Fig 1: site location

From Bronze Age to bronze casting, 3000 years of change at Ewer Street, Southwark

Douglas Killock

Introduction

The archaeological potential of the site at 55 Ewer Street was demonstrated during monitoring of a geotechnical investigation undertaken in 2010, which suggested that the location lay close to the edge of a sand and gravel eyot and not, as had been previously thought, in a former channel that formed part of the Thames.[1] Subsequent trial trenching undertaken in 2011 and 2012 confirmed the presence of Roman ditches cut into natural sands and gravels at the base of the archaeological sequence. This led to full excavation of the site in 2012. The results of the archaeological mitigation documented a multi-period site periodically occupied or used from the Bronze Age to the present day.

A full discussion of the archaeological and topographical background to the site is beyond the scope of this article; the principal developments for the prehistoric and Roman periods have been amply discussed elsewhere.[2] The site today is situated *c.* 500m south of the Thames embankment (Fig. 1). Before the establishment of an effective river wall in the 13th and 14th centuries[3] occupation of the area was entirely dependent on the hazards resulting from the fluctuating fluvial regime. In the earlier prehistoric periods water levels were low and the tidal head would have been situated further east. The combination of light sand and gravel soils combined with abundant fresh water attracted early farmers, and Bronze Age arable field systems as evidenced by ard marks are a feature of north Southwark, such as are found at Hopton Street.[4] Rising water levels impacted these farmed areas and left a series of sand and gravel islands of various sizes standing between tidal channels. The two largest islands formed the core of the later Roman settlement at Southwark. The latest topographical model of the area suggested that the site lay within the Bankside Channel which passed between the south island and the small Bankside Eyot which was located to the northwest.[5] Areas which had formed part of the Roman suburb in Southwark ended up being submerged by rising tidal levels in the later medieval or post-medieval period. Substantial alluvial horizons developed across large tracts of marginal ground and the poorly drained soils attracted very little

