710-1760, three sherds, form: unidentified.

Imports

Chinese porcelain, Batavian ware (CHPO BATV), 1700-1750, one sherd, form: bowl; rounded.

Chinese blue and white porcelain (CHPO BW), 1590-1900, four sherds, form: bowl; rounded, plate.

Chinese porcelain with famille rose decoration (CHPO ROSE), 1720-1800, one sherd, form: bowl.

German Cologne or Frechen stoneware (KOLFREC), 1550-80, one sherd, form: unidentified.

German Frechen stoneware (FREC), 1550-1700, nine sherds, form: jug; bartman.

Dutch red earthenware (DUTR), 1300-1650, three sherds, forms: unidentified.

Dutch red earthenware with sgraffito decoration (DUTSDSG), 1480-1550, one sherd, form: chaffing dish.

Dutch slipped red earthenware (DUTSL), 1300-1650, one sherd, forms: dish, carinated type 2.

Westerwald stoneware (WEST), 1590-1900, one sherd, form: mug.

DISTRIBUTION

Pottery is present in phase 2 to 6 and a synthesis of the ceramic finds is discussed by phase.

Table 1 shows the contexts containing pottery, the number of sherds, the pottery types and their date range and the latest wares date of production found in the deposit, besides a spot date for the group.

Phase 2

There are thirteen sherds of pottery representing the same number of vessels in this phase and all ceramics date to the post-medieval period and more precisely the 17th century. The majority of the pottery is sourced to the Surrey-Hampshire Borders comprising six sherds with forms recognised as bowls or dishes (BORDB and RBORB) and a rounded mug (BORDB). Other wares (their forms could not be identified) included local post-medieval redware (PMR), or were sourced from Essex (PMFR), the Midlands (MORAN) and one sherd was imported from Cologne or Frechen representing stoneware (KOLFREC).

Phase 3

This phase produced eight sherds of pottery representing some seven vessels. The pottery types present are similar to the previous group and include Surrey-Hampshire border whiteware (BORDY) with a dish, post-medieval redware (PMR), Essex made PMFR and a dish in

Metropolitan slipware (METS). The majority of the pottery came from context [3] except for the only import of a Dutch slipware (DUTSL) dish, dated 1480-1650, which came from context [18].

Context	SC	Phase	Pottery types	Date range of the pottery	Latest dated ware	Suggested date of deposition
[2]	15	4	BORDY, LONS, METS, MPUR, PMR, STMO, TGW, TGW A, TGW D.	1500-1926	1670-1926	18th century (includes residual mid 17th century group)
[3]	7	3	BORDY, METS, PMFR, PMR.	1550-1900	1630-1700	Mid 17th century
[15]	12	6	CHPO ROSE, LONS, PMR.	1580-1926	1720-1800	1720 – 1760
[16]	16	4	BORDB, BORDY, CHPO BW, FREC, LONS, NOTS, PMR, TGW C, WEST.	1550-1926	1700-1800	Early 18th century
[18]	1	3	DUTSL.	1500-1650	1500-1650	1500 – 1650
[19]	102	6	BLACK, BORDG, CHP2, CHPO, BW, LONS, MPUR, NOTS, PMR, STSL, SWSG, SWSL, TGW, TGW C, TGW H.	1500-1926	1720-1780	1720 – 1750
[20]	4	6	BORDB, PMR, TGW.	1570-1900	1620-1700	1620 – 1700
[23]	15	6	BLACK, BORDG, MPUR, PMR, TGW.	1500-1900	1600-1900	1700 – 1750
[24]	18	4	BORDG, BORDO, BORDY, LONS, METS, MPUR, PMR, RBOR, TGW.	1500-1926	1670-1926	1700 – 1750
[34]	5	2	BORDB, KOLFREC, PMFR, PMR, RBORB.	1550-1900	1620-1700	1620 – 1700
[36]	19	4	BLACK, BORDY, PMFR, PMR, RBORB, RBORG, TGW D.	1550-1900	1630-1680	1630 – 1700
[37]	91	5	BORDB, BORDG, BORDG CHP2, BORDO, BORDY, CHPO, BATV, CHPO, BW, FREC, LONS, MORAN, MPUR, NOTS, PMFR, PMR, PMRE, RBOR, RBORB, RBORG, STMO, STRSB, STSL, TGW.	1500-1926	1750-1800	c. 1750
[39]	1	4	PMFR.	1580-1700	1580-1700	1580 – 1700
[44]	8	2	BORD, BORDB, BORDO, BORDY, MORAN, PMFR, PMR.	1480-1900	1620-1700	1620 – 1700

Table 1. BFQ 06, distribution of pottery showing the number of sherds, the phase of the contexts with the pottery types, their date range, the latest pot type and the suggested deposition spot date for the context.

