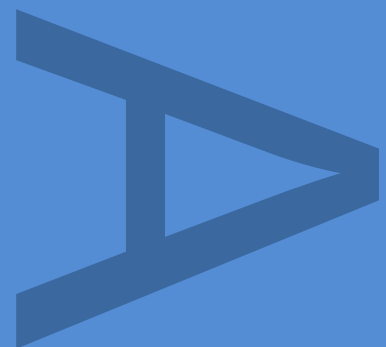


**FORMER FIRE STATION SITE
SOUTHWARK BRIDGE ROAD
LONDON BOROUGH OF SOUTHWARK
SE1**

ARCHAEOLOGICAL EVALUATION

PCA REPORT NO: R12378

FEBRUARY 2016



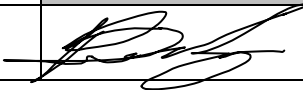
PRE-CONSTRUCT ARCHAEOLOGY

DOCUMENT VERIFICATION

FORMER FIRE STATION SITE, SOUTHWARK
BRIDGE ROAD, LONDON BOROUGH OF
SOUTHWARK

ARCHAEOLOGICAL EVALUATION

Quality Control

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**FORMER SOUTHWARK FIRE STATION, 94 SOUTHWARK BRIDGE ROAD,
LONDON, SE1 0EG: AN ARCHAEOLOGICAL EVALUATION**

Site Code: SBR16

Central NGR: TQ 3210 7988

Local Planning Authority: London Borough of Southwark

Commissioning Client: Hadston Southwark Limited

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February 2016

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1. ABSTRACT

- 1.1 Pre-Construct Archaeology Limited was commissioned by Hadston Southwark Limited to carry out an archaeological evaluation on land at Former Southwark Fire Station, 94 Southwark Bridge Road, London SE1 0EG.
- 1.2 The archaeological evaluation was necessary in order to supply the client, Hadston Southwark Limited, and the London Borough of Southwark, with relevant archaeological information in order for them to be able to determine this aspect of a future planning application to redevelop parts of the site. A written scheme of investigation for the evaluation of the site was prepared by Mills Whipp Projects and approved by the London Borough of Southwark (Dr C. Constable email to Mills Whipp Projects, 21st January 2016).
- 1.3 The evaluation consisted of the excavation of 3 test pits of 2.5m x 2.5m in order to expose the sequence of deposits and one larger 8m x 8m trench in order to allow a more detailed investigation. It was proposed that these test pits would provide a north-south cross section of deposits across the site.
- 1.4 An Archaeological Watching brief on a geotechnical test pit had previously been carried out by Pre-Construct Archaeology Ltd. and reported on separately (Grosso, 2015). Although the results of that investigation are discussed herein, that report should be read in conjunction with the findings from these works to provide the complete picture of the archaeological evaluation.
- 1.5 The evaluation revealed a sequence of natural deposits overlain by what is believed to be the former marshland relating to the time of the Bishop of Winchester's Park. Into this marshland a 17th century ditch was cut that is likely to have served as some form of boundary marker. These deposits were sealed by a series of post-medieval made ground layers.
- 1.6 In addition, it was possible to positively identify the top of the former graveyard that related to the workhouse. A number of grave cuts, decayed coffin remains and partial remains of a neonatal burial were identified, recorded and left *in situ*.
- 1.7 No archaeological features relating to the prehistoric, Roman, Saxon or Medieval periods were found.
- 1.8 Upon completion of the project the completed archive will be deposited with the London Archaeological Archive and Research Centre (LAARC) using the unique site code SBR16.

2. INTRODUCTION

- 2.1 Pre-Construct Archaeology Ltd. was commissioned by Mills Whipp Projects, on behalf of Hadston Southwark Limited, to conduct an archaeological evaluation on land at Former Southwark Fire Station, 94 Southwark Bridge Road, London, SE1 0EG in the London Borough of Southwark.
- 2.2 The archaeological evaluation was commissioned in order to provide The London Borough of Southwark with the relevant archaeological information for the study site in order for them to be able to determine this aspect of a future planning application to redevelop parts of the site. A written scheme of investigation for the evaluation of the site was prepared by Mills Whipp Projects and approved by the London Borough of Southwark (Dr C. Constable email to Mills Whipp Projects, 21st January 2016).
- 2.3 The study site is centred on National Grid Reference TQ 3210 7988 and occupies an area of approximately 8688m². It is currently occupied by the Former Fire Station's buildings, yards and Drill Towers and is bounded to the north by Copperfield Street, to the west and south by Sawyer Street and to the east by Southwark Bridge Road.
- 2.4 The proposed development comprises of the part demolition of buildings on site whilst retaining buildings of special architectural and historic significance, development of a new secondary school and sixth form college, provision of a new series of buildings delivering c. 180 new residential units, provision of new commercial or leisure space and the creation of a new central landscaped courtyard and outside space.
- 2.5 The study site lies adjacent to an Archaeological Priority Zone (APZ) as defined by the London Borough of Southwark.
- 2.6 The archaeological evaluation of the site comprised of a watching brief on a 2m x 2m geotechnical test pit, the excavation of 3no. 2.5m x 2.5m test pits and a larger 8m x 8m trench. Three of the test pits and the larger trench were arranged in a broadly north-south alignment in order to give a north-south cross section across the study area. One test pit was located in the car park to the east of Winchester House with the specific purpose of determining whether the proposed landscaping in that area would impact on the top of the former workhouse graveyard.
- 2.7 The watching brief on the geotechnical test pit (TP1) was conducted in November 2015 and has been reported on separately (Grosso, 2015), although the results are assessed within this report.
- 2.8 The works were carried out between 2nd February and 12th February 2016. They were supervised by the author and project managed by Tim Bradley, both of Pre-Construct Archaeology Ltd.
- 2.9 Upon completion of the project the archive together with all associated materials will be deposited with the London Archaeological Archive and Research Centre (LAARC) using the unique site code SBR16.

3. TOPOGRAPHY AND GEOLOGY

- 3.1 The subject site is located on the western side of Southwark Bridge Road approximately 630m south of the River Thames. This section of Southwark Bridge Road lies at approximately 4.2m OD while the site generally lies at 3.80m OD.
- 3.2 Pleistocene drift geology in north Southwark consists of Kempton Park Gravel, capped in places with a layer of brickearth varying in thickness of between about 1m and 3m. These deeply buried deposits represent the base of the archaeological sequence. They form a series of low-lying islands (eyots) that stretch along the ancient inter-tidal zone defining the southern bank of the Thames. The surface of the islands lay at elevations of around 0.5m and 1.5m. They were separated by tidal channels filled with alluvium which produced mud flats at low tide.
- 3.3 Research indicates that the study site lies on the southern edge of the 'Borough Channel', an alluvial filled watercourse that separates one of the main gravel islands on its northern side from the mainland to the south. In the Roman period this island was occupied by the Roman town of Londinium's southern suburb.
- 3.4 In 2006 an evaluation at 122-144 Southwark Bridge Road, approximately 120m south of the study site, recorded natural sand and gravel between 1.58m OD and 1.97m OD which is likely to represent the typical elevation of the gravel forming the mainland to the south of the Borough Channel. In the general vicinity of the site, however, Ordnance Datum heights of the natural gravels produce a complex picture of differing levels, although most lie between 0.5m and 2.0m OD.
- 3.5 The watching brief conducted by PCA on a geotechnical test pit at the northern end of the study site (TP1) did not record any identifiable channel alluvium, giving rise to the possibility that the Borough Channel lies to the north of the site (Grosso, 2015). The evaluation test pits confirmed this, with no channel alluvium evident in any of the investigations. Natural gravel was recorded at 1.55m OD in TP2, 1.38m OD in TP3 and 1.60m OD in TP4.

4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The following archaeological and historical background has been drawn from the Written Scheme of Investigation (Mills Whipp Projects, 2016).

4.1 Prehistoric

4.1.1 Prehistoric pottery and flint finds have been recovered from North Southwark indicating occupation of the inter-tidal zone from the Mesolithic onwards. This area would have provided good hunting and fishing and the islands are likely to have attracted early seasonal settlement.

4.1.2 A more permanent settlement may have been established in the Bronze Age at Fennings Wharf by London Bridge where a ring barrow and associated cremations were uncovered. Although a scatter of Iron Age burials have been recorded in this area, indicating that occupation continued into the Roman period, no significant settlement sites have yet been discovered. These limited finds are insufficient to form any broad landuse pattern but indicate the presence of prehistoric peoples at various periods in this area, although there is no evidence for settlement or land use in the immediate proximity of the study site.

4.2 Roman

4.2.1 Soon after the invasion of AD 43 the Romans established Londinium on a low gravel hill (Cornhill) on the north bank overlooking the River Thames. In the mid-1st century, a suburb to the Roman town developed on the southern side of the river located on an island (eyot) north of the study site. It was established along Watling Street, being the main Roman road south and being the antecedent to Borough High Street and Old Kent Road. Archaeological evidence suggests that the settlement was mainly, with the exception of Roman cemeteries, confined to the eyot. The study site, however, lies approximately 200m southwest of the Roman suburb's core.

4.2.2 Various Roman deposits have been recorded in the area of the study site, south of the Roman suburb. At 54 Southwark Bridge Road, approximately 120m north of the site, a Roman dumped layer was recorded while at Ewer Street, to the north of the study site, Roman ditches were recorded. Another Roman ditch, thought to be a field boundary, was recorded at 137 Great Suffolk Street approximately 230m southeast of the study site and Roman plough soil was recorded at Lant Street. This pattern of land use suggests that the study site occupied an area of agricultural land to the south of the settlement.

4.3 Saxon

4.3.1 There is no archaeological evidence for early Saxon land use in the vicinity of the study site. By the 9th century, however, the Southwark bridgehead may have become a Saxon 'burh' or fortified town in response to the Viking attacks from the Thames. It may have been defended by a ditch, part of which may have been recorded during excavations at Montague Close in

the vicinity of Southwark Cathedral which lies approximately 700m north-east of the study site. If this were the case then the study site lay well south of the defended town which, again, centred on the northern section of Borough High Street. No significant Saxon finds have been reported in the vicinity of the study site.

4.4 Medieval

- 4.4.1 The study site lay within part of the Bishop of Winchester's estate in Southwark, a stretch of land lying between Paris Garden and the church of St Mary Overie within the parish of St Saviour. It was bounded to the north by the river and to the south by the parish of St George's. The estate was granted to the Bishops of Winchester by Bermondsey Abbey in the 12th century. Apart from some building along the river frontage at Bankside, the estate was mostly waterlogged open meadowland known as the Bishop of Winchester's Park. The study site lay at the southern end of 'The Park'.
- 4.4.2 By a gradual process of leasing out plots through the 16th and 17th centuries the estate was developed for housing. However, no significant medieval finds have been made in the proximity of the study site.

