

**CENTRE BUILDINGS
REDEVELOPMENT, LONDON
SCHOOL OF ECONOMICS AND
POLITICAL SCIENCE,
HOUGHTON STREET, CITY OF
WESTMINSTER, LONDON WC2A
2AE: AN ARCHAEOLOGICAL
EVALUATION**

**SITE CODE: HGT 15
REPORT NO: R12299**



**PRE-CONSTRUCT
ARCHAEOLOGY**

**CENTRE BUILDINGS REDEVELOPMENT, LONDON SCHOOL OF ECONOMICS AND
POLITICAL SCIENCE, HOUGHTON STREET, CITY OF WESTMINSTER, LONDON
WC2A 2AE: AN ARCHAEOLOGICAL EVALUATION**

Museum of London Site Code: HGT 15

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Written and Researched by: Amelia Fairman
Pre-Construct Archaeology Limited, November 2015

Project Manager: Helen Hawkins

Contractor: Pre-Construct Archaeology Limited
Unit 54, Brockley Cross Business Centre
96 Endwell Road
Brockley
London
SE4 2PD

Tel: 020 7732 3925

Fax: 020 7732 7896

Email: hhawkins@pre-construct.com

Website: www.pre-construct.com

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PCA Report No: R12299


DOCUMENT VERIFICATION

Site Name

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ECONOMICS AND POLITICAL SCIENCE, HOUGHTON STREET, CITY OF
WESTMINSTER, LONDON WC2A 2AE**

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Text Prepared by:	A Fairman		27.11.15
Graphics Prepared by:	R Murphy		27.11.15
Graphics Checked by:	J Brown	<i>Josephine Brown</i>	4.12.2015
Project Manager Sign-off:	H Hawkins		4.12.2015

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

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1 ABSTRACT

- 1.1 This report details the results and working methods of an archaeological evaluation undertaken by Pre-Construct Archaeology Ltd. during preliminary works for the Centre Buildings redevelopment of the London School of Economics and Political Science, Houghton Street, City of Westminster, WC2A 2AE.
- 1.2 The fieldwork was carried out between 14th October and 17th November 2015. The fieldwork comprised the excavation of three trial pits under watching brief conditions, and eight evaluation trenches across the subject site. These included an additional mitigation trench to investigate the extent of archaeological horizons within the centre of the southern limits of the site. A ninth trench (AP8) was to be excavated during a later phase of works, but is now no longer required as there will be no below ground impact in this area. The work was commissioned by the London School of Economics.
- 1.3 The evaluation identified natural horizons of brickearth and gravel overlain/truncated by Saxon, early post-medieval and post-medieval activity. Saxon activity was identified in the form of dumping, pitting, construction and the establishment of multi-phase boundaries dating between 720 and 850 AD. These features were overlain by 16th to 17th century development, comprising further dumped debris, refuse pits and the construction of basement walls. A property boundary, potentially timber lined, was identified in the north-east of the site and related to a former terrace along Clements Lane. Development during the 18th and 19th centuries gradually began to encroach upon the formerly undeveloped areas of the subject site. This included construction associated with former housing along Houghton Street to the west of the site, and properties which formerly lay to the south and north of Clements Inn Passage which bisected the northern part of the site. Development relating to the 19th century construction of St. Clement Danes Grammar School was also observed within a number of trenches. The majority of earlier features and horizons were overlain by late 19th century levelling/demolition material associated with the construction of the extant university buildings.
- 1.4 No archaeological features or deposits relating to the prehistoric, Roman or medieval periods were encountered during the investigation. Residual material, including burnt flint, Roman brick/tile and medieval pottery were however recovered from later features which indicated some activity of these dates within the wider area.

2 INTRODUCTION

- 2.1 An archaeological evaluation was undertaken by Pre-Construct Archaeology Ltd. (PCA) in advance of the Centre Buildings redevelopment, London School of Economics and Political Science, Houghton Street, City of Westminster, London, WC2A 2AE.
- 2.2 The site is located within the City of Westminster, and centred at National Grid Reference TQ 30806 81128. The site is currently occupied by the East Building, the Clare Market Building, Clements Inn Passage, the Anchorage (nos. 8 to 10 Clements Inn Passage, and the St Clement's Building (east). The study site is bound by Houghton Street to the west, New Inn Passage to the south and St Clements Lane to the north. The eastern limits of the site are largely bound by Aldwych House.
- 2.3 PCA was commissioned by the London School of Economics in advance of proposed redevelopment. The site lies within the Strand conservation area as defined by the City of Westminster. The site does not encompass, nor lie within the immediate vicinity of any Scheduled Ancient Monuments.
- 2.4 The project was undertaken in accordance with an approved Written Scheme of Investigation (Hawkins 2015b).
- 2.5 Following the completion of the project the site archive will be deposited in its entirety with the London Archaeological Archive and Research Centre (LAARC) identified by the unique code HGT 15.
- 2.6 The evaluation was conducted between 14th October and 17th November 2015.
- 2.7 The project was monitored by Gill King of Historic England on behalf of the City of Westminster, and project-managed for PCA by Helen Hawkins. The evaluation was supervised by the author.

3 PLANNING BACKGROUND

3.1 National Planning Policy Framework (NPPF)

3.1.1 In March 2012 the Department for Communities and Local Government issued the National Planning Policy Framework (NPPF), replacing Planning Policy Statement 5 (PPS5) 'Planning for the Historic Environment' which itself replaced Planning Policy Guidance Note 16 (PPG16) 'Archaeology and Planning'. It provides guidance for planning authorities, property owners, developers and others on the investigation and preservation of heritage assets.

3.1.2 In considering any planning application for development, the local planning authority will be guided by the policy framework set by government guidance, in this instance the NPPF, by current Unitary Development Plan policy and by other material considerations.

3.2 Regional Guidance: The London Plan

3.2.1 The over-arching strategies and policies for the whole of the Greater London area are contained within the Greater London Authority's London Plan (July 2011) which includes the following statement relating to archaeology.

Policy 7.8: Heritage assets and archaeology

Strategic

A London's heritage assets and historic environment, including listed buildings, registered historic parks and gardens and other natural and historic landscapes, conservation areas, World Heritage Sites, registered battlefields, scheduled monuments, archaeological remains and memorials should be identified, so that the desirability of sustaining and enhancing their significance and of utilising their positive role in place shaping can be taken into account.

B Development should incorporate measures that identify, record, interpret, protect and, where appropriate, present the site's archaeology.

Planning decisions

C Development should identify, value, conserve, restore, re-use and incorporate heritage assets, where appropriate.

D Development affecting heritage assets and their settings should conserve their significance, by being sympathetic to their form, scale, materials and architectural detail.

E New development should make provision for the protection of archaeological resources, landscapes and significant memorials. The physical assets should, where possible, be made available to the public on-site. Where the archaeological asset or memorial cannot be preserved or managed on-site, provision must be made for the investigation, understanding, recording, dissemination and archiving of that asset.

LDF preparation

F Boroughs should, in LDF policies, seek to maintain and enhance the contribution of built, landscaped and buried heritage to London's environmental quality, cultural identity and economy as part of managing London's ability to accommodate change and regeneration.

G Boroughs, in consultation with English Heritage, Natural England and other relevant statutory organisations, should include appropriate policies in their LDFs for identifying, protecting, enhancing and improving access to the historic environment and heritage assets and their settings where appropriate, and to archaeological assets, memorials and historic and natural landscape character within their area.

3.3 Local Guidance: City of Westminster

3.3.1 The local planning authority responsible for the study site is the City of Westminster whose Westminster City Plan: Strategic Policies, adopted in November 2013 outlines planning policies for the city including those relating to the historic environment:

POLICY S25 HERITAGE

Recognising Westminster's wider historic environment, its extensive heritage assets will be conserved, including its listed buildings, conservation areas, Westminster's World Heritage Site, its historic parks including five Royal Parks, squares, gardens and other open spaces, their settings, and its archaeological heritage. Historic and other important buildings should be upgraded sensitively, to improve their environmental performance and make them easily accessible.

Reasoned Justification

The intrinsic value of Westminster's high quality and significant historic environment is one of its greatest assets. To compete effectively with other major, world-class cities the built environment must be respected and refurbished sensitively as appropriate. Any change should not detract from the existing qualities of the environment, which makes the city such an attractive and valued location for residents, businesses and visitors.

Detailed policies for each type of heritage asset will be set out in the City Management Plan. Area-based characteristics and detailed measures required to protect and enhance heritage assets have been set out in Conservation Area Audit Supplementary Planning Documents and the Westminster World Heritage Site Management Plan.

3.3.2 More detailed references to the historic environment are included in policies of the Unitary Development Plan (UDP), which were saved in January 2010 and still form part of current planning guidance:

POLICY DES 9: CONSERVATION AREAS

Aim

10.108 To preserve or enhance the character or appearance of conservation areas and their settings.

POLICY DES 9: CONSERVATION AREAS

(A) Applications for outline planning permission in conservation areas

In the case of outline planning applications within designated conservation areas it may be necessary to require additional details to be produced in order that the physical impact of the proposed development may be fully assessed.

(B) Planning applications involving demolition in conservation areas

1) Buildings identified as of local architectural, historical or topographical interest in adopted conservation area audits will enjoy a general presumption against demolition

2) Development proposals within conservation areas, involving the demolition of unlisted buildings, may be permitted

a) If the building makes either a negative or insignificant contribution to the character or appearance of the area, and/or

b) If the design quality of the proposed development is considered to result in an enhancement of the conservation area's overall character or appearance, having regard to issues of economic viability, including the viability of retaining and repairing the existing building

3) In any such case, there should also be firm and appropriately detailed proposals for the future viable redevelopment of the application site that have been approved and their implementation assured by planning condition or agreement.

(C) Planning application for alteration or extension of unlisted buildings

Planning permission will be granted for proposals which

1) Serve to reinstate missing traditional features, such as doors, windows, shop fronts, front porches and other decorative features

2) Use traditional and, where appropriate, reclaimed or recycled building materials

3) Use prevalent facing, roofing and paving materials, having regard to the content of relevant conservation area audits or other adopted supplementary guidance

4) In locally appropriate situations, use modern or other atypical facing materials or detailing or innovative forms of building design and construction

(D) Conservation area audits

The existence, character and contribution to the local scene of buildings or features of architectural, historical or topographical interest, recognised as such in supplementary planning guidance, such as conservation area audits, will be of relevance to the application of policies DES 4 to DES 7, and DES 10.

(E) Changes of use within conservation areas

Permission will only be granted for development, involving a material change of use, which would serve either to preserve or enhance the character and appearance of the conservation area, bearing in mind the detailed viability of the development.

(F) Setting of conservation areas

Development will not be permitted which, although not wholly or partly located within a designated conservation area, might nevertheless have a visibly adverse effect upon the area's recognised special character or appearance, including intrusiveness with respect to any recognised and recorded familiar local views into, out of, within or across the area.

(G) Restrictions on permitted development in conservation areas

1) In order to give additional protection to the character and appearance of conservation areas, directions may be made under article 4(2) of the Town and Country Planning (General Permitted Development) Order 1995. Types of generally permitted development to which such directions may apply will include:

a) painting, cladding or rendering of building facades

b) insertion or replacement of doors and windows

c) removal or replacement of boundary walls and fences

d) alteration of roof profiles and replacement of roofing materials.

2) Such added powers of planning control may be applied to designated conservation areas the subject of adopted conservation area audits or to buildings or groups of buildings therein identified as being of architectural, historical or topographical interest.

3) The existence of such directions will be taken into account in the authorisation of development that may itself be made subject to the removal of permitted development rights, in appropriate individual cases.

DES 11: SCHEDULED ANCIENT MONUMENTS, AREAS AND SITES OF ARCHAEOLOGICAL PRIORITY AND POTENTIAL

Aim

10.147 To identify archaeological remains of national and local importance, conserve them in their settings, and provide public access to them. Where new development is proposed on sites of archaeological potential, to ensure adequate

archaeological impact assessment, followed by appropriate provision for preservation or investigation, recording, and publication.

POLICY DES 11: SCHEDULED ANCIENT MONUMENTS, AREAS AND SITES OF ARCHAEOLOGICAL PRIORITY AND POTENTIAL

(A) Scheduled Ancient Monuments

Permission for proposals affecting the following Scheduled Ancient Monuments, or their settings, will be granted providing that their archaeological value and interest is preserved:

- 1) the Chapter House and Pyx Chamber in the Cloisters, Westminster Abbey
- 2) the Jewel Tower.

(B) Areas and Sites of Special Archaeological Priority and Potential

Permission will be granted for developments where, in order of priority:

- 1) all archaeological remains of national importance are preserved in situ
- 2) remains of local archaeological value are properly, evaluated and, where practicable, preserved in situ
- 3) if the preservation of archaeological remains in situ is inappropriate, provision is made for full investigation, recording and an appropriate level of publication by a reputable investigating body.

Policy application

10.148 There are three categories of archaeological remains. In order of importance they are:

- a) Scheduled Ancient Monuments: nationally important remains which are scheduled under the Ancient Monuments and Archaeological Areas Act 1979
- b) Areas of Special Archaeological Priority: areas rich in archaeological remains, where ground works are likely to reveal archaeological remains
- c) Sites of Archaeological Significance and Potential: areas where archaeological remains are known or thought likely to exist.

10.149 These locations are listed in the Sites and Monuments Record maintained by English Heritage. The Areas of Special Archaeological Priority are Lundenwic and Thorney Island; Paddington and Lillestone Villages; Marylebone Village; Tyburn Settlement and Ebury Village. The archaeological data produced by the Museum of London and English Heritage provide more detailed information, including further sites and areas of archaeological significance and potential within Westminster. Areas of Special Archaeological Priority are illustrated on Maps 10.3-10.7. Information on these and other sites of archaeological priority and potential are available from the Greater London sites and monuments record maintained by English Heritage.

10.150 In considering applications for development of land with archaeological potential, the City Council will require an archaeological assessment detailing the potential impact of development upon surviving archaeological remains. Should archaeological evaluation and investigations be required, it must be undertaken in accordance with a written scheme of investigation approved by the City Council. The Greater London Archaeology Advisory Service provides guidance papers detailing these procedures. With respect to policy DES 11 B (3), investigation may include a watching brief and, or, a full excavation.

10.151 The City Council will seek professional archaeological advice as appropriate and will encourage applicants proposing development to do the same. Where development may affect land of archaeological priority or potential, the City Council will expect applicants to have properly assessed and planned for the archaeological implications of their proposals. In this way the Council and the applicant will have sufficient information upon which an informed planning decision, incorporating appropriate archaeological safeguards, may be based. Such safeguards normally consist of design measures to ensure the permanent preservation of archaeological remains in situ or, where that is not appropriate, archaeological rescue investigations in advance of development. The results and finds from archaeological investigations also need to be analysed, interpreted, presented to the public and curated for future use. Attention is drawn to the advice contained within the code of practice prepared by the British Archaeologists' and Developers Liaison Group.

3.3.3 Two archaeological planning conditions have been attached to the site upon granting of planning permission.

3.3.4 In terms of designated heritage assets, as defined above, no Scheduled Ancient Monuments, Historic Wreck sites or Historic Battlefields lie within the immediate vicinity of the site. The site does however lie within the Strand Conservation Area as defined by the City of Westminster.

4 GEOLOGY AND TOPOGRAPHY

4.1 Geology

4.1.1 The geology of the area is represented by Drift Deposits of brickearth and Thames river terrace deposits of Hackney Gravel, overlying the London Clay, which in turn overlie Woolwich and Reading Beds. The Woolwich and Reading Beds and London Clay were formed during the Palaeocene and Eocene periods respectively, whilst the Terrace Gravels and brickearth were laid down in the Pleistocene period.

4.1.2 Investigations carried out just north of the site at St. Philip's Buildings, Sheffield Street (PCA 2010) revealed brickearth deposits at approximately 16.55m OD. Additional geotechnical investigations were carried out across the study site, and are detailed in the Archaeological Impact Assessment (Hawkins 2015a). These, however, did not differentiate between brickearth and natural gravel with natural horizons documented from 14.40m OD and 14.64m OD.

4.2 Topography

4.2.1 The site is located in the west central part of London, approximately 350m north of the River Thames.

4.2.2 The four buildings which occupy the study site are basemented to variable depths, with levels ranging from 18.21m OD to 14.25m OD, as previously discussed within the Impact Assessment (Hawkins 2015a).

5 ARCHAEOLOGICAL AND HISTORIC BACKGROUND

5.1 Research into the archaeological and historical background of the site has previously been carried out as part of a desk-based assessment of the study site and is summarised below (Gould and Boyer 2014).

5.2 Prehistoric

5.2.1 Environmental and archaeological evidence suggests that the vicinity of the study site was largely open ground from the prehistoric and into the Roman periods. Palaeolithic and Mesolithic flint tools dating from 440000 BC onwards have been recovered from sites in Westminster, but there is no certain evidence of settlement or habitation. Elephant remains from the last interglacial period (130000-110000 BC) have been reported from Pall Mall and St James' Square in 1758 and prehistoric animal bone (lion, hippopotami and rhinoceros) have been found around the Trafalgar Square area.

5.2.2 By the Bronze Age, starting c.2000 BC there is evidence of small settlements in several other inner London boroughs, but there is scarce evidence in Westminster, barring Thorney Island. This however lies some distance to the west of the subject site.

5.3 Roman

5.3.1 In the first century AD the Roman town of Londinium was established to the east of the study area. Two Roman roads passed close to the site, the Strand and Fleet Street to the south and Oxford Street, New Oxford Street and High Holborn to the north. The southern road delineated the higher and dry ground from the riverside beach or strand. The closest occupation during this period seems to be a small hamlet near the present Bond Street underground station where the road crossed the Tyburn stream.

5.3.2 A Roman sarcophagus was found in 1741 in Surrey Street close to the Strand. Roman vases were also recovered during excavations at Arundel House, approximately 200m south of the subject site, where excavators suggested the presence of a Roman bath house. Additional archaeological evidence attesting to Roman occupation derives from excavations carried out at St. Catherine's House and along Keeley Street, located less than 100m south, and c.250m to the north-west of the subject site respectively. The former encountered residual Roman material within later cut features and the latter recorded Roman pottery, ceramic building material and three rubbish pits. A potential Roman structure is listed c.100m south of the study site according to a survey by Glanville, no other information or evidence however is cited.

5.3.3 Two outcrops of brickearth form areas of higher ground centred on St Paul's Cathedral and Covent Garden and may be a contributory factor for the positioning of Roman London and Saxon Lundenwic centred about these locations. The brickearth is relatively free-draining and can be easily excavated into for slope terracing, as well as for more domestic reasons such as digging rubbish pits and well sumps. The brickearth itself was also a very useful material for hut construction as well as being utilised for floor surfaces, loom weights and possibly pottery. During the seventeenth to nineteenth centuries it was still sought after as the addition of sand from the underlying terrace formations made it ideal for making bricks. It has also been suggested that good beaching opportunities available on the outside of a bend in the Thames were preferable to the disintegrating riverside walls and quays of Londinium.

5.4 Saxon and Medieval

5.4.1 The Saxon settlement flourished between the seventh and ninth centuries AD and covered an area of perhaps as much as one hundred and fifty acres. It appears that both former Roman roads within the immediate vicinity of the subject site were retained after the decline of Roman Londinium and into the Saxon period. The earliest archaeological features from human settlement in the area derive from the middle Saxon period and form part of the town of Lundenwic.

5.4.2 After an attack by Danish Vikings in 886 King Alfred ordered a return to the more defensible site at old Londinium. The area was not settled again until the early tenth century when a community of Danes lived in the vicinity. This fact is commemorated by the church of St Clement Danes, c.150m south of the study site which was reputedly founded by them and named after the patron saint of mariners.

5.4.3 An excavation at the Royal Opera House in Covent Garden (ROP 95) found traces of timber buildings nearly twelve metres long and many signs of a thriving and congested urban space. The eastern extent is less clear, but it is likely the present site lies on the eastern edge of the settlement. An excavation by the Museum of London Archaeology Service in 1998 at St Catherine's House, on the east side of Kingsway, directly to the west of the Old Building, found additional evidence of occupation in the form of wells, pits and probably buildings of mid Saxon date.

5.4.4 Numerous archaeological watching briefs and evaluations attest to Saxon occupation of the wider area. A watching brief carried out by the Museum of London Archaeology Service in 1991 at Wild Street encountered middle Saxon occupation layers, rubbish pits and possible structural features. Associated artefacts included pottery, loomweight fragments and burnt daub with wattle impressions. Earlier investigations along Russell Street in 1987 recorded a middle Saxon pit containing slag and Ipswich-ware pottery fragments.

5.4.5 An evaluation carried out at 29-33 Kingsway, to the west of the subject site, identified a pit or well cut into natural gravels. Within the backfill of the feature were fragments of burnt daub, middle Saxon pottery and a round headed copper alloy pin. These findings were reported as indicative of occupation, and therefore supported the notion that settlement during this period extended further east than had previously been surmised. Similar findings were reported from an evaluation at King's College, c.250m to the south of the subject site. Middle Saxon pits, postholes, occupation deposits and gravel surfaces were recorded.

5.4.6 Archaeological investigations at Bruce House, Kemble Street, c.150m west of the site revealed extensive evidence of Saxon occupation. Cut features, including wells, rubbish pits and cess pits were identified, in addition to occupation layers, dump layers and deposits of dark earth. The high frequency of bone and antler off cuts retrieved also inferred that bone-working took place on or near the site. Additional work along Keeley Street to the west of the study site encountered a wattle-lined well, numerous cesspits, rubbish pits and a large north-west south-east aligned ditch. Structural remains included shallow postholes and a timber building, plus a metalled surface. This area would have lain within the eastern portion of middle Saxon Lundenwic.

5.5 Post Medieval

5.5.1 The Earl of Clare opened a meat market in 1648 which was called Clare Market and gave its name to the vicinity. By this time the area had been developed with a complete layout of streets and terraced housing. The only area of the site not occupied by housing was the area currently occupied by the East Building. This land was owned by St Clements Danes Church and had been purchased in 1552 by its wardens. In 1749 the parish of St Clement Danes was a thriving area. By the 19th century the area of Clare Market was described as a 'cluster of narrow dirty streets and passages'.

5.5.2 Watching briefs carried out along Wild Street, Drury Lane, Lincoln Inn Field's and Chancery Lane recorded post medieval structural features including walls, floors and brick-lined cesspits. Comparable results were reported from an evaluation along East Russell Street, c.300m south west of the study site. Works here established that post-medieval ground raising deposits extended between three and four metres below current road level.

5.5.3 An evaluation of test pits carried out in 2000 at the City Literary Institute identified the remains of 'Wild House', a large private residence built in the 1630s. This had subsequently been truncated by a Victorian basement. Garden features and levelling deposits were also encountered and interpreted as remnants of the 17th century formal gardens, associated with the property.

- 5.5.4 Numerous archaeological investigations have taken place along Kingsway, to the immediate west of the study site. Cesspits and sewers dating between the 17th and 18th centuries were identified in addition to drainage features, rubbish pits and an air raid shelter. Investigations along St Mary Le Strand and at King's College, to the south of the site encountered post medieval structural remains. The former evaluation and watching brief identified several phases of wall construction, a potential burial vault and boundary wall associated with the original 18th century churchyard, whereas the latter identified the remnants of drains indicative of a building within the vicinity, a 17th century wall and an oven or tank subsequently sealed by demolition debris.
- 5.5.5 To the immediate west of the site Le Fevre's riding academy was believed to have been located along Drury Lane. This is documented from 1635 and was converted into a short-lived playhouse to accommodate visiting French actors. A second theatre was located along Portugal Street, c.100m north of the site. This was a converted tennis court, opened by Sir William d'Avenant and was the first London theatre to have a proscenium arch and movable scenery. The theatre was demolished to make way for an extension to the museum of the Royal College of Surgeons.
- 5.5.6 Two large houses are documented to the south of the study site. Sir William Drury's mansion house was constructed during the mid 16th century, and comprised a cluster of buildings surrounded by wooded grounds with a high fence. By the late 17th century the western parts of the grounds were developed with housing and later the Queen of Bavaria public house. To the south of this property was Conduit House, which according to Stow was 'over a spring'. No other information is known.
- 5.5.7 Holmes identified a cemetery less than 100m to the north of the study site. This was known as the 'Green Ground' and was described as crowded with bodies. It became the entrance drive and grass plot used by King's College Hospital by 1896. An additional burial space was located along Drury Lane, c.300m west of the subject site. The cemetery covered 0.25 acres and was laid out as a public garden, it may also have been known as the Tavistock burial ground.
- 5.5.8 The earliest cartographic source consulted was Agas' map of 1557. The study site appears to lie within open ground, with a concentration of development appearing to the south. Drury House is clearly marked to the north west, as are a number of Inn's including New Inn, Clements Inn and Lincolns Inn to the south and south-east respectively.
- 5.5.9 By 1682 the street plan, including Houghton Street, Clare Market and Clements Lane have been formalised. The footprint of the St. Clement's building appears almost entirely developed by properties fronting Clements Lane. The location of the Anchorage and the Clare Market buildings are similarly now developed, whereas the southern limits of the East Building appear empty.
- 5.5.10 Rocques' map of 1746 illustrates that the site of the East Building was also built upon by this stage with houses facing west onto Houghton Street and south onto New Inn Passage (Figure 9). This map shows the new buildings of Clements Inn running adjacent to the eastern boundary of the site and some of these survive until the mid twentieth century. The general area appears otherwise little changed from 1682.

- 5.5.11 Shortly after this, further development takes place in the area of the market as buildings fill in some of the open space. Horwood's map of 1792-99 depicts a row of terraced houses built facing south onto Clements Inn Passage. Individual earlier and probably timber framed properties were no doubt being replaced or rebuilt at this time and throughout the nineteenth century. Into the early nineteenth century the street plan remains largely unaltered and although a Greenwood map of 1827 is not very accurate in its scale, it shows new buildings being erected to the rear of houses facing onto Houghton Street.
- 5.5.12 In 1844 the St Clements Danes School was constructed upon land that is now occupied by the East Building and completely replaced the earlier buildings and the terraced housing. The school remained until 1928 when the land was purchased by the LSE. The first edition Ordnance Survey map of 1867-74 illustrates that by this time the Anchorage had been built and the footprints of the other buildings within the study site had been developed in their entirety with earlier buildings.
- 5.5.13 By 1894-1896, no changes appear to the areas of the Clare Market, Anchorage or East Buildings. The St Clement's Building (east) however shows a clear plot indicating the demolition of the earlier terraced housing and public house. A large area to the east of 'Vestry Hall', north of Clare Market, also appears to have been cleared. In the late nineteenth century much of the area north of the Strand and south of Lincolns Inn Fields, contained densely packed slum dwelling. From 1862 to 1882 the Law Courts complex was built to designs by G.E. Street. The newly formed London County Council (LCC) sought to address the problems of poverty and overcrowding with large scale urban planning. In 1899 the LCC (Improvements) Act was passed which gave the council powers of compulsory purchase to carry out a scheme of slum clearance and new roads were to be driven through the heart of a residential and business district with the erasure of the old street pattern. The cost was £5.24 million and in the Clare Market area approximately three thousand two hundred people were removed.
- 5.5.14 The grand thoroughfares of the Aldwych and Kingsway were set out to improve access between the Strand and Holborn and new large scale commercial buildings on either side were to be faced in stone with classical details creating a triumphal tree lined carriageway. The formal opening of Kingsway took place in 1905. It was a broad avenue 30.5m wide with a tunnel beneath for electric trams (the south part of which was used by cars from 1961). The infilling of the vacant street fronting plots followed slowly between 1903 and 1927 when the focused turned toward completing the Aldwych crescent. These buildings were all very likely to be built with basements and foundations that would extend below the level of archaeological deposits and into the natural geology.
- 5.5.15 The Ordnance Survey map of 1906-09 illustrates the construction of 'Strand Newspaper House', which later became St Clement's Building (west), and the laboratory of the Government Chemist, which was later replaced by St Clement's Building (east). The streets and terraced properties adjacent to Houghton Street, including Holles Street, have been cleared, in addition to properties lining the southwestern side of Houghton Street. Additional clearances have taken place within the former New Inn Gardens, presumably to make way for Aldwych House.