Phase 4

A total of 69 sherds of pottery, representing some 62 vessels were found in this phase. The majority of the pottery derives from local sources comprising 33 sherds (29 ENV's) mostly post-medieval redwares (PMR) quantified as 22 sherds from 20 vessels. This ware is in the form of bowls or dishes. Local delftware (TGW, TGW A, TGW C and TGW D) accounts for six sherds

being mostly tablewares, whilst London stoneware is present with five sherds from three vessels which include a tankard with a possible WR measure mark, dated 1700-1824 found in context [24] and possible large bottles or jars from contexts [2] and [16]. Surrey-Hampshire border wares are the second most important source of pottery represented by sixteen sherds (14 ENV's) with forms recognised only as bowls or dishes. Ten sherds or 9 ENV's are of Essex fine redware and mostly PMFR, whilst two sherds are from separate Metropolitan slipware dishes.

Imported wares account for five sherds and are present as a sherd of Chinese blue and white porcelain from context [16] and German stonewares, two sherds each from Frechen, as a jug, and Westerwald, which includes a mug. Pottery from the Midlands consists of Midlands purple ware (two sherds), Nottingham stoneware (one sherd) and Staffordshire type mottled brown-glazed ware (one sherd) in addition to a sherd of Black-glazed ware. The pottery types in this phase indicate a late 17th to early 18th century date.

Phase 5

All the pottery in this phase came from context [37], a foreshore accumulation. The majority was locally sourced with 65 sherds or 38 ENV's, mostly comprising post-medieval redwares (31 sherds, 28 ENV's) and consisting of mostly bowls, dishes and lids. Industrial forms comprising a sugar cone mould and an uncertain industrial vessel, all single sherds were also present. Three sherds of an industrial vessel are also recorded in 16th century local redware (PMRE) Tin-glazed wares (delftware) account for eight sherds (7 ENV's) and are mostly tablewares, except for two ointment pots. A tankard with a Queen Anne ale mark (AR), dated 1702-14, besides a large storage vessel are the only forms recognised in the five sherds of London stoneware.

Surrey-Hampshire border wares account for seventeen sherds or twelve vessels and forms identified are dishes (BORDO, RBOR) and a chamber pot (BORDG CHP2). Three sherds are from Essex and all consist of PMFR. From a Midlands source there are fifteen sherds or nine vessels which are in fabrics previously noted in earlier phases: MORAN, MPUR, NOTS (as a bowl) and STMO, besides a sherd of Staffordshire-type red-slipped glazed ware (STRSB) as a rounded bowl. Staffordshire-type slipware, made at many centres in Great Britain, occurs in the form of a single dish sherd, whilst two sherds of Chinese porcelain and seven sherds of Frechen stoneware (FREC) are present as four jugs, including a bartman, which are the only imports. Ninety-one sherds of pottery representing some 69 vessels were recorded for Phase 5.

Phase 6

There are 133 sherds of pottery, representing 58 vessels recorded for Phase 6. The majority of the pottery (89 sherds, 36 ENV's) is of a local source and mostly comprises London stoneware or post-medieval redware with 38 sherds each, or 14 and 13 ENV's respectively. The high proportion of London stoneware is unusual, and consists mostly of an uncertain form, possibly an industrial vessel of a 'bellied' jar type or container shape found only in contexts [15] and [19]. The

post-medieval redware is in the form of bowls, which are mostly rounded in profile and handled, besides a lid. Delftware (TGW, TGW C and TGW H) occurs mostly as tablewares, besides a straight-sided jar.

Pottery from the Midlands represents the second largest source of pottery with 21 sherds or eleven sherds, most of which consist of White salt-glazed stonewares (SWSG) in the form of plates and saucers. Midlands purple ware (two sherds) and a single sherd of a Nottingham stoneware bowl are the other ceramics from this source. Fifteen sherds of pottery (5 ENV's) are of a general Great Britain source and these are represented by Black-glazed ware (eight sherds or 2 ENV's) including a possible large jar, four sherds of a rounded dish in combed slipware (STSL) and a single sherd of dipped white salt-glazed stoneware (SWSL). Surrey-Hampshire border wares are not an important origin for pottery by this phase and the four sherds in BORDB and BORDG, are probably residual, except possibly for a type 2 chamber pot. The only imported pottery is contemporary and consists of Chinese porcelains (CHPO BW and CHPO ROSE) with four sherds, 3 ENV's from a plate and bowl. In this phase the majority of contexts contained ceramics dating from the early to mid 18th-century.