4.5 Post-Medieval

- 4.5.1 Rocque's map of 1746 shows that the site is still predominantly occupied by open ground and may well have been used as a tenter ground. By 1774, however, a workhouse and an associated burial ground to the east of it was under construction on the study site. The burial ground did not extend beyond the northern edge of the workhouse where a gap is shown between it and a row of houses.
- 4.5.2 The original workhouse was composed of an eastern, northern and a western block. The western block terminates in wings and had a smaller, independent block placed at either end. Both the northern block and western block are built from stock brick to three storeys with a basement level and are still in evidence in the central area of the site.
- 4.5.3 The workhouse ceased to exist in 1808 and in 1820 it was converted into a hat factory. At this point various alterations and additions were made to the workhouse buildings. Two Georgian houses were built facing Southwark Bridge Road which occupy the eastern block of the workhouse which later became Winchester House.
- 4.5.4 In 1875 the Metropolitan Board of Works purchased the site as a headquarters and training school for the new Metropolitan Fire Brigade which had been established in 1865. A headquarters building was also constructed in front of Winchester House fronting onto Southwark Bridge Road with its northern edge stretching across the north-eastern part of the site. The red brick Engine House Block was built at its southern end and it was during this same period that the Cottage Block was added. The headquarters building was demolished in 1969 after suffering severe bomb damage during WWII.
- 4.5.5 The other buildings on the site survived including the 18th and 19th century buildings to include

Winchester House and the north and west blocks. The Ordnance Survey map of 1952 provides an indication of the degree of survival on the site prior to the demolition of the building in front of Winchester House. It suggests the small buildings in the southwest corner of the site had been demolished to make way for the Main Block. The demolition of the Victorian building in front of Winchester House is shown to have included the northern range as well as shown on the Ordnance Survey map of 1967-72. This area is now open ground with only the Training Tower 4 and the Firehouse Services building in evidence. In the late 20th century the Main Block was added at the southern end of the site while on the western edge, the earlier buildings were replaced by the Firehouse in 1997.

5. RESEARCH AIMS

5.1 The archaeological evaluation seeks to address the following research objectives:

- What has been the effect upon the site of past construction activity?
- What has been the effect upon the site of WWII bomb damage?
- Are there any buried remains relating to the workhouse?
- Do the marshland deposits relating to the Bishop of Winchester's park survive and, if so, what archaeological evidence do they contain, if any?
- Can the site be shown to have been unoccupied during the Saxon and Medieval periods?
- Is there any evidence for the Roman Borough Channel and associated revetments?
- Is there any evidence for Roman land use on the southern side of the Borough Channel?
- Is there any evidence for prehistoric activity on the site?
- What is the general topography of the site and how does it relate to the present deposit models for north Southwark?

6. EVALUATION METHODOLOGY

- 6.1 The first phase of archaeological evaluation comprised of a watching brief on a geotechnical test pit (TP1) that was conducted in November 2015 and has previously been reported on (Grosso, 2015). This phase of the work comprised of the excavation of four additional test pits.
- 6.2 Three of the test pits were located in the central courtyard. Of these, two (TP2 & TP4) had dimensions of 2.5m x 2.5m and were excavated to the depth of the natural deposits – these were recorded from ground level. One test pit (TP3) was larger in size to allow a more detailed hand investigation and had dimensions of 8m x 8m; this was stepped appropriately in order to allow safe access.
- 6.3 The final test pit (TP5) was located in the car park to the east of Winchester House. It had dimensions of 2.5m x 2.5m and was excavated for the primary purpose of identifying the highest level of the workhouse burial ground.
- 6.4 The scope of the evaluation had been agreed following consultation between Mills Whipp Projects and the Archaeology Officer at Southwark Council. All works were carried out in accordance with the approved Written Scheme of Investigation and in accordance with the GLAAS Archaeological Guidance Papers: Archaeological Guidance Paper 3: Standards and Practices in Archaeological Fieldwork in London, Archaeological Guidance Paper 4: Archaeological Reports, Archaeological Guidance Paper 5: Evaluations.
- 6.5 Test Pits 2 & 4 were located to the north and south of the central courtyard area respectively and were carefully machine excavated to the top of the undisturbed natural horizon under constant archaeological supervision.
- 6.6 Test Pit 5 was located at the northern end of the car park, immediately to the east of Winchester House. Owing to the presence of a high voltage cable that could not be identified positively as live or dead the decision was taken to hand dig this test pit. This was undertaken under constant archaeological supervision to an approximate depth of 1.20m BGL. The test pit was then recorded from a base line that was located by GPS.
- 6.7 Test Pit 3 was larger in size in order to allow a more detailed investigation of the deposits present. It was 8m x 8m and was stepped twice to expose the undisturbed natural horizon while at the same time allowing safe entry for cleaning and recording purposes. The base and all faces of the trench were cleaned using appropriate hand tools with cleaning, examination and recording being carried out both in plan and in section.
- 6.8 Human remains were encountered in Test Pit 5. In accordance with the Written Scheme of Investigation these were cleaned only sufficiently to make identification clear. They were then recorded *in situ* and left undisturbed. On completion of the investigation of the test pit, the human remains were covered with polythene for protection. Finally, the base of the test pit was covered with a thin layer (approx. 50mm thick) of sharp sand in order to make re-identification of the burial horizon easier when landscaping eventually takes place.

- 6.9 Individual descriptions of archaeological deposits and features were recorded on pro-forma recording sheets. Plans were drawn on polyester based drawing film from base lines located by means of GPS at a scale of 1:20. Relevant sections were drawn on polyester based drawing film at a scale of 1:10. A full digital photographic record of the works was prepared. Temporary benchmarks were inserted by GPS.
- 6.10 Upon completion of the archaeological investigation all test pits were backfilled.
- 6.11 Upon completion of the project the archive and all associated material will be deposited with the London Archaeological Archive and Research Centre (LAARC) using the unique site code SBR16.

7. THE ARCHAEOLOGICAL SEQUENCE

7.1 Test Pit 2



Plate 1: East Facing Section of TP2

- 7.1.1 The earliest deposit encountered in TP2 was natural sandy gravel [12] comprising of compact to loose yellow brown to mid light grey sand and gravels. Visible across the entire test pit, this natural sandy gravel was recorded at a height of 1.55m OD.
- 7.1.2 Cut into the natural [12] was a linear feature [13], running across the test pit broadly in a north-east to south-west direction which had gently sloping sides and a concave base. This feature was 0.60m wide x 0.15m deep and was recorded at a height of 1.46m OD. This feature is most likely to be a field boundary ditch of an indeterminate date. The fact that it is directly cut into the natural and sealed with alluvium may suggest an early date but in the absence of datable material this must remain conjecture.
- 7.1.3 Sealing cut feature [13] and the natural [12] was a layer [11] of loose light to mid grey sandy alluvial gravel. Visible across the entire test pit, this layer had a thickness of between 0.20m and 0.38m and was recorded at heights of between 1.66m and 1.71m OD. No dating evidence was recovered from this layer.
- 7.1.4 Sealing layer [11] across the entire test pit was deposit [10] of soft, dark grey silty sand with frequent inclusions of oyster shell and occasional inclusions of charcoal fragments, clay tobacco pipe (CTP), glass and ceramic building material (CBM). There was also evidence of root action. It had a thickness of 0.80m and was recorded at a height of 2.46m OD. This layer is most likely to represent the former marshland/meadowland horizon of the Bishop of Winchester's Park.

- 7.1.5 Sealing layer [10] was a layer [9] of 18th – 19th century made ground comprising of light grey sandy silt. It contained a high proportion of demolition rubble, animal bone, glass and CTP. The CTP collected has been attributed a date of 1680-1710 although it is quite possible that this material was brought in from elsewhere. It had a thickness of between 0.50m and 0.78m and was recorded at heights of between 2.96m and 3.24m OD.
- 7.1.6 Sealing layer [9] was a further layer [8] of made ground comprising of dark grey to lighter black silty clayey sand with occasional inclusions of crushed brick, slag, glass, animal bone and CTP. It had a thickness of between 0.27m and 0.55m and was recorded at a height of 3.51m OD. It is likely that this made ground was deposited as a formation layer for the workhouse courtyard.

7.2 Test Pit 3



Plate 2: Overhead View of TP3 Showing Exposed Natural in the Base

- 7.2.1 The earliest deposit encountered in TP3 was [62], comprising of firm light yellow brown sandy clay and gravel recorded at a height of 1.38m OD. Prior to backfilling of TP3 a machine cut sondage was excavated which revealed this layer to be approximately 0.50m thick with the natural horizon then graduating to a more clayey sand matrix.
- 7.2.2 Cut into the natural [62] were the ephemeral remains of three probable post holes. The first of these [64] extended into the east facing section of the trench. It was circular in plan with vertical sides and a flat base. It had dimensions of 0.22m (N-S) x 0.10m (E-W) x 0.05m deep and was filled by [63], a firm mid grey silty clay and recorded at a height of 1.43m OD.

- 7.2.3 Also cut into the natural [62] was post hole [66] that also extended into the east facing section of the trench. It was circular in plan with very steeply sloping sides and a flat base. It had dimensions of 0.30m (N-S) x 0.16m (E-W) x 0.05m deep and was filled by firm mid grey silty clay and was recorded at a height of 1.43m OD.
- 7.2.4 The third post hole [68] was also cut directly into the natural [62]. It was circular in plan with very steeply sloping sides and a flat base with a diameter of 0.20m and a depth of 0.05m. It was filled with [67], a firm mid grey silty clay and seen at a height of 1.44m OD.
- 7.2.5 These post holes were shallow and no datable material was retrieved from the fills. They were all sealed by the fill of a 17th century ditch (see below) suggesting that they should be attributed to an earlier date. Whether this be to the period of the Bishop of Winchester's Park or earlier is not possible to determine, but their dimensions suggest they would have formed part of a relatively light-weight structure.
- 7.2.6 Sealing the post holes was a layer [60] of firm dark reddish brown silty clay with occasional small pebbles. It had a thickness of 0.58m and was recorded at a height of 2.17m OD. Pottery retrieved from this layer had been attributed a date of 1630-1680 and it is believed that this layer represents the former marshland/meadowland of the Bishop of Winchester's Park.
- 7.2.7 Cut into layer [60] was a substantial ditch [58] . It had steeply sloping sides that were concave at the bottom leading to a flat base. It ran in a north-west to south east direction across the trench and appeared to form a 'T' junction in the most north-west corner. It was approximately 3.0m wide and was 0.74m deep.



Plate 3: Showing Ditch Cut [58] in the West Facing Section

- 7.2.8 The base of the ditch [58] was filled with an alluvial deposit [61] comprising of firm blue grey silty clay. It had a thickness of 0.26m and was recorded at a height of 1.76m OD.