- 5.5.16 The opportunity for development offered by so many vacant plots of land was seized by the LSE which was looking to expand and find a more suitable and permanent home. The Passmore Edwards Hall was built in 1902 on a site in Clare Market allotted by the LCC for an indefinite period and a minimal rent. This was to form the core of the modern 'Old Building', as it came to be known. It increased in size either by extension following compulsorily purchase of earlier properties and demolition, or by the acquisition and use of neighbouring properties as School buildings.
- 5.5.17 By 1932 the LSE East Building is depicted in its entirety (even though the east part was not built until 1938), with the completed Aldwych House to the east. The areas later occupied by the Clare Market Building, St Clement's Building (east) and still occupied by the Anchorage appear little changed from 1906.
- 5.5.18 No changes are illustrated on the Ordnance Survey map of 1952 and the laboratory of the Government Chemist is labeled as a 'Government Laboratory' (later replaced by St Clement's Building (east)).
- 5.5.19 The Ordnance Survey map of 1969 shows that by this time the Clare Market Building and St Clement's Building (east) and the former terraced properties had been cleared.

6 ARCHAEOLOGICAL METHODOLOGY

- 6.1 In accordance with the approved Written Scheme of Investigation (Hawkins 2015b), seven of the eight evaluation trenches were excavated (AP1-7), with an additional mitigation trench (AP9) and three trial pits (TP14-16). These were located across the site with variable dimensions. Trenches 2, 3, and 6 measured 5m x 5m and were located in areas of a current basement in order to test the impact this has had upon archaeological deposits. Trench 7 was targeted on Clements Inn Passage, to test the width impact of the Victorian sewer, to see if any undisturbed ground survived on either side of it. Trench 1 was located adjacent to a concrete core and could not be extended beyond 1.5m x 2m due to the presence of a boiler room. Trench 4 was located within the basement of the Anchorage building, which was still in use at the time of the evaluation. The trench was positioned within a lightwell and measured 1.5m x 1.5m. Trench 5 was located adjacent to a concrete core, and was also within an area of restricted space. This extended to a maximum of 5m x 2.8m.
- 6.2 All excavation took place under archaeological supervision with the machine excavated trenches and trial pits taking place with a machine fitted with a ditching bucket. Following the removal of modern overburden or generic dump layers, all archaeological features/deposits or discrete cut features were hand excavated entirely or slotted as appropriate.
- 6.3 The trenches were cleaned by hand, recorded and photographed. Recording of the deposits was accomplished using the Single Context Recording Method on proforma context and planning sheets, as presented in PCA's Operations Manual 1 (Taylor 2009). Contexts were numbered and are shown in this report within squared brackets. Plans and sections were drawn at a scale of 1:20.
- 6.4 The areas investigated were located by means of measured survey. Temporary benchmarks were established adjacent to trench 2 (TBM1), 3 (TBM2), 5 (TBM3) and 6 (TBM4). Survey points and established slab level heights were utilised to calculate the levels of trenches 1, 4 and 7.
- 6.5 The completed archive, comprising all written, drawn and photographic records, will be deposited with the London Archaeological Archive and Research Centre under the unique Site Code HGT 15.

7 ARCHAEOLOGICAL SEQUENCE (FIGURES 3-10 AND PLATES 1-11)

Trench AP1

7.1 Phase 1: Natural

7.1.1 Natural brickearth [71] was encountered at a depth of 13.14m OD. This extended across the base of the trench, where not truncated by the concrete raft/footings for the extant building. Given these truncations, the exposed brickearth covered a 1.42m (north-south) by 1.72m area.

7.2 Phase 2: Saxon

7.2.1 Truncating natural horizons was a sub-rectangular cut [68]. This was heavily truncated to the north and south-east of the feature, and extended 0.80m (north-south) by 1.20m by 0.37m depth. Deposits of brown grey silty clay [70] and grey brown sandy clay [67] backfilled the cut sequentially and contained inclusions of sub-angular gravels, flecks of charcoal and occasional pottery sherds. The latter was recovered from upper fill [67] and was dated between 600 and 800 AD (North French greyware).

Trench AP2

7.3 Phase 1: Natural

7.3.1 Brickearth was exposed across the entirety of the base of the trench at a level of 14.98m OD. Modern deposits, including a concrete slab, directly sealed the brickearth and it is therefore likely that this represents a truncated horizon.

7.4 Phase 2: Saxon

7.4.1 Along the eastern limit of excavation, ditch [5] was identified. This extended to an exposed length of 3.20m by 0.54m width on a north-east south-west alignment. The feature exhibited steep sides to a flat base which dropped slightly in elevation from north to south (14.52m OD to 14.50m OD), giving a total depth of 0.52m. Primary fill [10] appeared to represent a natural accumulation/slumping along the western side of the ditch and comprised brown grey silty clay with occasional fragments of oyster shell and daub. Secondary fill [4] of silty clay contained oyster shell, daub, animal bone and struck flint inclusions. This feature has therefore been tentatively ascribed to phase 2 on the basis of the lack of later material, and given the presence of Saxon features/horizons in close proximity (see AP3 and AP9).

7.5 Phase 4: Post-medieval

- 7.5.1 The construction of a substantial north-east south-west aligned brick wall truncated the upper limits of fill [4]. Red brick wall [2] was constructed over a concrete foundation within linear construction cut [2], backfilled with loose silty clay [1] and [6] containing clay tobacco pipe stems dated to the 19th century. The boundary wall extended along the eastern limit of excavation and returned west at the northern limit of the trench. The corbelled footings extended to a maximum width of 0.74m by up to 0.60m in height and had been constructed with red bricks with shallow frogs. It is likely that the constructions relate to the late 19th century school (St Clement Danes Grammar School) depicted cartographically from 1867.
- 7.5.2 Pit [9] was also dated to this period. The square pit extended with steep/near vertical sides to an irregular stepped base covering a 1.46m by 1.30m area. The 0.43m deep feature had been backfilled with a dense concentration of demolition rubble [8]. The latter contained clay tobacco pipe and pottery fragments dated between 1580 and 1740 which might suggest the demolition of earlier properties during the construction of the Grammar School.

Trench AP3

7.6 Phase 1: Natural

- 7.6.1 The brickearth horizon [30] identified within this trench appeared slightly weathered at the upper limits of 14.59m OD. This was investigated via a slot to ensure this obscured no earlier anthropogenic activity and was found to be clean of material, becoming increasingly firm to a depth of 0.49m (14.10m OD).

7.7 Phase 2: Saxon

- 7.7.1 Alluvial deposit [20] sealed natural brickearth from 14.88m OD. This comprised a firm layer of brown grey silty clay containing occasional fragments of animal bone, angular gravels and sub-angular flints. A rounded posthole measuring 0.40m in diameter [40] truncated the alluvium to a depth of 80mm. Gravelly clay [39] backfilled the posthole and contained fragments of daub, oyster shell and animal bone. Due to health and safety restrictions the entirety of layer [20] could not be exposed, and it is therefore unknown whether additional postholes were associated with [40].
- 7.7.2 Extending across the base of the trench, where seen, was a firm layer of brown black silty clay [19]=[38]=[43] containing medium to large fragments of animal bone, oyster shell, charcoal flecks and occasional small fragments of pottery dated between 775 and 850 AD. This deposit was identified between 15.00m OD and 14.91m OD with a maximum thickness of 0.20m in the north of the trench, lensing out towards the south. The quantities of animal bone and shell would suggest this to be a dump layer of refuse material.

7.8 Phase 3: Early post-medieval

- 7.8.1 Deposits of sandy silt [34] and sandy mortar [35] were identified in the west and east of the trench respectively from 15.10m OD. The former contained a mixed assemblage of medieval and post-medieval unglazed peg tiles, Flemish pavers, brick, pottery, clay tobacco pipe and fragments of animal bone and oyster shell. These suggested the deposit post-dated 1640, and is likely to be of mid to late 17th century date. Mortar-rich deposit [35] was contemporary to [34] and contained intermediate post great fire bricks dated from 1664-1725. Both deposits were interpreted as levelling horizons and were recorded from 15.07m OD.
- 7.8.2 Surface lain brick walls [22] and [23] were constructed from a founding level of 14.93m OD. These ran perpendicular to one another along north-west south-east and north-east south-west alignments respectively. Eastern wall [21] was constructed in unfrogged post-medieval bricks, in use between 1450 and 1700. This survived to a single course, with a maximum length of 0.88m. Northerly wall [22] survived to a maximum of two courses in height by 1.06m length by 0.24m width. Given the comparable materials utilised in construction and founding level, it is likely that both walls functioned together. A third wall extended across the western limit of excavation following a north-east south-west alignment, and returned to the east at the southerly limit of excavation. By contrast to [21] and [22] red brick wall [23] survived to a maximum height of 0.74m (10 courses) with a further 3 courses of corbelled brick foundations. The bricks were laid in English bond and were dated between 1450 and 1700. The entire construction had been built within a linear construction cut [25] which extended a further 0.14m in width from the face of the bottom corbel, and backfilled with silty clay and mortar [24].
- 7.8.3 Of uncertain relationship to the walls, due to extensive robbing cuts, were a series of dump layers. Layers [31], [32] and [33] were identified in section with the combined thickness of 1.19m from 16.03m OD. These dumps of coarse sandy silt contained frequent inclusions of building rubble and mortar lenses which may indicate they coincide with the demolition/abandonment of properties represented by walls [21]/[22]/[23]. The building material recovered from [32] post dated 1666 and fragments of clay tobacco pipe dated between 1580 and 1740. A second sequence of dumping was identified within the west facing section from 15.88m OD. Deposits of mottled grey/reddish brown sandy silts containing angular gravels, small fragments of peg and pan tile, mortar lenses, clay tobacco pipe and pottery sherds were recorded as layers [36], [37]=[14] and [16] with the combined thickness of 0.80m. The assemblages suggested a mid to late 17th century date range for the latter dump layers.

- 7.8.4 Squared cuts [13] and [27] were identified within the eastern and southern limits of the trench. Pit [27] extended 1.30m north-south by 1.90m and extended with steep sides to a flat base 0.18m in depth. Recorded from 15.16m OD, the pit had been backfilled with blue-grey silty clay and mortar [26] containing clay tobacco pipe stems dated between 1580 and 1740, pottery sherds dated between the mid 16th century and 1700 and fragments of post-medieval brick in use between 1450 and 1800. Also within the fill were a number of large animal bone fragments which suggest this to have been a refuse pit. Cut [13] appeared to target wall [21] and may therefore be part of a robbing trench. This was recorded from 15.95m OD and extended with steep sides to a flat base. As seen the feature measured 1.92m north-south by over 1.30m width and 1.03m depth. The cut had been backfilled sequentially with fills of sandy silt [15] and [12] containing inclusions of clay tobacco pipe dating from the mid 17th century, large fragments of animal bone, including horn cores, and pottery sherds dated between 1550 and 1600.
- 7.8.5 Linear cut [42] extended along the southern limit of excavation on a north-west south-east alignment to a length of 2.55m by over 0.20m in width. This had been backfilled with dark black brown silty clay [41] containing inclusions of pottery sherds dated between 1580 and 1700 and abraded red brick dated between 1450 and 1800. Due to health and safety limitations the feature could not be excavated to establish full depth or function. This was therefore interpreted as a possible property boundary.

7.9 Phase 4: Post-medieval

- 7.9.1 Linear robbing cut [18] extended along a north-west south-east alignment, targeting earlier walls [23] and [22]. The cut measured 2.70m by 1.30m by 1.09m in depth from 16.03m OD and had been backfilled with mortar and building rubble [28] and capped with grey brown sandy silt [17]. A mixed assemblage of brick, clay tobacco pipe and pottery sherds was recovered from the backfills which suggested a mid 18th century date range. Some earlier residual material included medieval pottery sherds dated between 1240 and 1400.
- 7.9.2 Also attributed to this period were dump layers [29] and [11] which were interpreted as levelling horizons in advance of construction for the extant building. These comprised brown-black sandy silts containing CBM rubble, clay tobacco pipe, animal bone, pottery and mortar flecks. The building material dated from the mid 18th century, whereas the clay tobacco pipe and pottery dated from 1580 to 1740. These deposits were identified from directly below slab level with a maximum thickness of 0.80m.

Trench AP4

7.10 Phase 1: Natural

- 7.10.1 Natural brickearth [102] was identified, where not truncated, at 15.05m OD. The exposed areas of the brickearth and limited size of the trench were too small to be able to make any inferences regarding the underlying topography of this part of the site.

7.11 Phase 4: Post-medieval

- 7.11.1 The earliest deposit identified within the trench comprised a 0.19m thick layer of orange-brown gravelly sandy clay [93]. Recorded from 15.23m OD, the layer contained sub-angular and sub-rounded gravels but no cultural material. This was interpreted as a levelling horizon for the construction of overlying masonry and therefore ascribed to this phase of activity. The layer was truncated by the construction of north-west south-east aligned brick wall [97] within construction cut [96]. Wall [97] extended to an observed length of 1.48m by 0.61m width and 0.17m height (two courses) and utilised unfrogged red bricks bonded with Portland mortar, giving a post 1830 date of construction. Silty clay [95] backfilled the construction cut, and was clean of any cultural material.
- 7.11.2 Associated with wall [97] was brick drain [100] which was located to the immediate north of the boundary wall and followed the same alignment. The drain was constructed within a squared construction cut [98] with unfrogged red bricks, and backfilled with silty clay and mortar [98]. The construction cut was first identified at 14.98m OD and the 0.26m by 0.46m internal area of the drain infilled with brown grey clay-silt [101]. Pottery, clay tobacco pipe and brick fragments recovered from [101] suggested a late 18th to 19th century date of deposition. The fill also contained a number of residual early Roman bricks which might suggest the truncation of earlier horizons during the construction process.
- 7.11.3 Sealing all earlier features and extending across the full limits of the trench was a 30mm thickness of yellow brown silty clay [94]. The dump layer is likely to relate to the abandonment of the earlier structure and contained mortar and flint inclusions.

Trench AP5

7.12 Phase 1: Natural

- 7.12.1 Brickearth [54] was recorded across the trench from an uppermost elevation of 14.26m OD. The upper horizon of this layer exhibited significant undulations potentially indicative of water scouring. The undulations had become backfilled naturally with deposits of coarse sandy gravel [53]/[49] and sand [52]. The sand and gravel deposits were partially excavated and extended to a maximum depth of 0.27m.

7.13 Phase 3: Early post-medieval

7.13.1 Linear cut [47] extended across the north-eastern limits of the trench along a north-east south-west alignment. The cut was observed for a total length of 2.64m by over 0.74m in width (not fully exposed) and extended with steep sides to a depth of over 1.05m. The base of the features was unseen and due to space and safety restrictions, the cut could not be fully excavated. This was backfilled sequentially with deposits of sandy clay [51] containing oyster shell, animal bone and building material, eroded timber (no structural pieces survived) [50] and organic rich silty clay [46] containing occasional inclusions of oyster shell and animal bone. The precise function of the cut remains unclear, however it does appear to respect property boundaries illustrated cartographically from the late 18th century. The building material recovered from the backfills included medieval and post-medieval peg tiles and abraded brick fragments giving the assemblage a date range of 1666-1800, with some residual earlier material dating from 1480.

7.13.2 Also cut into natural horizons was a sub-circular small pit or large posthole [44] identified along the southern limit of excavation. The shallow feature extended to a projected diameter of 0.63m by 80mm depth and exhibited concave sides and base. It had been backfilled with greyish-brown sandy silt with gravel and glass inclusions. The latter was dated between 1640 and 1680.

7.14 Phase 4: Post-medieval

7.14.1 A single dump of compacted brick rubble and mortar [48] was identified at 14.44m OD and sealed the upper fills of ditch [47]. The layer extended to 0.65m north-south by 0.75m by 80mm thickness and was interpreted as demolition rubble derived from earlier properties in advance of the 19th and 20th century redevelopments documented cartographically.

Trench AP6

7.15 Phase 1: Natural

7.15.1 The earliest horizon identified within this trench comprised a firm silty clay with iron staining [63]. This was identified from 13.79m OD and comprised a continuous horizon directly below brickearth [54]. The brickearth extended across the base of the trench with an undulating upper horizon from an uppermost elevation of 14.09m OD. Similarly to trench AP5, these undulations had become naturally infilled with coarse sandy gravel deposits [56] and [57].

7.16 Phase 2: Saxon

7.16.1 Ephemeral linear feature [194] followed a north-east south-west alignment for a length of 1.80m by 0.75m width. This had been backfilled, potentially naturally, with firm, grey brown clay to a depth of 0.37m from 14.06m OD. Despite no dating recovered from the fill, the feature was tentatively ascribed to this period based upon similarities with feature [68] backfilled by [70]/[67] within trench AP1 to the south of this trench.

7.17 Phase 4: Post-medieval

- 7.17.1 Walls [59] and [61] were identified running along a north-east south-west alignment to the west and east of trench AP6 respectively. The latter comprised the concrete foundation for a demolished boundary wall which extended up to 0.65m in width by over 2.80m length. The 0.20m thick foundation was recorded from 14.16m OD and had been truncated by construction for the extant building.
- 7.17.2 Red and yellow brick wall [58] extended to a width of 1.32m by 0.31m height. This had been built within linear construction cut [59] which extended 0.27m in width from the face of the wall and was overlain by construction cut backfill of silty sand [60]. Bricks utilised in the construction were dated between 1770 and 1940 and had been bonded with Portland mortar used from 1830 to 1950.
- 7.17.3 Both wall [58] and foundation [61] were considered to represent buildings pre-dating the extant building, which formerly fronted onto Clements Inn Passage. These may relate to a former Public House illustrated on Ordnance Survey maps from 1867.

Trench AP7

7.18 Phase 4: Post-medieval

- 7.18.1 East west aligned walls [65] and [66] were identified running parallel with Clements Inn Passage. Due to extensive live services and loose deposits of made ground extending beyond 1.20m in thickness, the full nature of these could not be investigated. The walls had been constructed c.1.90m apart, and the only visible wall in plan [65] extended to a width of 0.45m. These constructions were identified from 17.12m OD and may relate to a known underlying culvert which extends throughout the length of the passageway.

Trench AP9

7.19 Phase 1: Natural

- 7.19.1 Brickearth [30] was recorded within the trench at the base of cut features and within a central sondage. This was encountered at an uppermost elevation of 15.05m OD dropping down to 14.76m OD in the south-eastern limits of the trench.

7.20 Phase 2: Saxon

- 7.20.1 Three broad sub-phases of activity were identified of this date. The recovery of pottery consistently dated between 720 and 850 AD might argue that these phases took place within a limited time frame, indicative of intense activity. However, a paucity of dateable material from the earlier phase 2a deposits and features means that the precise time frame between each episode of activity is difficult to determine.

Phase 2a:

- 7.20.2 Sealing the natural was a 0.27m thick layer of soft, brown grey silty sand with manganese staining [116]. This covered a 3.94m by 3.22m area at 15.32m OD and contained occasional fragments of burnt flint. This was sealed by greenish grey silty sand and clay dumps [114] and [115] which were clean of dateable material and identified from 15.35m OD. These horizons were subsequently truncated by numerous rounded postholes which were recorded from between 15.30m OD and 15.13m OD. The 31 postholes (cuts [109], [111], [130]-[142], [162]-[177]) followed a rough north-east south-west alignment with a particular concentration in the northern limits of the trench. Each of the postholes largely extended to between 0.10m and 0.18m in diameter and extended with steep sides to a tapered base up to 0.15m in depth. These were backfilled potentially naturally with deposits of light brown grey silty clay and gravel (fills [108], [110], [117]-[129], [146]-[161]). Within the fills were inclusions of charcoal, shell and occasional small fragments of animal bone.
- 7.20.3 Sub-squared pit [113] was identified at 15.32m OD and extended to 0.80m north-south by 1.18m east-west and 80mm in depth. It is likely that this is the base of a heavily truncated feature and had been backfilled with greenish grey sandy silt [112] containing inclusions of animal bone.

Phase 2b:

- 7.20.4 Sealing the western postholes was a 60mm thick layer of soft silty clay [107] which contained fragments of burnt clay, animal bone, brickearth lenses and abraded daub. The layer extended 3.80m north-south by 1.38m east west, and was truncated to the east by north-east south-west aligned curvilinear ditch [92]. The ditch could be traced for a length of 3.40m by 0.64m width and appeared to curve eastwards at its northerly limits (truncated). In profile the ditch extended with steep sides to a concave base, 0.20m in depth. Loose deposits of dark grey brown sandy-silty-clay [91] backfilled the cut, and became visibly more silt rich towards the base indicating initial natural infill or slumping. Within the backfill was a small assemblage of large pottery fragments, including a near complete profile of a jar in Ipswich ware dated between 720 and 850 AD.

Phase 2c:

- 7.20.5 Post dating the ditch was a large pit or linear feature which extended across the northern limits of excavation covering a 3.05m east-west by 1.52m area. Pit [90] exhibited concave sides to a flat base at 15.09m OD and was first identified at 15.54m OD. This had been backfilled with deposits of brownish green sandy gravel [103] and brownish grey sandy gravel [87] in turn. Primary fill [103] was largely sterile of cultural material and contained only a moderate assemblage of animal bone. Secondary fill [87] however contained a large assemblage of large animal bone fragments in addition to oyster shell, residual Roman brick and tegula (dated 55-160 AD) and fragments of Ipswich ware pottery dated between 720 and 850 AD.

7.20.6 Cut from the comparable horizon of 15.38m OD was a second pit. Pit [105] appeared sub-rounded in plan and extended to a diameter of 1.60m by 0.15m depth. The cut exhibited concave sides and a slightly concave base and had been backfilled with silty sand fills [104] and [89] in turn. These contained inclusions of early Roman combed box flue tile (dated 55-160 AD) and Eccles brick (dated 50-80 AD) in addition to Ipswich ware pottery sherds in use between 720 and 850, animal bone and oyster shell.

7.21 Phase 3: Early Post-medieval

7.21.1 Two broad phases of activity were attributed to this phase. These comprised an initial phase of structural remains in the form of multiple postholes, with roughly contemporary dumping (phase 3a) followed by the excavation of large refuse pits suggesting a potential change in use of the area (phase 3b).

Phase 3a:

7.21.2 A group of nine postholes were encountered from 15.46m OD. These comprised sub-squared (cuts [144], [179], [189], [190] filled by [143], [178], [182], [183]) and rounded (cuts [187], [188], [191]-[193] filled by [180], [181], [184], [185], [186]) postholes. The sub-squared postholes extended up to 0.20m by 0.20m and the rounded postholes extended between 60mm and 120mm diameter. These had been backfilled with comparable fills of dark brown-black silty sand largely devoid of cultural material. A single piece of unglazed peg tile was recovered from fill [143] dated from 1480. As a group these followed a north-east south-west alignment. These were sealed by a 100mm thick deposit of mottled silty clay [106] containing fragments of animal bone and gravel. A small assemblage of unglazed peg tiles were also recovered from the dump layer dated between 1480 and 1900.

7.21.3 Sealing the earlier dump layer and extending across the entirety of the trench was a 0.10m thick levelling deposit of brown grey silty clay [84]. Within the deposit were quantities of animal bone, pottery (dated 1580 to 1700) and a moderate assemblage of building materials including tile and daub. The tiles recovered comprised Roman tiles, medieval glazed peg tiles and unglazed post-medieval peg tile. Also within the layer was a small piece of worked bone (SF2). Overlying [84] were discrete dumps of blue-grey clay [83] and grey brown clay-gravel [82] in turn which were only identified in the south of the trench, with the combined thickness of 0.16m.

7.21.4 Small pit [81] truncated the upper horizons of [84]. This extended to a diameter of 0.46m by 0.32m depth and exhibited concave sides to a flat base. Grey brown silty clay [80] had been utilised to backfill the cut and contained a number of bricks dated between 1450 and 1800 and mid 16th century pottery sherds.

7.21.5 A second levelling horizon across the entirety of the trench was identified at 15.68m OD. Dark grey brown silty clay [79] raised the ground level by 0.10m and contained post-medieval and medieval peg tile, residual Roman tegula, small to medium sized fragments of animal bone and a small assemblage of pottery dated between 1580 and 1700.

Phase 3b:

7.21.6 A group of three large intercutting pits were observed truncating [79] within the south-eastern limits of the trench. The earliest of these comprised rounded pit [86] and linear/squared feature [75]. The latter extended to a length of 1.20m by 0.90m by 0.30m depth and had been backfilled with sandy gravel [74]. Pottery recovered from the fill suggested a date range of 1580 to 1700. Rounded pit [86] measured 1.84m in diameter and extended with concave sides to a flat base, 0.57m in depth. A 0.20m thick primary fill [88] of yellow brown silty clay backfilled the base of the pit and contained animal bone, pottery dated between 1580 and 1650 and a mixed assemblage of building material. Chalk, slate roofing tile, medieval and post-medieval peg tile and brick were recovered from the fill and might suggest this to represent demolition debris. Secondary fills [85]=[145] of mixed silty clays also contained demolition rubble, plus animal bone, oyster shell, slag and fragments of degraded wood. Within the assemblage of building material was a residual early Roman brick dated between 50 and 160 AD, whereas the pottery sherds inferred a 1580 to 1650 date range.

7.22 Phase 4: Post-medieval

7.22.1 Sub-squared pit [73] truncated both earlier pits [75] and [86]. This covered a 2.30m by 2.10m area and extended to a depth of 0.88m with gently sloping sides to a flat base. Primary fill [72] was an organic rich deposit of silty clay containing oyster shell, clay tobacco pipe, pottery sherds, glass and a large assemblage of building material including Malmstone, medieval and post medieval peg tiles, brick and pavers. The assemblage suggested a late 18th century date range for deposition. Secondary fill [69] was largely comprised of building material and mortar with additional inclusions of animal bone, oyster shell, slag, glass, clay tobacco pipe and pottery sherds. These inclusions were roughly contemporary to the primary fill, dating from 1780.