SIGNIFICANCE OF THE COLLECTION

The pottery is of significance at a local and regional level. The ceramics derived from activity associated with Thames revetments and their construction. Not all the material originated from the site and some may have been transported as rubbish used in the backfill behind the construction of the revetments. The stoneware and post-medieval redware industrial vessels add to the corpus of forms found in London.

The assemblage has a post-medieval ceramic profile as would be expected for inner London. Similarly dated assemblages of pottery have been recorded nearby at Regents Wharf (LMA02) and Price's Candle Factory (YPE02) (Sudds 2003a, Sudds 2003b).

POTENTIAL

The pottery has the potential to date the features in which it was found and to provide a sequence for them, and a number of vessels merit illustration. The stoneware and post-medieval redware industrial vessels on the site add to the typology for these local ceramic industries.

Research aims

- What part of the ceramic assemblage relates to onsite activities as opposed to revetment construction?
- What were the purpose of the stoneware and post-medieval redware industrial vessels?

Recommendations for further work

A pottery report is required for discussing the types of pottery on the site and how they relate to on site activities. Five vessels require illustration.

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Appendix 6 Timber Assessment
By Damien Goodburn

**SUMMARY ASSESSMENT OF THE HISTORIC WOODWORK FOUND
AT BRIDGES WHARF, WANDSWORTH**

By DM Goodburn

The General Form Of Timber Structures Found

The historic structural woodwork excavated and recorded falls into two main categories, timbers for revetting the junction of the tidal inlet and the Thames and timber constructions associated with drainage of land just behind the frontages. There were several phases of revetments and drains. As the revetments were fairly heavily truncated by later activities and their upper parts did not survive it is not clear whether they would have functioned solely as river walls or both river walls and wharf frontages. The commonly found practice of advancing the frontage, in this case out into the Thames and mouth of the Falcon Brook, was found. Thus, the oldest structures were found to the north and east progressing westward.

Timbers reused from boats or barges

After careful cleaning much of the timber used in these structures was recognised on-site as reused. Tarred hair and other features suggested that many of the items derived from barges built in distinctive local styles. Further cleaning off-site has revealed other relic features in some structural timbers showing previous use in some form of machinery (see below for further details).

Initial dating

The initial spot dating of the pottery, ceramic building material and tobacco pipes found suggests that the earliest revetment dates to the late 16th or early 17th century, with the latest being 18th century (D. Killock pers comm), the drains being of a similar date range. The woodworking evidence is commensurate with such a range (below). No clearly late medieval woodwork was found.

Historic tidal levels

Whilst there are more details to be recorded in the story of changing tidal levels in the lower Thames, general upper ranges are broadly known for the City and Pool of London area for the Post-medieval period. The evidence derives from many sites, mostly accurately tree-ring dated. Quay surfaces expected to be dry except during occasional floods are documented between c. +3-3.5m OD during the late 16th to mid 18th centuries. In the late 1970's this level was c. 4.5m OD. The upper levels to which large spring high tides would reach is important for reconstructing the possible ranges for the timber structures found. The location well west of the City will have had an effect on the levels encountered c. 400 years ago, but area specific data is lacking here.

The London Waterfront Archaeology Comparative Corpus

It should be noted that the historic waterfronts of the London region have been subject to more extensive and detailed archaeological investigations than in any other region of the world. This

has produced a vast corpus of well-dated waterlogged timber structures from the Roman and Medieval periods. More recently PCA, the Museum of London Archaeology Service and AOC Archaeology have carried out systematic investigations of post-medieval waterfront sites. Structures investigated have included river walls, wharves, foundations, mills, drains, docks, slipways and tanks. Much of the timber employed during this period was reused and most of it derives from boats, barges or ships of various types. Some of this work is now published and much more is undergoing post-excavation research. The author has been involved with many of these projects. Therefore the assessment of the historic woodwork provided here is informed by knowledge of that large corpus of historic woodworking evidence.