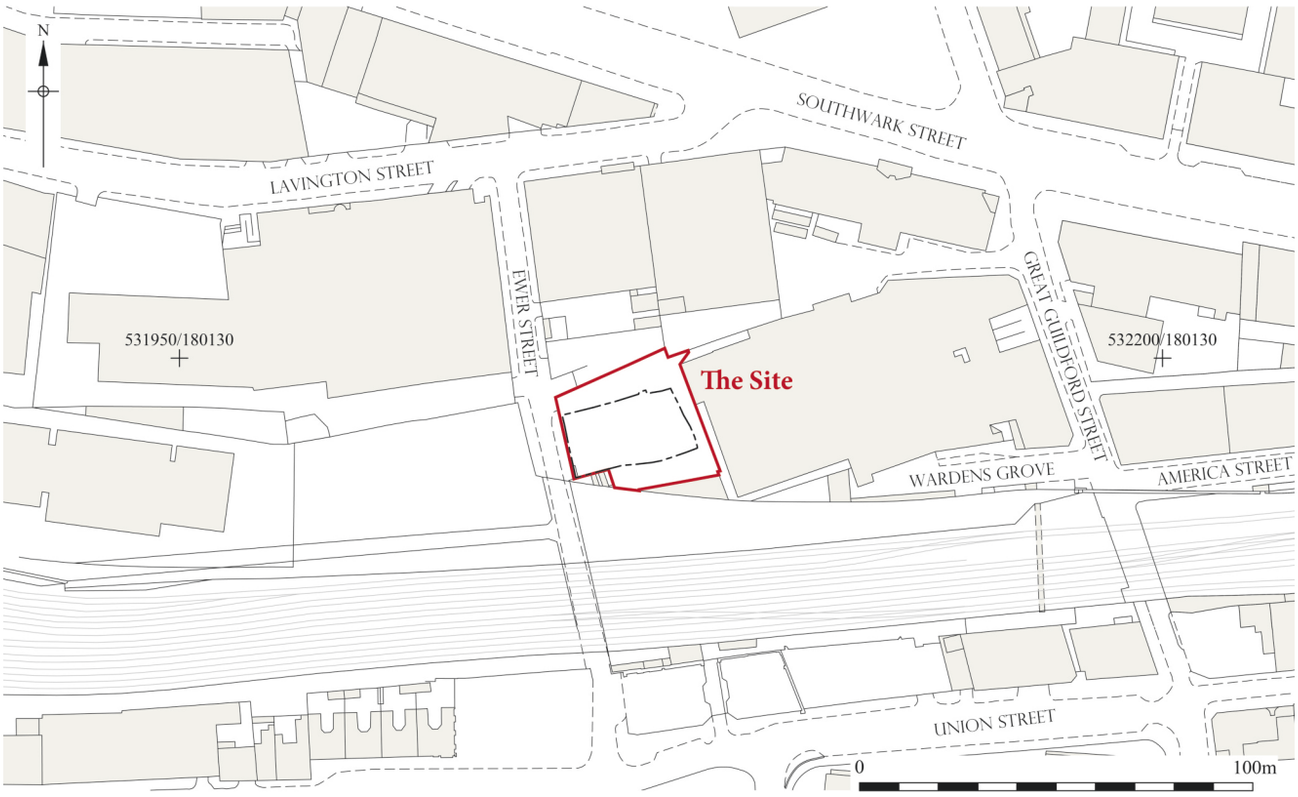

Fig. 2: excavation area

occupation until urban expansion in the early post-medieval period extended westward from the settlement around the southern bridgehead.

The edge of the island and the Bankside Channel

Natural sands and gravels were exposed at a maximum level of 1.15m OD in the east and 1.18m on the southwest margin of the site. The southern parts of the excavated area (Fig. 2) had been heavily impacted by the excavation of numerous pits and ditches here, which may have resulted in the recorded upper level of the sand and gravel being slightly lower than it might otherwise have been. However, within the bounds of the excavated area a gently sloping plateau was evident across the southern half of the site which probably never exceeded 1.20m OD. The surface of the gravel shelved gently to the north over a distance of *c.* 6m from the southern limit of excavation down to a level of *c.* 0.85m OD. There was little or no evidence that alluvial channel fills had ever extended further to the south and covered a wider area, or had been deposited at a higher level. However, it should be noted that the surface of the eyot as recorded had almost certainly been affected by river erosion in later periods. Had the alluvial channel fills once extended further to the south, they would have been impacted firstly by the plethora of Roman cut features that were evident and, had any remnant of it survived, by later scouring by the Thames. The rather neat division between the higher areas of sand and gravel found to the south and the channel fills located to the north may therefore have been more apparent than real.

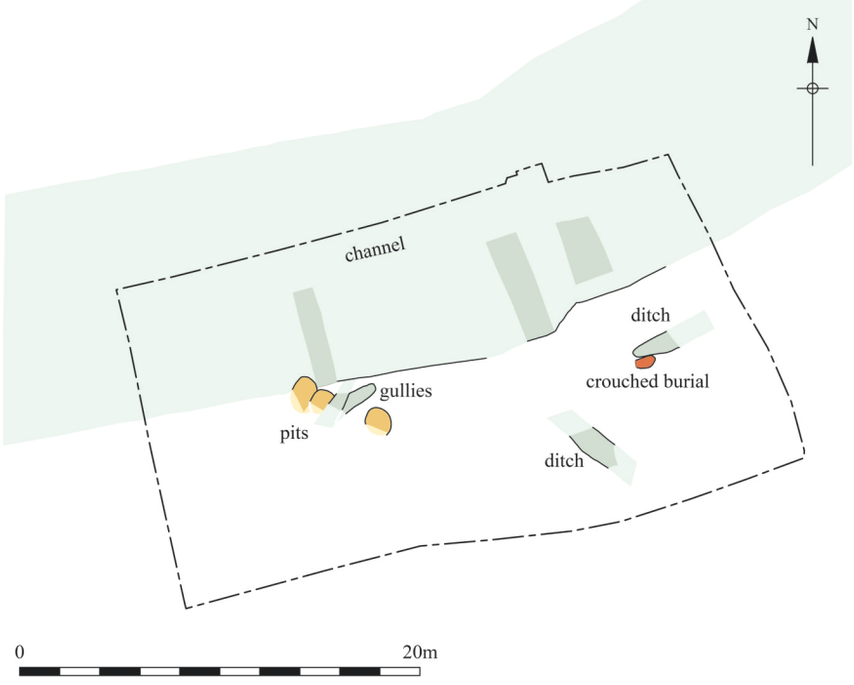

Fig. 3: prehistoric features

Environmental analysis of the alluvial deposits within the channel provided informative results. The peat horizons which are a common feature of the Bronze Age landscape in Southwark were noticeably absent here, probably because the