- 7.2.9 Alluvial deposit [61] was sealed by a fill [59] of firm dark grey black organic silty clay with occasional inclusions of oyster shell, CBM flecks, small rounded pebbles and CTP fragments. Where seen it had a thickness of 0.13m and was recorded at a height of 2.20m OD. This fill is likely to represent an early silting up of the ditch [58].
- 7.2.10 Sealing [59] was a fill [57] of firm brown black organic silty clay with occasional inclusions of CTP fragments, CBM fragments, animal bone and rounded pebbles. It ran across the entire width of the ditch, was 0.50m thick and was recorded at a height of 2.16m OD. Pottery collected from this fill has been attributed to a date of 1680-1700.
- 7.2.11 The upper fill [56] of ditch [58] comprised of firm brown black organic clayey silt with occasional inclusions of oyster shells pebbles and CBM. As exposed, it ran for 4.15m in a north-south direction and was 0.25m thick and was recorded at a height of 2.48m OD.
- 7.2.12 Sealing the above was a dump layer [55] of loose to moderate light grey mortar with frequent inclusions of brick and tile. It ran for an exposed length of 4.14m in a north – south direction, was between 0.18m and 0.25m thick and was recorded at a height of 2.61m OD.
- 7.2.13 Sealing layer [55] was a dump layer [54] of loose to moderate mid grey ash and glass slag. Recorded in section, it ran for 4.15m in a north – south direction, was 0.13m thick and was seen at a height of 2.75m OD.
- 7.2.14 Sealing layer [55] was a layer [51] of made ground comprising of loose to moderate dark grey brown sandy silty clay with frequent inclusions of mortar fragments and CBM fragments. Seen in section, it ran for 4.56m in a north – south direction, was 0.25m thick and was seen at a height of 2.98m OD.
- 7.2.15 Visible in the northern part of the section, also sealing layer [51] was a layer [53] of moderately compact mid – dark grey brown sandy silt with frequent inclusions of chalk fragments with lenses of yellow clay. It had dimensions of 0.86m (N-S) x 0.22m thick and was seen at a height of 3.20m OD.
- 7.2.16 Visible in section towards the north of the trench and sealing layer [53] was a slightly 'cessy' layer [52] comprising of moderately compact dark black grey fine sandy silt which ran for 0.86m north – south, was 0.10m thick and was seen at a height of 3.28m OD.
- 7.2.17 Towards the southern end of the trench, and likely to be the same as [53], was a layer of made ground [50] comprising of firm dark grey brown sandy silty clay with frequent inclusions of CBM fragments and mortar. It had dimensions of 2.37m (N-S) x 0.10 – 0.78m thick and was seen at a height of 3.04m OD.
- 7.2.18 Sealing layer [50] were a series of made ground layers. Layer [49] comprised of moderately compact dark grey brown sandy silty clay with dimensions of 0.76m (N-S) x 0.10m deep and was seen at a height of 3.21m OD.

- 7.2.19 This layer [49] and layer [50] were sealed by a layers [47] & [48] of made ground and are considered to be the same. They comprise of moderately compact dark grey brown sandy silty clay with frequent inclusions of mortar and moderate inclusions of CBM. They had thicknesses of between 0.34m and 0.39m and were seen at heights of between 3.44m and 3.50m OD.
- 7.2.20 Sealing the 'cessy' layer [52] was a layer of made ground [34] comprising of moderately compact dark grey brown fine sandy silty clay with moderate inclusions of tile fragments and flecks of mortar. It had a thickness of 0.32m and was seen at a height of 3.60m OD.
- 7.2.21 Sealing layers [47] & [48] (separated by a modern drain) was a possible gravel surface [44] & [45] comprising of moderately firm mid reddish yellow brown sandy gravels which had a thickness of 0.05m and was seen at heights of between 3.43m and 3.54m OD.
- 7.2.22 Sealing gravel surface [44] & [45] was a layer of made ground [19] & [46] comprising of moderately compact dark grey brown fine sandy silty clay with frequent inclusions of CBM and mortar. It had a thickness of between 0.05m and 0.13m and was seen at a height of 3.60m OD.
- 7.2.23 Cut through [19] and [46] was a construction cut [24] for a brick culvert. Seen only in section, the cut was linear in form with vertical sides with a sharp break at the bottom leading to a flat base. As seen in section, it had dimensions of 0.90m (N-S) and was 0.65m deep and was seen at a height of 3.60m OD.
- 7.2.24 The culvert itself [23] is likely to have related to drainage for the workhouse buildings. As seen in section, it had dimensions of 0.78m (N-S) x 0.38m height and was recorded at a height of 3.44m OD. It was constructed of red brick (dimensions 222mm x 65mm x 100mm) and bonded together with light grey mortar with roof tiles being used for the base. Brick and mortar samples taken from this structure have been attributed a date of 1750-1900.
- 7.2.25 The construction cut was backfilled with [22] a moderately compact dark grey brown sandy silty clay to a thickness of 0.65m and was recorded at a height of 3.60m OD.
- 7.2.26 The entire trench was sealed to the surface by layers of concrete and tarmac.



Plate 4: East Facing Section Showing Stratigraphic Sequence.

7.3 Test Pit 4

- 7.3.1 The earliest deposit encountered in TP 4 was natural yellowish brown to mid light grey sandy gravel [18] that was recorded at a height of between 1.69m and 1.72m OD.
- 7.3.2 Sealing the natural [18] was a thin gravel deposit [17] comprising of loose light to mid grey sandy gravel. Visible across the entire test pit, it had a thickness of 0.20m and was seen at a height of 1.89m OD.
- 7.3.3 Sealing gravel deposit [17] was a layer [16] of firm dark reddish brown silty clay with occasional inclusions of oyster shell, crushed CBM, animal bone and small pebbles. It had a thickness of 0.95m and was seen at a height of 2.86m OD. It is believed that this layer represents the former marshland/meadowland of the Bishop of Winchester's Park.
- 7.3.4 Sealing layer [16] was a layer [15] of post-medieval made ground comprising of loose light grey to light brown sandy silt with frequent inclusions of demolition rubble. Seen across the entire test pit, it had a thickness of 0.40m and was recorded at a height of 3.24m OD.
- 7.3.5 Sealing layer [15] was a further layer [14] of later post-medieval made ground comprising of soft to loose dark grey to lighter black silty clayey sand with occasional inclusions of CBM, glass, CTP and animal bone. Seen across the entire test pit, it had a thickness of 0.25m and was seen at a height of 3.46m OD.
- 7.3.6 The entire test pit was sealed to ground level by a layer of concrete followed by a layer of tarmac.

7.4 Test Pit 5



Plate 5: Test Pit 5 General View Looking North

- 7.4.1 The earliest deposit encountered in TP5 was a layer [25] that is considered to be the cemetery soil of the workhouse graveyard. It comprised of stiff to loose mid grey to dark brown sandy silt with moderate inclusions of glass, CTP, CBM, shell and disarticulated human bone. It had dimensions of 1m (N-S) x 2.10m (E-W) and was recorded at heights of between 2.54m and 2.68m OD. It should be noted that the southern part of the trench was truncated by a modern intrusion.
- 7.4.2 Cut into this graveyard horizon [25] were a number of definite and probable graves (see Fig 4). Grave cut [27] was rectilinear in nature and filled with [26], a loose mid grey silty sand with inclusions of glass, pot, and CBM. A copper alloy ring [Δ1] was also retrieved from the top of this deposit. The grave cut as seen had dimensions of 1.50m (N-S) x 0.20m (E-W) and was recorded at a height of 2.68m OD.
- 7.4.3 Grave cut [29] was rectilinear in nature and was filled with [28], a loose mid to dark greyish sandy silt with occasional inclusions of glass, pot, CTP, CBM and disarticulated human bone. It had dimensions of 0.45m (N-S) x 0.80m (E-W) and was recorded at a height of 2.64m OD. A small sondage of 200mm deep was excavated into what was considered to be the 'head end' of the grave in order to test the depth at which human remains might be encountered. This exercise, however, did not reveal any human remains at this depth.
- 7.4.4 Cleaning of the Test Pit also exposed the partial remains of a neonatal burial recorded as grave [33]. There was also some evidence of coffin staining [32] around the outside of cut [33]. The grave was filled with [30], a loose mid brown silty sand. This grave had dimensions of 0.25m (N-S) x 0.15m (E-W) and was recorded at a height of 2.52m OD.



Plate 6: Neonatal burial [31] – View North

- 7.4.5 Grave cut [37] was rectilinear in shape and also showed evidence of coffin staining [36] around the outside of the cut. This grave was not excavated but was filled with [35], a loose mid grey to dark greyish black silty sand. It ran into the section on the northern side of the test pit and as exposed it had dimensions of 0.65m (N-S) x 0.85m (E-W) and was recorded at a height of 2.55m OD.
- 7.4.6 Extending from the western section of the test pit was the foot end of grave cut [39], that was filled with loose mid grey silty sand with occasional inclusions of pot and glass. The exposed section of this grave cut had dimensions of 0.45m (N-S) x 0.20m (E-W) and was seen at height of 2.56m OD.
- 7.4.7 Extending from the northern section of the test pit was grave cut [42] that also had evidence of coffin staining [41] around the outside of the cut. It was filled with [40], a very loose light brownish to light greyish sandy silt. It had exposed dimensions of 0.20m (N-S) x 0.80m (E-W) and was recorded at height of 2.56m OD.
- 7.4.8 All the grave cuts were sealed by a layer [21] comprising of moderately firm dark grey to slightly lighter greyish black silty sand. It had dimensions of 0.70m (N-S) x 2.5m (E-W) x 0.25m deep and was recorded at a height of between 2.80m and 3.08m OD. Whilst disarticulated human remains were present within this deposit, no grave cuts were identified and it is likely that it represents some form of landscaping carried out after the graveyard went out of use.
- 7.4.9 Layer [21] was sealed by a layer [20], a moderately firm dark grey to mid black sandy silt with frequent inclusions of post-medieval CBM and CTP. This layer had a thickness of 0.50m and was recorded at a height of between 2.80m and 3.31m OD. It is likely that this layer also represents some form of landscaping carried out post closure of the graveyard.
- 7.4.10 The entire test pit was sealed by a concrete slab with cobbles laid on top.

8. DISCUSSION AND CONCLUSIONS

8.1 Research Aims

8.1.1 *What has been the effect upon the site of past construction activity?*

Apart from a brick built culvert [23] in TP3, the evaluation was able to confirm that prior to the construction of the workhouse in 1774 the area within the drill yards was relatively undeveloped with limited previous construction impact.

8.1.2 *What has been the effect upon the site of WWII bomb damage?*

The evaluation revealed no obvious evidence to suggest WWII bomb damage.

8.1.3 *Are there any buried remains relating to the workhouse?*

TP 5 was able to successfully identify the top of the workhouse graveyard at 2.68m OD, i.e. about 1.20m below ground level. A total of six graves were positively identified. Cleaning of the base of the test pit resulted in the partial remains of a neonatal burial being exposed. These remains were recorded and photographed and left *in situ*. Three of the graves (including the neonatal burial) had clear evidence of decayed coffin remains *in situ*. The highest level on an identifiable grave was 2.68m OD.