Methodology

This author was asked to assist with the interpretation, recording and sampling of the exposed woodwork on the site at the evaluation stage. Later the trench was extended and key timbers which had been exposed earlier were, where possible, lifted for cleaning, recording and sampling off-site. In addition to the site records of plans, elevations, sections and photographs the specialist records include pro-forma timber sheets, annotated sketches and detailed scale timber drawings. This methodology matches that developed by the Museum of London and the English Heritage Guidelines on Waterlogged Wood.

A total of 30 timber sheets were completed off-site and 12 detailed scale timber drawings were made. The total number of 'timbers' processed off-site was 26 although in some cases a timber might include up to 4 pieces of wood if repair patches and joints were included. The vast majority of the timbers were reused.

Unfortunately the wood encountered was either elm or softwood and thus unsuitable for tree-ring analysis or when of oak it had too few tree-rings (<50) and lacked sapwood, therefore no tree-ring samples were taken. However, a small number of samples of tarred hair were obtained for possible further analysis.

Due to the reuse of the timber and site conditions few tool marks were well preserved.

The Earliest Revetment, Structure [14]

The first apparent revetment on the landward/east side was not fully exposed and had been heavily truncated. It comprised two oak uprights (probably small piles), which were visible together with some thin (< 25mm thick) planking of elm set on edge between them. The alignment of the structures was rather more NW-SE than that of the subsequent two revetments. The use of thin elm planking would best fit the later 16th or 17th centuries. It is unlikely that this lightly retained revetment stood very long (see Sect 2).

The Second Main Revetment And Some Of Its Timbers, Structure [55]

The second main revetment was the most substantial, and it consisted of a timber-framed structure built by carpenters, rather than labourers. It was heavily truncated to a little over sill beam level, all the tenoned in posts had been robbed out, but the sill beam, some retaining piles and one course of sheathing planking survived. The sheathing [56] consisted of reused elm barge planking secured by iron spikes to the sill beam on, originally, the river ward side of the posts. The positioning of the revetment sheathing is known from other sites on the Thames from the early 17th century onwards. This contrasts with the medieval revetments in which the sheathing was always placed behind the uprights on the landward side. The post tenons were set into deep mortices c. 0.55m edge to edge. Only a minority of the tenons were pegged. Faint auger marks in the mortice bases seemed to have been left by a 'shell' auger rather than the earlier 'spoon' variety.

The sill (or 'baseplate') was made of two, worn, re-used oak beams [53] and [46]. These were c. 180mm wide and 160mm deep. Sill [46] was boxed heart and [53] was cut out of what had probably been a sawn slab. The two elements were joined with a simple edge-halved scarf, fastened with two oak pegs. The workmanship resembles that seen in London waterfronts of the 16th–early 18th centuries.

Apart from severe wear on the timbers several unusual redundant bolt holes were found. They were c. 25mm round or square on one face and much larger and rectangular c. 50mm x 25mm on the other faces. Timber [46] also had the impression of two dovetail housings cut in opposing wider faces. A building or nautical origin seems very unlikely; perhaps the timbers derive from some form of machinery such as a mill?

The Reused Barge Bottom Plank [56]

The basal sheathing plank found in situ was clearly a 'chine-plank' (a timber which runs round outside the edge of the bottom) from some form of flat bottomed ('hard chined') river barge. It was broadly similar to those known from 'Western Barges' found by PCA at Adlards Wharf and MoLAS at the Millennium Bridge S Side. The planking survived c. 0.3m high and was c. 35mm thick, iron nails and tarred hair set-work were visible along the lower edge which was the junction of the bottom and side in the parent barge. The side planking was iron spiked to the bottom

planking which was slightly thicker along the edge to accommodate the nails. The face of the plank was pierced by oak treenails that once held the barge 'floor timbers' (lowest frame timbers across the bottom).

The third main revetment and some of its timbers , structures [43] and [67]

This revetment also ran N-S and showed some signs of collapse and decay with what appear to be squared oak piles dislodged to the north. This structure was a simple but strongly built 'pile and plank revetment', which could have been put together by labourers. The truncated piles set at c. 0.6m centres were not lifted. Neither was the basal oak planking with iron stained nail holes which indicated reuse. The plank was 4.4m long and c. 50mm thick. Pieces of reused barge planking including some of elm, fitted with edge tenons in the 'western barge' style were also identified (two items from structure [43]).