relatively high level of the sand and gravel meant that the site was located beyond the channel margins and the surrounding mudflats which would otherwise have provided an ideal environment for peat formation. A rich organic horizon was documented toward the base of the alluvial sequence, which ranged from 0.21m OD to 0.69m OD. These deposits represent a regularly flooded floodplain. C^{14} dating of this horizon has dated the beginning of its formation to 800-670 BC or the Late Bronze Age to Early Iron Age.[6] The organic horizon appears to represent the formation of a ground surface after water levels rose during the Bronze Age and inundated the earlier peat formations and large areas that had previously been farmed. Palaeo-botanical analysis demonstrates that the immediate environs of the site would have comprised a floodplain supporting a variety of ferns, wetland plants and some wetland trees. The more distant dry 'mainland' would have consisted of largely open ground with limited woodland.

Possible Bronze Age features

A very small quantity of prehistoric pottery was recovered from the excavations comprising seven sherds dated to the Late Bronze Age and Middle Iron Age. The majority of these were found in residual contexts but two shallow linear cuts in the surface of the gravels contained no finds later than the pottery dated to the Late Bronze Age (Fig. 3). Both were truncated by later Roman ditches; the largest surviving element measured 2.38m long by 1m wide with a depth of only 0.22m. It is difficult to offer a valid interpretation for these truncated segments. Both had clearly been part of more extensive linear cuts and each had a terminus, but they followed slightly differing alignments and were separated by a distance of *c.* 13m. It is therefore uncertain whether the two were contemporary or not and, given that the combined pottery assemblage from these features amounted to three sherds, assigning them to the Late Bronze Age is something of a leap of faith. Considering their location a drainage or boundary role is possible.

A crouched burial

An inhumation burial placed in a crouched position with the individual lying on its right hand side with the head to east was found immediately to the south of the easternmost linear cut discussed above (Fig. 3). Unfortunately this burial had no associated grave goods and the fill of the grave cut, which was very shallow indeed, contained no artefacts at all. Neither of the bone samples submitted for dating had enough collagen preserved within it to obtain a viable C^{14} result. It is tempting to assign this burial to a prehistoric period and associate it with the possible Bronze Age ditch or gully located immediately to the north. Indeed changes in burial practice during the Late Bronze Age and early Iron Age which suggest an increasing emphasis of burials marking space and boundaries have been observed.[7] Crouched burials are known for the south-east of England from Yarnton, Oxon, Kemble, Glos and Suddern Farm, Hants for example, where they have been dated to the Middle Iron Age.[8] However, the association of the burial with the ditches and its prehistoric dating in this particular case, considering the paucity of the evidence, will have to remain tentative. Tidal scouring of medieval date or later had truncated the surface of the gravel island in this area, and the grave cut, which only survived as a 0.26m deep remnant, was sealed by later alluvium. The only certain dating evidence is therefore that it must be earlier than the deposition of the alluvium. The skeleton was poorly preserved and the osteological analysis concluded it reflected the burial of a young adult.[9]

Roman pits and ditches

A variety of cut features dating to the Roman period cut into the surface of the sand and gravel plateau located across the southern half of the site. Some of the pits, which measured up to 2.50m in diameter and *c.* 0.50m deep, may have served for sand and gravel extraction. Their principle function was certainly not rubbish disposal; the frequency of domestic waste was noticeably low. Two substantial ditches were evident but these did not follow the same alignment and may not have formed part of a planned system of land division. They may not have been contemporary (Fig. 4). The dating evidence from all of the Roman cut features was sparse and that from the ditches was no exception. The eastern ditch contained a slightly larger pottery assemblage dated to AD 70–120 whilst the western ditch, which had been recut, contained eight sherds dated to AD 50–150. The majority of the Roman pottery assemblage can be dated to AD 50–170 and there seems to be a marked fall off in the overall level of activity across the site after this. The pottery assemblage did not contain any elements of Roman diagnostic land-use