7.22.2 Evidence of late 18th century construction was identified along the eastern limit of excavation. Red brick wall [78] was constructed in post great fire unfrosted narrow bricks, laid in English bond. The wall extended to an observed length of 2m by 0.20m width and over 0.73m height. The full depth of the wall or founding level could not be established and the wall extended beyond 15.12m OD. The wall followed a north-east south-west alignment and had been laid within linear construction cut [77], backfilled with silty clay [76].

7.22.3 The alignment of wall [78] and materials utilised suggests this to have formed part of the rear boundary wall associated with a line of terraced properties which formerly fronted onto the east side of Houghton Street. These are clearly depicted on Horwood's map of 1792-99.

Trial Pits:

7.23 Phase 1: Natural

7.23.1 Natural brickearth [30]=[215] was recorded at the base of trial pits 14, 15 and 16 from an uppermost elevation of 14.50m OD dropping to 14.18m OD from south to north. This horizon was overlain by a dense sandy gravel deposit [214] within trial pit 15 only. The deposit extended over 1m in thickness with lenses of sand and was observed within the western limits of the trial pit only from 14.46m OD. Due to the limited exposure the full extent of the gravel remains unclear, or whether this should be considered more of a fill of cut feature. The gravel was overlain by a 0.30m thick deposit of weathered brickearth [213] which contained charcoal inclusions and had a mottled appearance of yellow brown/red-brown silt.

7.24 Phase 2: Saxon

7.24.1 A distinctive horizon of black-brown sandy silt containing frequent inclusions of oyster shell was recorded within trial pit 16. Layer [64] extended to a thickness of 0.32m from 14.68m OD and appeared to represent a continuation of layer [19] as recorded within AP3. A comparable layer of sandy silt [207] containing charcoal, oyster, daub and animal bone inclusions was also encountered within trial pit 15 from 14.96m OD. The latter sealed a 100mm thick layer of grey silty clay [208] containing charcoal flecks, and capped the fills of two pits.

7.24.2 Pits [212] and [210] were identified in the west and east of trial pit 15, but due to health and safety restrictions could only be recorded from ground level. These were first identified at 14.71m OD and appeared rounded and sub-squared in plan respectively. Rounded pit [212] extended to 0.56m by 0.56m by 0.35m depth. Sub-squared pit [210] covered a 0.95m by 0.88m area and extended with concave sides to a concave base 0.65m in depth. Both pits had been backfilled with comparable deposits of black-brown sandy silt containing frequent inclusions of medium to large sized animal bone fragments (fills [211] and [209]).

7.25 Phase 3: Early post-medieval

7.25.1 Levelling deposits of brown-black sandy silt containing clay tobacco pipe, pottery and CBM were identified within trial pits 15 [206] and 16 [55]. These extended to a maximum of 1.18m in thickness (layer [55]) from an uppermost elevation of 15.86m OD.

7.26 Phase 4: Post-medieval

7.26.1 Evidence of a post-medieval basement was recorded running along a north-east south-west alignment within trial pit 15. This eastern boundary was represented by a compact mortar foundation, and was sub-divided by red-brick wall [200] running perpendicular. The 0.42m wide wall was constructed with unfrogged red bricks to a maximum height of 1.07m and defined two smaller internal areas, each sized c.1.30m by 0.74m. The wall was interpreted as a former basement wall, and was lain within a linear construction cut [202], founded at 14.74m OD and backfilled with soft sandy silt [201].

7.26.2 The abandonment of the property defined by wall [200] was inferred by dumped debris [204] and [203] within the southern and northern internal areas respectively. These deposits of sandy silt contained inclusions of CBM and angular gravels. The sequence was subsequently sealed by a 0.52m thickness of grey-brown sandy silt [205].

8 PHASE SUMMARY

8.1 The following represents an overview of each phase of activity identified within evaluation trenches AP1-7, AP9 and TPs 14 to 16:

8.2 Phase 1:

8.2.1 Natural horizons of brickearth were encountered within all areas investigated other than AP7. The level at which these were recorded reflects more the degree of truncation by overlying structures rather than any trends in the underlying topography. In the southern extent of the site, natural was recorded from 15.05m OD, dropping to 14.98m OD and 14.59m OD in the far south and east respectively. The northerly trenches identified natural horizons at c.14.26m OD, whereas central trenches AP1 and AP4 identified a truncated horizon of 13.14m OD and 15.05m OD.

8.2.2 Some variation in the natural was encountered within the northern trenches. Trenches AP5 and AP6 identified deposits of natural sand gravel which had been laid within deeper undulations of the upper horizon of natural brickearth. An additional discrete deposit of sandy gravel was encountered within TP15, which may either represent a natural accumulation or the fill of a cut feature extending beyond the limit of excavation.

8.3 Phase 2: Saxon

8.3.1 Saxon features or horizons were recorded within five out of the eight trenches investigated. Trenches AP2, AP1 and AP6 identified truncated horizons, with only the base of Saxon features observed to truncate natural brickearth. Trenches AP3 and AP9, within the southern limits of the site, however identified a stratified sequence of activity, with at least three sub phases of activity identified within trench AP9.

8.3.2 A series of linear cuts were identified which may represent property boundaries. These largely extended along a north-east south-west alignment (as seen within AP2, AP9) with some potentially north-west south-east cuts identified within trenches AP1 and AP6. However, it should be noted that the latter cuts were identified in smaller trenches, were highly truncated and therefore interpretation of these features should be considered extremely tentative. Ditches within AP2 and AP9 however were exposed to lengths of around 5m in each trench by between 0.54m and 0.64m in width. Each ditch exhibited a slightly different profile which may argue that these represent different phases of a boundary ditch rather than a single continuous feature.

- 8.3.3 It is clear that the curvilinear ditch in AP9 represented the penultimate episode of Saxon activity in this trench (phase 2b). The ditch post dated an initial phase of dumping followed by construction, as indicated by numerous rounded postholes (phase 2a). A particular concentration of postholes were identified at the northern limit of excavation, and were interpreted as representing either multiple structures, or multiple phases of modification/repair to a single structure or boundary. The abandonment of the ditch was suggested by the excavation of a number of large pits for refuse disposal, one of which truncated the northern limits of the ditch (phase 2c). Pottery recovered from the Saxon features exclusively comprised Ipswich ware dated between 720 and 850. Large fragments of this pottery were recovered from the base of the curvilinear ditch and therefore suggest a mid 8th to 9th century date of abandonment. A number of residual Roman building materials were also recovered from the fills of cut features attributed to this phase.
- 8.3.4 The identification of Saxon cut features and dumped deposits within trial pits 15 and 16 suggest that Saxon occupation extended to the far eastern limit of the study site.
- 8.4 Phase 3: Early Post-medieval (16th to 17th Centuries):**
- 8.4.1 The 16th to 17th century development of the area was identified within trenches AP3, AP5 and AP9. A linear cut extending along a north-west south-east alignment within northern trench AP5 corresponds well to the illustrated property boundaries on Morgan and Lea's map of 1682. Material culture recovered from the linear cut and an adjacent small pit consistently dated to the mid 17th century. The features are therefore likely to relate to the rear spaces behind properties which formerly fronted onto Clements Lane.
- 8.4.2 Activity of this phase within trenches AP3 and AP9 comprised construction, dumping and pitting. A number of brick walls encountered within AP3 were attributed to this phase. These comprised two north-east south-west aligned walls and a third which ran perpendicular between the two. The walls were interpreted as a basement boundary wall, with two internal dividing walls. The bricks utilised in construction were dated between 1450 and 1700, but had been constructed over levelling material dated to the mid 17th century. Very little development is depicted cartographically within this part of the study site until the later 18th centuries however. Therefore, the walls either represent an undocumented or short-lived property of this period, or alternatively part of the later construction of St. Clements Danes Grammar School (late 19th century) using re-used materials which have given a false early date range. A map regression or further exposure of this part of the site may refine this dating further.
- 8.4.3 Numerous dump layers and pits were also identified within this trench, dating from the late 17th century. Unfortunately extensive robbing cuts targeting the earlier masonry have removed many of the stratigraphic links between these features.

8.4.4 Other indications of early post-medieval development were recorded within trench AP9 with the identification of a north-east south-west aligned group of squared postholes. These contained building material post dating 1480 and were located on the edge of a group of large pits, and may relate to a fence line or boundary. This part of the site appeared to have been subjected to multiple episodes of levelling and pitting post dating the postholes, from the late 16th century onwards. Residual Roman and medieval material was recovered from these features and suggest the disturbance of earlier horizons during this phase of activity.

8.4.5 Features of this phase identified within AP9 appeared to be slightly earlier in date to those encountered within eastern AP3. This may indicate the gradual expansion of development from the main arterial roads to the west and south of the study site.

8.5 Phase 4: Post-medieval

8.5.1 Activity of the 18th and 19th centuries was encountered within all trenches other than AP1. Trenches AP3 and AP9 exclusively contained evidence dating to the 18th century. A single north-east south-west aligned boundary wall extended along the eastern limit of excavation of AP9. This may correspond to the back wall of a terrace which formerly fronted onto Houghton Street and is illustrated on Horwood's map of 1792-99. Beyond this boundary, to the east, was evidence of pitting and dumping within both trenches. A large robbing cut was also identified within trench AP3 and dated to the later 18th to early 19th centuries and targeted earlier masonry.

8.5.2 Numerous walls relating to the 19th century development of the area were recorded across the study site. Boundary walls within trench AP2 relate to the construction of St. Clement Danes Grammar School, with a squared pit, likely to relate to a since removed structure also associated with the school. Additional walls associated with development fronting onto Clements Inn Passage were recorded within trenches AP4 and AP6. The former trench identified a boundary wall and drain associated with a property which would have lain to the south of the passage. Trench AP6 however identified boundary walls which ran perpendicular to the passage and are likely to relate to a former Public House documented on the first edition Ordnance Survey map of 1867. Within the passage itself were parallel walls which followed the alignment of the passage within trench AP7. Although these could not be investigated in great detail, due to the presence of numerous live services, these are likely to be associated with the known sewer which runs the length of the road.

8.5.3 Additional traces of post-medieval activity comprised dump layers recorded within many of the trenches. These were interpreted as levelling horizons associated with the extant structures and contained a large amount of demolition material.

Plate 1: North facing shot of Trench AP1



Plate 2: South facing shot of Trench AP2 (1m scale)



Plate 3: View to south of ditch [5]



Plate 4: View to north of trench AP3 (1m scale)



Plate 5: View to east of trench AP4 (1m scale)



Plate 6: View to north of trench AP5 with linear cut [47] to upper right of frame (1m scale)



Plate 7: View to north of trench AP6 (1m scale)



Plate 8: View to north of trench AP7 (1m scale)



Plate 9: View to north of ditch [92], trench AP9 (1m scale)



Plate 10: View to north of postholes AP9 (1m scale)



*Plate 11: View to north of sondage within AP9 through redeposited natural [116]
(1m scale)*



9 INTERPRETATIONS AND CONCLUSIONS

9.1 Interpretations:

- 9.1.1 Natural horizons consistent with the natural geology of Hackney gravels and brickearth were encountered within all areas investigated other than trench AP7. These suggested that the level of natural lay between 14.50m OD and 15m OD, with lower levels recorded within areas subject to horizontal truncation during construction/levelling for the extant buildings.
- 9.1.2 Evidence of Saxon activity and occupation was recorded within a number of the trenches. Where deeper horizontal truncation was evident (i.e. brickearth directly below the basement slab), only the bases of deeper cut features were exposed (trenches AP1, AP2, AP6). However, trenches AP3 and AP9 identified a stratified sequence of Saxon activity. The most extensive evidence derived from trench AP9 which exposed an initial phase of dumping/levelling, overlain by construction as indicated by numerous postholes, which were in turn post-dated by the excavation of a north-east south-west aligned property boundary. This appeared to have been abandoned by the late 8th to early 9th century, with activity continuing in the form of dumping and pitting. This later phase of dumping and pitting was also identified within trench AP3 and within trial pits 14 and 15, suggesting Saxon occupation continued to the far eastern extent of the site. A second property boundary was identified to the south of AP9 within trench AP2. This followed a comparable alignment but exhibited a very different profile, and the base recorded at the much lower elevation of 14.50m OD by comparison to 15.19m OD. These differences were marked enough to consider these two separate phases of a property boundary as opposed to a single feature and suggest some longevity of occupation within the area to prompt the re-establishment of these boundaries.
- 9.1.3 The next phase of activity to be identified across the site dated to the early post-medieval period (16th to 17th centuries). This comprised evidence of construction in the form of basement walls, dumped deposits, pitting and linear property boundaries. The latter was identified in north-eastern trench AP5 and appears to relate to a documented property boundary illustrated on late 17th century maps and relates to a line of properties along Clements Lane. Evidence of dumping and pitting recorded with the other trenches suggest that the focus of the development perhaps lay just beyond the study site (presumably focussed along the main arterial roads) with the area encompassed by the site primarily used for refuse disposal. The dating of basement walls within trench AP3 to this phase remains tentative, with dates based upon the fabric of the bricks. These either relate to a previously undocumented structure (as this area is cartographically depicted undeveloped until late 19th century) or are part of a later structure which utilised re-used materials.
- 9.1.4 Evidence relating to the 18th century development of the area was recorded within trenches AP3 and AP9. Within the latter a brick boundary wall was identified which is likely to relate to the rear boundary of a line of terraced properties which formerly lined the east side of Houghton Street. These structures can be clearly seen cartographically from at least 1746. Activity to the east of the boundary of this date was limited to dumping and pitting.

9.1.5 Further evidence of the expansion of development throughout the 19th century was encountered within numerous trenches. Masonry related to the construction of St Clement Danes Grammar School was identified, in addition to boundary walls relating to former properties to both the south and north of Clements Inn Passage. Within the passage itself were two parallel walls which were thought to bound a known Victorian sewer running the length of the passage. The walls were largely overlain by further dumping and levelling, interpreted as demolition horizons dating to immediately prior to the extant development.

9.2 **Research Objectives:**

9.2.1 The archaeological investigations sought to address the following research questions:

- To determine the natural topography of the site:
Natural horizons consistent with Hackney Gravel and brickearth were encountered across the site. The level at which these were recorded was variable. Differential horizons of brickearth were a result of truncation by both archaeological features or the nature of the foundations for the extant building. A number of trenches exhibited brickearth directly below the concrete slab (AP1, AP2, AP4, AP5, AP6, TP14). The most heavily impacted brickearth was identified within trench AP1 at a level of 13.14m OD, whereas the northerly trenches identified a truncated horizon of c.14.26m OD. The remainder of the site identified natural levels between 14.50m OD and 15m OD.
- To establish the presence or absence of prehistoric and Roman activity:
No features or horizons were encountered during the investigations of prehistoric or Roman date. However, residual material including burnt flint, and Roman brick/tile recovered from later features might suggest a presence within the wider area.
- To establish the presence or absence of Saxon activity:
A stratified sequence of Saxon activity was encountered within central trench AP9. This identified an initial phase of dumping and construction followed by the establishment of property boundaries. The boundary was subsequently post dated by further dumping and pitting, with all material recovered dated between 720 and 850 (excluding residual earlier Roman material). The dumping and pitting extended to the eastern extent of the subject site, as identified within an additional evaluation trench and within trial pits.

Deeper cut features of Saxon date were also recorded in other parts of the site, where modern activity had horizontally truncated archaeological horizons down to the top of brickearth. These represented a combination of pits and potentially linear property boundaries. However, the limited exposure in many of the trenches means that interpretations should be considered extremely tentative. The clearest evidence for a second property boundary was encountered within southern trench AP2. Although this followed a comparable alignment to that recorded within AP9, the ditch was cut to a much lower elevation and exhibited significant differences in profile to suggest this was a different feature and likely to relate to a different phase of earlier or later boundary. No finds were recovered from the feature with which to refine the dating further.

- To establish the presence or absence of medieval and post-medieval activity at the site:

No firmly dated features of medieval date were recorded across the study site. However, quantities of medieval pottery were recovered as residual material from later contexts, indicating that during later construction phases medieval horizons were impacted upon. It should also be noted that the extent of intercutting pits/robbing trenches may have led to contamination of some features and therefore the potential for medieval horizons should not be ruled out for any future work on the site.

The next significant phase of activity encountered, post-dating the Saxon period, dated to the early post-medieval period. This comprised dumping, pitting and construction. A property boundary relating to the rear of Clements Lane (documented cartographically on Morden and Lea's map of 1682) was identified within the most north-easterly trench and contained an organic rich backfill perhaps suggesting a former timber lining. In other parts of the site evidence suggested the majority of the site to have been utilised for refuse disposal. An exception to this was a number of basement walls recorded in the east of the site. These either demarcate a previously unknown property or indicate the reuse of earlier materials for later structures. The features and horizons of this date illustrate the gradual expansion of development throughout the early post-medieval period across the study site beyond the ribbon development along the main arterial roads to the south and west of the study site.

Later post-medieval activity comprised property boundaries and dumping/pitting dating to the 18th century followed further construction and levelling. The earlier property boundary related to the rear of a terrace documented along Houghton Street to the west of the site. Dumped deposits and pitting beyond this wall, to the east, suggests that this part of the site (south-east) remained largely undeveloped during this period. By the 19th century development had rapidly increased across the entirety of the site. Walls associated with St. Clement Danes Grammar School were identified archaeologically. Properties which formerly lay to the south and north of Clements Inn Passage were also identified archaeologically. It can be assumed that the levelling deposits and demolition debris observed sealing these features relates to the abandonment and destruction of these properties in advance of construction for the extant university buildings.

- To establish the nature, date and survival of activity relating to any archaeological periods, at the site:

The earliest archaeological horizons identified dated to the Saxon period (720 to 850AD) and indicated occupation across the majority of the study site. These largely comprised cut features relating to property boundaries and refuse disposal. Evidence of construction was also evident in the form of numerous postholes indicative of either several smaller structures or one larger multi-phase building. Medieval activity was only identified in the form of residual artefacts within later deposits which suggest some disturbance of these horizons.

Saxon horizons were therefore post-dated by early post-medieval and post-medieval development. Features of this date included property boundaries, boundary/basement walls and dumping/refuse disposal. The survival of these features and horizons was entirely dependent upon the level of truncation from the extant buildings, as detailed below.

- To establish the extent of all past post-depositional impacts on the archaeological resource:
The archaeological horizons and features identified across the site were largely observed directly below the basement slab level. The degree of survival therefore largely depended upon the depth of truncation from the extant structures. This meant that in areas of deeper impact, e.g. AP1, only the base of deeper cut features were identified, whereas in areas of less impact, e.g. AP3 and AP9, a stratified sequence of archaeological features could be identified.

The impact of development pre-dating the extant university complex also had an influence upon the survival of the underlying resource. Cartographic sources suggest that the main focus for development lay to the west of the subject site (along Houghton/Houghton Street) and to the north on either side of Clements Inn Passage (formerly Crab-tree Orchard) and Clements Lane. By contrast, almost the entirety of the south-eastern limits of the site remained undeveloped until the mid-late 19th century. This corresponds directly to the areas in which the greatest depth of stratified archaeological deposits and features were recorded.

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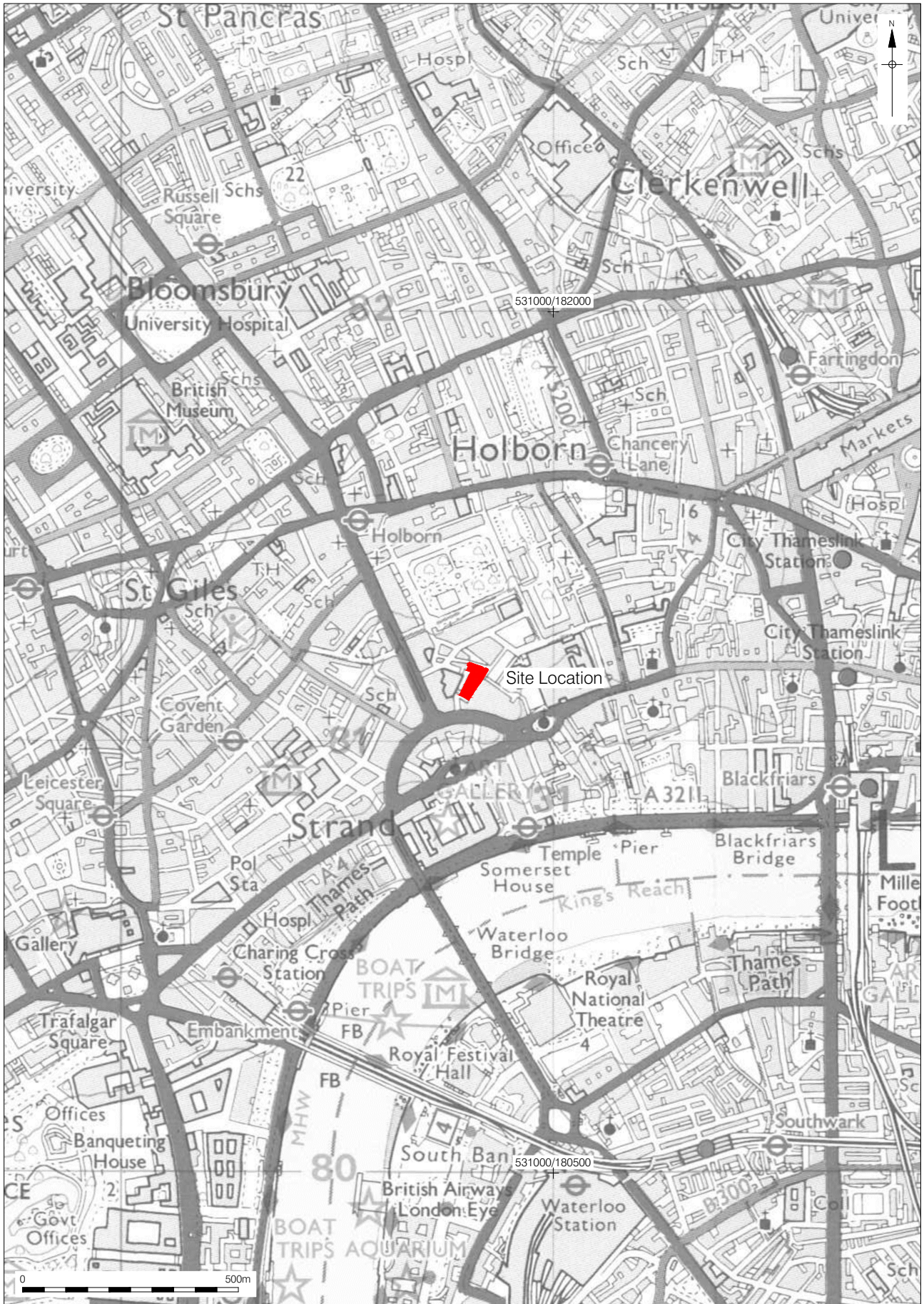
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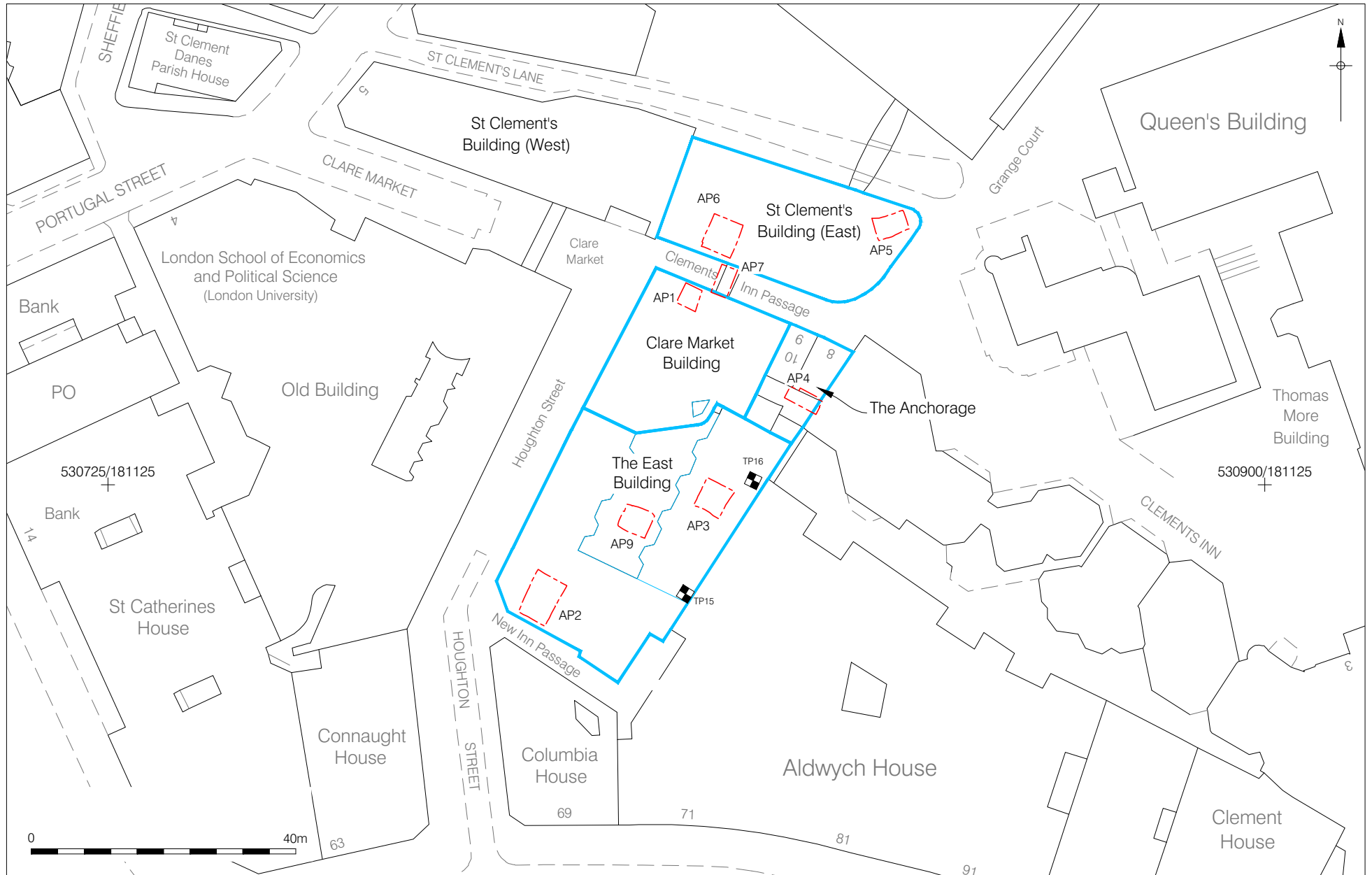