Group of small flat bottomed oak posts , timbers [40]-[42], structure 43

The decayed bases of three small oak posts made from reused timbers were found lying in deposits overlying the excavated revetments. These were set close together, timbers [41] and [42] were originally set in a posthole [47]. They may have functioned as mooring posts or a deadman. The timbers were pierced by oak treenails and bore evidence for relic joints on the ends (bridle or halvings) showing that they probably derived from flat-bottomed barge floor timbers.

An E-W box drain [32]

Cutting through the third revetments at the north end was a plank box drain c. 0.3m wide. This ran roughly east-west and may have articulated with the oak plank lined revetment extension [33] described below. The lifted plank from this drain was 35mm thick, made from tangentially faced softwood (probably Scots Pine). Rectangular section iron nails had been used to hold the side planks to the base. Although the earliest of these softwood box drains date to the late C16th in the London region (at the Rose theatre), they are most common in the late 17th and 18th centuries.

Dog-leg extensions to the North end of the third main revetment (Structure [33])

At the north end of the third main revetment a complex set of small revetments were added. These were short pile and plank structures surviving one or two plank courses high. These structures contained many second-hand timbers, mostly elements of barges, either oak framing pierced with oak treenails and some iron spikes, or planking of oak or elm. Plank [33] was some form of oak barge planking pierced with treenail holes and very neatly fitted with 'Dutchmen' (inset patches) set in tarred hair and held in place with small iron tacks. The Dutchmen covered

splits in the through sawn oak planking, which were left by seasoning, and they were fitted on the inside before the framing. The well preserved edge of the planking was carefully cut to a rabbet, to which the remains of the next board were nailed over tarred hair 'set-work', a method of maintaining a watertight seam.

An E-W elm log drain [54]

Log drain timber [54] ran below the baseplate [53] of revetment structure [55], with the tapered male end set to the west. Such elm log drains and pipes are known from many wet London sites from the later 16th century. It's presence implies buildings located to the SE.

Summary And Further Work Suggestions

The last two main revetments found during the Bridges Wharf excavation were robust but money was clearly saved by using largely second-hand timber. The carpenters who framed up the second revetment, structure [55], in utilitarian 16th to 17th century style must have had to work very hard to cut the long-seasoned oak of the sills. Those sill beams may have been taken from a local mill? The very high incidence of the reuse of barge timbers probably hints at the proximity of a barge building or repair yard. The timbers seem to derive from flat bottomed barges built in a variety of styles, including the Thames 'western barge' style with planks fastened together with edge tenons like those used in Roman vessels.

Recommendations

In due course the material warrants a summary publication with illustration, full referencing and some comparison with material from other sites such as Adlard's Wharf, Millenium Bridge and Dace Road. It would also be useful to have the tarred hair samples reviewed with respect to potential fibre identifications.

Appendix 7 Clay Tobacco Pipe Assessment
By Chris Jarrett

ASSESSMENT OF THE CLAY TOBACCO PIPES (BFQ 06)

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 have not been subject to much redeposition or were deposited soon after breakage. Clay tobacco pipes are present in eleven contexts, all as small groups (under 30 fragments).

All the clay tobacco pipes (61 fragments and none are unstratified) were recorded in an ACCESS database and classified by Atkinson and Oswald's (1969) typology (AO) and 18th-century examples by Oswald's (1975) typology and prefixed OS. The pipes are further coded by decoration and quantified by fragment count. The degree of milling on 17th-century examples has been noted and recorded in quarters, besides the quality of finish. The tobacco pipes are discussed according to their types and distribution.

THE CLAY TOBACCO PIPE TYPES

The clay tobacco pipe assemblage from the site consists of 26 bowls and 35 stems. The clay tobacco pipe bowls range in date between 1660 and 1780.

1660-80

AO15: a single, spurred bowl of a good quality has three quarters milling on the surviving rim.

1680-1710

A single bowl is present dating to this period but cannot be classified to type as its heel or spur is missing.

AO20: six rounded profile, heeled bowls, of good quality. They include three variants comprising tall and a short versions. Milling of the bowl rim became less important during this time, but one bowl has a quarter and another has half milling.

AO22: three bowls all from different moulds. All the examples are of a good quality and one example has a quarter milling.

18th century

A single bowl fragment is dated broadly to this century.

1700-40

OS10: twelve bowls are identified in varying degrees of completeness, but an extremely slender variant was noted. Two of the bowls are marked with the makers initials on the heel, but these are not completely legible: ? L and ? O, the latter having a crown surviving above the family initial, whilst the forename is damaged.