Fig. 4: Roman features

beyond the later 3rd century AD.[10]

There was a notable absence of features dating prior to AD 200 cutting the alluvial channel fills. The subject of the tidal and sea level sequence for this area is complex. It is generally accepted that after a peak in the early Roman period sea levels began to fall and did so consistently throughout the Roman period.[11] This would have allowed areas that had previously been inter-tidal mudflats to dry out and become consolidated. Only one cut feature dating to the Roman period was recorded cutting into the alluvial channel fills and this pit contained pottery dated to AD 200 and 400. A north-south aligned ditch located in the western half of the site contained pottery dated to after AD 250 and represents the only late Roman feature found in the area which included a denser concentration of earlier Roman pits and ditches.

As mentioned above, the frequency of pottery was low, suggesting limited activity on the site. This was perhaps no surprise, given its location and the fact that there seems to have been no attempt made to use the transport potential of the channel edge or indeed to manage the bank in any way. The paucity of pottery was reflected across the other finds assemblages; building materials were present but in relatively low quantities and the animal bone assemblage was also small. The latter was dominated by large domesticates, such as cattle and horse. The presence of semi-articulated remains of these animals probably indicates that carcasses, or parts of them, were being dumped or placed in a location marginal to the main settlement. Some of the horse bones exhibited butchery marks which suggested that the carcasses had been skinned.[12]

Medieval (?) flooding

Horizontal stratigraphy was largely absent from the Roman sequence and it was particularly noticeable that there was no trace of a late Roman abandonment sequence. 'Dark earth' horizons of various sorts are commonly found across the Roman city and its southern suburb and one has been documented almost immediately south of the site at 100–142 Union Street.[13] If such a horizon ever extended across the Ewer Street site it was almost certainly removed by tidal scouring during the medieval or post-medieval period. A band of alluvium which sealed the Roman cut features extended across the entire site. It was recorded at a maximum level of 1.23m in the northern half of the site above the earlier palaeo-channel and survived to a level of 1.36m OD above the gravel plateau in the south. No medieval artefacts were recovered from the alluvium, and its surface was sealed by dump deposits which contained pottery dated to after 1650 and clay tobacco pipes dating from 1660 onwards.

This sequence is entirely in keeping with the documented development of the area; numerous excavations have recorded alluvial deposition dated to the medieval period. Although water levels had receded in the late Roman period they began to rise again and by *c.* AD 1000 the height of the tide in London would have reached the same level as the peak suggested for the mid 1st century AD which has been estimated at +1.25/1.50m.[14] Tidal levels continued to rise thereafter and are still doing so today. There is little doubt that the threat of flooding was a perennial problem, failures of the river wall were frequent. Even after the embankments had been built and strengthened the land in this area still required extensive work to establish and maintain drainage.[15] Large areas could be flooded simply as the result of heavy rain and the area to the north of the site, known as Paris Garden, was largely uninhabited and occupied by a dense willow thicket until the late 16th century.[16]

Post-medieval urban expansion and industrialisation

The distribution of features containing Saxo-Norman pottery across this sector of Southwark suggests that the settled area in the later 11th and 12th centuries extended along the waterfront from Winchester Palace in the west to Battle Bridge Lane in the east and as far south as St. George's church.[17] The suburb spread slowly from this core during the medieval period and western areas such as Ewer Street were not re-occupied until the 17th century. Duke Street, now part of Union Street, is shown on Rocque's map but most of the site was open ground with the eastern part being occupied by 'The Bowling Green'; the western part lies within a tenter ground.

