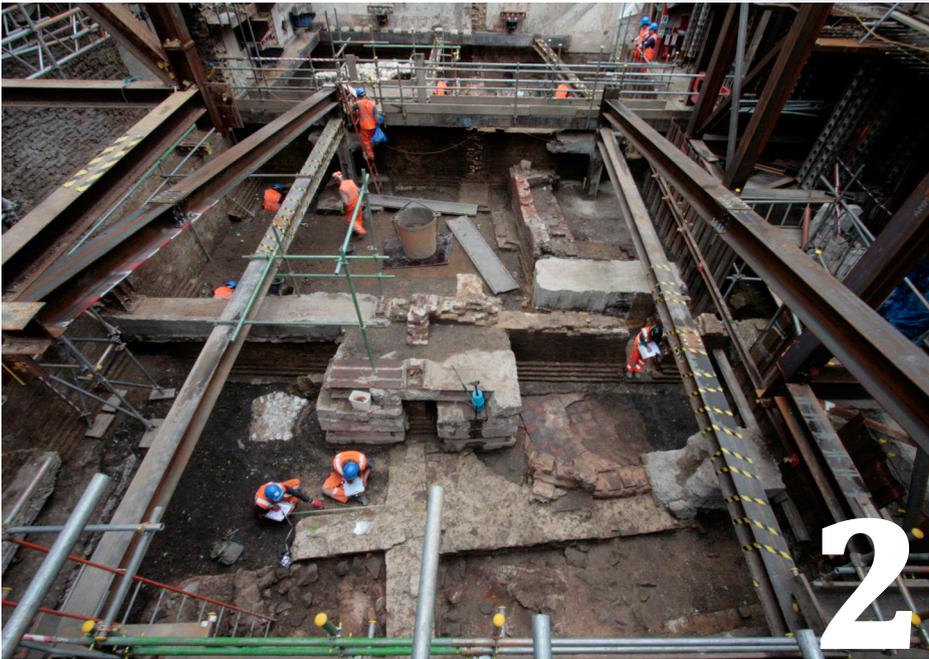


11–15 Borough High Street and 2 London Bridge Street, London Borough of Southwark



Post-Excavation Assessment

September 2013



Client: Network Rail

Thameslink Archaeological Assessment 2: Archaeological Excavations at 11-15 Borough High Street and 2 London Bridge Street, London Borough of Southwark

Site Codes: BVK11 (with reference to BVA08 & BVY09)

National Grid Reference: Centre - TQ 32738 80233

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1 ABSTRACT

- 1.1 This assessment details the results and working methods of archaeological investigations conducted at 11-15 Borough High Street and 2 London Bridge Street, London Borough of Southwark (Fig. 1) (hereinafter referred to as '11-15 Borough High Street' for the sake of brevity). The archaeological work was funded by Network Rail and was undertaken to discharge planning conditions attached to the 'Network Rail (Thameslink 2000) Order 2006' (TWA 2006; NWR 2009a; 2009b).
- 1.2 The archaeological investigations detailed in this document were centred at National Grid Reference TQ 32738 80233 and constitute 'Thameslink Archaeological Assessment 2 - 11-15 Borough High Street, 2 London Bridge Street'. Archaeological test pits were excavated by Museum of London Archaeology (MOLA) in 2009 (BVY09) and a Standing Building Survey (BVA08) was conducted in 2009/10 whilst the main archaeological excavations were conducted by Oxford Archaeology and Pre-Construct Archaeology (OA-PCA) during 2011 (BVK11). As part of this an archaeological watching brief on remedial engineering works was conducted between January, February, March, June and July 2011, whilst the main archaeological excavations were undertaken between August and November 2011.
- 1.3 The archaeological investigations encountered fluvial sands from 0.80m OD, and the uppermost archaeological horizon at c.3.85m OD. This demonstrated the presence of a stratified archaeological sequence measuring 2.95m in thickness.
- 1.4 The earliest identified horizon of naturally deposited sands and gravels (Phase 1/2) was identified during localised augering. These interventions were too localised and limited in size however, to be able to make wider inferences regarding the underlying topography of the eyot on which the site is located. Waterlain alluvium was identified along the northern boundary of the site and may represent the presence of a channel or inlet within close proximity. The discovery of residual Mesolithic/Neolithic implements within later deposits suggests that the natural topography of the island was impacted upon during Roman landscaping/development of the area. No further traces of prehistoric occupation/exploitation were identified.
- 1.5 Eight broad phases of Roman activity were recorded across the site (Phases 3a-h). These comprised an initial phase of ground raising/consolidation, followed by mid to late 1st century construction and development primarily associated with industry. The latter inferred the production of leaded copper and copper working within the boundaries of the site, and hot ironworking in close proximity. Potentially associated with these activities were at least two structures, defined by brickearth partition walls. One example is likely to have fronted onto Road 1, whereas a second example is suspected to have fronted a subsidiary road running perpendicular, or parallel to the road.