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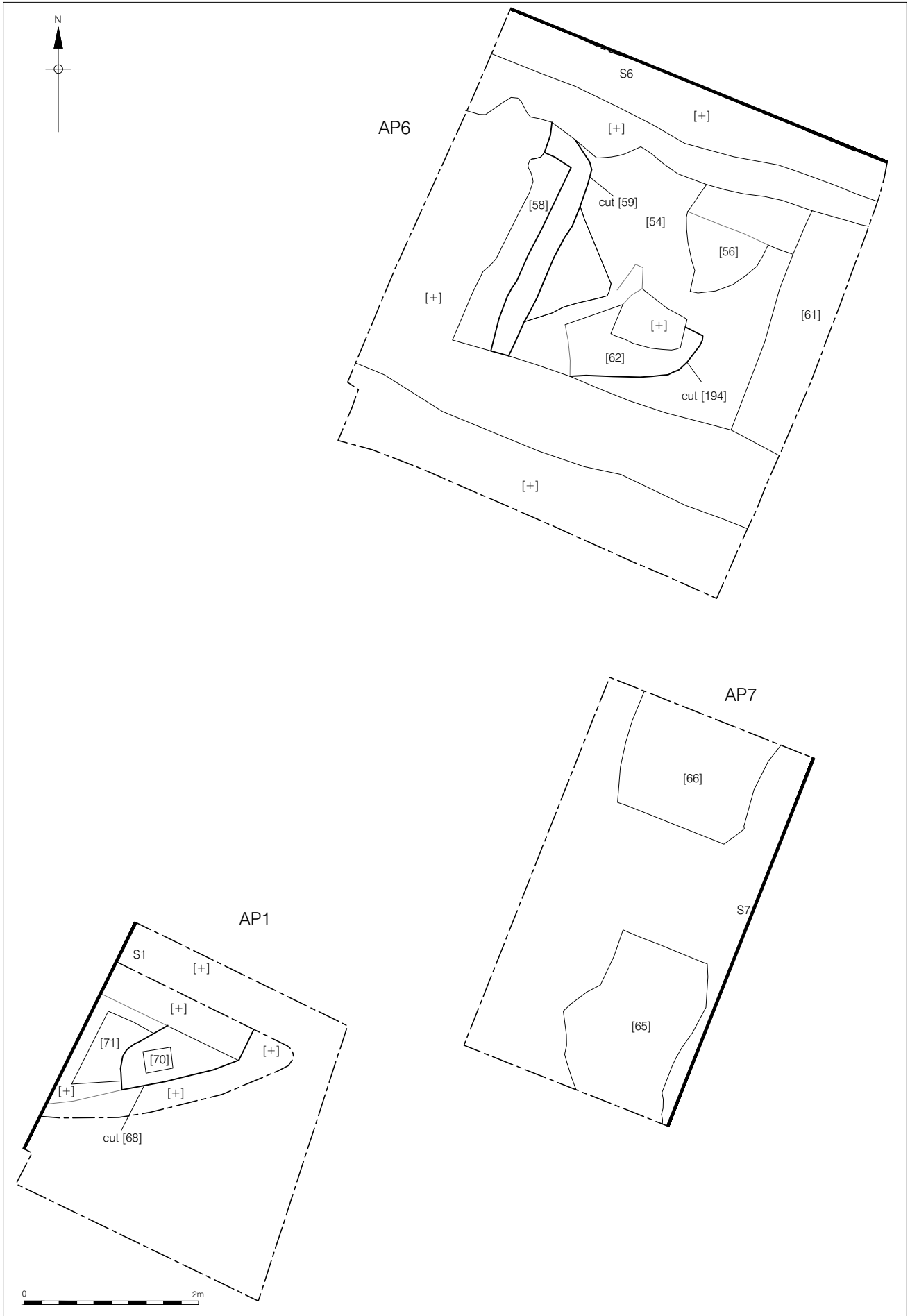
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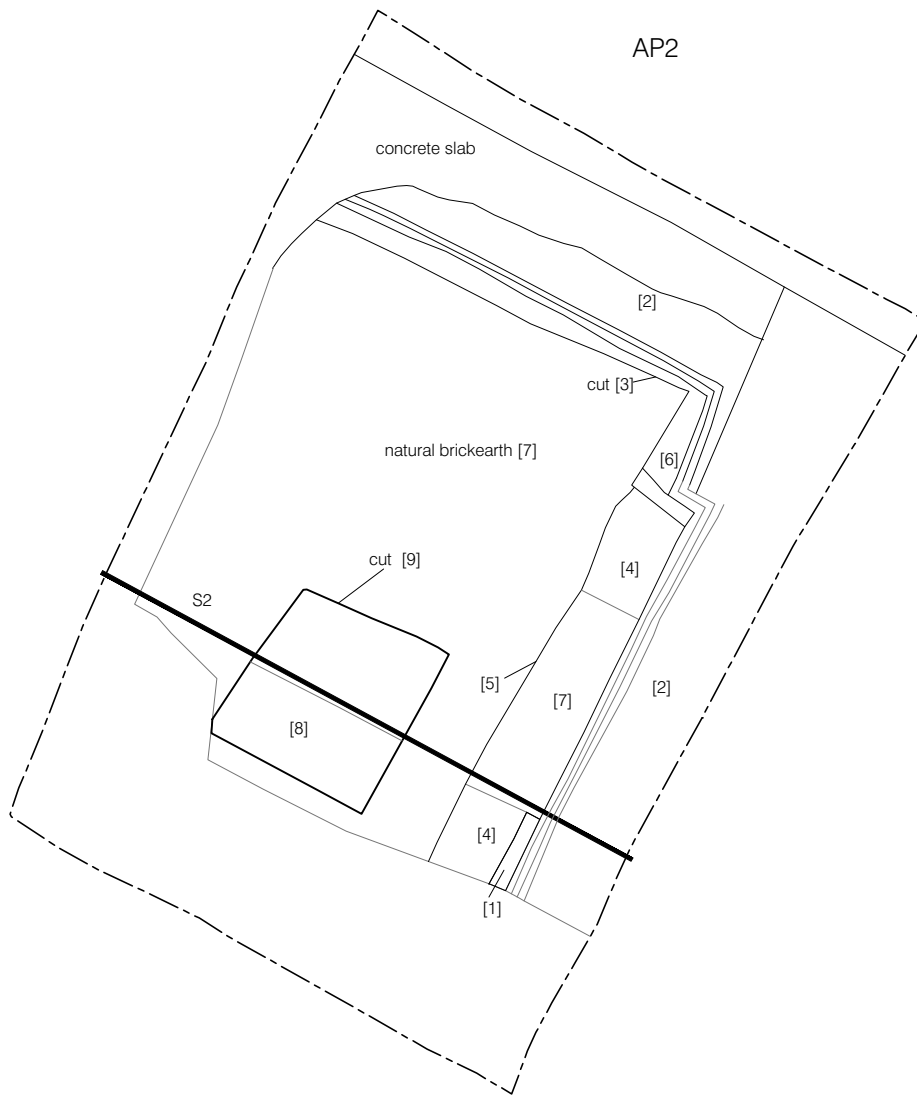
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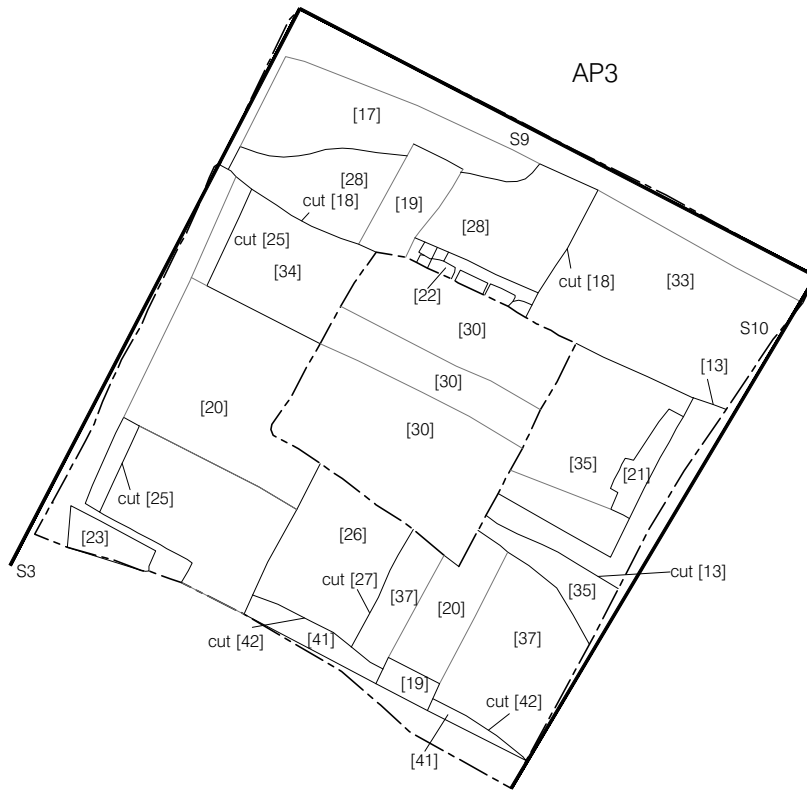


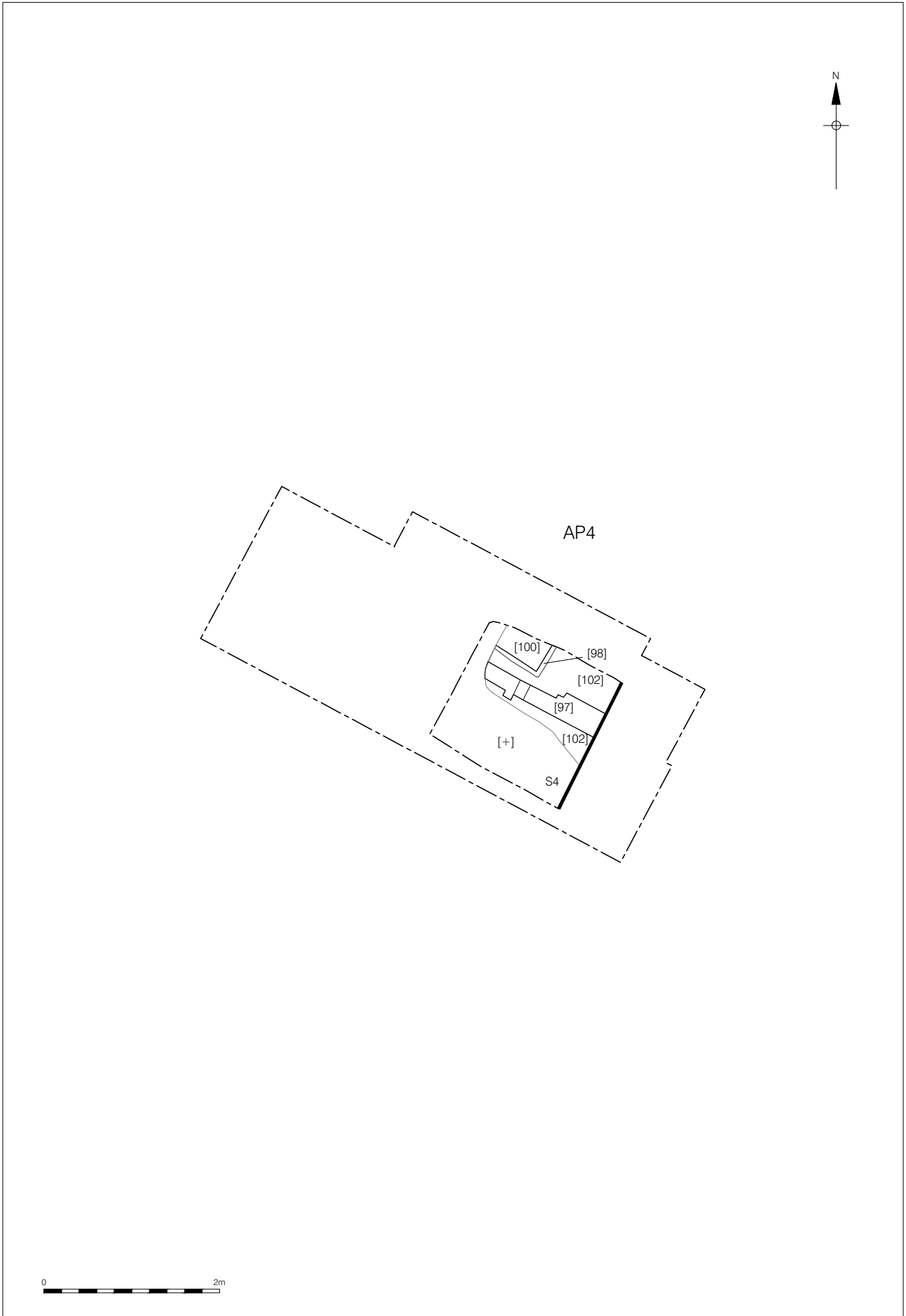
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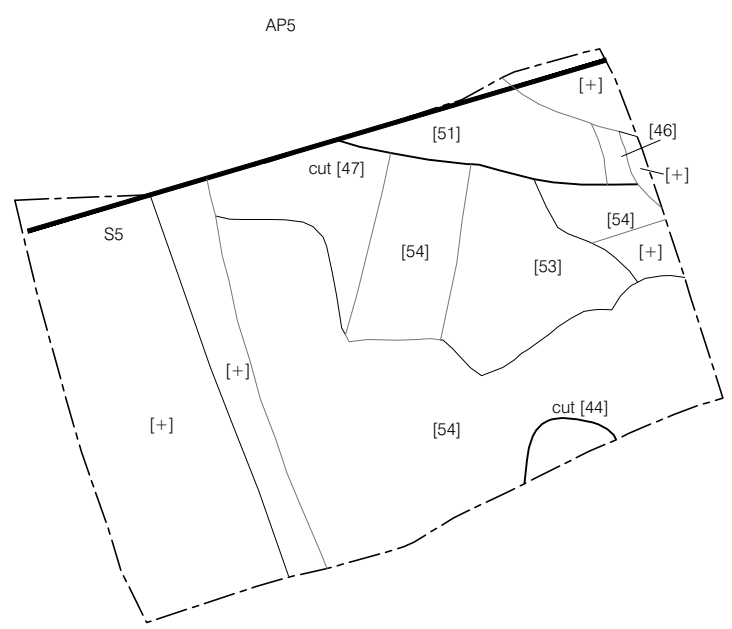
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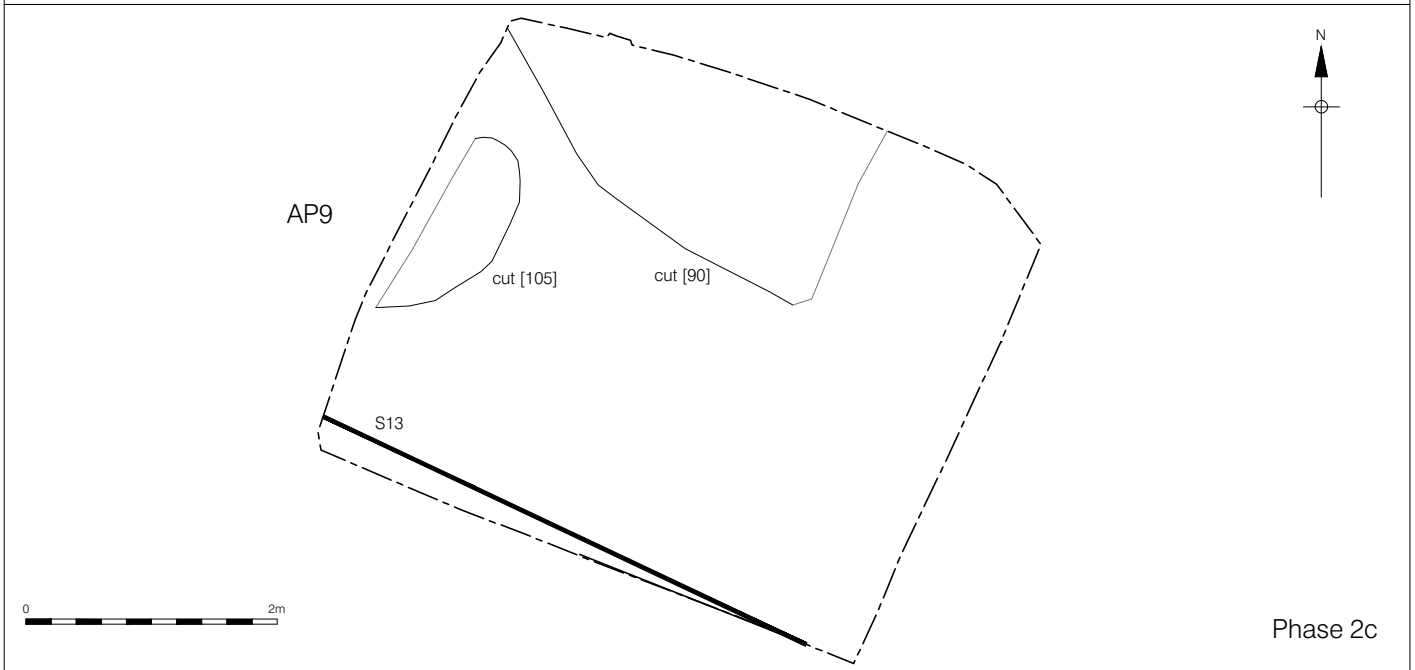
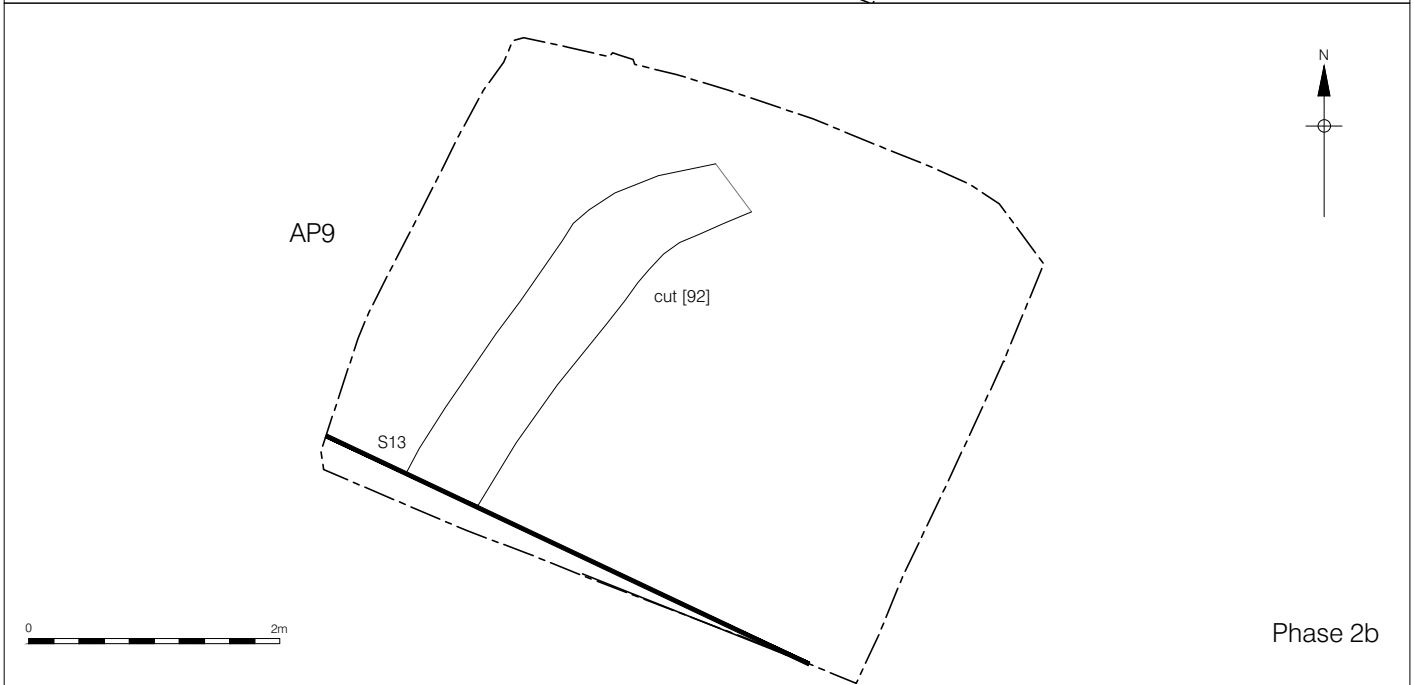
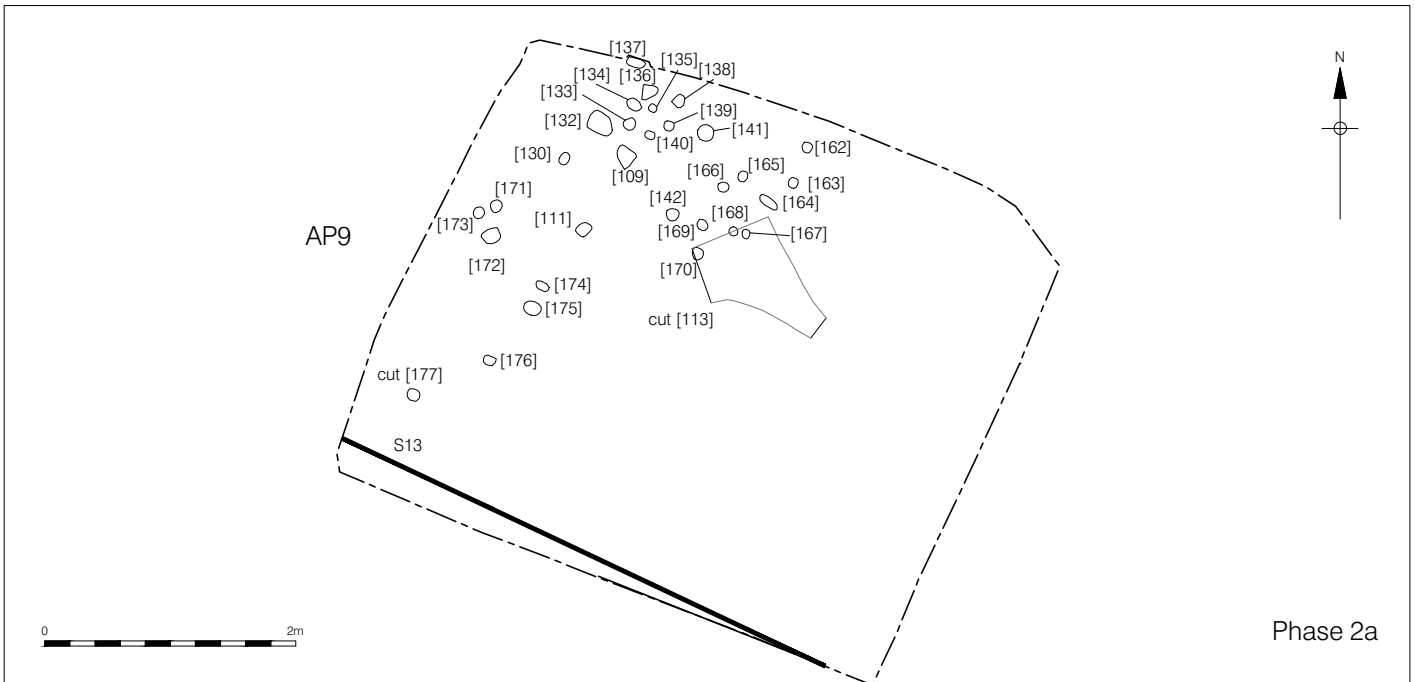


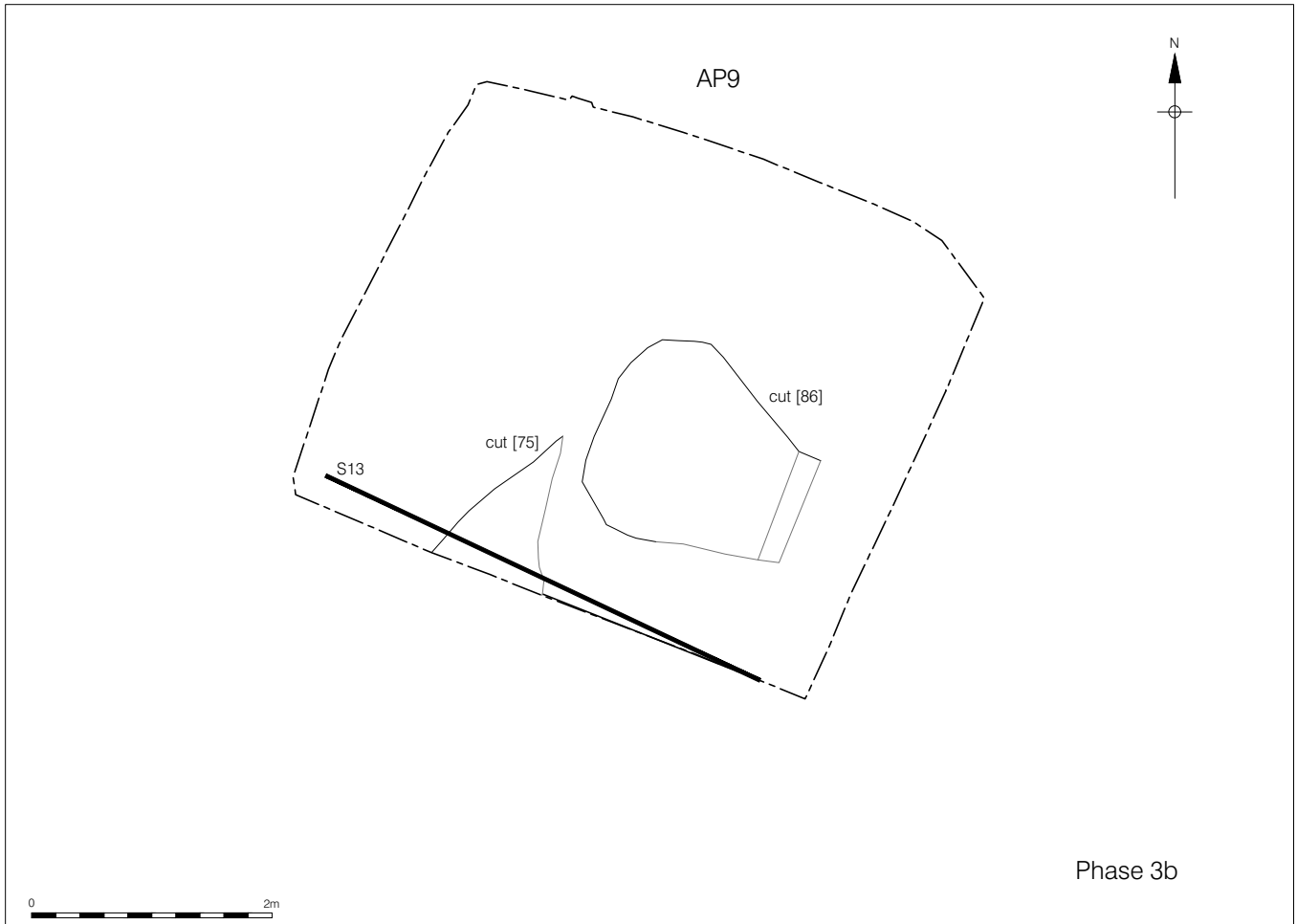
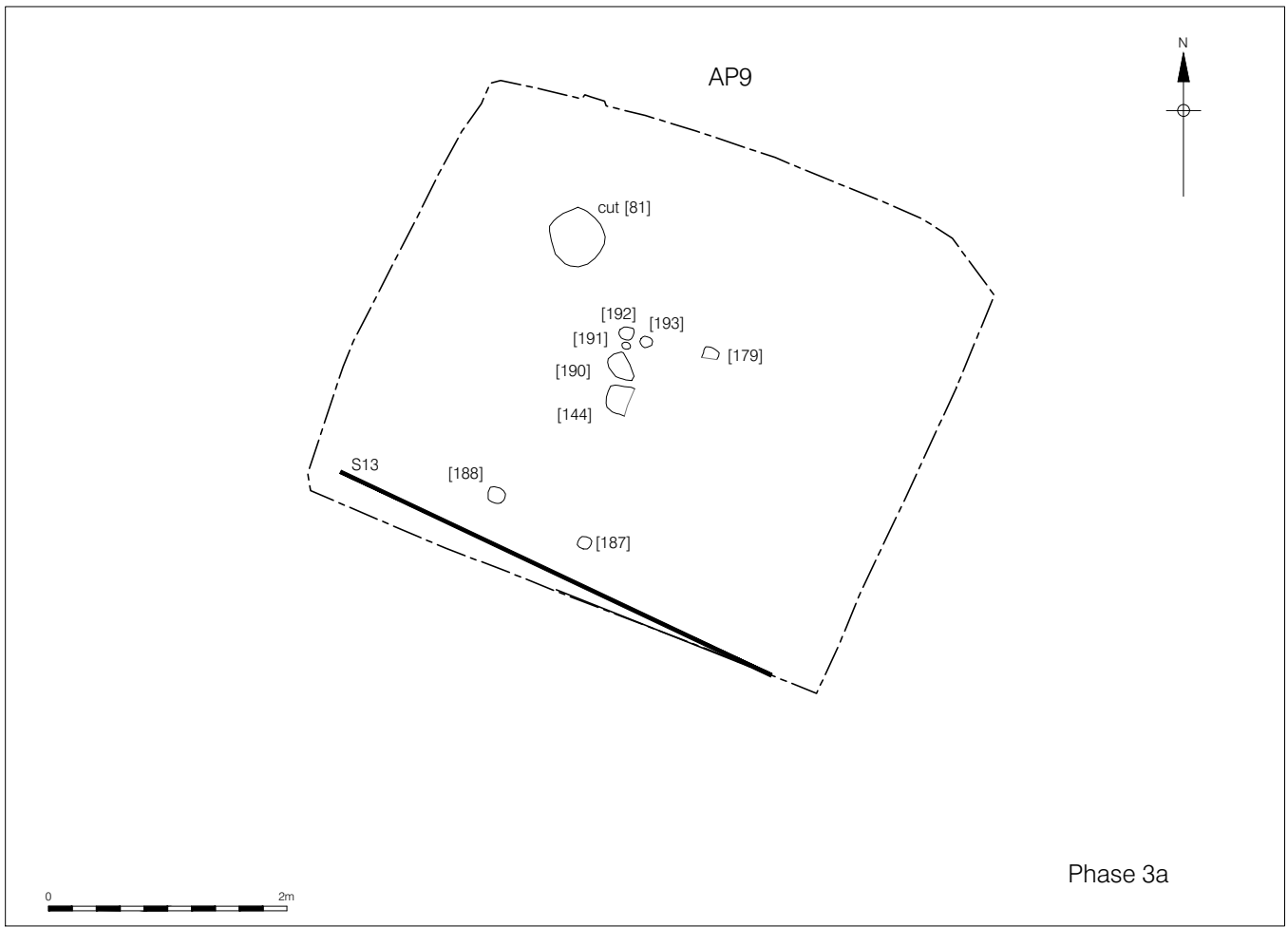