For the post-medieval period the results of the excavation largely confirmed the cartographic evidence. The earliest cut features dated to the very end of the 17th century, though there was confirmation of rubbish disposal across the surface of the reclaimed marsh dating from *c.* 1650 onward, suggesting that nearby areas had become settled by this time. It appears that the site remained open ground in the late 17th and 18th century with only four cut features dating to this period evident. The base of a small pit pertaining to the late 17th or early 18th century was identified in the centre of the trench and another pit of identical date was located in the southwest corner. This feature was

Fig. 5: inscribed slate

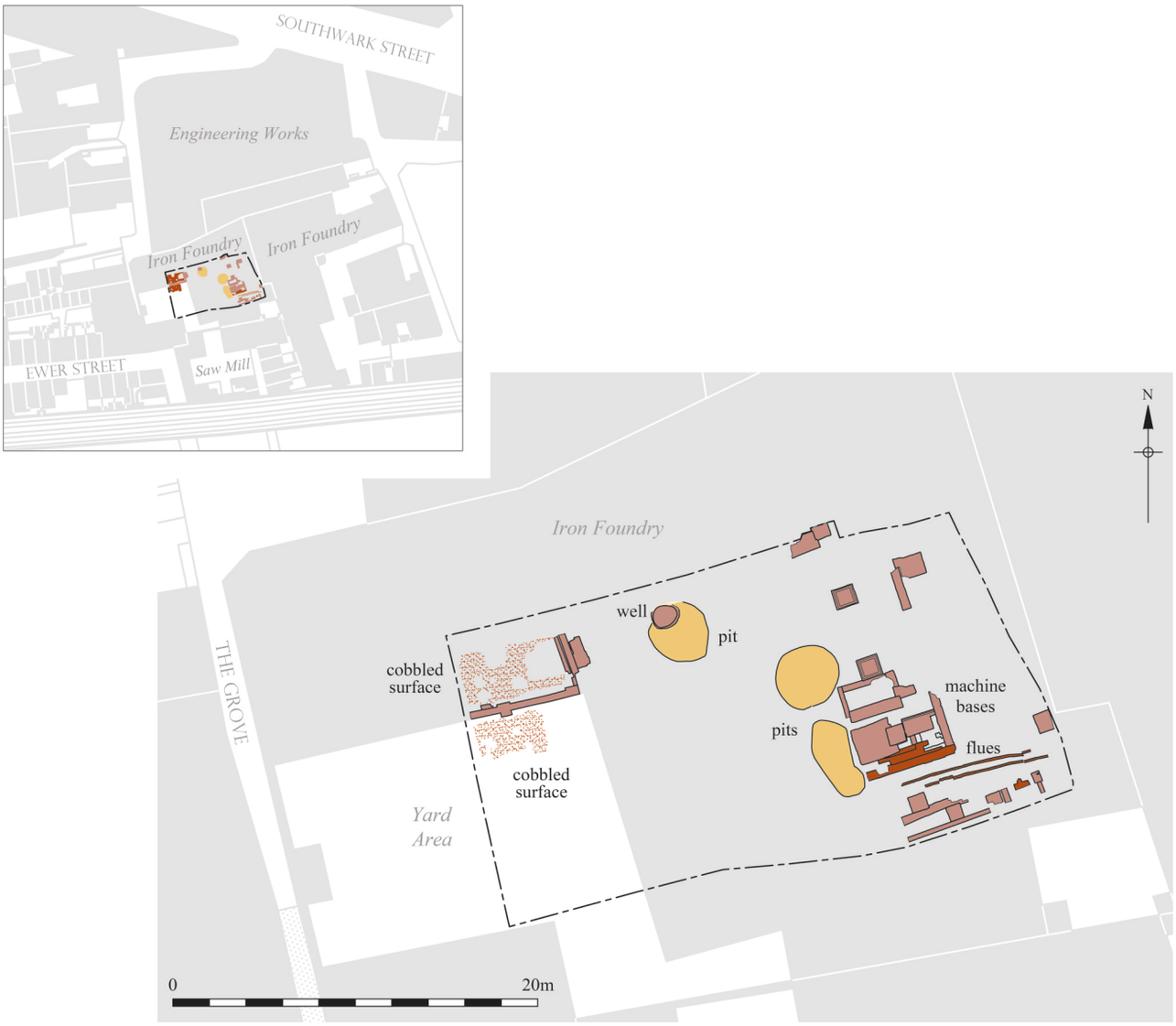

Fig. 6: 19th-century features of Iron works and foundry

truncated by a very poorly constructed circular brick lined cesspit or well, built in the first half of the 18th century; the backfill of the construction cut contained pottery broadly dated to AD 1700–1800 and clay tobacco pipe to AD 1700–1740. This feature had gone out of use and been backfilled by the beginning of the 19th century, the evidence for this being provided by the pottery and pipe assemblages from the upper fills dating to after AD 1760 and 1780 respectively.