1730-1760

OS11: one bowl with the rare example of an oval incuse stamp with the initials 'W T' and scrolls found on the underside of the heel. This stamp has been previously illustrated (Atkinson and Oswald 1969, ?, fig. 10, group f), but on a different shaped bowl. That example was found at 4-9 Wood St, London (site code: ER.74) and was of the site of Tom's Coffee House. This stamp has been assigned to William Tappin I, working 1692/1700-42, who originated in Bristol, where it was more common to use stamps on the underside of the heel, or his son William Tappin II, born in 1717 and died in 1769 (Heard, << <http://www.kieron.heard.ukonline.co.uk/pipes/tappin.htm>>>).

1730-1780

OS12: one bowl, which is unmarked and is burnt with a damaged rim.

DISTRIBUTION

Context	Phase	Fragment count	Date range of clay tobacco pipe types	Latest dated clay tobacco pipe type	Clay tobacco pipe types	Spot date
2	4	3			Stems	1570-1910
3	3	1			Stem	1570-1910
16	4	9	1700-1780	1730-1780	OS10, OS12	1730-1740
18	3	2			Stems	1570-1900
19	6	4	1700-1740	1700-1740	OS10	1700-1740
20	6	2			Stems	1570-1910
21	6	2			Stems	1570-1910
23	6	1	1700-1740	1700-1740	OS10	1700-1740
24	4	5	1700-1740	1700-1740	OS10 (? O)	1700-1740
34	2	1			Stem	1570-1910
36	4	12			Stems	1570-1910
37	5	19	1780	1730-1780	AO15, AO20, AO22, OS10 (? L), OS11 (W T)	1730-1740

Table 1. BFQ06: Distribution of clay tobacco pipes.

The clay tobacco pipes are recorded in phases 2 to 6. Table 1 shows the distribution of the clay tobacco pipes, showing the phase, number of fragments, the date range of the types and the latest bowl, what clay tobacco pipe types are found in each deposit, together with a spot date.

SIGNIFICANCE OF THE COLLECTION

The clay tobacco pipes are of significance only at a local level and provide some evidence for the types and possible makers supplying the local area. Other assemblages of clay tobacco pipes have been recorded near by on excavations at Regent and Grove Wharfs, Lombard Road, (LMA02) and Prices Candle Factory, Battersea (YPE02) (Jarrett 2002a, Jarrett 2002b), but shows a wider date range of bowl types and also includes non-local and imported Dutch pipes.

POTENTIAL

The clay tobacco pipes have the potential to date the contexts they were found in and one pipe requires illustration.

RESEARCH AIMS

Further research aims are indicated for the clay tobacco pipe assemblage from BFQ06.

RECOMMENDATIONS FOR FURTHER WORK

Publication of the site should include a short report on the clay tobacco pipes and include an illustration of the OS11 bowl stamped W T.

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Appendix 8 Glass Assessment
By Chris Jarrett

GLASS ASSESSMENT (BFQ06)

Chris Jarrett

Introduction

A small sized assemblage of glass was recovered (1 box). The assemblage is fairly fragmentary (24 shards), but some datable forms are recognised. The condition of the glass probably indicates fairly rapid deposition, but of a secondary nature. The glass is present in small groups in six contexts and none are unstratified. The assemblage was entered on an Excel spread sheet.

Catalogue of forms

Storage

?carboy: dark green glass, shoulder, base and body sherds of a large, thick walled, wide opened neck storage jar. Six fragments. 18th-19th century. Contexts [15] and [19].

Bottle: dark green glass, high kicked base with pontil scar. One shard. 1730-90. Context [15].

Wine bottle, cylindrical or mallet type: dark green glass, kicked base. One shard. 18th century. Context [37]

Wine bottle, ?onion shape: dark green glass, base sherd with a low kick. One shard. 1680-1710. Context [37].

Bottle: dark green glass, body/shoulder. Three shards. ?18th century. Context [37].

Bottle/phial: dark green glass, rim sherd with a bevelled string. One sherd. ?mid 18th century. Context [37].

Phial: light green glass, base with an internal kick, but externally flat with a pontil scar. 17th-18th century. Context [37].

Unidentified forms

Vessel: significant surface hydration. One shard. Post-medieval. Context [16].

Vessel: light green glass. One fragment. Post-medieval. Context [19].