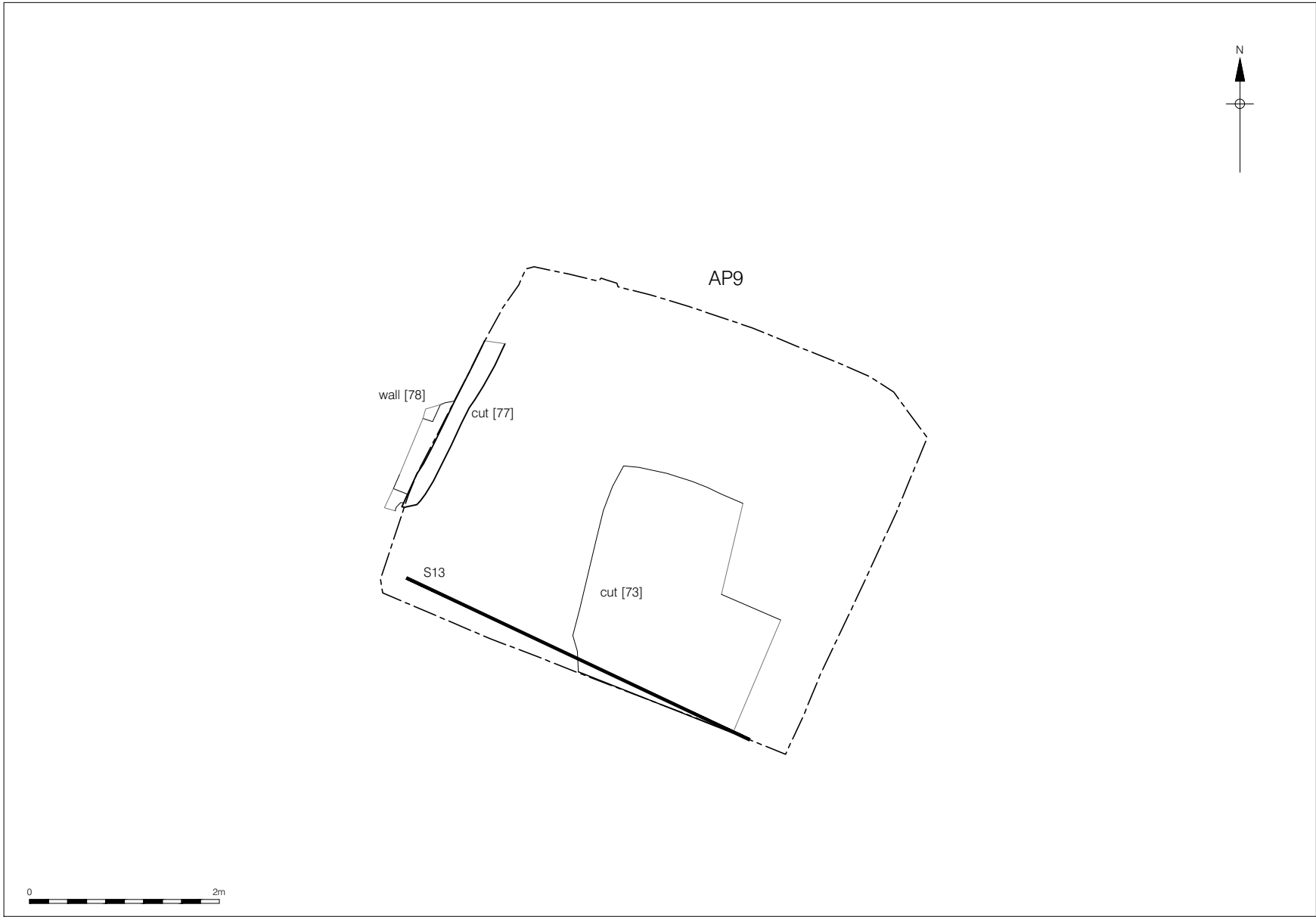
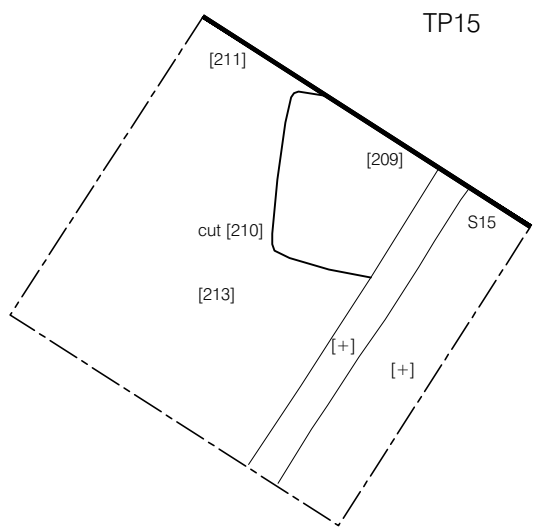
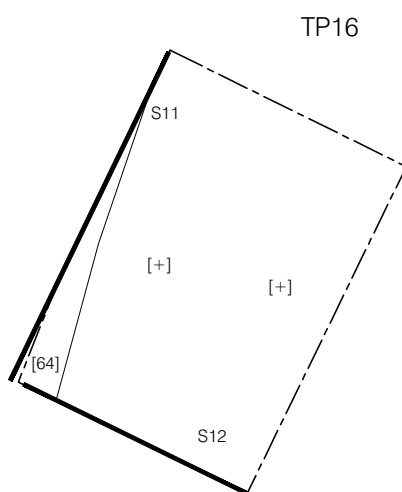
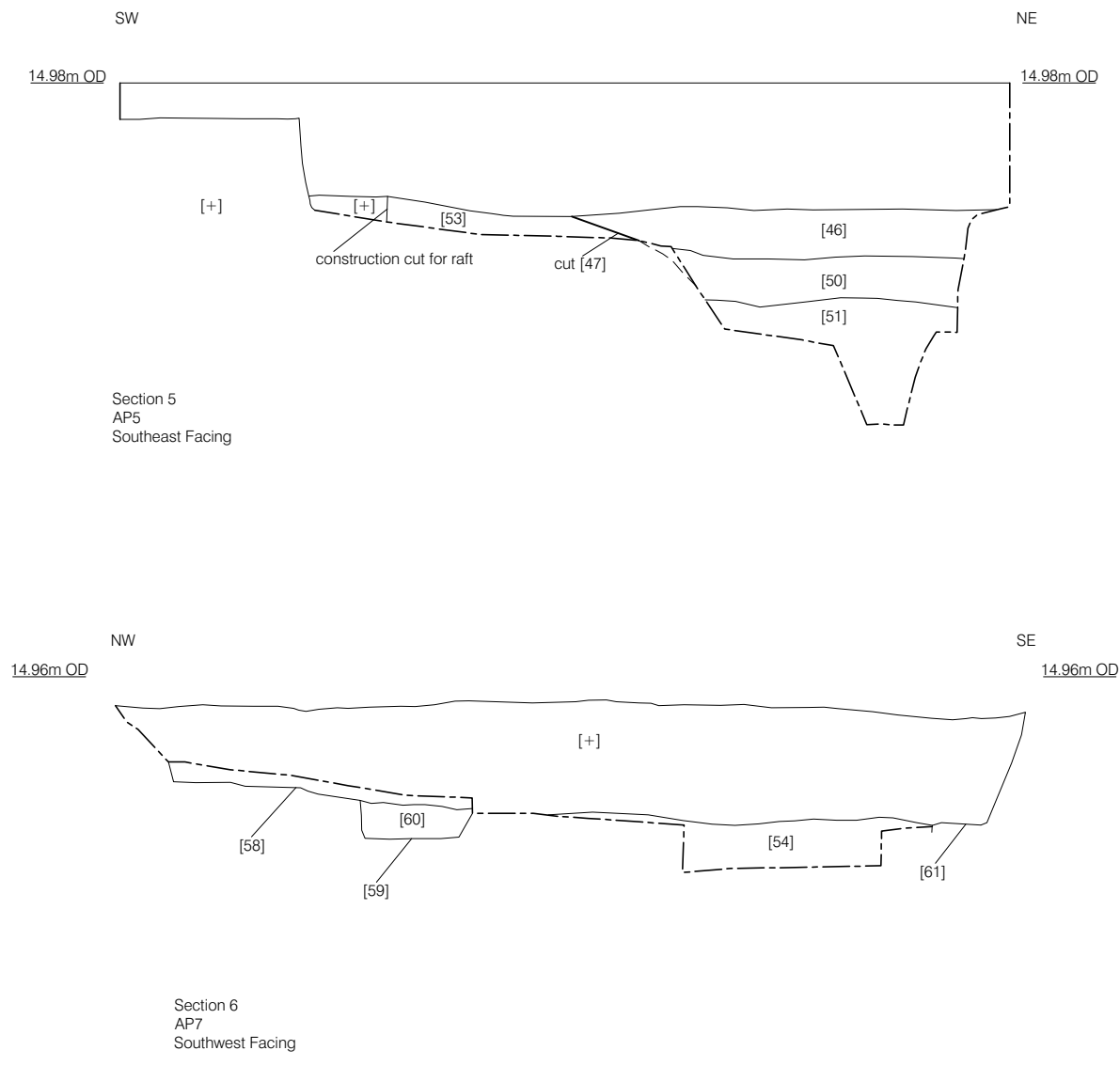
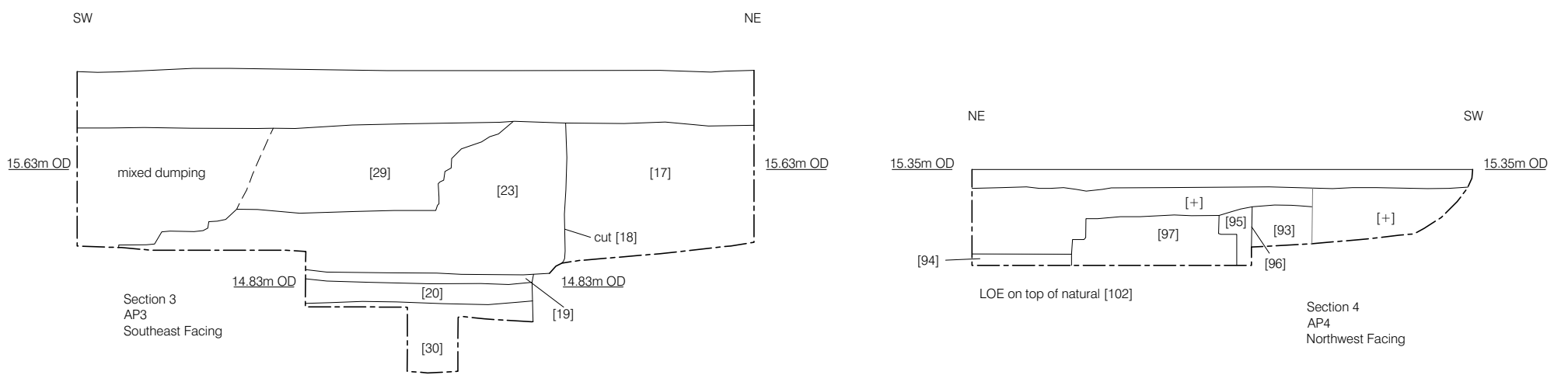
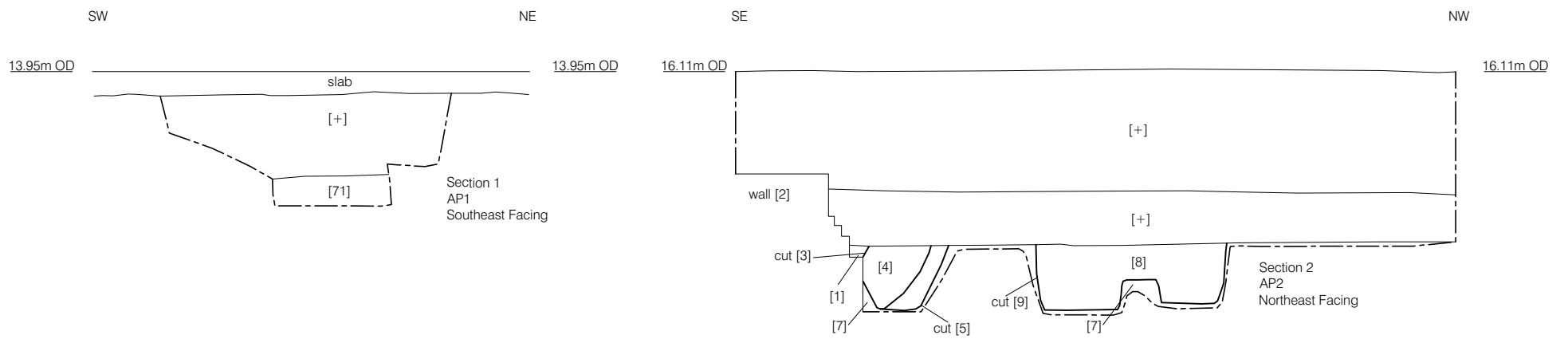
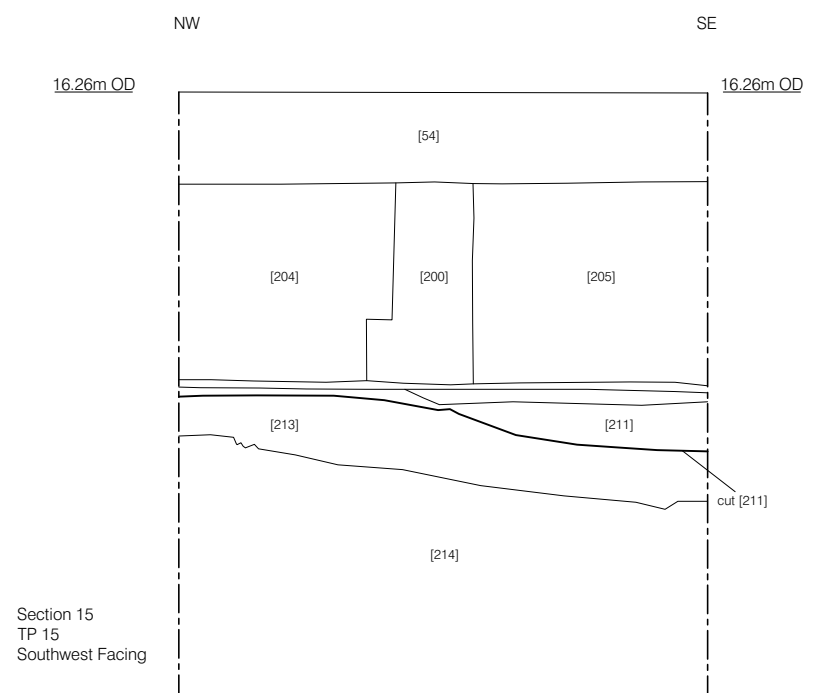
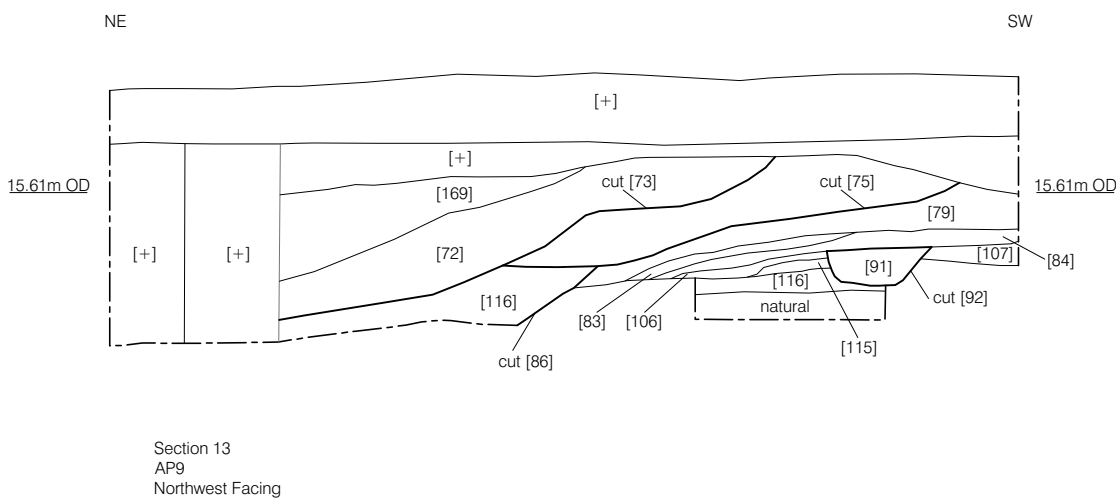
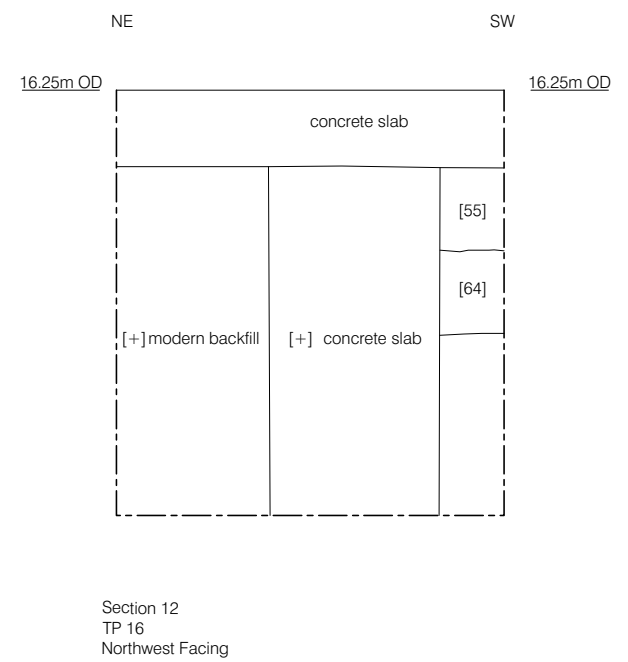
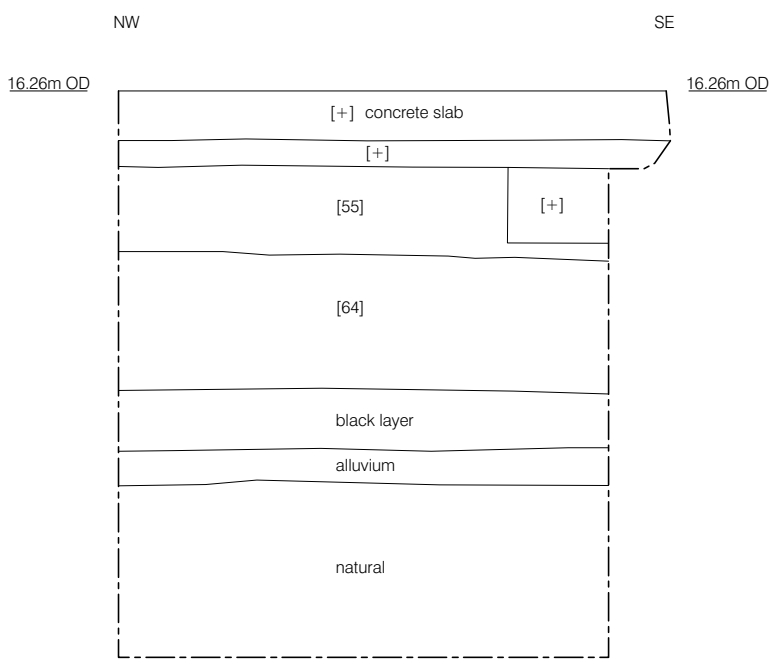
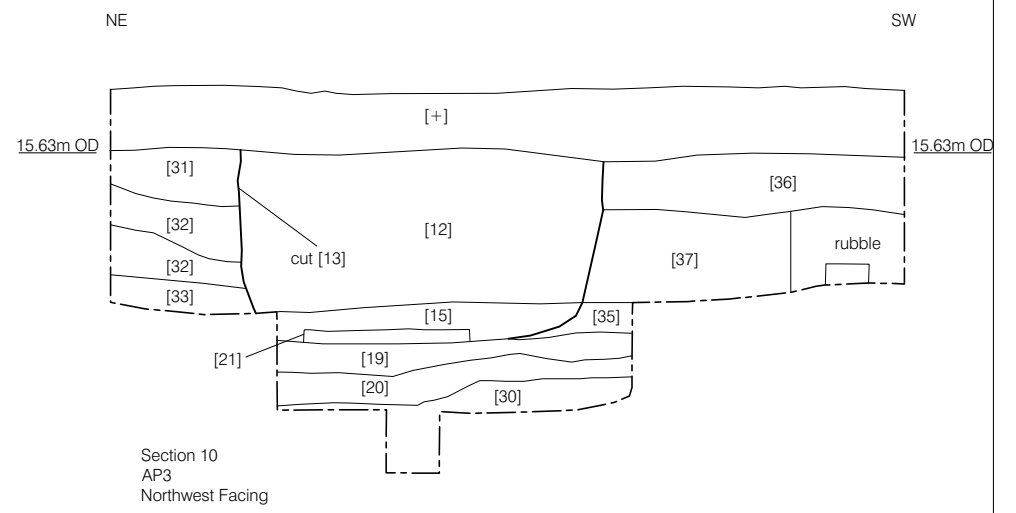
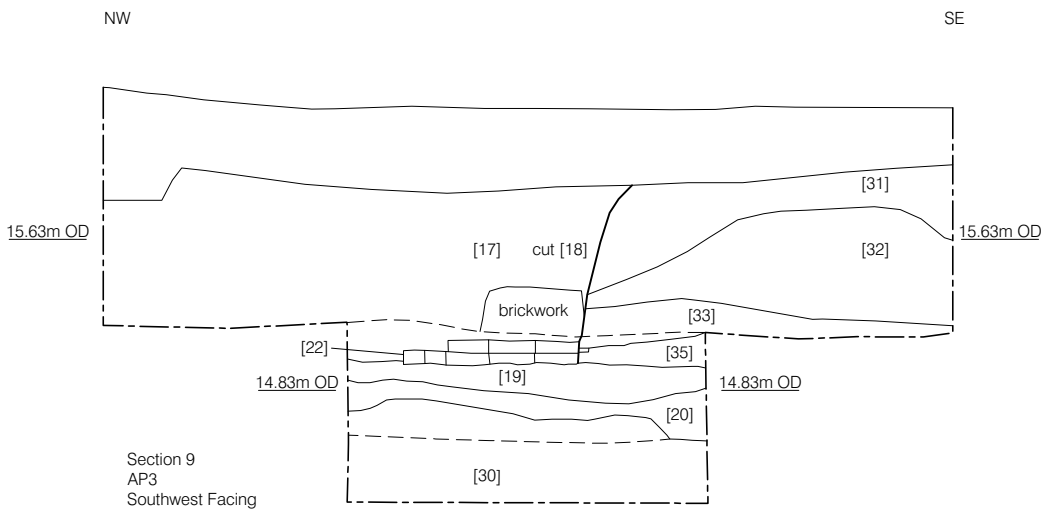
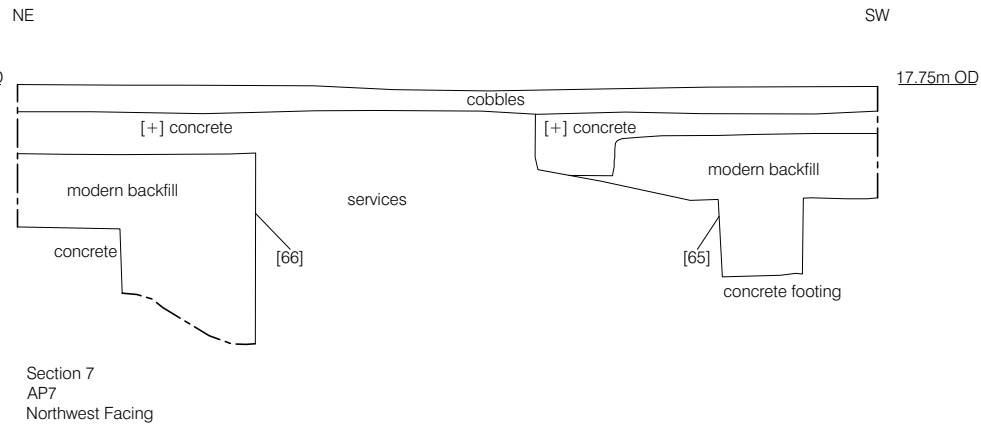