8.1.4 *Do the marshland deposits relating to the Bishop of Winchester's Park survive – what archaeological evidence do they contain, if any?*

Test Pits 2, 3 and 4 all revealed probable evidence for deposits likely to relate to the Bishop of Winchester's Park surviving directly above the natural horizon. Material collected from these deposits has been attributed dates relating to the early-mid 17th century which perhaps suggests the period at which increased activity commenced within the landscape. A substantial ditch was recorded within TP3 that is likely to have formed a boundary of some kind that has also been attributed a 17th century date.

8.1.5 *Can the site be shown to have been unoccupied during the Saxon and Medieval periods?*

No archaeological deposits or features relating to the Saxon or Medieval periods were found during the evaluation, leading to the conclusion that the site remained unoccupied during these periods.

8.1.6 *Is there any evidence for the Roman Borough Channel and associated revetments?*

No archaeological deposits that could be attributed to the Roman Borough Channel were identified during the evaluation. The evidence suggests, when looked at in conjunction with the findings of TP1, that the natural deposits slope from south to north with a drop of approximately 0.44m between TP4 and TP1. It is considered most likely that the Roman Borough Channel lies to the north of the study site.

8.1.7 *Is there any evidence for Roman land use on the southern side of the Borough Channel?*

No archaeological features or deposits that can be attributed to the Roman period were found during the evaluation.

8.1.8 *Is there any evidence for prehistoric activity on the site?*

The field boundary ditch in TP2 is sealed by the former marshland so is likely to be earlier than the 17th century. The post holes found in TP3 were truncated by the 17th century ditch running across the trench so would also be earlier than this date. It is not possible, however, to attribute any of these features to the prehistoric period due to the absence of datable finds. They are equally likely to be associated with early activity relating to the Bishop of Winchester's Park. However, given their shallow depth (50mm), as post holes they would need to relate to a land surface at least 200mm higher up the sequence in order to have any structural integrity so the post holes are likely to be medieval or later.

8.1.9 *What is the general topography of the site – how does it relate to the present deposit models for north Southwark?*

Within the southernmost test pit (TP4) the natural deposits were identified at a height of 1.72m OD while in the most northern test pit (TP1) it they were recorded at a height of approximately 1.28m OD. When looked at in conjunction with the other test pits a model of the natural deposits sloping gently from south to north is developed. These levels for the natural deposits are in keeping with previously known levels for the area (Mills Whipp, 2016).

8.2 **Conclusions**

8.2.1 The objective of the archaeological evaluation was twofold. Firstly, to provide insight into the nature of the buried topography and archaeological survival through the excavation of a series of test pits creating a north-south transect across the study site. Secondly, to attempt to provide information as to upper level of survival of burials associated with the workhouse graveyard.

8.2.2 It can be concluded that the study site remained as undeveloped land up until the time of the construction of the workhouse in 1776. Archaeological evidence preceding this date appears to relate solely to possible landscape features (ditches) associated with the Bishop of Winchester's Park.

8.2.3 With respect to the graveyard, the highest recorded level that is associated with burials (the upper level of a grave cut) is 2.68m OD, whilst the highest level of articulated human remains was 2.52m OD (the neonatal burial). The proposed deepest impact level for the landscaping in this area is understood to be 2.65m OD (Mills Whipp, 2016). It can therefore be concluded that at their deepest point there is a possibility that the landscaping groundworks may have an impact on *in situ* burials in the graveyard.

9. ACKNOWLEDGEMENTS

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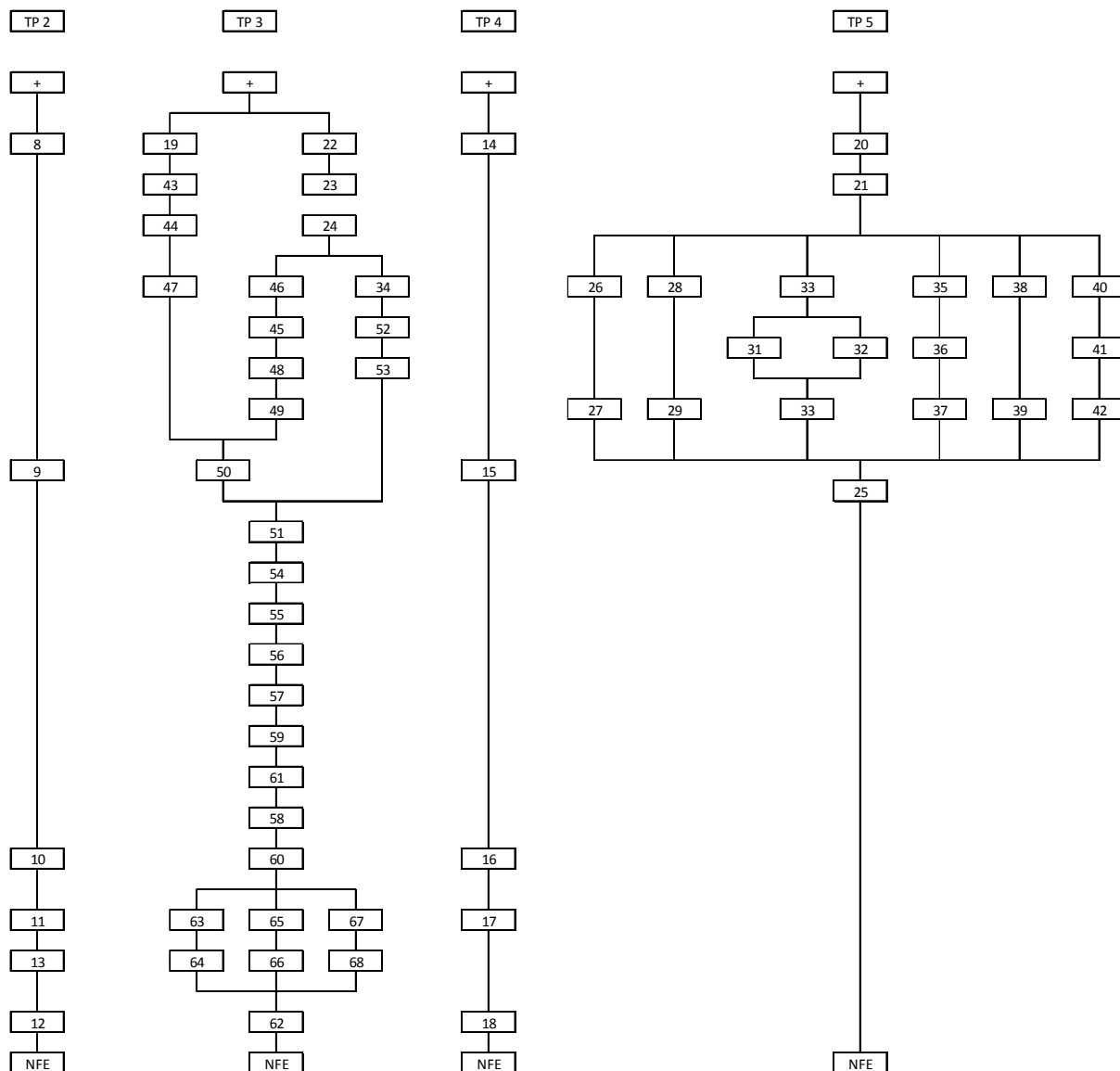
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APPENDIX 1: CONTEXT INDEX

| Site Code | Context No. | Test Pit No. | Plan | Section | Type | Highest Level | Lowest Level | Description |
|-----------|-------------|--------------|------|------------|----------|---------------|--------------|-------------------------------------|
| SBR 16 | 8 | TP 2 | | S. 2 | Layer | 3.51 | | Made Ground |
| SBR 16 | 9 | TP 2 | | S. 2 | Layer | 3.54 | 2.96 | Made Ground |
| SBR 16 | 10 | TP 2 | | S. 2 | Layer | 2.46 | 2.46 | Agricultural Horizon |
| SBR 16 | 11 | TP 2 | | S. 2 | Layer | 1.71 | 2.66 | Alluvial Deposit |
| SBR 16 | 12 | TP 2 | | S. 2 | Layer | 1.46 | 1.33 | Natural |
| SBR 16 | 13 | TP 2 | | S. 2 | Cut | 1.46 | | Field Boundary Ditch |
| SBR 16 | 14 | TP 4 | | S. 3 | Layer | 3.46 | 3.46 | Made Ground |
| SBR 16 | 15 | TP 4 | | S. 3 | Layer | 3.24 | 3.24 | Made Ground |
| SBR 16 | 16 | TP 4 | | S. 3 | Layer | 2.86 | 2.86 | Agricultural Horizon |
| SBR 16 | 17 | TP 4 | | S. 3 | Layer | 1.89 | 1.89 | Alluvial Deposit |
| SBR 16 | 18 | TP 4 | | S. 3 | Layer | 1.72 | 1.69 | Natural |
| SBR 16 | 19 | TP 3 | | S. 6 | Layer | 3.60 | | Dump Layer |
| SBR 16 | 20 | TP 5 | | S. 4 | Layer | 3.31 | 3.26 | 19th C Landscape Layer |
| SBR 16 | 21 | TP 5 | | S. 4 | Layer | 3.04 | 3.04 | Layer Sealing Graveyard |
| SBR 16 | 22 | TP 3 | | S. 6 | Fill | 3.60 | | Fill of [24] |
| SBR 16 | 23 | TP 3 | | S. 6 | Masonry | 3.44 | | Brick Culvert |
| SBR 16 | 24 | TP 3 | | S. 6 | Cut | 3.60 | | Construction Cut for [23] |
| SBR 16 | 25 | TP 5 | TP 5 | | Layer | 2.63 | 2.54 | Graveyard Horizon |
| SBR 16 | 26 | TP 5 | TP 5 | | Fill | 2.68 | 2.68 | Fill of [27] |
| SBR 16 | 27 | TP 5 | TP 5 | | Cut | 2.68 | | Probable Grave Cut |
| SBR 16 | 28 | TP 5 | TP 5 | S. 4 | Fill | 2.64 | 2.37 | Fill of [29] |
| SBR 16 | 29 | TP 5 | TP 5 | S. 4 | Cut | 2.34 | | Probable Grave Cut |
| SBR 16 | 30 | TP 5 | TP 5 | | Fill | 2.52 | 2.52 | Fill of [33] |
| SBR 16 | 31 | TP 5 | TP 5 | | Skeleton | 2.52 | 2.52 | Neonatal Burial |
| SBR 16 | 32 | TP 5 | TP 5 | | Coffin | 2.52 | 2.52 | Coffin Staining |
| SBR 16 | 33 | TP 5 | TP 5 | | Cut | 2.52 | | Grave Cut |
| SBR 16 | 34 | TP 3 | | S. 6 | Layer | 3.60 | | Dump/Levelling Layer |
| SBR 16 | 35 | TP 5 | TP 5 | | Fill | 2.55 | 2.55 | Fill of [37] |
| SBR 16 | 36 | TP 5 | TP 5 | | Coffin | 2.55 | 2.55 | Coffin Remains |
| SBR 16 | 37 | TP 5 | TP 5 | | Cut | 2.55 | | Grave Cut |
| SBR 16 | 38 | TP 5 | TP 5 | | Fill | 2.56 | 2.56 | Fill of [39] |
| SBR 16 | 39 | TP 5 | TP 5 | | Cut | 2.56 | | Probable Grave Cut |
| SBR 16 | 40 | TP 5 | TP 5 | | Fill | 2.56 | 2.56 | Fill of [42] |
| SBR 16 | 41 | TP 5 | TP 5 | | Coffin | 2.56 | 2.56 | Coffin Staining |
| SBR 16 | 42 | TP 5 | TP 5 | | Cut | 2.56 | | Grave Cut |
| SBR 16 | 43 | TP 3 | | S. 6 | Layer | 3.53 | 3.47 | Possible Occupation Layer |
| SBR 16 | 44 | TP 3 | | S. 6 | Layer | 3.47 | 3.43 | Gravel Surface |
| SBR 16 | 45 | TP 3 | | S. 6 | Layer | 3.54 | 3.5 | Gravel Surface |
| SBR 16 | 46 | TP 3 | | S.6 | Layer | 3.60 | | Dump/Levelling Layer (Same as [19]) |
| SBR 16 | 47 | TP 3 | | S. 6 | Layer | 3.44 | | Dump/Levelling Layer |
| SBR 16 | 48 | TP 3 | | S. 6 | Layer | 3.50 | | Dump/Levelling Layer (Same as [47]) |
| SBR 16 | 49 | TP 3 | | S. 6 | Layer | 3.21 | | Dump/Levelling Layer |
| SBR 16 | 50 | TP 3 | | S. 6 | Layer | 3.04 | | Dump/Levelling Layer |
| SBR 16 | 51 | TP 3 | TP 3 | S. 6 | Layer | 2.98 | | Dump/Levelling Layer |
| SBR 16 | 52 | TP 3 | | S. 6 | Layer | 3.28 | | Possible Night Soil |
| SBR 16 | 53 | TP 3 | | S. 6 | Layer | 3.20 | | Dump Layer of Building Material |
| SBR 16 | 54 | TP 3 | | S. 6 | Layer | 2.75 | | Dump from Glass Foundry |
| SBR 16 | 55 | TP 3 | | S. 6 | Layer | 2.61 | | Dump of Building Material |
| SBR 16 | 56 | TP 3 | | S. 6 | Fill | 2.48 | | Fill of [58] |
| SBR 16 | 57 | TP 3 | TP 3 | S. 5, S. 6 | Fill | 2.16 | | Fill of [58] |
| SBR 16 | 58 | TP 3 | TP 3 | S.5, S. 6 | Cut | 2.17 | | Cut for Ditch |
| SBR 16 | 59 | TP 3 | | S. 6 | Fill | 2.20 | | Lower Fill of [58] |
| SBR 16 | 60 | TP 3 | TP3 | S. 5, S. 6 | Layer | 2.17 | | Agricultural Horizon |
| SBR 16 | 61 | TP3 | | S.5, S. 6 | Fill | 1.76 | | Alluvial Fill of [58] |
| SBR 16 | 62 | TP 3 | TP 3 | S.5, S. 6 | Layer | 1.38 | | Natural |
| SBR 16 | 63 | TP 3 | | S. 6 | Fill | 1.43 | | Fill of [64] |
| SBR 16 | 64 | TP 3 | TP 3 | S. 6 | Cut | 1.43 | | Post Hole |
| SBR 16 | 65 | TP 3 | | S. 6 | Fill | 1.43 | | Fill of [66] |
| SBR 16 | 66 | TP 3 | TP 3 | S. 6 | Cut | 1.43 | | Post Hole |
| SBR 16 | 67 | TP 3 | | | Fill | 1.44 | | Fill of [68] |
| SBR 16 | 68 | TP 3 | TP 3 | | Cut | 1.44 | | Post Hole |