- 1.6 Both structures remained in use until the early 2nd century. During the lifespans of these buildings copper production continued within the area but at a reduced capacity. A direct correlation was observed between the reduction of industry and an increase in domestic activity across the Site. A brief shift in property boundaries was suggested by at least two phases of east-west aligned ditches within the south-eastern quadrant of Area B. These were distinctive in differing in alignment from the surrounding architecture.
- 1.7 A high status building dating from the early 2nd century dominated the northern excavation Area A1 and extended into adjacent Area A2. The complex was interpreted as a potential bathhouse, and comprised at least four rooms, one of which appeared to be a Laconicum, or sweating room. Although the precise function of the remaining rooms remains unclear, it is apparent that the two northernmost rooms underwent numerous modifications into the mid/late 2nd century. These modifications included the robbing/removal of wall facings, the laying of opus signinum surfaces and installation of additional internal structures, including a drain and flue. The nature of repairs within the Laconicum however inferred that even if the complex was initially designed as a bathhouse, it might not have remained in use as this throughout its entire lifespan. Dumped debris suggested that parts of the complex began to fall out of use by the late 2nd to early 3rd century.
- 1.8 Activity within the central and southern excavation Areas A2 and B during the 2nd to early 3rd centuries comprised an initial phase of dumping and instatement of opus signinum surfaces. These surfaces lay at a comparable elevation to those within Area A1, but are likely to have been part of a separate complex. The replacement of the earlier brickearth partition by stone walls were also dated to this period, and is therefore likely to have been part of a widespread development scheme taking place during the early 2nd century. Construction increased further by the mid 2nd century, by which time 7 distinct spaces or rooms could be identified across Area B. Stone walls defined the three western rooms whereas those to the east appeared to lie within a timber-framed building. Many of these rooms illustrated numerous phases of use. This was particularly evident for those rooms within the timber-framed building, which inferred that the complex was rebuilt/redeveloped at least 2-3 times. Activity subsequently decreased during the late 2nd/early 3rd century within these areas. Former property boundaries were generally maintained but modified.
- 1.9 Widespread robbing trenches and demolition debris suggested an occupation decline during the late 3rd to 4th centuries (Phase 4a). Material contained within the debris, such as plaster, and other high status materials are likely to have derived from the bathhouse, and might infer something of the original design and appearance of some of the rooms. Such debris did not however indicate a total abandonment of the area. Refuse and cess pits, postholes and secondary robbing cuts within Area B, suggested that occupation continued in this vicinity, within the boundaries of the earlier structures.