Vessel: pale green glass. One fragment. Post-medieval. Context [2].

Vessel: pale green glass, thin walled, ?large globular vessel. Four fragments. Post-medieval. Context [19]

Vessel: pale green glass. One shard. Post-medieval. Context [36].

Window Glass

Window pane: pale green. One fragment. Post-medieval. Context [2].

Window pane: pale green. One small fragment. Context [16].

Distribution

The glass finds from the site are found in Phases ? and its distribution is summarised in Table 1.

Context	Phase	Form	No. of shards	Spot date
[2]	4	Vessel, Window pane	2	Post-medieval
[15]	6	?carboy, bottle	4	1730-90
[16]	4	Vessel, window pane	2	Post-medieval
[19]	6	?carboy, vessel	8	Post-medieval
[36]	4	Vessel	1	Post-medieval
[37]	5	Bottles: cylindrical or mallet, ?onion, bottle or phial, phial	7	?mid 18 th century

Table 1. BFQ06, distribution of glass showing the forms, number of sherds and a suggested spot date for each context.

Significance, Potential and Recommendations:

The glass assemblage from BFQ06 has limited significance at a local, national or international level. Other glass assemblages have been excavated near by at Lombard Road and Price's Candle Factory (Carter 2002a, Carter 2002b). However carboys (large liquid storage vessels) are relatively uncommon finds. The glass does have some potential to date the site stratigraphy. It is recommended that a short summary text on the glass be compiled to be included in any site publication. No illustrations are required.

Bibliography

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- Carter, S. 2003b 'Assessment of the vessel glass' in K. Hülka, 'Assessment of an Archaeological Excavation at the former Prices Patent Candle Factory, York Place, London Borough of Wandsworth'. Pre-Construct Archaeology Ltd unpublished document.

Appendix 9 Ceramic Building Materials Assessment

By Kevin Hayward

The assemblage of ceramic building material comprises a common group of post-medieval brick and tile fragments which serve to inform of dating of the stratigraphy. All of the material was re-deposited and is of little intrinsic interest. It is therefore recommended that no further work is done on this assemblage.

BFQ06 CBM spot dates

Context	Date range of the material		Latest dated material		Spot date
2	1180	1900	1480	1900	1480 – 1800
3	50	1900	1480	1900	1480 – 1800
15	1200	1900	1666	1900	1666 – 1800
16	50	1950	1480	1900	1600 – 1800
18	1666	1900	1666	1900	Late 17 th – Early 18 th century
19	1630	1850	1630	1850	1630 – 1850
20	1480	1900	1480	1900	1600 – 1800
23	1200	1900	1666	1900	1666 – 1800
36	1200	1900	1480	1900	1480 – 1800
39	1450	1700	1450	1700	1450 – 1700
44	50	1700	1450	1700	1450 – 1700

Appendix 10 Metal and Small Finds Assessment
By Märit Gaimster

THE METAL AND SMALL FINDS FROM BRIDGES WHARF (BFQ06)

Märit Gaimster

Few metal or small finds were recovered from the evaluation, consisting of a piece of slag, a handful of iron nails and an ivory cutlery handle. The nails were associated with drains and other structural features on site; most of these may be discarded after assessment. A near-complete ivory handle dates from the late 17th or 18th centuries (cf. Thompson *et al.* 1984, 100-3); its description should be included in any further publication of the site.

context	sf	description	date
2	1	near-complete ivory cutlery handle; tapering with rounded end; L 70mm	late 17th to 18th centuries
16		iron nail; incomplete	
16		large lump of slag	
18		iron clench bolt; one diamond-shaped rove extant; L 65mm; also an incomplete iron nail	
24		iron nail; flat-rectangular section; L 100mm; also an incomplete iron nail	
32		two incomplete iron nails; one with small domed head	

References

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Appendix 11 Environmental assessment

By Frank Meddens

The Environmental Samples

The environmental work involved targeted sampling of natural deposits to obtain a column 100x10cm), comprising two sections (samples <2. and <3>), which covered the early part of the foreshore sequence. The *lithostratigraphic sequence* recovered was clearly noted on a section drawing. The column comprises a sequence of dark greenish grey clayey silt alluvium, which includes a plainly defined band of molluscs.

The sequence has not been further described or assessed at this stage, as it is undated and not associated with any of the archaeological components identified. Further work on this sequence is possible but not recommended. Any further investigation of the column samples would need to be linked to specific research questions relevant to the early foreshore development.