APPENDIX 2: MATRIX



APPENDIX 3: POTTERY

Chris Jarrett

Introduction

The pottery assemblage consists of 54 sherds, representing 49 estimated number of vessels (ENV) and weighing 1.426kg. All of the pottery was stratified except for two sherds, 2 ENV, 34g. The pottery dates exclusively to the post-medieval period except for one unstratified Roman sherd. The condition of the pottery is good and very few sherds show evidence of abrasion. The majority of the assemblage consists of sherd material and only a few vessels have complete profiles and therefore some forms could be recognised. It is most likely that the pottery was subjected to secondary and tertiary deposition processes. The pottery was recovered from ten contexts as small (30 sherds or less) sized groups. The pottery was recorded in detail in a database format and was defined using the Museum of London Archaeology (2014) coding systems. The assemblage is discussed as a spot dating index.

Spot dating Index

Unstratified, Trench TP3

| Pottery type | Code | Date range | SC | ENV | Wt (g) | Forms |
|--|-------|------------|----|-----|--------|-----------|
| Surrey-Hampshire border whiteware with green glaze | BORDG | 1550-1700 | 1 | 1 | 10 | Porringer |
| Unidentified | SAND | 50-400 | 1 | 1 | 24 | |

Context [4], spot date: 1720–1780

| Pottery type | Code | Date range | SC | ENV | Wt (g) | Form |
|--|-------|------------|----|-----|--------|----------------------|
| London stoneware | LONS | 1670-1926 | 1 | 1 | 89 | Saggars |
| White salt-glazed stoneware | SWSG | 1720-1780 | 2 | 2 | 31 | Plate, teapot lid |
| English tin-glazed ware | TGW | 1570-1846 | 1 | 1 | 15 | Charger |
| London tin-glazed ware with plain white glaze (Orton style C) | TGW C | 1630-1846 | 1 | 1 | 30 | |
| London tin-glazed ware with pale blue glaze and dark blue decoration | TGW H | 1680-1800 | 1 | 1 | 8 | Bowl: medium rounded |

Context [5], spot date: 1670–1926

| Pottery type | Code | Date range | SC | ENV | Wt (g) | Forms |
|-----------------------------------|------|------------|----|-----|--------|--------|
| London stoneware | LONS | 1670-1926 | 1 | 1 | 192 | Saggar |
| London-area post-medieval redware | PMR | 1580-1900 | 1 | 1 | 35 | |

Context [15], spot date: 1670–1700

| Pottery type | Code | Date range | SC | ENV | Wt (g) | Forms |
|---|------|------------|----|-----|--------|---------------|
| London stoneware | LONS | 1670-1926 | 1 | 1 | 12 | Jug:, rounded |
| Miscellaneous unsourced post-medieval pottery | MISC | 900-1500 | 1 | | 5 | |
| London-area post-medieval redware | PMR | 1580-1900 | 1 | 1 | 64 | |
| Staffordshire-type combed slipware | STSL | 1660-1870 | 1 | 1 | 7 | Bowl or dish |

Context [25], spot date: 1720–1780

| Pottery type | Code | Date range | SC | ENV | Wt (g) | Forms |
|-----------------------------------|------|------------|----|-----|--------|-------|
| London-area post-medieval redware | PMR | 1580-1900 | 1 | 1 | 182 | |
| White salt-glazed stoneware | SWSG | 1720-1780 | 1 | 1 | 26 | Plate |

Context [26], spot date: 1550–1900

| Pottery type | Code | Date range | SC | ENV | Wt (g) | Form |
|---------------------------------|------|------------|----|-----|--------|--------|
| Surrey-Hampshire border redware | RBOR | 1550-1900 | 1 | 1 | 45 | Pipkin |

Context [26], spot date: 1660–1700

| Pottery type | Code | Date range | SC | ENV | Wt (g) | Form |
|---|---------|------------|----|-----|--------|--------------------|
| Surrey-Hampshire border whiteware with green glaze | BORDG | 1550-1700 | 1 | 1 | 1 | |
| Surrey-Hampshire border whiteware with clear (yellow) glaze | BORDY | 1550-1700 | 1 | 1 | 12 | |
| Chinese blue and white porcelain | CHPO BW | 1590-1900 | 1 | 1 | 1 | Plate |
| London-area post-medieval redware | PMR | 1580-1900 | 1 | 1 | 44 | Jar |
| Surrey-Hampshire border redware | RBOR | 1550-1900 | 2 | 2 | 18 | Bowl: small flared |
| Staffordshire-type combed slipware | STSL | 1660-1870 | 1 | 1 | 4 | |
| London biscuit-fired tin-glazed ware | TGW | 1570-1846 | 2 | 2 | 10 | Porringer |

| Pottery type | Code | Date range | SC | ENV | WtForm (g) |
|--------------|------|------------|----|-----|---------------|
| BISC | | | | | |

Context [38], spot date: 1680–1800

| Pottery type | Code | Date range | SC | ENV | Wt (g)Form |
|--|-------|------------|----|-----|-----------------|
| Frechen stoneware | FREC | 1550-1700 | 1 | 1 | 50 Jug: rounded |
| London-area post-medieval redware | PMR | 1580-1900 | 1 | 1 | 6 |
| London tin-glazed ware with pale blue glaze and dark blue decoration | TGW H | 1680-1800 | 1 | 1 | 7 Plate |

Context [57], spot date: 1680–1700

| Pottery type | Code | Date range | SC | ENV | Wt (g)Form |
|--|-------|------------|----|-----|-------------------------------|
| Surrey-Hampshire border whiteware with olive glaze | BORDO | 1550-1700 | 1 | 1 | 7 |
| Surrey-Hampshire border whiteware with clear (yellow) glaze | BORDY | 1550-1700 | 1 | 1 | 4 |
| Frechen stoneware | FREC | 1550-1700 | 2 | 1 | 22 |
| Essex-type post-medieval fine redware | PMFR | 1580-1700 | 3 | 2 | 36 Jug, rounded |
| London-area post-medieval redware | PMR | 1580-1900 | 9 | 7 | 200 Bowl: flared, chamber pot |
| Surrey-Hampshire border redware | RBOR | 1550-1900 | 1 | 1 | 45 Bowl or dish |
| Staffordshire-type coarseware | STCO | 1650-1800 | 1 | 1 | 90 |
| London tin-glazed ware with blue- or polychrome-painted decoration and external lead glaze | TGW A | 1570-1650 | 2 | 2 | 68 Bowl: rounded |
| London tin-glazed ware with plain white glaze | TGW C | 1630-1846 | 1 | 1 | 5 |
| London tin-glazed ware with pale blue glaze and dark blue decoration | TGW H | 1680-1800 | 1 | 1 | 5 Bowl: rounded |

Context [60], spot date: 1630–1680

| Pottery type | Code | Date range | SC | ENV | Wt (g)Form |
|-------------------------------|------|------------|----|-----|------------|
| Staffordshire-type coarseware | STCO | 1650-1800 | 1 | 1 | 5 |

| Pottery type | Code | Date range | SC | ENV | Wt (g) | Form |
|--|-------|------------|----|-----|--------|---------|
| London tin-glazed ware with plain white glaze (Orton style C) | TGW C | 1630-1846 | 1 | 1 | 4 | |
| London tin-glazed ware with blue- or polychrome-painted decoration and external lead glaze (Orton style D) | TGW D | 1630-1680 | 1 | 1 | 7 | Charger |

Significance, potential and recommendations for further work

The pottery has little significance at a local level and consists of fragmentary material and occurs as pottery types and forms frequently recorded in the Southwark and London area. Of some interest is the occurrence of the London stoneware saggars, which would have been derived as rubbish from pot houses located to the north of the site at Southwark and possibly to the east at Lambeth on Thameside locations. The only potential of the pottery is to date the contexts it was recovered from. There are no recommendations for further work.