- 1.10 Evidence of Late Saxon activity (Phase 4b) comprised two pit clusters found containing material dated up to 1050/1150. These clusters were extremely localised and suggested that certain property boundaries may have remained in use, despite extensive robbing of the superstructures. The Late Saxon pottery recovered from the Site represented the largest assemblage of this date by comparison to the other Thameslink assessment areas.
- 1.11 Three broad phases of medieval activity were identified across the excavation areas (Phase 5). These comprised several construction schemes dated between the 11th and 13th centuries followed by robbing dated up to the 15th century. Earlier walls dated between the 11th and 12th centuries and comprised chalk walls in the north-east of the excavation area, which incorporated Roman material within the construction and had been founded directly upon Roman foundations. These features pre-dated the documented relocation of St Thomas's Hospital to the east side of Borough High Street during the early 13th century. Evidence of this complex was encountered along the southern limits of excavation in the form of chalk piers with relieving arches. Material recovered from garden soils adjacent to this boundary contained high status material potentially derived from a religious establishment in close proximity, and may therefore also relate to St Thomas's Hospital. A number of stone walls were identified within the central excavation area, which respected the property alignments of the chalk arches. The difference in materials might suggest this to have been an entirely separate property, or a different scheme of works within the hospital precinct.
- 1.12 During the late 15th to early 17th century (Phase 6a) construction and redevelopment focussed on the western half of the excavation areas, and presumably related to properties that formerly fronted onto Borough High Street. A number of the brick walls incorporated re-used Roman materials, and had been founded over earlier Roman masonry. This suggested that elements of the bathhouse complex were visible at this time and integrated into post-medieval constructions. Additional construction comprised walls built of chalk, ragstone and reused ashlar blocks dated to the 16th/17th centuries. These were predominantly located within the southern two thirds of the excavation area.
- 1.13 A further series of chalk, brick and ragstone walls were attributed to mid/late 17th and 18th century modifications (Phase 6b/6c). These related to at least 2-3 former properties that fronted onto Borough High Street. Internal walls were constructed, localised reinforcements installed and repairs indicative of numerous modifications over a relatively short time span identified. Cess pits associated with the southernmost of these properties were also identified, and construction began to encroach on the eastern excavation areas from the late 17th and early 18th century. Cartographic sources illustrate a number of these properties, and suggest that the south-eastern quadrant of the excavation area was located within the open precinct of St Thomas's Hospital at this time. The lack of development within certain areas is therefore a direct result of differing property boundaries, and limitations to development as a result of the hospital precinct.

- 1.14 Expansion and sub-division of pre-existing property boundaries continued during the later 18th and 19th centuries (Phase 6d). Pre-existing walls were repaired and modified, earlier cess pits fell out of use, and a number of brick floors (basement level) were installed. The destruction of earlier properties, perhaps to make way for redevelopment of the wider area, was inferred by the presence of 13th to 15th century building material within dump layers of this phase. Similarly to earlier phases (6b and 6c) many of these modifications can be traced using cartographic sources. Discrepancies between the archaeological and the cartographic record however, suggest that some of construction schemes in the south of the excavation area were relatively short lived.
- 1.15 Properties comprising the earlier terrace were demolished by 1846 and the area landscaped as part of the redevelopment of the precinct of St Thomas's Hospital (Phase 7). The gardens/courtyard that encompassed the Site were short-lived, and followed by the construction of properties 11-15 Borough High Street by c.1863. These properties remained on the site until their demolition in 2010/2011. The depth of the footings associated with these properties effectively subdivided the site into the three main excavation areas: A1, A2 and B.