A timber-lined pit located in the southeast corner represents the only other structure dated to this period. No clear function was apparent for this feature; the timber had decayed and it extended beyond the limits of excavation. As seen it measured over 2m north-south, timber planking had been used to support the west side and the revetted space to the east was subdivided by more timber planking. There was no evidence of the staining commonly associated with tanning pits or a clay lining around the timber-work to retain fluids. The dating evidence suggests that the timber-lined tanks were constructed in the late 17th or

Fig. 7: 19th-century machine base

early 18th centuries and backfilled after AD 1720. A mid-18th-century date seems appropriate when considering the limited life-span of an external, possibly industrial, timber structure. A remarkable inscribed slate was recovered from this feature (Fig. 5).[18] A mass of lines and letters include a roughly executed 12-wind compass rose, lettering and Arabic numerals. A coherent line includes the inscription 'I O U, another has the letters 'O S V'; the latter are cut by the compass rose and there are numerous other examples of palimpsest here, including small cross compass marks. The original function of, or intended use for this object is most likely a writing slate, although it has been cut along the sides into a narrow rectangular shape.

The 19th-century iron foundry

The last major change in land-use evident from the excavation consisted of the establishment of an iron foundry in the 19th century. Elements of the foundry survived in the form of cobbled surfaces, brick piers and machine bases (Figs 6, 7). There were simple stanchion bases to support the superstructure of the works, and walls which can be demonstrated to be parts of the foundry as shown on early Ordnance Survey maps. These elements were particularly well preserved in the eastern half of the site, though the foundry shown on the 1872 Ordnance Survey map extended not only to the present street frontage but well beyond it to the west. The street pattern had been altered by 1896 when the Grove Iron Works is shown to the west of Ewer Street; this part of the new road had previously been part of a system of narrow streets or alleyways known as The Grove. These developments could be mirrored on many sites in Southwark which hosted iron working, casting and later engineering works. However, the industrial structures recorded at Ewer Street almost certainly formed part of a complex owned by Henry Prince, documented in the 1851 as an iron founder in the firm of Prince and Whitehouse at the Phoenix Foundry, Grove Southwark. The works owned by Prince not only produced iron but also specialised in the casting of bronze statues particularly for the Irish sculptor John Henry Foley. The most celebrated of these was the gilt bronze statue of Prince Albert which still sits in the Albert memorial in Kensington Gardens (Fig. 8). Both Foley and Prince died before they could see the statue set into the memorial and Prince's business closed almost immediately after his death in 1875; this event was almost certainly the cause of further delay in the tortuous progress toward completion of the memorial, even though the casting had been completed by the time of Prince's demise. The works was later owned by D. Church and Co., Brass and Iron Founders.[19]

Fig. 8: Albert memorial

Discussion

The evidence for Late Bronze Age occupation at Ewer Street rests on a few sherds of pottery. The location of the features along the wetland margin and the possible association with a crouched burial suggest they represent boundary features, although drainage remains a possibility. A few sherds of Late Bronze Age and Middle Iron Age pottery were also present as residual finds.

The crouched inhumation may be prehistoric. However, there are numerous examples of similar burials from later periods such as the group of early Roman crouched inhumations recorded at West Thurrock, Essex,[20] though its apparent isolation is more suggestive of a prehistoric date. The Roman cemeteries located nearby at America Street and Southwark Bridge Road as well as those known from Lant Street and Trinity Square were quite densely populated.[21] There are two Roman burials known from the Ewer Street area excavated in the 19th century,[22] but there is nothing to demonstrate that these relate to the crouched burial from the site at 55 Ewer Street.