Reference

Museum of London Archaeology 2014 Medieval and post-medieval pottery codes,
<http://www.mola.org.uk/resources/medieval-and-post-medieval-pottery-codes>

APPENDIX 4: CERAMIC BUILDING MATERIAL

Amparo Valcarcel

| Context | Fabric | Form | Size | Date range of material | | Latest dated material | | Spot date | Spot date with mortar |
|---------|--|--|------|------------------------|------|-----------------------|------|-----------|-----------------------|
| | | | | | | | | | |
| 15 | 3102;3064 | Abraded daub; whole Flemish floor tile | 2 | 1500 BC | 1800 | 1510 | 1800 | 1510-1800 | No mortar |
| 23 | 3032R;3032nr 3033 | Post great fire unfrogged brick; intermediate great fire unfrogged brick | 3 | 1664 | 1900 | 1666 | 1900 | 1666-1900 | 1750-1900 |
| 25 | 2276 | Post medieval peg tile | 1 | 1480 | 1900 | 1480 | 1900 | 1480-1900 | No mortar |
| 26 | 2276 | Post medieval peg tile | 1 | 1480 | 1900 | 1480 | 1900 | 1480-1900 | No mortar |
| 28 | 2271;3030; 2276;2279; 3032nr3033 | Transitional brick; Medieval and post medieval peg and pan; intermediate post great fire | 8 | 1180 | 1900 | 1480 | 1900 | 1664-1900 | 1750-1900 |
| 57 | 3102;3033; 2276 | Abraded daub; early post medieval sandy red brick; post medieval peg tile | 4 | 1500 BC | 1900 | 1480 | 1900 | 1480-1900 | No mortar |
| 60 | 2276 | Post medieval peg tile | 1 | 1480 | 1900 | 1480 | 1900 | 1480-1900 | No mortar |
| 61 | 2276 | Post medieval peg tile | 1 | 1480 | 1900 | 1480 | 1900 | 1480-1900 | No mortar |

Review

The building material assemblage (21 fragments, 6.65 kg) reflects the later post medieval development of this site and none of the material is of intrinsic interest. Just two fragments indicate a medieval or early post medieval occupation [28].

Recommendations

The value of this small assemblage lies in dating features from between the 16th and late 19th century. The fragments of a brick (3030 fabric) and peg tile (2271 fabric) indicate some earlier medieval to early post medieval activity around the area of investigation. No further work recommended.

APPENDIX 5: CLAY TOBACCO PIPE

Chris Jarrett

INTRODUCTION

A small sized assemblage of clay tobacco pipes was recovered from the site. All of the fragments are in a good condition. Clay tobacco pipes occur in four contexts as small (under 30 fragments) sized groups. All of the clay tobacco pipes (40 fragments and present as 20 bowls and 20 stems) were classified by Atkinson and Oswald's (1969) typology (AO), while the 18th-century examples are according to Oswald's (1975) typology. The material occurs in eight contexts as small sized groups (under 30 fragments) and is discussed as a spot dating index. Contexts containing only stems or nibs have been broadly dated according to the thickness of the stem and the diameter size of the bore. The bowl types range in date to between 1660–1780.

Spot dating catalogue

Context [4], spot date: 1700–1740

| Part | Bowl type | Date range | Initials | No. of bowls/FC | Comments |
|------|-----------|------------|----------|-----------------|----------------------------|
| Bowl | OS10 | 1700–1740 | ? P | 1 | First initial is illegible |

Context [9], spot date: 1680–1710

| Part | Bowl type | Date range | Initials | No. of bowls/FC | Comments |
|------|-----------|------------|----------|-----------------|-------------|
| Bowl | AO22 | 1680–1710 | | 1 | Rim missing |

Context [15], spot date: 1700–1740

| Part | Bowl type | Date range | Initials | No. of bowls/FC | Comments |
|------|-----------|------------|----------|-----------------|---|
| Bowl | OS10 | 1700–1740 | | 1 | Possible initial on the left side of the heel. ?D |
| Stem | | | | 2 | X1 medium thickness stem, x1 thick stem, both with wide bores |

Context [25], spot date: 1730–1800

| Part | Bowl type | Date range | Initials | No. of bowls/FC | Comments |
|------|-----------|------------|----------|-----------------|-----------------------------------|
| Stem | | | | 1 | Thin stem with a medium-wide bore |

Context [28], spot date: 1740–1780

| Part | Bowl type | Date range | Initials | No. of bowls/FC | Comments |
|------|-----------|------------|----------|-----------------|--|
| Bowl | OS12 | 1730–1770 | H B | 1 | Heel, initialled H B: Henry Blundell 2, Unicorn Alley (Kent Street), Borough, 1745–72 |
| Bowl | | | | 1 | Front of bowl fragment, 18th century |
| Bowl | | | | 1 | Fragment, c. 1740-75 armorial bowl with bird above three dots on the front of the bowl |
| Bowl | | | | 1 | Back of the bowl, c. 1680–1710 fragment |
| Stem | | | | 1 | With part of a heel, medium thick, fine bore |
| Stem | | | | 5 | X2 thin stems with a fine bore, x1 medium with a medium bore, x2 thick stem with a medium bore |

Context [40], spot date: 1660–1680

| Part | Bowl type | Date range | Initials | No. of bowls/FC | Comments |
|------|-----------|------------|----------|-----------------|---|
| Bowl | AO15 | 1660–1680 | | 1 | Intermittent half milling, good finish, taller bowl |
| Stem | | | | 1 | Medium thickness and a wide bore |

Context [57], spot date: 1700–1740

| Part | Bowl type | Date range | Initials | No. of bowls/FC | Comments |
|------|-----------|------------|----------|-----------------|--|
| Bowl | AO15 | 1660–1680 | | 4 | The bowls have a quarter to three quarters milling of the rim and an average finish. One bowl is of interest for having milled line stem decoration, consisting of a line around the stem circumference which forms a border for a diamond pattern |
| Bowl | AO15/AO19 | 1660–1710 | | 1 | Bowl is mostly missing |
| Bowl | AO18 | 1660–1680 | | 2 | Damaged rims, x1 with 3/4 milling and both have a fair finish |
| Bowl | AO19 | 1680–1710 | | 1 | The rim is mostly missing |
| Bowl | AO22 | 1680–1710 | | 1 | Damaged rim, cursory knife mark on the back of the bowl rim, average finish, fairly slender variant. |
| Bowl | OS10 | 1700–1740 | | 1 | Poorly finished, finger nail marks |
| Stem | | | | 8 | Medium to thick stems with wide bores |

Context [57], spot date: c. 1680-1710

| Part | Bowl type | Date range | Initials | FC | Comments |
|------|-----------|------------|----------|----|--|
| Bowl | AO15 | 1660–1680 | | 1 | Spur missing, full milling, fair finish |
| Bowl | | | | 1 | Rim fragment, milled, c. 1680–1710 bowl type |
| Stem | | | | 2 | Thick, wide bores |

Significance, potential and recommendations for further work

The clay tobacco pipes generally have little significance and consist of bowl types that are frequently found in Southwark. The OS12 bowl with the initials HB for Henry Blundell (context [28]) is frequently found in Southwark and Lambeth. The AO15 bowl found in context [57] is of interest for having on its stem decoration consisting of a milled diamond pattern: this is a very rare find for London and Southwark. The armorial bowl fragment with the bird featured as part of the front border (context [28]) is probably derived from a bowl with the Hanoverian coat of arms. The main potential of the clay tobacco pipes is to date the contexts they were recovered from. There are no recommendations for further work on the assemblage.

References

- Atkinson D. and Oswald. A., 1969, 'London clay tobacco pipes'. *Journal of British Archaeology Association*, 3rd series, Vol. 32, 171-227.
- Oswald, A. 1975, Clay pipes for the Archaeologist, British Archaeological Reports, British series, No.14.

APPENDIX 6: ANIMAL BONE

Karen Deighton

Introduction

A moderate amount of animal bones were recovered from four contexts in two test pits during the course of excavation.

This material was examined to establish the taxa present, level of preservation and to inform upon the potential for further work and any future collection strategies should subsequent excavation take place.

Method

Bones were identified, where possible, to taxa with the aid of a bone atlas (Schmid 1972). The presence of ageing data (i.e. status of epiphyseal fusion (Silver 1969)) was noted. The state of preservation was also noted.

The bone assemblage

Preservation

Fragmentation was fairly heavy with most long bones at the shaft or fragment stage: only a single complete long bone was noted. Bone surface condition was reasonable with a low level of evidence for abrasion or root etching. The evidence for canid gnawing was sparse with only three examples noted. The incidence of butchery, largely in the form of chop marks, was common. Two examples of knife marks were also observed. Burned material was noted in context 57.

Taxa by context

| Context | 20 | 25 | 28 | 57 | Total |
|--------------|-----------------|-------------|------------|------------|-----------|
| Test pit | 5 | 5 | 5 | 3 | |
| Type | landscape layer | Layer | Grave fill | Ditch fill | |
| Date | C19th | Early C17th | Late C18th | EarlyC18th | |
| Cattle | 1 | | 2 | | 3 |
| Cattle size | 5 | 1 | | 1 | 7 |
| Sheep/goat | 24 | | 5 | 3 | 32 |
| Sheep size | 5 | | 3 | 2 | 10 |
| Pig | 3 | | | | 3 |
| Goose | 1 | | | | 1 |
| Total | 39 | 1 | 10 | 6 | 56 |

The assemblage consists entirely of common domesticates, dominated by ovicaprids which is common for the post Medieval period. Epiphyseal fusion indicates that a range of ages are present. The mixed nature of the assemblage, both in terms of body part and taxa present, along with the high percentage of butchered bones and fairly heavy fragmentation suggest the assemblage originally to be the result of domestic butchery or kitchen waste possibly relating to the Late C18th-Early C19th workhouse or the two Georgian houses at the site (or in the case of context 25 to housing development in the C16th and C17th. However several of the contexts from which the assemblage was recovered suggest possible redeposition (e.g. Context 20 is a C19th landscape layer) at the time of the construction of the Metropolitan fire brigade buildings in the Mid-late C19th.

Potential and significance

The potential of the assemblage is low due to the possibility of redeposition. The local and regional significance of the material is also compromised by the possibility of redeposition. No further work is recommended.