2 INTRODUCTION

- 2.1 This assessment details the results and working methods of archaeological investigations conducted at 11-15 Borough High Street, London Borough of Southwark (Fig. 1). The archaeological work was funded by Network Rail and was undertaken to discharge conditions attached to the planning permission granted for the development for which provision was included in the 'Network Rail (Thameslink 2000) Order 2006' as detailed in the agreed 'Written Scheme of Investigation' (NWR 2009).
- 2.2 The principal objectives of Thameslink are: to reduce crowding on Thameslink and other London commuter services; reduce overcrowding in the underground; reduce the need for interchange between mainline and underground services; to provide new cross-London services, and; to facilitate dispersal of passengers from St Pancras following the completion of HS1. To achieve this, the Thameslink Programme included proposals for substantial construction works in London at Blackfriars Station, Farringdon Station, London Bridge Station and also between Metropolitan Junction and London Bridge Station. The latter included a new structure comprising a twin-track railway on raised structures between Metropolitan Junction, (Southwark Street), and London Bridge Station. This consists of the following elements: the Park Street & Hop Exchange Viaduct; the Borough Market Viaduct; the Borough High Street Bridge; the Railway Approach Viaduct; and the Station Approach Viaduct. (Fig. 1)
- 2.3 The archaeological investigations of the Thameslink project have been divided into 9 areas, each of which is the subject of a separate assessment report. Eight of the areas are in Southwark along the course of the new Borough Viaduct (Assessments 1-7 & 9; Fig. 1), whilst the remaining one is at Blackfriars Station, City of London (Assessment 8). The Assessments incorporate the results of the following archaeological investigations.

Assessment	Site Name	Site Code
Assessment 1	Vaults 2, 5 & 9, Railway Approach	BVL10
Assessment 2	11-15 Borough High St and 2 London Bridge Street	BVK11
Assessment 3	Pile Cap P, Green Dragon Court Pile Cap P & Pile Locations 1-6, 16-26 Borough High St, 1-7 Green Dragon Court; Test Pit 5 (Borough High St); Test Pits 6 & 21 (7 Bedale St) Pile Locations N1 & N2	BVJ10 BVX09 BVW10
Assessment 4	2-4 Bedale St	BVG10
Assessment 5	Borough Market Pile Locations K1, K2, L1, L2, M1 & M2 Borough Market	BVF10 BVU09

Assessment 6	The Wheatsheaf Rear of 6-7 Stoney St & Test Pits 1-2, 8-9, 13, Stoney St & The Wheatsheaf	BVE11 BVT09
Assessment 7	Arches 12-16 Park St Pile Caps A-H rear of Southwark St & Park St; Test Pits 14 & 17 Redcross Way & Test Pits 10-12, 15-16 Park Street	BVB10 BVQ09
Assessment 8	Blackfriars Station, New Bridge St, Queen Victoria St & Blackfriars North	THB09
Assessment 9	Western Approach Viaduct (formerly Station Approach Viaduct)	BVC12

- 2.2 The archaeological investigations detailed in this document were centred at National Grid Reference TQ 32738 80233 and constitute 'Thameslink Archaeological Assessment 2: 11-15 Borough High Street and 2 London Bridge Street' (hereafter 'The Site') (Fig. 1). The Site is bound by an extant property at 4 London Bridge Street to the south-east and 19a Borough High Street to the south-west, whilst Borough High Street forms the north-west site boundary and London Bridge Street forms the north-east (Fig. 2). 'Thameslink Archaeological Assessment 1 - Vaults 2, 5 & 9 Railway Approach' is located on the opposite side of London Bridge Street (see OA-PCA-TAA1) whilst 'Thameslink Archaeological Assessment 3 - Green Dragon Court' is located on the opposite side of Borough High Street (see OA-PCA-TAA3).
- 2.3 Late 19th century properties 11, 13 & 15 Borough High Street and 2 London Bridge Street were demolished within the assessment area during 2010/2011 to allow the construction of the new Viaduct (Borough High Street Bridge). No viaduct pile locations were positioned within the footprint of the demolished buildings and planning permission was granted to construct a replacement 4-storey retail/office building (NWR 2009).
- 2.4 The approved design for the reinstated buildings at 11-15 Borough High Street required differential depths of excavation across the site - to accommodate different thicknesses of imported structural fill beneath the new structure - with the consequence that archaeological deposits in the western third (Area C) would only be minimally impacted, whilst the eastern two thirds of the site (Areas A1, A2 & B) would require extensive archaeological mitigation (NWR 2009b) (Figs. 2 & 3). In addition, engineering and Health & Safety restrictions attached to the approved design required that the deeper archaeological excavation were sub-divided into two 'stages' of excavation, with Stage 1 project depth being 2.20m OD and Stage 2 project depth being 1.20m OD. However, the subsequent discovery of highly significant archaeological remains on site led to a reassessment of the thickness of fill required to support the new building, a reassessment that once implemented resulted in variable 'project depths' being employed. Extensive watching briefs were conducted during the course of the excavations, some of which were necessitated by the 'redesign'. The associated watching