The principal contribution that the excavation made to our understanding of Roman Southwark is that it has delimited the extent of the south island at this location. No evidence of Roman occupation was recovered from the site; it was used however and at times the landscape managed by digging ditches, but no structures were found on the gravel or along the edge of the Bankside Channel. In many ways this is not a surprise, since the site lies in a very peripheral location. Although the course of Road 2 is projected on to the south island it has never been found south of the Southwark Street Channel.[23] If this road was not present, the west end of the island would have been even more isolated than it appears on current maps of the area. It is perhaps no surprise that evidence of Roman presence both at Ewer Street and nearby at 100–142 Union Street is limited.[24] The level of activity on both sites diminishes from the mid-late second century onward.

The history of the site from the medieval period on looks to be typical of the area; it was inundated by rising tidal levels in the later medieval period and the entire area was capped by a band of alluvium. Very little seems to have happened in the locality until the surface of the alluvium stabilised and a new ground surface was established. Even after an effective river wall was put in place to the north, the site appears to have been open marsh or pasture for at least two centuries before it was impacted by the westward expansion of Southwark from the settlement around the southern bridgehead and Borough High Street. The earliest evidence for re-occupation of the site after its abandonment in the late Roman period dates to the end of the 17th century, and the archaeological sequence demonstrates that it largely remained open ground during the 18th century. This open area later disappeared under industrial works and the railway viaduct which now forms its southern boundary.

Acknowledgements
Pre-Construct Archaeology Limited thanks UKSA Ewer Street Sarl for commissioning the work, Mike Rozier and the staff of Elliott Thomas and of Modebest for their cooperation and support, also Dr Christopher Constable, the Senior Archaeology Officer for the London Borough of Southwark for his monitoring of the work. The author is grateful to Chris Mayo for project managing the excavation, Frank Meddens for management of the post-excavation project and editing this paper, Guy Seddon, Ireneo Grosso, Lee Harvey, Joe Brooks, John Joyce, Tomas Moskal, Pat Cavanagh, Matt Edmonds, Ian Cipin, Al Douglas, Kari Bauer and Neil Hawkins for their hard work during the excavation, Mark Roughley, Kevin Hayward, Katie Anderson, Chris Jarrett, Märit Gaimster, Kevin Rielly, James Langthorne, Dan Young, Rob Batchelor and Lisa Snape-Kennedy and Rick Archer for their specialist contributions, Chris Cooper for the logistics and Sophie White for finds management.

1. M. Edmonds *Land at Ewer Street, London Borough of Southwark SE1 0NX An Archaeological Watching Brief,* unpublished Pre-Construct Archaeology Report (2010).

2. e.g. J. Sidell, J. Cotton, L. Rayner and L. Wheeler *The prehistory and topography of Southwark and Lambeth* MoLAS Monograph 14 (2002); C. Cowan, F. Seely, A. Wardle, A. Westman and L. Wheeler *Roman Southwark settlement and economy Excavations in Southwark 1973-1991* MoLAS Monograph 42 (2009).

3. M. Carlin *Medieval Southwark.* (1996).

4. V. Ridgeway 'Prehistoric Finds at Hopton Street' *London Archaeol* **9** no. 3 (1999) 72–6.

5. Cowan *et al, op. cit.* fn. 2, Fig. 5.

6. D.S. Young and C.R. Batchelor *Ewer Street, London Borough of Southwark, London SE1 (Site Code: EWE10) Environmental Archaeological Assessment Report* unpublished QUEST report 2013.

7. M.L.S. Sørensen 2007 'English and Danish Iron Ages – a comparison through houses, burials and hoards' *in* C. Haselgrove and R. Pope (eds) *The Earlier Iron Age in Britain and the near Continent* (2007) 328–37.

8. G. Hey, A. Bayliss and A. Boyle 1999 'Iron Age inhumation burials at Yarnton Oxfordshire' *Antiquity* **73** (1999) 551–62; B. Cunliffe *Iron Age Communities in Britain Fourth edition, An account of England, Scotland and Wales from the seventh Century BC until the Roman conquest* (2005) 552.

9. J.Y. Langthorne *An Assessment of the Human Bone from Ewer Street, London Borough of Southwark: EWE12,* unpublished Pre-Construct Archaeology Report (2013).

10. K. Anderson *EWE10 Prehistoric and Roman Pottery*, unpublished Pre-Construct Archaeology Report (2013).

11. T. Brigham, D. Goodburn and I. Tyers with J. Dillon 'A Roman timber building on the Southwark waterfront, London' *Archaeol J* **152** (1996) 1–72.