References

- Schmid, E 1972 Atlas of animal bones London: Elsevier press
Silver, I. 1969 The ageing of domestic animals in D. Brothwell and E. Higgs (eds)

APPENDIX 7: GLASS

Chris Jarrett

INTRODUCTION

The glass is recorded as a small sized assemblage dating to the 17th and 18th century. All of the fourteen fragments of glass (representing some 13 vessels or items and weighing 275g, none of which is unstratified) are in a good condition although in a fragmentary state, except that the material was probably deposited under tertiary circumstances. The glass occurs in five contexts as small (under 30 fragments) sized groups. The material is interesting for containing glass production waste and it is discussed as a spot dating index.

Spot dating catalogue

No.: no of fragments; HLLA: high-lime low-alkali glasses

Context [25], spot date: post-medieval

| Form | No. | ENV | Wt (g) | Comments |
|---------------------|-----|-----|--------|---|
| ?blast furnace slag | 1 | 1 | 34 | A fragment of glassy 'blast furnace' slag, marbled: opaque pale grey blue and pale blue and blue. ?Glass production |

Context [28], spot date: ?early 18th century

| Glass type: colour | Form | No. | ENV | Wt (g) | Comments |
|------------------------|---------------------|-----|-----|--------|--|
| Natural: green tint | English wine bottle | 1 | 1 | 152 | Base, rounded kick. ?Mallet type. Weathered |
| Soda: clear | English wine bottle | 1 | 1 | 2 | Body sherd, weathered and iridescent |
| Soda: pale olive green | English wine bottle | 2 | 1 | 17 | Base and wall fragment, slightly weathered and iridescent |
| HLLA: blue | Lump | 1 | 1 | 2 | Rounded lump, opaque blue and lighter blue with frequent fine bubbles appearance of blast furnace slag |
| HLLA: olive green | Lump | 1 | 1 | 4 | Folded lump of glass with a granular, fine bubble int. |
| HLLA: olive green | Trail | 1 | 1 | 1 | A trail of glass with a main loop and smaller loops on an 'arm' of the trail. Some voids |
| HLLA: pale olive green | Vessel | 1 | 1 | 1 | Top of a hollow/rolled rim, ?possibly a bowl |
| Soda: clear | Vessel | 1 | 1 | 3 | Body sherd, fluted, weathered and iridescent |

Context [38], spot date: 17th- 18th century

| Glass type: colour | Form | No. | ENV | Wt (g) | Comments |
|--------------------|-------|-----|-----|--------|--|
| HLLA: green tint | Phial | 1 | 1 | 13 | Base (34mm in diameter), splayed with a conical kick, free-blown |

Context [40], spot date: c.1640–1800

| Glass type: colour | Form | No. | ENV | Wt (g) | Comments |
|---------------------|---------------------|-----|-----|--------|---|
| Natural: green tint | English wine bottle | 1 | 1 | 6 | Neck of possible wine bottle, weathered |

Context [54], spot date: post-medieval

| Glass type: colour | Form | No. | ENV | Wt (g) | Comments |
|-----------------------------|--------|-----|-----|--------|---|
| HLLA: pale blue/amber | Vessel | 1 | 1 | 6 | ?Base of a bottle. Dichroic: appears opaque pale blue and amber when held to a transmitted light source |
| HLLA: pale blue/olive green | Lump | 1 | 1 | 34 | folded lump of glass, mostly an opaque pale blue colour, although part of it is transparent olive green |

Significance, potential and recommendations for further work

The glass has little significance as the material occurs in small groups and as types and forms that are frequently encountered in the London area. The occurrence of glass production waste (lumps and trails, as well as the fragment of blast furnace slag, which may in fact be a by product of the glass industry) was probably dumped on the site. The material probably originated from glass houses on Southwark Thameside locations to the north of the site, e.g. Hopton Street. The only potential of the glass is to date the contexts it was recovered from. There are no recommendations for further work on the assemblage.

APPENDIX 8: OASIS FORM

OASIS ID: preconst1-243323

Project details

Project name Former Southwark Fire Station, 94 Southwark Bridge Road, London, SE1 0EG

The evaluation consisted of the excavation of 3 test pits of 2.5m x 2.5m in order to expose the sequence of deposits and one larger 8m x 8m trench in order to allow a more detailed investigation. It was proposed that these test pits would provide a north-south cross section of deposits across the site. The evaluation revealed a sequence of natural deposits overlain by what is believed to be the former marshland relating to the time of the

Short description of the project Bishop of Winchester's Park. Into this marshland a 17th century ditch was cut that is likely to have served as some form of boundary marker. These deposits were sealed by a series of post-medieval made ground layers. In addition, it was possible to positively identify the top of the former graveyard that related to the workhouse. A number of grave cuts, decayed coffin remains and partial remains of a neonatal burial were identified, recorded and left in situ. No archaeological features relating to the prehistoric, Roman, Saxon or Medieval periods were found.

Project dates Start: 02-02-2016 End: 12-02-2016

Previous/future work No / Not known

Type of project Field evaluation

Current Land use Industry and Commerce 2 - Offices

Monument type DITCH Post Medieval

Monument type BURIAL Post Medieval

Significant Finds POTTERY Post Medieval

Significant Finds BUILDING MATERIAL Post Medieval

Significant Finds GLASS Post Medieval

Significant Finds ANIMAL BONE Post Medieval

Project location

Country England

Site location GREATER LONDON SOUTHWARK SOUTHWARK Former Southwark Fire Station, 94 Southwark Bridge Road, London, SE1 0EG

Postcode SE1 0EG

Study area 8688 Square metres

Site coordinates TQ 32087 79878 51.501883924196 -0.096737618909 51 30 06 N 000 05
48 W Point

Height OD /
Depth Min: 1.6m Max: 2.55m

Project creators

Name of
Organisation Pre-Construct Archaeology Limited

Project brief
originator Mills Whipp Projects

Project design
originator Mills Whipp Projects

Project
director/manager Tim Bradley

Project
supervisor Ian Cipin

Type of
sponsor/funding Developer
body

Name of
sponsor/funding Hadston Southwark Limited
body

Project archives

Physical Archive
recipient LAARC

Physical
Contents "Animal Bones","Ceramics","Glass"

Digital Archive
recipient LAARC

Digital Contents "Animal Bones","Ceramics","Glass","Stratigraphic","Survey"

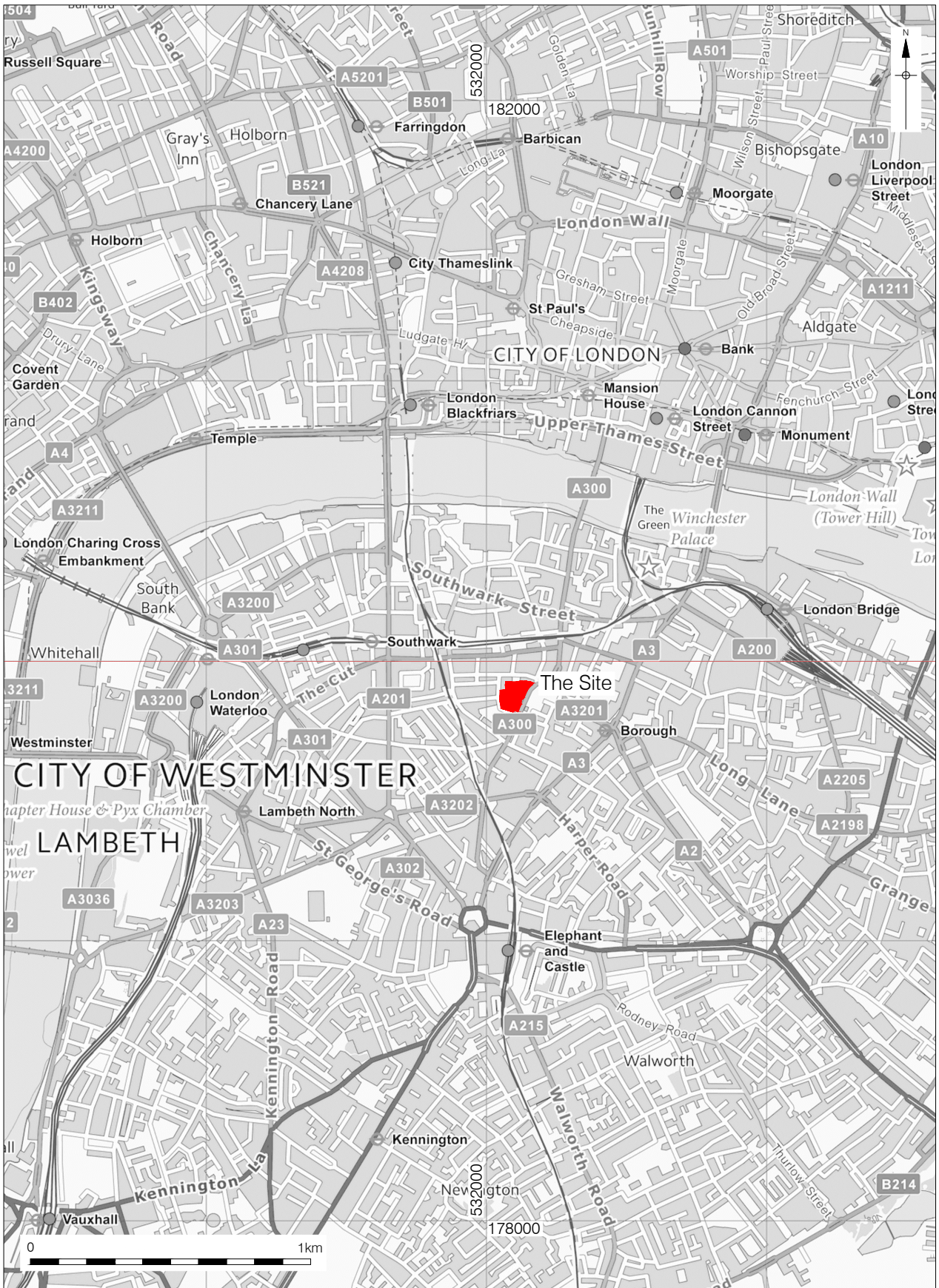
Digital Media available "Spreadsheets","Survey","Text"

Paper Archive recipient LAARC

Paper Media available "Context sheet","Drawing","Photograph","Plan","Report","Section","Unpublished Text"