briefs formed an integral part of the archaeological mitigation and monitored the underpinning of the London Bridge Street frontage; consolidation of party walls shared with 4 London Bridge Street and 19a Borough High Street; dynamic probe testing within the excavation areas; and the reburial of archaeological remains left in situ at project level.

2.5 The archaeological investigations conducted as part of Thameslink Archaeological Assessment 2 comprised:

BVY09 MOLA: June - September 2009

- Test Pit Watching Brief

BVA08 MOLA: February 2009 - April 2010

- Standing Building Survey

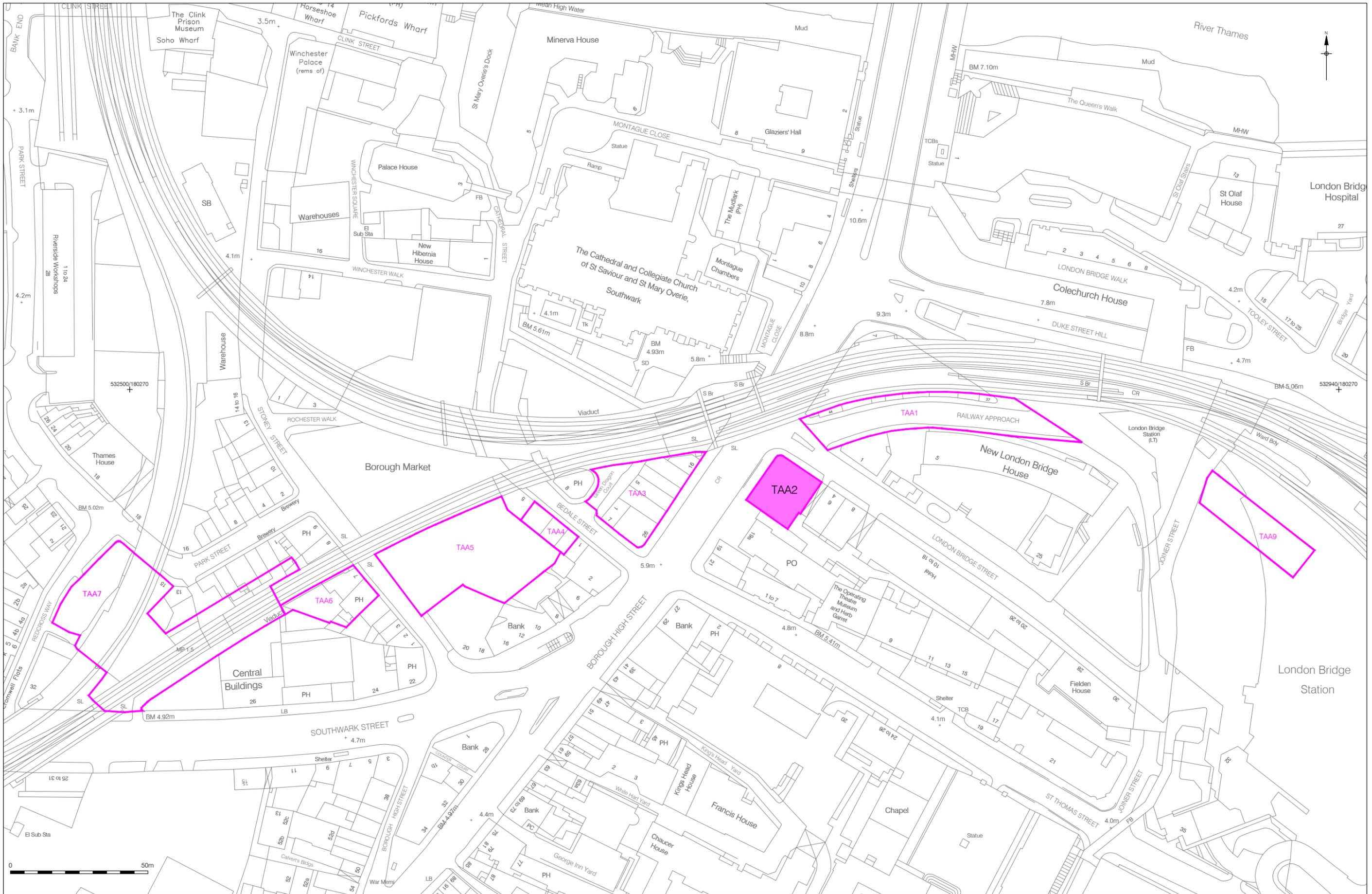
BVK11 OA-PCA: January - November 2010

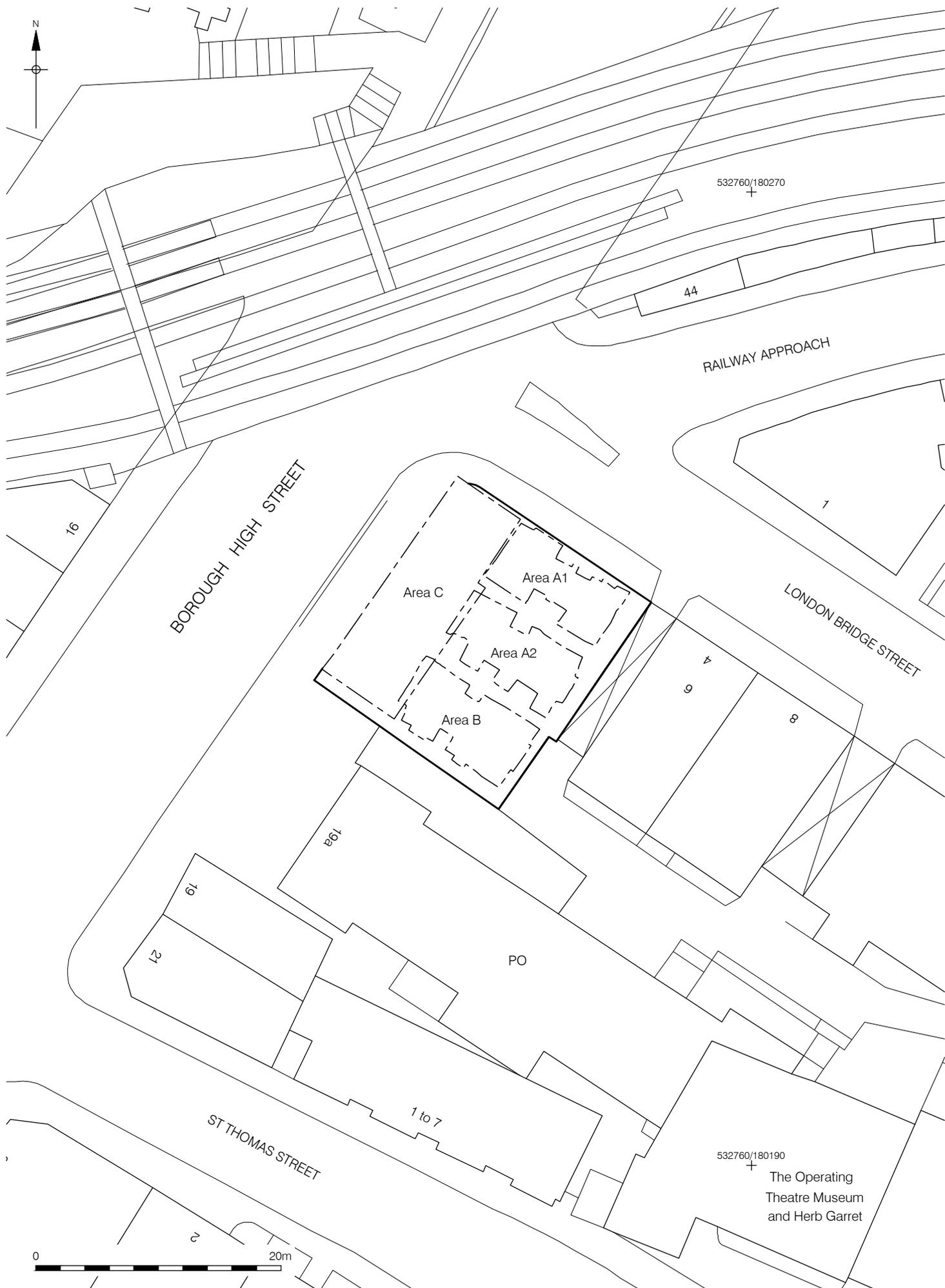
- Temporary Works Watching Brief
- Mitigation Watching Brief (Area C)
- Pre-Start Watching Brief (Area A1, Area A2 & Area B)
- Archaeological Excavation - Stage 1 (Area A1, Area A2 & Area B)
- Archaeological Excavation - Stage 2 (Area A1, Area A2 & Area B)
- Mitigation Watching Briefs (Area A1, Area A2 & Area B)