Figure 10
Plan of AP9 (Phase 4: Post-medieval)
1:60 at A4









APPENDIX 1: CONTEXT INDEX

Site Code	Context No.	Plan	Trench	Section / Elevation	Type	Description	Date	Phase
HGT-15	1	AP2	AP2	2	Fill	Mottled brown-yellow silty-clay; Fill of construction cut [3]	Post-medieval	4
HGT-15	2	AP2	AP2	2	Masonry	Red brick north-south aligned boundary wall on concrete foundation; two courses, shallow frog, with east-west return, bonded with indurated white mortar	Post-medieval	4
HGT-15	3	AP2	AP2	2	Cut	Linear cut, vertical sides to flat base; construction cut for wall [2]	Post-medieval	4
HGT-15	4	AP2	AP2	2	Fill	Mod compact dark brown grey silty clay withy oyster, bone, daub, struck flint; fill of linear [5]	Saxon	2
HGT-15	5	AP2	AP2	2	Cut	Linear north-south aligned cut; Ditch	Saxon	2
HGT-15	6	AP2	AP2	-	Fill	Grey brown sandy silt with charcoal/bone/pot/glass/CTP; Fill of construction cut [3]	Post-medieval	4
HGT-15	7	AP2	AP2	2	Layer	Firm, brown yellow silty clay; Brickearth	Natural	1
HGT-15	8	AP2	AP2	2	Fill	Grey-brown sandy silt with charcoal/CBM/pot/oyster/CTP; Fill of pit [9]	Post-medieval	4
HGT-15	9	AP2	AP2	2	Cut	Squared cut with stepped base; Pit	Post-medieval	4
HGT-15	10	AP2	AP2	2	Fill	Brown grey silty clay with daub; Primary fill of ditch [5] (slumping)	Saxon	2
HGT-15	11	-	AP3	-	Layer	Brown black, sandy silt with pot/CBM/bone; Dump layer	Post-medieval	4
HGT-15	12	-	AP3	10	Fill	Brown black sandy silt with bone/CBM/CTP; Fill of robbing cut [13]	Early post-med	3
HGT-15	13	AP3	AP3	10	Cut	Squared/linear cut with steep sides to flat base; Robbing cut	Early post-med	3
HGT-15	14	-	AP3	-	Layer	Grey silty sand with CBM; Dump layer	Early post-med	3
HGT-15	15	AP3	AP3	10	Fill	Brown black sandy silt with pot/CTP/bone; Fill of robbing cut [13]	Early post-med	3
HGT-15	16	-	AP3	-	Layer	Brown grey sandy silt with pot/CTP/bone; Dump layer	Early post-med	3
HGT-15	17	AP3	AP3	3, 9	Fill	Grey brown sandy silt with pot/CTP/CBM; Fill of pit [18]	Post-medieval	4

Site Code	Context No.	Plan	Trench	Section / Elevation	Type	Description	Date	Phase
HGT-15	18	AP3	AP3	3, 9	Cut	Squared cut, vertical sides to flat base; Pit	Post-medieval	4
HGT-15	19	AP3	AP3	3, 9, 10	Layer	Brown black sandy silty clay with bone/oyster/charcoal/pot; Dump layer	Saxon	2
HGT-15	20	AP3	AP3	-	Layer	Brown grey silty clay with bone/gravel; Alluvium	Saxon	2
HGT-15	21	AP3	AP3	10	Masonry	Red unfrogged brick, one course; North-south wall	Early post-med	3
HGT-15	22	AP3	AP3	9	Masonry	Red brick, two courses, sandy mortar with chalk; East-west wall	Early post-med	3
HGT-15	23	AP3	AP3	3	Masonry	Red brick, english bond, 10 courses with 3 corbelled foundation courses, sandy mortar with chalk; North-south wall	Early post-med	3
HGT-15	24	AP3	AP3	-	Fill	Grey brown silty clay with mortar; Fill of construction cut [25]	Early post-med	3
HGT-15	25	AP3	AP3	3	Cut	North-south linear cut, vertical sides to flat base; Construction cut for wall [23]	Early post-med	3
HGT-15	26	27	AP3	-	Fill	Mixed fill, blue grey silty clay with brown silt, mortar lenses, large animal bone frags/CTP/pot/CBM; Fill of pit [27]	Early post-med	3
HGT-15	27	27	AP3	-	Cut	Sub-rectangular cut with concave sides to flat base; Pit	Early post-med	3
HGT-15	28	AP3	AP3	-	Fill	Yellow brown sandy mortar and CBM rubble; Fill of pit [18]	Post-medieval	4
HGT-15	29	-	AP3	3	Layer	Brown black sandy silt with CBM rubble/CTP/bone/mortar flecks; Dump layer	Post-medieval	4
HGT-15	30	AP3	AP3	3, 9, 10	Layer	Yellow grey silty clay with sub-ang flints; Weathered brickearth	Natural	1
HGT-15	31	-	AP3	9, 10	Layer	Grey brown sandy silt with chalk/CBM/mortar; Dump layer	Early post-med	3
HGT-15	32	-	AP3	9, 10	Layer	Red grey sandy mortar with CBM rubble; Dump layer	Early post-med	3
HGT-15	33	AP3	AP3	9, 10	Layer	Grey brown sandy silt with oyster/CBM/mortar; Dump layer	Early post-med	3
HGT-15	34	AP3	AP3	-	Layer	Grey brown sandy silt with oyster/CBM/pot/CTP; Dump layer	Early post-med	3

Site Code	Context No.	Plan	Trench	Section / Elevation	Type	Description	Date	Phase
HGT-15	35	AP3	AP3	9, 10	Layer	Yellow brown sandy mortar with CBM rubble; Levelling	Early post-med	3
HGT-15	36	-	AP3	10	Layer	Mottled gre/red brown sandy silt with ang gravels/CBM/mortar lenses; Dump layer	Early post-med	3
HGT-15	37	-	AP3	10	Layer	Grey brown sandy silt with sub-rnd gravels/oyster/CBM/mortar; Dump layer	Early post-med	3
HGT-15	38	38	AP3	-	Layer	Blue grey silty clay with oyster/bone/daub/charcoal/sub-ang gravels; Dump layer	Saxon	2
HGT-15	39	-	AP3	-	Fill	Brown grey silty gravelly clay with bone/oyster/daub/charcoal; Fill of small pit/PH [40]	Saxon	2
HGT-15	40	40	AP3	-	Cut	Sub-circular cut with concave sides to irregular base; Small pit/PH	Saxon	2
HGT-15	41	AP3	AP3	-	Fill	Black grey silty clay with CBM/pot/bone; Fill of linear [42]	Early post-med	3
HGT-15	42	AP3	AP3	-	Cut	Linear east-west cut, not fully exposed, left in situ; Linear	Early post-med	3
HGT-15	43	-	AP3	-	Layer	Brown black sandy silty clay with bone/oyster/charcoal/pot; Dump layer (same as [19])	Saxon	2
HGT-15	44	pre-ex AP5, post-ex AP5	AP5	-	Cut	Sub-rounded cut with concave sides to flat base; Small pit/PH	Early post-med	3
HGT-15	45	pre-ex AP5, post-ex AP5	AP5	-	Fill	Grey brown sandy silt with gravel, occa glass; Fill of small pit/PH [44]	Early post-med	3
HGT-15	46	pre-ex AP5, post-ex AP5	AP5	-	Fill	Soft dark black brown silty clay with occa CBM/bone/oyster, organic rich; Fill of linear [47]	Early post-med	3
HGT-15	47	pre-ex AP5, post-ex AP5	AP5	-	Cut	North-west South-east cut, steep sides, base unseen; Linear property boundary	Early post-med	3
HGT-15	48	pre-ex AP5	AP5	-	Layer	White grey mortar with occa bone; Demolition debris	Post-medieval	4

Site Code	Con text No.	Plan	Trench	Section / Elevation	Type	Description	Date	Phase
HGT-15	49	pre-ex AP5	AP5	-	Layer	Grey brown sandy gravel; Natural Gravel spread	Natural	1
HGT-15	50	-	AP5	5	Fill	Black brown degraded wood, occa CBM/bone; Fill of linear [47]	Early post-med	3
HGT-15	51	post-ex AP5	AP5	5	Fill	Brown grey sandy clay with bone/CBM/oyster; Fill of linear [47]	Early post-med	3
HGT-15	52	pre-ex AP5	AP5	-	Layer	Yellow brown sandy gravel becoming more sand rich to north; Natural Sand layer	Natural	1
HGT-15	53	pre-ex AP5, post-ex AP5	AP5	5	Layer	Yellow brown sandy gravel; Natural Gravel spread	Natural	1
HGT-15	54	pre-ex AP5, post-ex AP5	AP5	-	Layer	Brown grey clay; Brickearth	Natural	1
HGT-15	55	-	TP16	11	Layer	Brown black sandy silt with pot/CBM/charcoal; Dump layer	Early post-med	3
HGT-15	56	AP6	AP6	-	Layer	Yellow brown sandy gravel; Natural gravel	Natural	1
HGT-15	57	AP6	AP6	-	Layer	Yellow brown sandy gravel; Natural gravel	Natural	1
HGT-15	58	AP6	AP6	6	Masonry	Red and yellow brick, header bond, light brown cemented mortar; North-south wall	Post-medieval	4
HGT-15	59	AP6	AP6	6	Cut	Linear cut, vertical sides to flat base; Construction cut for wall [58]	Post-medieval	4
HGT-15	60	-	AP6	6	Fill	Grey brown silty sand with CBM; Backfill of construction cut [59]	Post-medieval	4
HGT-15	61	AP6	AP6	6	Masonry	Concrete; North-south wall foundation	Post-medieval	4
HGT-15	62	AP6	AP6	-	Fill	Grey brown clay; Fill of linear [194]	Saxon	2
HGT-15	63	AP6	AP6	-	Layer	Grey brown silty clay with iron staining; Alluvium	Natural	1
HGT-15	64	-	TP16	11	Layer	Brown black sandy silt; Dump layer	Saxon	2
HGT-15	65	AP7	AP7	7	Masonry	Brick and concrete east-west wall; Sewer boundary	Post-medieval	4
HGT-15	66	AP7	AP7	7	Masonry	Brick and concrete east-west wall; Sewer boundary	Post-medieval	4
HGT-15	67	-	AP1	-	Fill	Grey brown sandy clay with gravel; Fill of pit [68]	Saxon	2

Site Code	Con text No.	Plan	Trench	Section / Elevation	Type	Description	Date	Phase
HGT-15	68	68	AP1	-	Cut	Sub-rectangular cut, steep sides, base unseen; Pit	Saxon	2
HGT-15	69	-	AP9	13	Fill	Grey brown silty clay and mortar with CBM/bone/pot/oyster/glass/metal/slag; Fill of pit [73]	Post-medieval	4
HGT-15	70	-	AP1	-	Fill	Brown grey silty clay with occa charcoal flecks; Primary fill of pit [68]	Saxon	2
HGT-15	71	AP1	AP1	1	Layer	Red yellow silty clay; Brickearth	Natural	1
HGT-15	72	-	AP9	13	Fill	Dark brown silty clay with CBM/pot/bone/oyster/glass/CTP/cu alloy obj; Fill of pit [73]	Post-medieval	4
HGT-15	73	73	AP9	13	Cut	Sub-squared cut with gently sloping sides to flat base; Pit	Post-medieval	4
HGT-15	74	-	AP9	13	Fill	Brown yellow sandy gravel with CBM/bone/pot; Fill of linear [75]	Early post-med	3b
HGT-15	75	75	AP9	13	Cut	North-east south-west aligned linear with gently sloping sides, base unseen; Linear/pit	Early post-med	3b
HGT-15	76	-	AP9	-	Fill	Grey brown silty clay with mortar/CBM; Fill of construction cut [77]	Post-medieval	4
HGT-15	77	77	AP9	-	Cut	North-south linear cut, vertical sides, base unseen; Construction cut for wall [78]	Post-medieval	4
HGT-15	78	77	AP9	-	Masonry	North-south red unfrogged brick, English bond to 6 courses; Boundary wall	Post-medieval	4
HGT-15	79	79	AP9	13	Layer	Grey brown silty clay with ang gravels/pot/bone/CBM; Dump layer	Early post-med	3a
HGT-15	80	-	AP9	-	Fill	Grey brown silty clay with CBM/pot; Fill of posthole [81]	Early post-med	3a
HGT-15	81	81	AP9	-	Cut	Sub-circular cut, steep sides to flat base; Posthole	Early post-med	3a
HGT-15	82	82	AP9	-	Layer	Grey brown clay gravel with gravel/brick; Dump layer	Early post-med	3a
HGT-15	83	83	AP9	13	Layer	Blue grey clay with gravel; Dump layer	Early post-med	3a
HGT-15	84	84	AP9	13	Layer	Brown grey silty clay with bone/pot/CBM/oyster/ang flint; Dump layer	Early post-med	3a

Site Code	Con text No.	Plan	Trench	Section / Elevation	Type	Description	Date	Phase
HGT-15	85	-	AP9	-	Fill	Mottled brown/red yellow sandy silty clay with CBM (demo rubble)/pot/bone/oyster/slag/degraded wood; Fill of pit [86]	Early post-med	3b
HGT-15	86	86	AP9	13	Cut	Sub-rounded cut with concave sides to flat base; Pit	Early post-med	3b
HGT-15	87	87	AP9	-	Fill	Grey brown sandy gravel with freq bone/CBM/pot; Fill of pit [90]	Saxon	2c
HGT-15	88	-	AP9	-	Fill	Yellow brown silty clay with pot/CBM/bone; Fill of pit [86]	Early post-med	3b
HGT-15	89	-	AP9	-	Fill	Brown grey sandy silt with bone/CBM/burnt clay/oyster/sub-rnd gravels; Fill of pit [105]	Saxon	2c
HGT-15	90	90	AP9	-	Cut	Linear/squared cut with concave sides to flattish/concave base; Pit	Saxon	2c
HGT-15	91	-	AP9	13	Fill	Grey brown sandy silty clay with bone/pot/oyster/gravel; Fill of curvilinear ditch [92]	Saxon	2b
HGT-15	92	92	AP9	13	Cut	Curvilinear cut with concave sides and base; Curvilinear ditch	Saxon	2b
HGT-15	93	-	AP4	4	Layer	Orange brown gravelly sandy clay; Dump/levelling layer	Post-medieval	4
HGT-15	94	-	AP4	4	Layer	Yellow/grey brown silty clay with CBM; Dump layer	Post-medieval	4
HGT-15	95	-	AP4	4	Fill	Dark brown grey silty clay with CBM/mortar/sub-ang flints; Fill of construction cut [96]	Post-medieval	4
HGT-15	96	-	AP4	4	Cut	Linear cut, steep sides to irregular base; Construction cut for wall [97]	Post-medieval	4
HGT-15	97	AP4	AP4	4	Masonry	East-west aligned red unfrogged brick to 2 courses, concrete bonding; Boundary wall	Post-medieval	4
HGT-15	98	AP4	AP4	-	Fill	Brown grey silty clay and mortar; Fill of construction cut [99]	Post-medieval	4
HGT-15	99	AP4	AP4	-	Cut	Sub-rectangular cut, gradually sloping sides, base unseen; Construction cut for drain [100]	Post-medieval	4
HGT-15	100	AP4	AP4	-	Masonry	Red unfrogged brick bonded with sandy mortar; Drain	Post-medieval	4

Site Code	Context No.	Plan	Trench	Section / Elevation	Type	Description	Date	Phase
HGT-15	101	-	AP4	-	Fill	Brown grey clay silt with pot/CBM/mortar/oyster; Fill of drain [100]	Post-medieval	4
HGT-15	102	AP4	AP4	4	Layer	Brown yellow sandy clay; Brickearth	Natural	1
HGT-15	103	-	AP9	-	Fill	Brown green sandy gravel with bone/CBM; Fill of pit [90]	Saxon	2c
HGT-15	104	-	AP9	-	Fill	Brown grey silt with CBM/bone/burnt clay/oyster/charcoal/flint; Fill of pit [105]	Saxon	2c
HGT-15	105	105	AP9	-	Cut	Sub-circular cut with concave sides and base; Pit	Saxon	2c
HGT-15	106	106	AP9	13	Layer	Mottled grey/yellow brown silty clay with CBM/bone/gravel; Dump layer	Early post-med	3a
HGT-15	107	107	AP9	13	Layer	Brown grey with orange brown flecks, silty clay with flint/charcoal/burnt clay/CBM/bone; Dump layer	Saxon	2b
HGT-15	108	-	AP9	-	Fill	Brown grey gravelly clay with charcoal/oyster/mussel/bone; Fill of posthole [109]	Saxon	2a
HGT-15	109	109	AP9	-	Cut	Rounded cut with steep sides to concave base; Posthole	Saxon	2a
HGT-15	110	-	AP9	-	Fill	Brown grey gravelly clay with charcoal flecks; Fill of posthole [111]	Saxon	2a
HGT-15	111	109	AP9	-	Cut	Sub-squared cut with near vertical sides to concave base; Posthole	Saxon	2a
HGT-15	112	-	AP9	-	Fill	Green grey sandy silt with bone; Fill of linear [113]	Saxon	2a
HGT-15	113	113	AP9	-	Cut	Sub-squared cut with steep sides to flat base; Linear/Pit	Saxon	2a
HGT-15	114	114	AP9	-	Layer	Green grey sandy silt; Dump layer	Saxon	2a
HGT-15	115	115	AP9	-	Layer	Yellow/grey brown silty clay with bone/sub-ang gravels; Dump layer	Saxon	2a
HGT-15	116	AP9	AP9	13	Layer	Brown grey silty sand with manganese staining and burnt flint; Weathered brickearth	Saxon	2a
HGT-15	117	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [130]	Saxon	2a
HGT-15	118	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [131]	Saxon	2a

Site Code	Context No.	Plan	Trench	Section / Elevation	Type	Description	Date	Phase
HGT-15	119	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [132]	Saxon	2a
HGT-15	120	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [133]	Saxon	2a
HGT-15	121	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [134]	Saxon	2a
HGT-15	122	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [135]	Saxon	2a
HGT-15	123	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [136]	Saxon	2a
HGT-15	124	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [137]	Saxon	2a
HGT-15	125	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [138]	Saxon	2a
HGT-15	126	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [139]	Saxon	2a
HGT-15	127	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [140]	Saxon	2a
HGT-15	128	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [141]	Saxon	2a
HGT-15	129	-	AP9	-	Fill	Brown grey silty gravelly clay; Fill of PH [142]	Saxon	2a
HGT-15	130	109	AP9	-	Cut	Sub-circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	131	109	AP9	-	Cut	Sub-circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	132	109	AP9	-	Cut	Sub-rectangular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	133	109	AP9	-	Cut	Sub-circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	134	109	AP9	-	Cut	Sub-circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	135	109	AP9	-	Cut	Sub-circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	136	109	AP9	-	Cut	Triangular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	137	109	AP9	-	Cut	Sub-rectangular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	138	109	AP9	-	Cut	Sub-squared cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	139	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	140	109	AP9	-	Cut	Sub-circular cut, steep sides to tapered base;	Saxon	2a

Site Code	Con text No.	Plan	Trench	Section / Elevation	Type	Description	Date	Phase
						Posthole		
HGT-15	141	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	142	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	143	-	AP9	-	Fill	Brown black sandy silt with gravel; Fill of PH [144]	Early post-med	3a
HGT-15	144	144	AP9	-	Cut	Sub-squared cut, steep sides to tapered base; Posthole	Early post-med	3a
HGT-15	145	-	AP9	-	Fill	Mottled brown/red yellow sandy silty clay with CBM (demo rubble)/pot/bone/oyster/slag/degraded wood; Fill of pit [86]	Early post-med	3b
HGT-15	146	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [162]	Saxon	2a
HGT-15	147	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [163]	Saxon	2a
HGT-15	148	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [164]	Saxon	2a
HGT-15	149	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [165]	Saxon	2a
HGT-15	150	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [166]	Saxon	2a
HGT-15	151	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [167]	Saxon	2a
HGT-15	152	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [168]	Saxon	2a
HGT-15	153	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [169]	Saxon	2a
HGT-15	154	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [170]	Saxon	2a
HGT-15	155	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [171]	Saxon	2a
HGT-15	156	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [172]	Saxon	2a
HGT-15	157	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [173]	Saxon	2a

Site Code	Con text No.	Plan	Trench	Section / Elevation	Type	Description	Date	Phase
HGT-15	158	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [174]	Saxon	2a
HGT-15	159	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [175]	Saxon	2a
HGT-15	160	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [176]	Saxon	2a
HGT-15	161	-	AP9	-	Fill	Light grey silty gravelly clay with charcoal flecks; Fill of PH [177]	Saxon	2a
HGT-15	162	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	163	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	164	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	165	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	166	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	167	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	168	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	169	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	170	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	171	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	172	109	AP9	-	Cut	Sub-rectangular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	173	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	174	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	175	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	176	109	AP9	-	Cut	Sub-squared cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	177	109	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Saxon	2a
HGT-15	178	-	AP9	-	Fill	Brown black sandy silt with gravel; Fill of PH [179]	Early post-med	3a
HGT-15	179	179	AP9	-	Cut	Sub-squared cut, steep sides to tapered base; Posthole	Early post-med	3a

Site Code	Context No.	Plan	Trench	Section / Elevation	Type	Description	Date	Phase
HGT-15	180	-	AP9	-	Fill	Brown black sandy silt with gravel; Fill of PH [187]	Early post-med	3a
HGT-15	181	-	AP9	-	Fill	Brown black sandy silt with gravel; Fill of PH [188]	Early post-med	3a
HGT-15	182	-	AP9	-	Fill	Brown black sandy silt with gravel; Fill of PH [189]	Early post-med	3a
HGT-15	183	-	AP9	-	Fill	Brown black sandy silt with gravel; Fill of PH [190]	Early post-med	3a
HGT-15	184	-	AP9	-	Fill	Brown black sandy silt with gravel; Fill of PH [191]	Early post-med	3a
HGT-15	185	-	AP9	-	Fill	Brown black sandy silt with gravel; Fill of PH [192]	Early post-med	3a
HGT-15	186	-	AP9	-	Fill	Brown black sandy silt with gravel; Fill of PH [193]	Early post-med	3a
HGT-15	187	144	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Early post-med	3a
HGT-15	188	144	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Early post-med	3a
HGT-15	189	144	AP9	-	Cut	Sub-squared cut, steep sides to tapered base; Posthole	Early post-med	3a
HGT-15	190	144	AP9	-	Cut	Sub-squared cut, steep sides to tapered base; Posthole	Early post-med	3a
HGT-15	191	144	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Early post-med	3a
HGT-15	192	144	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Early post-med	3a
HGT-15	193	144	AP9	-	Cut	Circular cut, steep sides to tapered base; Posthole	Early post-med	3a
HGT-15	194	AP6	AP6	-	Cut	East-west aligned cut, steep sides to irregular base; Linear	Saxon	2
HGT-15	195	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>
HGT-15	196	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>
HGT-15	197	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>
HGT-15	198	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>
HGT-15	199	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>	<i>unused</i>
HGT-15	200	TP15a	TP15	15	Masonry	North-south red brick wall; Basement wall	Post-medieval	4
HGT-15	201	TP15a	TP15	-	Fill	Grey brown sandy silt; Fill of construction cut [202]	Post-medieval	4
HGT-15	202	TP15a	TP15	-	Cut	Linear cut, vertical sides and flat base; Construction cut for wall [200]	Post-medieval	4
HGT-15	203	TP15a	TP15	15	Layer	Brown black sandy silt with CBM/gravel; Basement infill	Post-medieval	4

Site Code	Context No.	Plan	Trench	Section / Elevation	Type	Description	Date	Phase
HGT-15	204	TP15a	TP15	15	Layer	Brown black sandy silt with CBM/gravel; Basement infill	Post-medieval	4
HGT-15	205	-	TP15	-	Layer	Grey brown sandy silt with CBM/oyster; Dump layer	Post-medieval	4
HGT-15	206	-	TP15	-	Layer	Brown black sandy silt with CBM/CTP/oyster/mortar flecks; Dump layer	Early post-med	3
HGT-15	207	TP15b	TP15	15	Layer	Brown black sandy silt with bone/oyster/daub; Dump layer	Saxon	2
HGT-15	208	-	TP15	15	Layer	Brown grey silty clay with charcoal; Dump layer	Saxon	2
HGT-15	209	TP15b	TP15	-	Fill	Brown black sandy silt with bone/oyster/daub; Fill of pit [210]	Saxon	2
HGT-15	210	TP15b	TP15	-	Cut	Sub-squared cut, concave sides and base; Pit	Saxon	2
HGT-15	211	TP15b	TP15	15	Fill	Brown black sandy silt with bone/oyster/daub; Fill of pit [212]	Saxon	2
HGT-15	212	TP15b	TP15	15	Cut	Rounded cut with concave sides and base; Pit	Saxon	2
HGT-15	213	TP15b	TP15	15	Layer	Mottled yellow brown and red silty clay; Weathered brickearth	Natural	1
HGT-15	214	-	TP15	15	Layer	Yellow brown sandy gravel; Natural Gravel	Natural	1
HGT-15	215	-	TP15	-	Layer	Brown yellow silty clay; Brickearth	Natural	1
HGT-15	216							
HGT-15	217							

Brown black sandy silt with gravel; Fill of PH [144]

Sub-squared cut, steep sides to tapered base; Posthole

APPENDIX 2: OASIS REPORT FORM

OASIS ID: preconst1-231800

Project details

Project name

Centre Buildings Redevelopment, London School of Economics and Political Science, Houghton Street, City of Westminster

Short description of the project

Eight evaluation trenches and three trial pits were investigated prior to the redevelopment of the Centre Buildings, London School of Economics and Political Science, City of Westminster. The evaluation trenches were archaeologically investigated whereas the trial pits were monitored under watching brief conditions. The evaluation identified natural horizons of brickearth and gravel across the majority of the study site, variably impacted by the extant development. This was overlain or truncated by Saxon features associated with occupation, including structural remains in the form of postholes, property boundaries, refuse pits and dumped debris. These features were post dated by further development from the early post-medieval and post-medieval periods dating between the 16th and 19th centuries. The latter comprised further construction in the form of basement/boundary walls, pitting, dumping and linear property boundaries.