12. K. Rielly *Assessment of animal bone recovered from Ewer street, London Borough of Southwark (EWE10)* (2012) unpublished Pre-Construct Archaeology Report.

13. C. Edwards 'Roman land management and post-medieval structures at 100–142 Union Street, Southwark' *London Archaeol* **13** no. 9 (2013) 227–30.

14. T. Brigham 'The Thames and Southwark waterfront in the Roman period' in Watson *et al* (2001) 12–27.

15. *Op. cit.* fn 3, 36.

16. *Op. cit.* fn 3, 32.

17. B. Watson 'Saxo-Norman Southwark :a review of the archaeological and historical evidence' *London Archaeol* **12** no. 6 (2009) Fig 1.

18. M. Gaimster *The Inscribed Slate*, unpublished Pre-Construct Archaeology Report (2013).

19. G. Thomson *Ewer St Documentary Assessment* unpublished Pre-Construct Archaeology Report (2013).

20. P. Andrews 'West Thurrock: Late Prehistoric settlement, Roman burials and the medieval manor house, Channel Tunnel Rail Link Excavations 2002' *Trans Essex Archaeol and Hist* **40** (2009) 00–00.

21. M. Melikian 18 July 2002 Archaeology Matters / http://archive.museumoflondon.org.uk/Londinium/Lite/classifieds/Southwark.htm; K. Leary, B. Sudds and V. Ridgeway *Roman Burials in Southwark: Excavations at 52–56 Lant Street and 56 Southwark Bridge Road* Pre-Construct Archaeology Ltd. Monograph 17 (2014).

22. RCHM (England) *An inventory of the historical monuments in London III, Roman London* (1928) 167–8.

23. *Op. cit.* fn. 5, fig. 4.

24. *Op. cit.* fn. 13.

Letter

Effra and Brandons

The tributary of the Thames to which Duncan Hawkins briefly referred in his article on the Deptford Dockyard (Vol. 14, no. 4 (2015) 87) is, in fact, the Effra, which now joins the Thames at Vauxhall. Before sometime in the 12th or 13th century it ran north-east from the north end of Brixton Hill and along the borders of Walworth and Bermondsey to enter the Thames at Earl's Sluice alias *Orfleteditch*. It was diverted to its present mouth by Bermondsey Priory to prevent flooding in Bermondsey and it probably had some success, since a number of marshy areas along its course seem to have dried out (see my article in *SLAS News* no. 133 (April 2013) 15–17). It is the opposite of what is done today, when relief channels take water downstream rather than upstream (as in relief channels for the Thames in Buckinghamshire and for the Great Ouse in Norfolk). With much less water in the surviving downstream section, one would expect the stream to silt up, though because of the decrease in water volumes this would not have caused flooding. It would be interesting to know whether the excavations at Convoy's Wharf threw any light on this sequence.

To change the subject, in the latest issue of the *LA* (Vol. 14, no. 6 (2015) 160) the report on excavations of Charles Brandon's great house in Southwark states than the Brandons had held it from at least 1465, but this is not so; the bulk of Brandon's property can be traced back as a block to 1279 and was in the hands of a man called Dormer in 1495, so the Brandons must have acquired it after that (no record of this appears to exist) though Charles' uncle acquired the northernmost part of the site in 1504 from Godard Oxenbridge. Before that the Brandons probably lived on the other side of Borough High Street, where they leased two messuages from the Lovells of Barton Bendish with whom they had a close, but not always friendly, relationship. The earlier chalk foundations cannot therefore belong to Charles' grandfather but to one of the earlier holders of the property. The house, along with Brandon's other property in Southwark 'passed' to Henry VIII by compulsion not by a voluntary grant. The Archbishop of York did not use it as a palace since he was granted it in February 1556 and sold it in July 1557, while Elles Dyall who had purchased it with John Tull in his will of December 1558 ordered that 'all stuff of house not already sold' was to be sold to pay his debts which shows that demolition was well advance by then, though two 'banquetting houses' seem to have survived until at least 1559.

Graham Dawson
40 Station Road
Orpington
Kent BR6 0SA