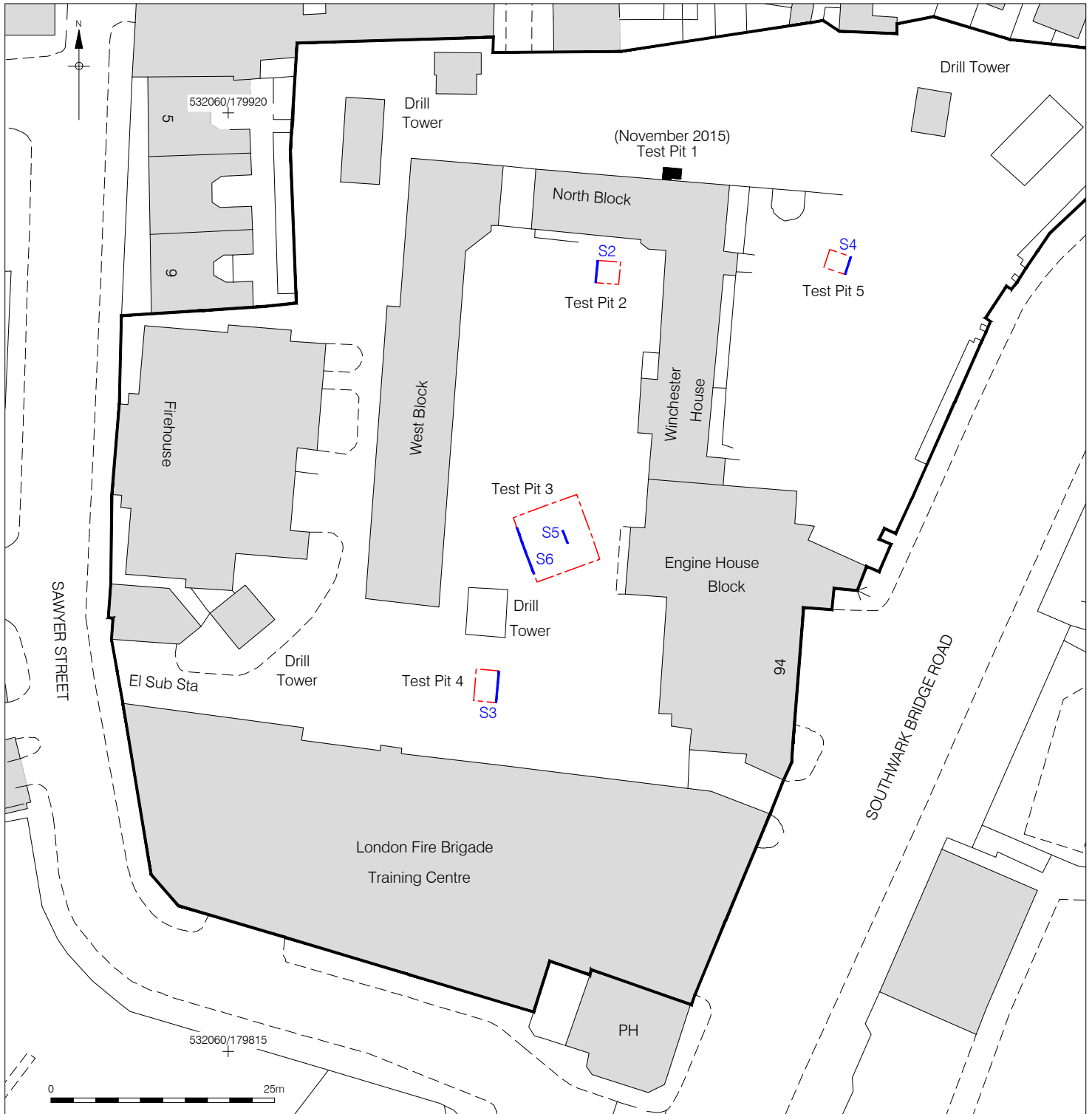
Entered by Tim Bradley (tbradley@pre-construct.com)

Entered on 22 February 2016



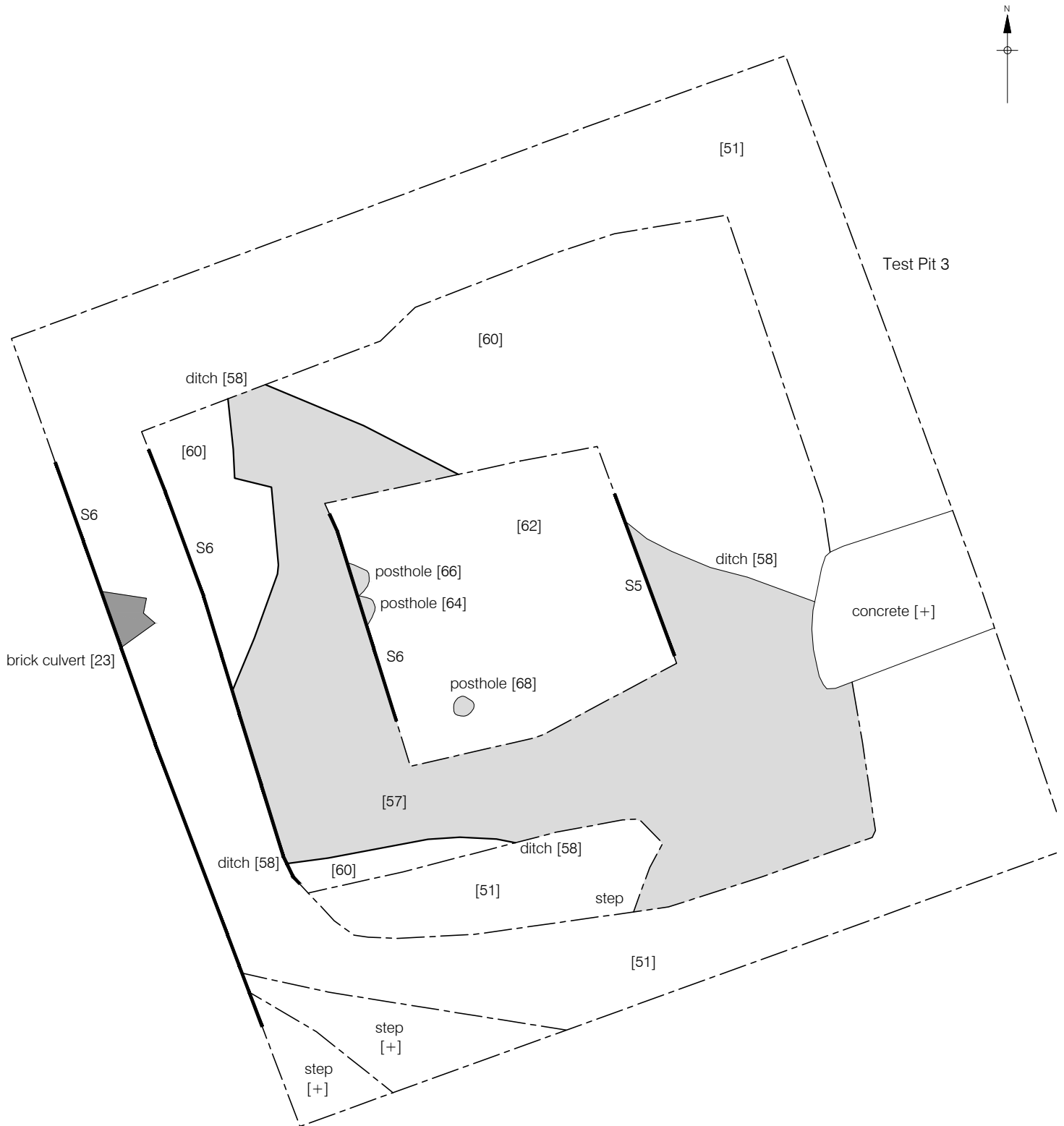
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Figure 1
 Site Location
 1:20,000 at A4



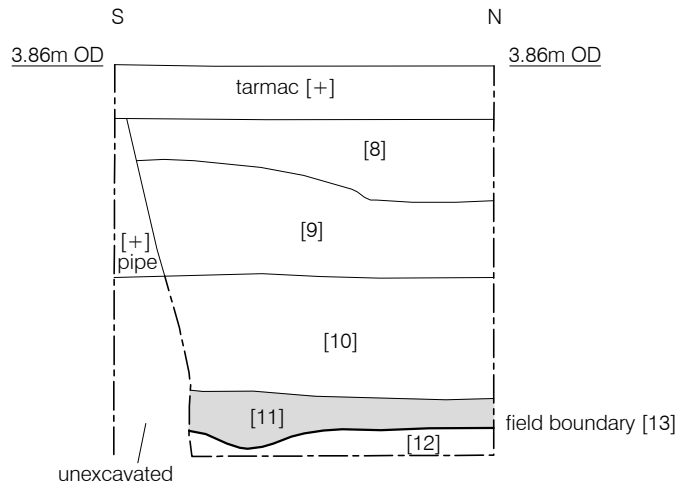
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Figure 2
 Test Pit Location
 1:625 at A4

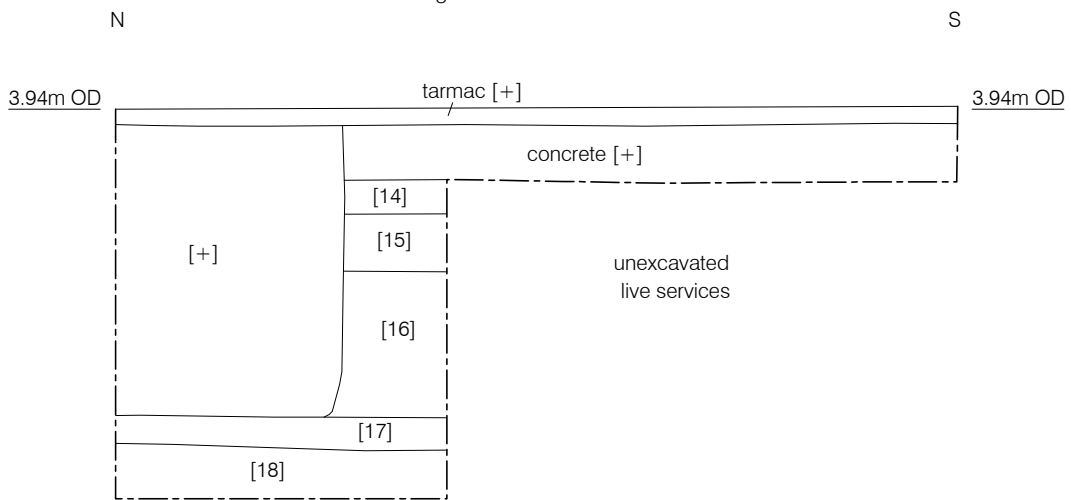


0 2m
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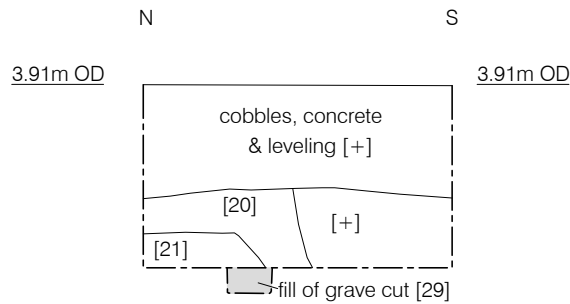
Figure 3
 Plan of Test Pit 3
 1:50 at A4



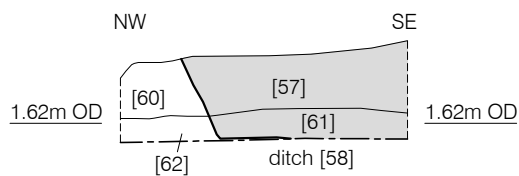
Section 2
Test Pit 2
East Facing



Section 3
Test Pit 4
West Facing



Section 4
Test Pit 5
West Facing



Section 5
Test Pit 3
Southwest Facing

PCA

PCA SOUTH

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