Project dates Start: 14-10-2015 End: 17-11-2015

Previous/future work Yes / Yes

Any associated project reference codes HGT15 - Sitecode

Type of project Field evaluation

Site status Conservation Area

Current Land use Other 2 - In use as a building

Monument type POSTHOLE Early Medieval

Monument type DITCH Early Medieval

Monument type DITCH Post Medieval

Monument type WALL Post Medieval

Monument type PIT Post Medieval

Monument type PIT Early Medieval

Significant Finds POT Early Medieval

Significant Finds TILE Roman

Significant Finds POT Medieval

Significant Finds POT Post Medieval

Methods & techniques "Sample Trenches", "Targeted Trenches"

Development type Public building (e.g. school, church, hospital, medical centre, law courts etc.)

Prompt Conservation Area Consent

Prompt Direction from Local Planning Authority - NPPF

Position in the planning process After full determination (eg. As a condition)

Project location

Country England

Site location GREATER LONDON CITY OF WESTMINSTER CITY OF WESTMINSTER Centre Buildings Redevelopment, London School of Economics and Political Science, Houghton Street, City of Westminster, London WC2A 2AE: An Archaeological Evaluation

Postcode WC2A 2AE

Site coordinates TQ 30806 81128 51.513417004766 -0.114721198228 51 30 48 N 000 06 53 W Point

Height OD / Depth Min: 13.14m Max: 15.05m

Project creators

Name of Organisation Pre-Construct Archaeology Limited

Project brief originator Helen Hawkins

Project design originator Helen Hawkins

Project director/manager Helen Hawkins

Project supervisor Amelia Fairman

Type of sponsor/funding body University

Name of sponsor/funding body London School of Economics and Political Science

Project archives

Physical Archive recipient LAARC

Physical Archive ID HGT15

Physical Contents "Animal Bones", "Ceramics", "Environmental", "Glass", "Metal", "Worked bone"

Digital Archive recipient LAARC

Digital Archive ID HGT15

Digital Media available "Images raster / digital photography","Spreadsheets","Text"

Paper Archive recipient LAARC

Paper Archive ID HGT15

Paper Media available "Context sheet","Map","Matrices","Miscellaneous Material","Plan","Report","Section"

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

Title Centre Buildings Redevelopment, London School of Economics and Political Science, Houghton Street, City of Westminster, London, WC2A 2AE: An Archaeological Evaluation

Author(s)/Editor(s) Fairman A

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Entered on 25 November 2015

APPENDIX 3: ANIMAL BONE

Evaluation of the animal bone recovered from the Centre Buildings redevelopment of the London School of Economics and Political Science, Houghton street, City of Westminster, London WC2A 2AE (HGT15)

Dr Kevin Rielly, November 2015

Introduction

This site was situated within the confines of the London School of Economics abutting and just north of the Aldwych, in turn at the eastern end of the Strand. Excavations consisted of seven evaluation trenches (AP1-7), an additional mitigation trench (AP9) and three trial pits (AP14-16). There was extensive evidence of Middle Saxon occupation with dumps, pits and a probable property boundary. Following a major hiatus, these levels were then truncated (pits and basement walls) and added to (dumps) by the early post-medieval development of this area, this dated to the 16th and 17th centuries. Further development, from the latter part of the 18th century, was then in evidence, including the construction of properties along Houghton Street, these were located at the western extremity of the excavation area.

Animal bones were derived from various deposits from the majority of the excavation trenches (see Table 1) and from each phase of activity (Table 2), the assemblage entirely recovered by hand. There was a single sample, taken from an early post-medieval deposit. This had not been processed at the time of writing this report.

Phase:	2	3	4	Total
Trench				
AP2	20		2	22
AP3	86	19	1	106
AP4			1	1
AP5		38	2	40
AP9	325	109	50	484
TP16	2	2		4
Grand Total	433	168	56	657

Table 1. Distribution of hand collected animal bones

Methodology

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

Description of faunal assemblage by phase

The site provided a phased hand-collected total of 657 bone fragments, these divided into the three major phases - 2 – Middle Saxon, 3 – Early post-medieval and 4 – Later post-medieval (see Table 2). There were a few moderate to poorly preserved bones in these collections; however, the majority are in good condition. In addition, there is no obvious sign of extensive fragmentation. Essentially, this combination of attributes suggests that most of these bones are unlikely to have been subjected to gross redeposition and that they were probably buried soon after deposition. This is clearly similar to the situation described for other bone collections recovered from sites in this locality, here referring to the numerous Middle Saxon as well as the occasional later (post-medieval) assemblages (see Rackham and West 1989, Rielly 2003, Rielly 2012 and Bendrey 2005).

Phase:	2	3	3	2	3	4	2	3	4
Trench:	AP3	AP3	AP5	AP9	AP9	AP9	All	All	All
Species									
Cattle	24	7	7	152	56	15	182	71	16
Equid		1		1			1	1	
Cattle-size	25	3	8	78	31	15	110	42	18
Sheep/Goat	13	1	13	39	7	16	57	22	16
Sheep		1		8	4		8	5	
Goat				1			1		
Pig	9	1	1	30	7	1	40	9	1
Sheep-size	13	3	2	16	3	2	32	8	4
Dog					1	1		1	1

Phase:	2	3	3	2	3	4	2	3	4
Trench:	AP3	AP3	AP5	AP9	AP9	AP9	All	All	All
Cat	1						1		
Rabbit			1					1	
Small mammal			1					1	
Chicken	1	2	5				1	7	
Grand Total	86	19	38	325	109	50	433	168	56

Table 2. Hand collected species abundance by phase and trench

Phase 2 (Middle Saxon)

Deposits dating to this phase, essentially 8th to mid 9th centuries, provided the major part of the site assemblage. These were mainly recovered, as with the other two phase collections, from the mitigation trench (AP9 – see Table 1) and principally from pits [90] and [105] and ditch [92], providing 239, 48 and 25 bones respectively. Many of the remaining Phase 2 bones were taken from trench AP3, this time from a series of layers and in particular from [19] with 67 bones. The wealth of major domesticated bones throughout these deposits includes a predominance of cattle bones followed by sheep/goat and then pig (see Table 3). All three species are represented by a mix of skeletal parts, indicative of general food and processing waste. There is a notable array of heavy butchery marks, particularly noticeable on the cattle collections. An exception to the general diversity of these deposits is the concentration of sheep horncores found in the fill [87] of pit [90]. While all other parts are present in this deposit, it is nevertheless unusual in that it provided all but one of the sheep horncores dated to this phase (a total of 7 out of 8), the other horncore was found in the fill [89] of pit [105]. In addition 4 out of the 7 cores as well as the single example from [105] are from rams, clearly suggestive of a selection process. These can be interpreted as probable hornworking waste.

Regarding other signs of craft activity, it is unusual for this period and general location, that there are no red deer antler fragments; while the single identified goat bone is a radius and not a horncore (see Conclusions).

Phase	Feature	C	S/G	P	N
2	P[90]	67.0	20.6	12.4	170
2	All	63.2	22.9	13.9	288
3	L[84]	72.5	21.6	5.9	51

Phase	Feature	C	S/G	P	N
3	All	66.4	25.2	8.4	107
4	All	48.5	48.5	3.0	33

Table 3. Percentage abundance of major domesticates within the phase collections and in a selection of deposits where C is cattle, S/G is sheep/goat, P is pig, N is the combined total number of bones and P is pit and L is layer.

There is a good collection of age data, both mandibular and epiphyseal, and a brief review of the cattle and sheep/goat evidence appears to suggest a rather similar exploitation pattern to that observed at several other Lundenwic sites where both species include approximately equal proportions of animals bred for the table (1st and 2nd year individuals) and those culled at a more advanced age following a secondary product contribution, be it milk, traction or wool (and see Cowie and Blackmore 2012, 133-7).

There would appear to be a rather minor exploitation of other food animals/birds, limited to chicken, although more evidence could be forthcoming following the provision and processing of soil samples. Non-food domesticates as horse and cat were also represented in these collections.

Of interest was the recovery of a sheep pelvis, from the fill [89] of pit [105] with a mended fracture through the acetabulum. The extensive remodelling around this joint would undoubtedly have taken a considerable amount of time thus suggesting a notable measure of care towards this adult individual.

Phase 3 (Early post-medieval)

A somewhat smaller collection was retrieved principally from a number of dump deposits (106 bones), again largely from AP9, although with a sizeable quantity from a few cut features (56 fragments). These were generally dated to 16th/17th centuries. The bones are comparable to those from the underlying levels in that there is again a wealth of cattle. This species is slightly more abundant alongside a similar increase in sheep/goat and a corresponding decline in pig (see Table 3). There is again a general mix of skeletal parts and a subtle indication of a change in the cattle age structure, now largely represented by juveniles (1st year animals) and adults. The former probably represent veal calves and the latter indicates the predilection for prime beef as well as surplus work animals (dairy and traction) often seen in collections dating to this period (see for example Rielly in prep).

There are perhaps indications of some redeposition. A partial articulation comprising a sheep humerus, radius and ulna was found in the fill [46] of a cut feature [47] (AP5) which may represent a disturbed carcass. Alternatively they may be the remains of a large joint. A clearer case for redeposition can be made by the recovery of a human ulna, this taken from the fill [12] of possible robber trench [13] (AP3). The same level also produced a ram horncore. A further four sheep horncores, 3 male and one of these sawn through at the base and at about half shaft, were found in layer [84] (AP9). While these may relate to the former collections, there

is no reason to suppose that similar activities could have taken place in the same locality several centuries later.

Evidence regarding supplementary meats is again minimal, with some chicken and rabbit. The non-meat component is now represented by single fragments of equid and dog, the latter comprising a metacarpus from a notably large animal (from layer [79] in AP9). The equid, a near complete mandible from the fill [26] of pit [27] (AP3), was from an animal aged approximately 10 years (using crown heights after Levine 1982).

Phase 4 (Later post-medieval)

Almost all this small collection was taken from cut features and principally from pit [73] in AP9 (50 bones). These deposits are dated from the late 18th into the 19th centuries. This late collection is clearly different to the previous assemblages, in particular concerning the notable increase in sheep/goat relative to cattle. However, the quantity of bones is perhaps too small to provide an effective comparison.

Conclusion and recommendations for further work

The Middle Saxon bones form the major component of the site assemblage, these apparently dating from the mid 8th to the mid 9th centuries, these limits encompassing Lundenwic at its broadest extent through to its subsequent decline and abandonment (following Cowie and Blackmore 2012, 209). Notable concentrations of animal bones, particularly within AP9, have provided a reasonable quantity of information concerning animal exploitation during this period with an obvious potential concerning the retrieval of similar concentrations of bones following further excavation in this part of the site. It can be observed that the area of London encompassing Lundenwic is relatively well excavated with numerous large bone collections, especially from the Royal Opera House (Rielly 2003) and the various sites detailed in Rielly (2012), here including Bruce House, this situated just the other side of Kingsway. However, apart from Bruce House and the combined collections from Hare Court and Church Court (Bendrey 2005, 64), there are no other sites in the general vicinity (essentially the eastern extremity of the settlement) with large quantities of animal bones i.e. in excess of 400-500 identifiable to species. This excludes the site of St Catherine's House, Kingsway adjacent to the current site and also Somerset House (both providing rather small collections as mentioned in Rielly 1997 with additional information taken from MoLAS archives).

There are undoubtedly a number of interesting aspects of this site assemblage in comparison to the evidence compiled to date concerning Lundenwic and in particular with reference to other late Middle Saxon collections at the periphery of the settlement (taken from Cowie and Blackmore 2012, 149-152). General similarities include the rather poor range of food animals, the major usage of cattle compared to sheep/goat and pig and a mix of younger and older individuals amongst the first two species. However several of these late sites and especially at the periphery also show a somewhat greater abundance of sheep/goat (up to 30%) compared to the earlier occupation levels as well as notable evidence for local production. The former is clearly not apparent at this site while the production evidence, relying on the recovery of bones from neonate individuals cannot be readily assessed without recourse to sieved collections. Obviously the lack of sieved material may also account, to a certain extent, for the low species diversity resulting in the poor recovery of birds and the absence of fish bones. Notably, the fish bone collections from these sites tend to be dominated by eel and herring, neither of which can be readily recovered by hand.

A major attribute of Lundenwic site assemblages is the evidence for craft activities. The sheep horncores, with a predominance of rams, can certainly be identified as craft waste. However there is a complete absence of the two most common craft waste items – goat horncores and red deer antler fragments, a further indication of hornworking waste and evidence for antler working respectively. The latter waste is generally the most prevalent (see for example Cowie and Blackmore 2012, 164) and indeed was recovered in some quantity from Bruce House. Yet there was just one antler piece from Hare Court and Church Court (Bendrey 2005, 65) while none were found amongst the admittedly small collection from Somerset House (Rielly 1997). Could this cumulative evidence be suggestive of a lack of such working at the eastern perimeter of this settlement? In contrast, this period did see a contraction in the size of the settlement and its accompanying craft industries (see Leary 2004, 5)

Turning now to the post-Saxon collections, it can be seen that these are well dated (specifically the Phase 3 assemblage), in good condition and reasonably large. There is undoubtedly a high potential concerning the recovery of additional material, thus allowing for an analysis of animal exploitation dating to the development of this area following the lengthy post-Saxon hiatus. The importance of this collection cannot be underestimated, principally due to the lack of work on contemporary collections from this general area. Notable early post-medieval assemblages have been excavated but these were invariably ignored (or rather relegated) in preference to the underlying and debatably more important Middle Saxon animal bone collections. There are exceptions, although with only one example to date which provided a reasonable collection, from Hare Court and Church Court (Bendrey 2005).

The bone evidence is suggestive of a good potential for the recovery of large collections dating to the Middle Saxon and early post-medieval periods following further excavation (in particular within the additional mitigation area – AP9). The present Saxon collection demonstrates notable similarities and differences to the evidence so far accumulated from other Lundenwic sites continuing the very limited species abundance pattern linked with the ‘food rent’ procurement hypothesis (following O’Connor 1991, 277 after Hodges 1989) but with no obvious comparison with other ‘late’ collections concerning a greater usage of sheep/goat and possible evidence for peripheral ‘farms’ (after Cowie and Blackmore 2012, 152). There are also subtle indications of change, notably the absence of particular working waste items, which may relate to the decline of the settlement. These issues should be explored further, an increase in the size of the relevant collections greatly facilitating this comparison. Other poor representations or absences can be related to the recovery methods employed and it is imperative that further excavation should be accompanied by an organised sampling programme.

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APPENDIX 4: POST ROMAN POTTERY

Post-Roman pottery assessment (HGT15)

Chris Jarrett

Introduction

A small sized assemblage of pottery was recovered from the site (two boxes). The pottery dates to the Middle Saxon, medieval and post-medieval periods. The material is in a fragmentary state, consisting of sherd material, although vessel types could be identified. None of the pottery was abraded, only one sherd was laminated and therefore most sherds appear to have been discarded soon after breakage. The pottery was quantified using sherd counts (SC), estimated number of vessels (ENV) and weight, measured in grams. Post-Roman pottery was recovered from 25 contexts and individual deposits produced only small (fewer than 30 sherds) sized groups.

All of the pottery (116 sherds, 83 ENV and weighing 4.768g, of which none was unstratified) was examined macroscopically and microscopically using a binocular microscope (x20), and recorded in an ACCESS database, by fabric, form and decoration. The classification of the pottery types is according to the Museum of London Archaeology (2014). The pottery is discussed by its types and distribution.

The Pottery Types and their forms

The range of pottery types and their quantification for each of the archaeological periods represented is shown in Table 1.

Middle Saxon

There was a total of nineteen sherds/10 MNV/1.038kg of Middle Saxon pottery recorded, most of which is represented only as sherd material. Ipswich ware, dated in London AD 730–850, is the most frequent pottery type recorded for this period and present in the fine and coarse ware variant fabric types. Only rounded jars could be determined in this ware and context [91] produced the most complete vessel with a rim diameter of 260 mm and rilling on the shoulder. This vessel was made in the coarse ware (IPSC) and was over-fired with reddish purple surfaces. It was used as a cooking pot from the evidence of external surface sooting and an internal food deposit. Singular, non diagnostic sherds of fine sand-tempered ware (SSAND) (context [87]) and Middle Saxon shell-tempered ware (MSS) (context [19]) are noted.

Period/source/pottery type	Code	Date range	SC	ENV	Wt (g)
Middle Saxon					
Thames valley					
Sand-tempered (fine)	SSAND	600–800	1	1	43

Period/source/pottery type	Code	Date range	SC	ENV	Wt (g)
Shell-tempered ware	MSS	770–850	1	1	9
East Anglia					
Ipswich fine ware	IPSF	730–850	5	5	218
Ipswich coarse ware	IPSC	730–850	10	1	728
France					
North French greyware	NFGW	600–800	2	2	40
Medieval					
London area					
Shelly–sandy ware	SSW	1140–1220	1	1	24
Surrey					
Cheam whiteware	CHEA	1350–1500	1	1	2
Post–medieval					
Essex					
Metropolitan slipware	METS	1630–1700	1	1	33
Essex–type post–medieval black–glazed redware	PMBL	1580–1700	11	6	869
Essex–type post–medieval fine redware	PMFR	1580–1700	2	2	29
London area					
London stoneware	LONS	1670–1926	3	1	94
London–area post–medieval redware	PMR	1580–1900	13	10	661
London–area early post–medieval redware	PMRE	1480–1600	8	5	297
London–area post–medieval slipped redware with green glaze	PMSRG	1480–1650	2	2	345
London–area post–medieval slipped redware with clear (yellow) glaze	PMSRY	1480–1650	1	1	106
English tin–glazed ware	TGW	1570–1846	3	2	42
London tin–glazed ware with blue– or polychrome–painted decoration	TGW A	1570–1650	1	1	11

Period/source/pottery type	Code	Date range	SC	ENV	Wt (g)
and external lead glaze (Orton style A)					
London tin-glazed ware with blue- or polychrome-painted decoration and external lead glaze (Orton style D)	TGW D	1630-1680	1	1	5
Britain					
Creamware	CREA	1740-1830	4	2	60
Pearlware with under-glaze blue-painted decoration	PEAR BW	1770-1820	1	1	3
Pearlware with under-glaze painted decoration	PEAR PNTD	1770-1840	1	1	28
Pearlware with transfer-printed decoration	PEAR TR	1770-1840	3	3	31
Midlands					
Midlands purple ware	MPUR	1400-1750	2	1	68
Surrey Hampshire					
Surrey-Hampshire border whiteware with green glaze	BORDG	1550-1700	19	14	286
Surrey-Hampshire border whiteware with olive glaze	BORDO	1550-1700	1	1	105
Surrey-Hampshire border whiteware with clear (yellow) glaze	BORDY	1550-1700	6	6	104
Surrey-Hampshire border redware	RBOR	1550-1900	2	2	49
Imports					
Germany					
Frechen stoneware	FREC	1550-1700	10	7	460
Low Countries					
Dutch red earthenware	DUTR	1300-1650	1	1	18

Table 1. HGT15. Post-medieval pottery types, their sources and quantification by sherd count (SC), estimated number vessels (ENV) and weight (Wt).

There are singular sherds of North French grey ware (NFGW) as a vessel base (context [19]) and a rilled shoulder sherd (context [64]) and both fragments may have derived from pitchers.

Medieval

Only two sherds/27g of medieval pottery are recorded. Firstly there is a residual sherd of shelly sandy ware (SSW), dated 1140–1220 in the form of a jar rim (context [37]) and secondly, there is the green-glazed base of Cheam ware (CHEA) vessel dated 1350–1500, and this item was used for cooking (context [19]).

Post-Medieval

The post-medieval pottery produced the largest component of the assemblage (95 sherds/70 MNV/3.704kg). Most of this material dates to the late 16th and particularly the 17th century.

The majority of the pottery is from a London source (32 sherds/23 MNV/1.561kg) and consists of mostly local coarse red earthenwares (16th-century PMRE and later PMR) besides the slipware version (PMSRG and Y). The identified forms found in these wares consist of a bowl or dish (PMSRG), a cauldron (PMSRY), flower pot (PMR) and a tall rounded jar with a thumbled neck (PMRE). The tin-glazed wares are found as a bowl or dish (TGW), chargers (TGW A and D) and a plate (TGW). The bowl or dish dates to the late 17th-early 18th century and has blue foliage decoration on a white background.

Pottery from the Surrey-Hampshire borders are recorded as (27 sherds/22 MNV/544g) and mostly occur as the whiteware (BORDG/O and Y), mainly dated c. 1550–1700. Forms in this ware occur as bowls or dishes (BORDG), the base of an upright candlestick (BORDG), drinking jug (BORDG) porringer (BORDY) and tripod pipkins (BORDG and Y). The redware from this source (RBOR) is dated 1550–1900 and it is present as a chamber pot and a small rounded jar.

There are fourteen sherds/9 MNV/931g of pottery recorded as Essex fine red earthenwares (PMFR) and as the black glazed version (PMBL), all dated 1580–1700, besides the white slip decorated type Metropolitan slipware (METS), dated 1630–1700. The forms recorded in this ware are mostly tygs (multiple-handled mugs) as three examples in PMBL, besides a small dish in METS, decorated with white slip dots in a circular pattern on the rim.

A single sherd of a Midlands purple ware (MPUR) butter pot, dated c. 1580–1700 is recorded with a collared rim.

Imported pottery is restricted to only two types. Firstly as German Frechen stoneware (FREC), dated 1550–1700 and recorded as rounded jugs, which include bartmannen and secondly as a non diagnostic sherd of Dutch redware (DUTR), dated 1300–1650.

Pottery dating from the end of the 18th century is mostly found as types made in several different British locations and particularly as industrial finewares (although Staffordshire was the main source for these pottery types in London). These industrial finewares are recorded as nine sherds/7 MNV/130g and consist of creamware, dated 1760–1830 and pearl ware, dated 1770–1840. The latter pottery type could be additionally decorated with either blue (PEAR BW) or green (PEAR PNTD) glazes or transfer-prints (PEAR TR). Forms in

these wares are a rounded bowl (CREA), bowl or dish (PEAR TR), oval dishes (PEAR PNTD and TR) and a plate (PEAR BW).

London stoneware (LONS) is noted only as sherds of a rounded jug with rilled decoration and this item is dated to the late 18th-19th century.

Distribution

The pottery was recovered from Phases 2–4 and its distribution is shown in Table 2.

Context	Trench	Phase	Size	SC	ENV	Wt (g)	Context	Context	Fabrics (forms)	Spot date
							ED	LD		
6	AP2	4	S	2	2	39	1580	1900	PMR (flower pot), RBOR (jar, 18th-19th century small rounded)	
8	AP2	4	S	5	5	63	1770	1840	CREA, PEAR BW (plate), PEAR 1800–1840 PNTD (dish, oval), PEAR TR (dish, oval)	
11	AP3	4	S	10	8	656	1580	1700	BORDY, FREC (jug, rounded), 1580–1700 IPSF, PMR	
15	AP3	3	S	6	6	93	1550	1700	BORDG (tripod pipkin), BORDY 1550–1700 (porringer), FREC (jug rounded), PMRE	
16	AP3	3	S	2	1	30	1570	1846	TGW (bowl or dish)	Late 17th-early18th century
17	AP3	4	S	1	1	28	1550	1700	BORDG (candlestick, upright)	1550–1700
19	AP3	2	S	3	3	46	1350	1500	CHEA, MSS, NFGW	1350–1500
24	AP3	3	S	3	3	100	1612	1650	BORDY (tripod pipkin), PMFR, 1612–1650 TGW A (charger)	
26	AP3	3	S	1	1	2	1550	1700	BORDG	1550–1700
34	AP3	3	S	5	4	67	1580	1700	BORDG (drinking jug), FREC (jug, 1580–1700 rounded), PMR	
35	AP3	3	S	1	1	12	1570	1846	TGW (plate)	Late 17th-early18th century
37	AP3	3	S	4	4	70	1630	1680	DUTR (jar), FREC (jug, rounded), 1630–1680 SSW, (jar, rounded), TGW D (charger)	

Context	Trench	Phase	Size	SC	ENV	Wt (g)	Context	Context	Fabrics (forms)	Spot date
							ED	LD		
41	AP3	3	S	1	1	7	1580	1700	PMFR	1580–1700
46	AP5	3	S	1	1	8	1550	1700	FREC (jug, rounded)	1550–1700
64	TP16	2	S	1	1	5	600	800	NFGW (?pitcher)	600–800
69	AP9	3	S	14	8	464	1550	1600	BORDG (bowl or dish), BORDY (tripod pipkin), PMRE (jar, rounded), PMSRG (bowl or dish)	1550–1600
72	AP9	3	S	19	15	951	1630	1700	BORDG and O (bowl or dish, tripod pipkin), BORDO (tripod pipkin), FREC (jug, bartmannen), METS (dish small), MPUR (butter pot), PMBL (mug, cylindrical), PMR, PMSRG	1630–1700
74	AP9	3	S	1	1	350	1580	1700	PMBL (tyg)	1580–1700
79	AP9	3	S	12	5	692	1580	1700	PMBL (tyg), PMR, PMSRY (cauldron)	1580–1700
80	AP9	3	S	1	1	29	1550	1700	BORDG (bowl or dish)	1550–1700
84	AP9	3	S	2	2	74	1580	1700	IPSF	730–850
87	AP9	2	S	3	2	163	720	850	IPSC (jar, rounded), IPSF (jar), SSAND	730–850
91	AP9	2	S	9	1	633	720	850	IPSC (jar, rounded)	730–850
101	AP4	4	S	8	4	178	1770	1830	CREA (bowl, rounded), LONS (jug), PEAR TR (bowl or dish), RBOR (chamber pot)	19th century
104	AP9	2	S	1	1	8	720	850	IPSF	720–850

Table 2. HGT15: Distribution of the pottery showing for each context which produced pottery, the trench, the phase, the assemblage size (Size), the number of sherds (SC), estimated number of vessels (ENV) and weight (Wt (g)), the date range of the latest pottery type (Context ED/LD), the pottery-types and their forms and a considered date for deposition (Spot date).

Significance and potential for the assemblage and recommendations for further work

The pottery has significance at a local level and occurs as pottery types expected within the Middle Saxon *Lundenwic* settlement, while the later medieval and post-medieval wares are what would be expected for the London area. Middle Saxon pottery assemblages from *Lundenwic* have been frequently reported upon, e.g. Blackmore (2003; 2013) as well as at Hare Court to the south east of the site and believed to lie outside of the main settlement (Jarrett 2005a). However, the absence of chaff-tempered wares and the presence of Ipswich ware and shell-tempered wares may indicate that the study area developed after c. 750. This would fit in well with the dating evidence found on sites located on peripheral areas of the settlement (e.g. The National Gallery and National Portrait Galleries) that demonstrate expansion of the *Lundenwic* settlement during the late 8th century. The early post-medieval pottery is wholly domestic in its nature, although it is interesting for containing a number of drinking forms: drinking jugs, jugs, including bartmannen and tygs. This may indicate the occurrence of a drinking establishment on or close to the site. Additionally, the occurrence of Surrey-Hampshire border whiteware in the form of a drinking jug and an upright candlestick reflects the material culture of the Inns of Court (Jarrett 2005b): Lincolns Inn being located in the immediate vicinity of the study area. The 19th-century pottery occurs in a small quantity and has no significance.

The pottery has the potential to date the contexts it was recovered from and relate it to activities associated with the study area. The presence of Middle Saxon pottery may help with further defining the extent of *Lundenwic*. A small number of items would merit illustrating. There are no recommendations for further work at this stage, although the importance of the pottery from the evaluation should be reviewed in the light of new material recovered from future archaeological work undertaken on the site.

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APPENDIX 5: CERAMIC BUILDING MATERIAL

ASSESSMENT OF BUILDING MATERIAL, CENTRE BUILDINGS REDEVELOPMENT, LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE, HOUGHTON STREET, CITY OF WESTMINSTER, (HGT-15)

Compiled by Dr. Kevin Hayward and Amparo Valcarcel, November 2015

INTRODUCTION AND AIMS

Five bags of stone, brick and mortar were retained from the excavations at London School of Economics and Political Science, Houghton Street, City of Westminster, London, (HGT-15).

This moderate sized assemblage (191 examples 54.08kg) was assessed in order to:

- Identify (under binocular microscope) the fabric and forms of the Roman building materials as well as any evidence for later medieval or post-medieval occupation
- Identify the fabric of any of the unworked and worked stone in order to determine what the material was made of and from where it was coming from.

Reference should also be made to the access catalogues for the building material (HGT-15.mdb).

METHODOLOGY

The application of a 1kg masons hammer and sharp chisel to each example ensured that a small fresh fabric surface was exposed. The fabric was examined at x20 magnification using a long arm stereomicroscope or hand lens (Gowland x10) and compared with Pre-Construct Archaeology's stone and ceramic building material reference collection. The appropriate Museum of London building material fabric code was then allocated to each item.

With the whole bricks, two samples were retained from each structure; this is in accordance with PCA's sampling guidelines. The samples were examined at our offices in Brockley.

REVIEW

This medium sized assemblage (190 fragments 54.08kg) is dominated by later post medieval ceramic building material including a large assemblage of daub, residual early roman fabrics (box flue tile, tile, *tegulae* and bricks), and a few examples of stone.

CERAMIC BUILDING MATERIAL 167 examples 48 kg

A large size of the assemblage (83%) consists of medieval and post medieval brick and peg tile with smaller quantities of Roman ceramic building material.

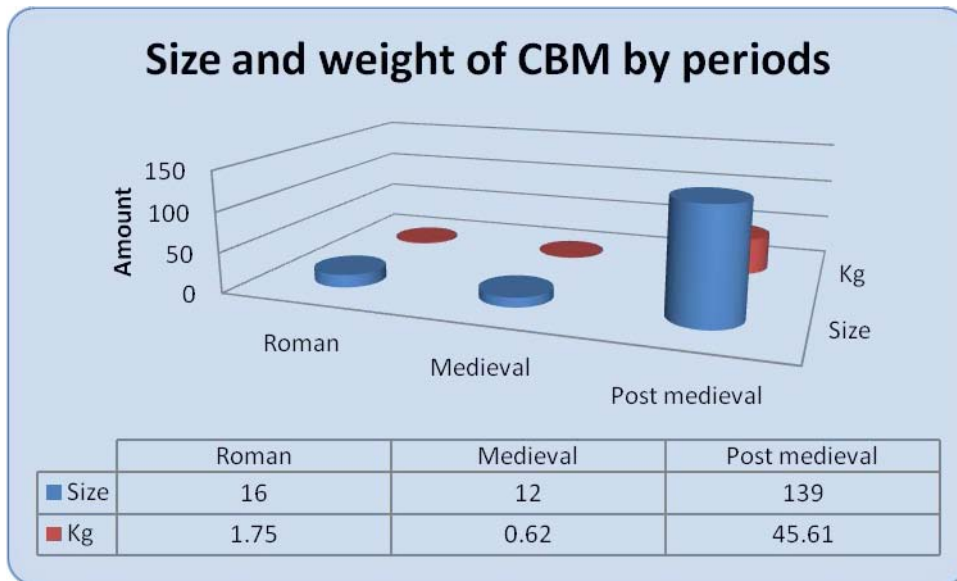


Figure 1 Size and weight (kg.) of CBM by periods excluding stone and daub.

ROMAN 16 examples 1.75 kg

CONDITION

The small assemblages of Roman ceramic building material suggests that they may have once represented structures, and probably these materials have been reused in the Saxon period. Only contexts [85] [87] [89] [104] have entirely Roman material, and contexts [79] [84] [101] have Roman materials mixed with medieval and post medieval bricks and roofing tiles.

FABRICS

Early London Sandy Fabric Group 2815 (AD 50-160) 15 examples 1.47kg

2459a; 3006; 2452

By far the most common fabric both here and in Roman London are the early (AD 50-160) 2815 red group using local brickearth with coarse moulding sand. Bricks, *tegulae*, tile [79] [84] [85] [87] [101] and the only combed box flue tile [104], were made of this material.

Early Eccles Group 2454 (AD 50-80) 1 example 0.028kg

Roman ceramic building made from the very early Eccles fabric group (AD 50-80) a fine cream-yellow-pink sandy fabric with occasional rose quartz 2454 brick is present in just one context [89].

FORMS

Brick 11 examples 1.42 kg

Contexts [85] [87] [89] [101] have small quantities of horizontal partially complete Roman bricks in three fabrics 2454, 2452 and 3006. The fact that these bricks appear to be fresh would suggest that they derive from an on-site or nearby Roman Structure.

Tegulae 2 examples 0.016kg

Both of the flanged roofing tiles are made from London sandy fabric 2452 fabric and are in a fragmentary condition [79] [87].

Box flue tile 1 example 0.01kg

Only one fragment of box flue tile [104] was preserved. It was made with early sandy fabric 2452, and presents five combed parallel lines.

Flat Undiagnostic Tile 2 examples 0.05kg

Horizontal elements in the form of small fragments of tile are present in one context [84] with fabrics 2459a and 2452.

THE DAUB 3102 16 examples 0.85kg

Abraded daub attesting to the presence of timber framed wattle and daub construction in the vicinity were identified in small lumps from [4] [14] [84] [89] and [107]. The daub possibly was derived from buildings of the Saxon period.

MEDIEVAL 12 examples 0.62kg

The assemblage is dominated by peg tile.

Peg Tile

2271; (1180-1450)

Fragments of thin sandy rectangular medieval roofing tile with coarse moulding sand are present intermixed with post medieval brick and tile from [34] [51] [72] [84] [88] [145] and with Roman materials from [79]. One example from [84] had splash glaze.

POST MEDIEVAL 139 examples 45.61 kg

Early post-medieval sandy red fabrics

Brick 25 examples 16.82kg

3033 (1450-1800)

3046 (1450-1800)

Chunks of early post medieval red bricks from [14] [26] [34][41] [48] [69] [88] [101][106] and [145] bonded in a crinkly grey mortar [14] would suggest derivation from a 16th to 18th century building. Complete bricks are preserved in context [11] [21] [23] and [88], and bricks which is possible to take two dimensions from contexts [72] [80] and [88] shows the presence of early post medieval buildings with wide width (112 mm).

Intermediate post great fire bricks 3 examples 3.04kg

3032nr 3033 (1664-1725)

Complete bricks from [2] and [35] and a chunk from [31] prove the existence of buildings of this period in this area. Brick from context [2] is bonded with Roman mortar.

Post great fire bricks 23 examples 17.21kg

3032 22 examples 14.43kg

22 examples of post great fire brick from [28] [32] [34] [50] [69] [72] [78] [97] [100] and [101] bonded in a crinkly grey light mortar are typical in form of a late 18th to 19th century build. Two samples from context [97] bonded with Portland mortar suggest a possible reuse in the 20th century. Some of these bricks are narrow [69] [100].

3035 (1770-1940) 1 example 2.7kg

One London yellow brick from context [58].

3261 (1800-1950) 1 example 2.1Kg

Unfrogged firebrick

Peg tile 41 examples 34.7kg

2271; (1450-1850) (+14mm) 4 examples 0.46kg

Fragments of sandy rectangular post medieval roofing tile with coarse moulding sand are present from [46] and [69].

2276; (1480-1900) 36 examples 3.01kg

Peg tiles belonging to the very common sandy red fabric 2276 dominate the post medieval roofing tile assemblage from context [14] [32] [34] [36] [46] [69] [88] [72] [51] and [106] .

Pan tiles

2279 (1630-1850) 7 examples 1.14kg

Common orange-red not glazed sandy curved pan tile 2279 is present in context [8] [12] [14] [37] and [69].

Floor Tile 4 examples 0.89kg

“Flemish” silty Floor Tiles

2850; 3063 (1450-1600) 4 examples 0.89kg

The small assemblage of floor tiles are from only two contexts [34] and [72], and one of them is glazed [72]. The tradition for using large plain glazed Flemish floor tile with a silty fabric was restricted to the latter half of the 15th century through into the 16th century.

MORTAR

A summary of the mortar types as well as their period of use from the excavations at HGT-15 are given below (Figure 2).

Mortar/Concrete Type	Description	Use at HGT-15
T1 Grey Clinker Mortar	Hard grey clinker mortar	18 th – 19 th century associated with clinker brick [14] [28]
T2 Roman Mortar	A very hard mortar	1800-1950 [2]
T3 Portland Mortar	Hydraulic cement made from burning lumps of marl found in London clay	1830-1950 [97]

Figure 2 list of mortar types identified from the excavation HGT15

STONE 6 examples 2.8kg

3105 1 example, 1.07kg

Kentish Ragstone/ hard dark grey calcareous sandstone (Kent Ragstone); – Glaucontic sandstone (Hassock stone) - Hythe Beds. Lower Cretaceous (Lower Greensand) Maidstone area, North Downs

A fragment of ragstone building rubble was recovered from [87]. This is the most common building stone for Roman London and is therefore ubiquitous everywhere.

3120 1 example 1.38kg

Malmstone Fine hard shelly sandstone, possibly a Kentish ragstone variant Lower Greensand (Lower Cretaceous) Weald.

A fragment of malmstone building rubble was recovered from [72]. This is a common building stone for Roman London.

3108 1 example 0.07 kg

Yorkstone Fine banded light brown calcareous sandstone, Lower Cretaceous (Wealden) Kent.

A fragment of Yorkstone building paver was recovered from [101]. This is a building paving stone between the 18th and 19th century.

3115 Slate 1 example 0.08kg

Blue-Green hard fissile slate Cornish Slate – Devonian Cornwall.

A fragment of Slate building was recovered from [88]. This is a building roofing stone between 12th and 19th century.

3116 1 example 0.33kg

Chalk/Fine powdery white foraminiferal limestone, Upper Chalk (Upper Cretaceous) Thames Valley.

Very common stone used as construction rubble from [88].

3123M 1 example, 0.13kg

Hard, coarse, dark-grey vesicular basalt lava -with white (leucite) and black inclusions. Neidermendig lavastone, Tertiary-Andernach Region, NW Germany

A fragment of Neidermendig lavastone, probably from a Saxon quern.

Summary

This medium assemblage is dominated by post medieval ceramic building materials. The most common bricks are unfrogged sandy red bricks, a few examples of intermediate post great fire bricks, and post great fire narrow unfrogged brick; intermixed with curved pan tile, floor tile and roofing peg tile, some Flemish silty pavers and a small example of stone (Malmstone, Kentish ragstone, chalk, slate and Yorkstone). These bricks are often bonded in a soft grey clinker mortar typical of later 18th to 19th century recipes in London, e.g. [14] [28], Roman [2] and Portland mortar [97] which are common until the first half of 20th century.

Early Roman sandy and Eccles fabrics, typically used in London in the 1st century and early to mid 2nd century AD were probably reused, and daub possibly was derived from buildings of the Saxon period.

There are some fragments of thin sandy rectangular medieval roofing tile (fabric 2271) with coarse moulding sand which are present, intermixed with post medieval brick and tile, which suggests the existence of a medieval building.

Contexts [11] [21] [23] [88] contain complete red Tudor/Stuart (3033 and 3046 fabrics), and context [14] [26] [34] [41][48] [69] [72] [80] [101] [106] and [145] contains examples of these fabrics. Some of them are shallow (51mm) and wide (112mm) bricks. This evidently belongs to an earlier 16th-17th century construction phase.

Brick fabrics 3032nr3033, 3032 and 3035, peg tiles (2271, 2276), curved pan tiles (2279), Flemish silty paving and stone assemblage from Houghton Street, is rather typical of 17th and 19th century construction whose only potential relates to dating the site.

DISTRIBUTION

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date	Spot date with mortar
2	3032nr3033	Whole reused intermediate post great fire brick	1	1664	1725	1664	1725	1664-1725	1800-1925
4	3102	Abraded daub	7	1500B C	1666	1500BC	1666	1500BC-1666	No mortar
8	2276;2279	Post medieval unglazed peg and pan tiles	3	1480	1900	1480	1900	1630-1900	1750-1900
11	3033	Whole unfrogged post medieval sandy red brick	1	1450	1700	1450	1800	1450-1800	No mortar
12	2279	Post medieval unglazed pan tiles	2	1630	1850	1630	1850	1630-1850	No mortar
14	3102;2276;3033; 2279;3101PM	Abraded daub; post medieval unglazed peg and pan tiles;	6	1500B C	1900	1480	1900	1630-1900	1750-1900

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date	Spot date with mortar
		reused post medieval sandy red brick; crinkly grey mortar							
21	3033	Whole unfrogged post medieval sandy red fabric	1	1450	1700	1450	1700	1450-1700	No mortar
23	3033	Whole unfrogged post medieval sandy red fabric	1	1450	1700	1450	1700	1450-1700	No mortar
26	3046	Unfrogged post medieval sandy red fabric	1	1450	1700	1450	1700	1450-1800	No mortar
28	3032	Post great fire brick	2	1666	1900	1666	1900	1666-1900	1750-1900
31	2276;3032nr3033	Unglazed post medieval peg tile; abraded intermediate post great brick							
32	2276;3032R	Post medieval unglazed peg tiles; abraded post great fire bricks	5	1480	1900	1666	1900	1666-1900	No mortar
34	2271;2276;2850;3046; 3063; 3032	Medieval and post medieval unglazed peg tiles: post medieval Flemish silty pavers; post medieval red sandy brick; post great fire brick	15	1180	1900	1666	1900	1666-1900	No mortar
35	3032nr3033	Whole intermediate post great fire	1	1664	1725	1664	1725	1664-1725	No mortar
36	2276	Post medieval unglazed peg tile	1	1480	1900	1480	1900	1480-1900	No mortar
37	2279	Post medieval unglazed pan tile	1	1630	1850	1630	1850	1630-1850	No mortar

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date	Spot date with mortar
41	3033	Abraded post medieval sandy red brick	1	1450	1700	1450	1700	1450-1800	No mortar
46	2271;2276	Medieval and post medieval unglazed peg tiles	13	1180	1900	1480	1900	1480-1900	No mortar
48	3033;2276	Abraded post medieval sandy red brick; post medieval unglazed peg tile	2	1450	1900	1480	1900	1480-1900	No mortar
50	2276;3032R	Post medieval unglazed peg tile; post great fire brick	3	1480	1900	1666	1900	1666-1800	No mortar
51	2271;2276	Medieval and post medieval unglazed peg tiles	9	1180	1900	1480	1900	1480-1900	No mortar
55	2276	Post medieval unglazed peg tile	1	1480	1900	1480	1900	1480-1900	No mortar
58	3035;3261;3101PM	Post great fire unfrogged brick; unfrogged firebrick; Portland mortar	2	1770	1940	1800	1950	1800-1950	1830-1950
69	2271;2276;3033;2279;3032	Medieval and post medieval unglazed peg tiles; post medieval sandy red brick; post great fire burnt narrow brick	16	1180	1900	1666	1900	1780-1900	No mortar
72	3120;2271;3033;2276;3063;3032	Malmstone (rub.); medieval and post medieval unglazed peg tiles; post medieval unfrogged sandy red bricks; post medieval glazed and unglazed Flemish silty paver; post great fire unfrogged narrow brick;	24	50	1900	1666	1900	1780-1900	No mortar

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date	Spot date with mortar
78	3032	Whole post great fire unfroged narrow bricks	2	1666	1900	1780	1900	1780-1900	No mortar
79	2452;2271	Early roman sandy tegula; medieval and post medieval peg tile	2	55	1850	1180	1850	1180-1450+	No mortar
80	3033	Post medieval wide sandy red bricks	2	1450	1800	1666	1800	1450-1800	No mortar
84	3102;2459a;2452;3032M;2271;2276;	Abraded daub; early roman tiles; Niedermendig lava stone (quern);medieval brown splash glazed peg tile; post medieval unglazed peg tiles	6	1500B C	1900	1480	1900	1480-1900	No mortar
85	3006	Early sandy roman brick	1	50	160	50	160	50-160+	No mortar
87	3105;2452	Kentish ragstone (rub.); early roman sandy tegula and bricks	10	50	1666	55	1666	55-160+	No mortar
88	3116;3115;2271;3033;3046;3033; 2276	Chalk (rub.); slate roofing tile; medieval and post medieval unglazed peg tiles; post medieval sandy wide red bricks	11	50	1900	1480	1900	1050-1900	No mortar
89	3102;2454	Abraded daub; early roman Eccles brick	7	1500B C	80	50	80	50-80+	No mortar
97	3032;3101PM	Whole post great fire unfroged narrow bricks; Portland mortar	4	1666	1900	1666	1900	1780-1900	1830-1950
100	3032	Post great fire unfroged narrow bricks	2	1666	1900	1666	1900	1780-1900	No mortar

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date	Spot date with mortar
101	3108;2452;3033; 3032	Yorkstone paver; early roman sandy brick; post medieval sandy red brick; post great fire brick	4	50	1900	1666	1900	1700-1900	No mortar
104	2452	Early roman sandy combed box flue tile	1	55	160	55	160	55-160+	No mortar
106	3033;2276	Post medieval sandy red bricks; post medieval unglazed peg tiles	4	1450	1900	1480	1900	1480-1900	No mortar
107	3102	Abraded daub	1	1500-BC	1666	1500BC	1666	1500BC-1666	No mortar
143	2276	Post medieval unglazed peg tile	1	1480	1900	1480	1900	1480-1900	No mortar
145	2271;3033; 2276;	Medieval and post medieval unglazed peg tile; post medieval red sandy brick	5	1180	1900	1480	1900	1480-1900	No mortar

RECOMMENDATIONS/POTENTIAL

An assessment of the building materials (stone; ceramic building material; daub) from Houghton Street, City of Westminster (HGT-15) shows that nearly 60% of it is post medieval building material (16th century and 20th century).

Most of the bricks are typical of the Victorian era narrow post great fire unfroged bricks would have only been in circulation following the brick tax brought about by government legislation after 1780.

1776	Brick size regulation Act: took effect July 1777, first blanket national legislation. Min. size of bricks at 8 ½ x 4 x 2 ½ ". Last legislation on sizes until the 20 th century, remained in force until the 19 th century	216 x 101.5 x 63.5	Parliament (Act)
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By comparison the medieval component is very small and is limited to standard peg tile. The presence of medieval peg tiles may indicate that there were a few tiled buildings during that period in the vicinity of the site.

The presence of early Roman sandy and Eccles fabric suggest the existence of Roman buildings nearby. The rest is in a reused and fragmentary condition indicating some recycling. Roman materials and daub were probably reused in Saxon buildings.

Malmstone, likely to be of Roman origin, is residual or reused in the Saxon period. Niedermendig lava stone indicates the presence of a Saxon settlement. The other stones are common in the medieval and post medieval periods.

The building material assemblage very much reflects the later post medieval development of this site and none of the material is of intrinsic interest – all should be discarded. No further work. The only item of interest is a piece of combed box flue tile [104].

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APPENDIX 6: CLAY TOBACCO PIPES

Clay Tobacco Pipe Assessment (HGT15)

By Chris Jarrett

Introduction

A small sized assemblage of tobacco pipes was recovered from the site (one box). Most fragments are in a good condition indicating that most of the material was deposited soon after breakage. Clay tobacco pipes were found in fifteen contexts, as small sized (under 30 fragments) groups.

All of the clay tobacco pipes (39 fragments, of which none are unstratified) were entered into a database format file and classified using Atkinson and Oswald's (1969) typology (AO). The pipes are further coded by decoration and quantified by fragment count. The degree of milling on 17th-century examples has been noted and recorded in quarters, as well as their quality of finish. The tobacco pipes have been discussed by their types and distribution.

THE CLAY TOBACCO PIPE TYPES

The clay tobacco pipe assemblage from the site is comprised of six bowls, two nibs (mouth parts) and 31 stems. The pipe bowls range in date between c.1610 and 1680. All of the bowls show evidence of use.

1610–1640

AO6: one spurred bowl with full milling of the rim and a good quality of finish. Context [17].

1640–1660

AO10: two heeled bowls with rounded profiles, a good finish and either three quarters or full milling of the rim. Both bowls have had their heels handled in a sub-standard way during the manufacturing process. Context [34]

1660–1680

AO15: two spurred bowls with a rounded profile and a good finish. One bowl is of an average finish and has a damaged rim, although it shows evidence for milling (context [15]) while the second example has a poor quality of finish and three quarters milling of the rim (context [12]).

A number of bowls are represented mostly by stems and the start of the swelling of the bowl and these were poorly dated .

Distribution

The tobacco pipes are found in Phases 3 and 4 and their distribution is shown in Table 1. Where clay tobacco stems only occur in a context, then they have been broadly dated according to stem thickness and the bore diameter.

Context	Trench	Phase	Size	No. of		Context ED	Context LD	Bowl types/part	Context considered date
				fragments	Context ED				
6	AP1	4	S	4		1580	1910	Stems	19th century
8	AP2	4	S	2		1580	1910	Stems	1730–1910
11	AP3	4	S	2		1580	1910	X1 bowl fragment, x 1 stem	1580–1740
12	AP3	3	S	3		1660	1680	X1 AO15, x1 stem	1660–1680
15	AP3	3	S	1		1660	1680	X1 AO15	1660–1680
16	AP3	3	S	2		1580	1910	Stems	1580–1740
17	AP3	4	S	2		1610	1640	X1 AO6, x1 stem	1610–1640
26	AP3	3	S	1		1580	1910	Stem	1580–1740
29	AP3	4	S	1		1580	1910	Stem	1580–1740
32	AP3	3	S	1		1580	1910	Stem	1580–1740
34	AP3	3	S	4		1640	1660	X1 AO10, x2 stems	1640–1660
37	AP3	3	S	8		1580	1910	Stems	1580–1740
69	AP9	3	S	1		1580	1910	Stems	1580–1740
72	AP9	3	S	6		1580	1910	X2 nibs, x2 stems	1580–1740
101	AP4	4	S	1		1580	1910	Stem	Mid 18th -19th century

Table 1. HGT15. Distribution of the tobacco pipes showing, the trench, the phase, size of the assemblage (Size), the number of fragments, the date of the latest clay tobacco pipe bowl or stem (Context ED and LD), the range of bowl types or parts present and a deposition spot date (context considered date) for each context.

Significance, potential and recommendations for further work

The clay tobacco pipes are of little significance at a local level. The bowl types present fit within the typology for London. A similarly dated assemblage of clay tobacco pipes has been excavated nearby at Hare Court (Jarrett 2005, 76). There is no evidence for clay tobacco pipe production at the site. The main potential for the tobacco pipes is as a dating tool for the contexts in which they were found. There are no recommendations for further work on the assemblage, although its importance should be reviewed if more clay tobacco pipes are recovered from further archaeological work on the site.

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APPENDIX 7: GLASS

Glass Assessment (HGT15)

By Chris Jarrett

Introduction

A small sized assemblage of glass was recovered from the site (less than one box). The material is fragmentary, not abraded and naturally weathered: most of the assemblage appears to be deposited under tertiary circumstances, except for that from context [45] , which was probably deposited soon after being discarded. Glass was found in four contexts, as small sized (under 30 fragments) groups.

All of the glass (six fragments, four items, 133g, of which none are unstratified) were entered in to a database format file and classified according to glass type, colour and form. The material has been discussed briefly by the forms represented and by its distribution.

Forms

The breakdown of the forms is as follows:

English wine bottle, squat globe and shaft type: 1 fragment, 1 MNV, 124g

Vessel: 1 fragment, 1 MNV, 7g

Window pane: 4 fragments, 2 MNV, 2g

Distribution

All of the glass dates from the post-medieval period and was only recovered from Phase 3 dated deposits.

Trench AP3

Context [37]: spot date: post-medieval

Vessel: pale olive green natural glass, weathered, possibly from a wine bottle, 1 fragment, 1 MNV, 7g. Post-medieval

Trench AP5

Context [45]: spot date: c.1640–80

English wine bottle, squat globe and shaft type: pale olive green natural glass, free-blown, 1 fragment, 1 MNV, 124g. c.1640–80

Trench AP9

Context [69]: spot date: post-medieval

Window pane: pale green tinted soda glass, thin walled fragment, heavily weathered ,1 fragment, 1 MNV, 1g.
Post-medieval

Context [72]: spot date: post-medieval

Window pane: pale green tinted soda glass, thin walled fragments, heavily weathered, 3 fragments, 1 MNV,
1g. Post-medieval

Significance, potential and recommendations for further work

The glass has no significance as it consists of mostly fragmentary material that cannot be readily related to site activities, the exception being the mid 17th-century wine bottle. The main potential for the glass is to provide dating for the contexts in which it was found. There are no recommendations for further work on the assemblage.

PCA

PCA SOUTH

UNIT 54
BROCKLEY CROSS BUSINESS CENTRE
96 ENDWELL ROAD
BROCKLEY
LONDON SE4 2PD
TEL: 020 7732 3925 / 020 7639 9091
FAX: 020 7639 9588
EMAIL: info@pre-construct.com

PCA NORTH

UNIT 19A
TURSDALE BUSINESS PARK
DURHAM DH6 5PG
TEL: 0191 377 1111
FAX: 0191 377 0101
EMAIL: info.north@pre-construct.com

PCA CENTRAL

7 GRANTA TERRACE
STAPLEFORD
CAMBRIDGESHIRE CB22 5DL
TEL: 01223 845 522
FAX: 01223 845 522
EMAIL: info.central@pre-construct.com

PCA WEST

BLOCK 4
CHILCOMB HOUSE
CHILCOMB LANE
WINCHESTER
HAMPSHIRE SO23 8RB
TEL: 01962 849 549
EMAIL: info.west@pre-construct.com

PCA MIDLANDS

17-19 KETTERING RD
LITTLE BOWDEN
MARKET HARBOROUGH
LEICESTERSHIRE LE16 8AN
TEL: 01858 468 333
EMAIL: info.midlands@pre-construct.com