2.6 The OA-PCA archaeological site work was supervised by Amelia Fairman and Jacek Gruszczynski under the project supervision of Joanna Taylor and the project management of Peter Moore and Dan Poore. Chris Place (Network Rail Project Archaeologist) acted as archaeological advisor to Network Rail and the progress of the archaeological investigations were monitored by Dr Chris Constable (Senior Archaeology Officer, Southwark Council).

2.7 This document presents a post-excavation assessment of the stratigraphic record, finds and environmental data from the fieldwork. Further definition of research priorities, schemes of analysis and reporting of the present datasets are detailed in the 'Thameslink Archaeological Assessment: Updated Project Design' (OA-PCA forthcoming).

2.8 The completed archive for 'Thameslink Archaeological Assessment 2' will be deposited at the London Archaeological Archive and Research Centre (LAARC) under the site codes BVA08, BVY09 and BVK11. The deposited archives will comprise artefactual material and written, drawn and photographic records.





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Figure 2
 Trench Location
 1:400 at A4

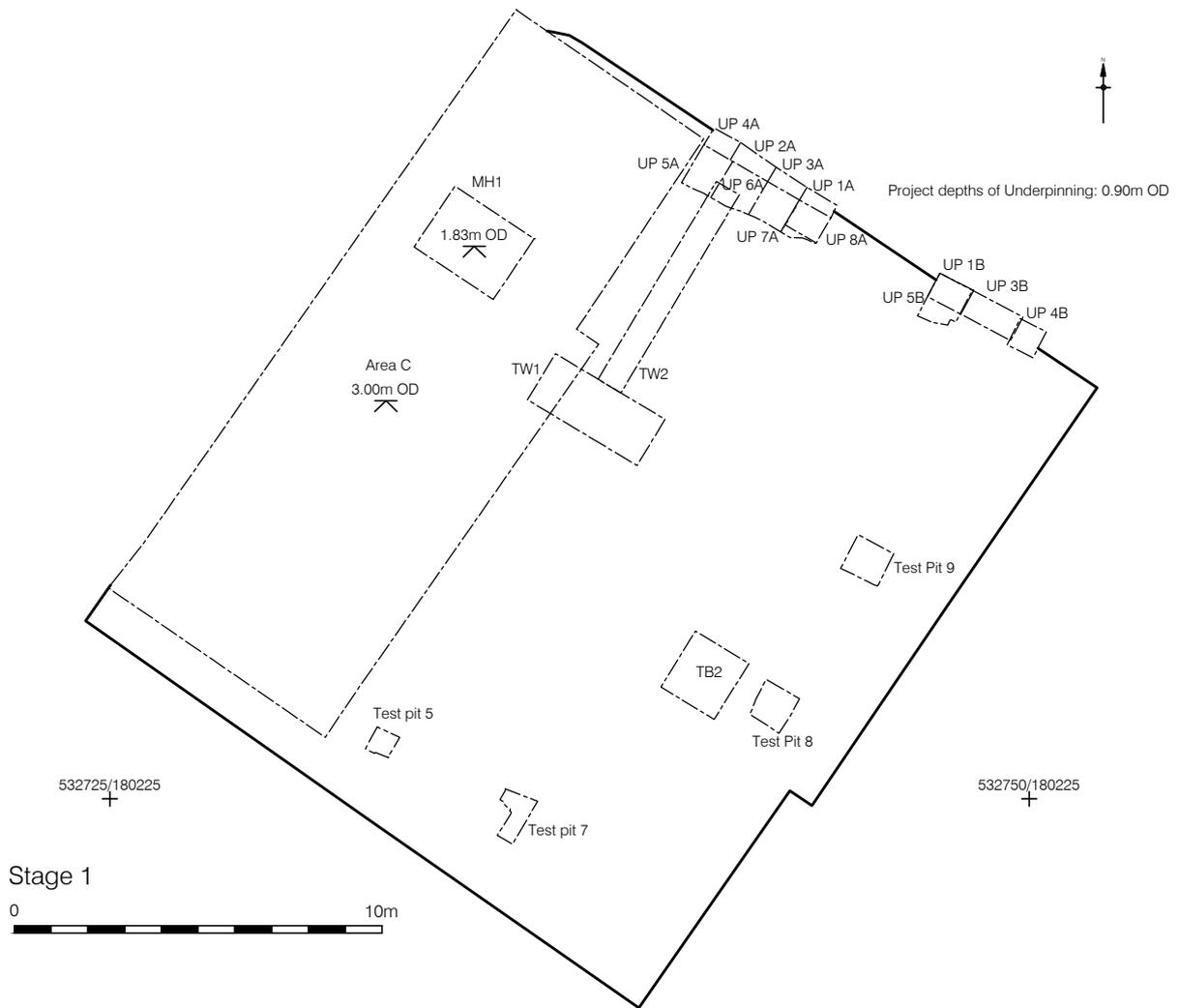


Figure 3
Project depths
1:200 at A4

3 PLANNING BACKGROUND

3.1 The Thameslink Transport & Works Act Order, 2006

3.1.1 Provision for construction of Thameslink was included in the Network Rail (Thameslink 2000) Order 2006 made by the Secretary of State for Transport (17th October 2006). The Secretary of State also directed (22nd November 2006) that planning permission be deemed to be granted for the development provided for in the Order subject to certain conditions. Conditions 25 and 26 required that:

25. No development shall take place in respect of Borough Viaduct until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the local planning authority.

26. No development shall begin in respect of Borough Viaduct until a detailed scheme showing the scope and arrangement of foundation design and all new groundworks and providing for a regime for monitoring the works has been submitted to, and approved in writing by, the local planning authority. The development shall be carried out and monitored in accordance with the approved scheme.

3.1.2 Separate conditions applied to development where planning permission was granted jointly by the Secretaries of State for Transport and Communities and Local Government (17th October 2006). The relevant condition (No. 23) attached to the permission for Application TL5 (11-15 Borough High Street) required that:

No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the local planning authority.

3.2 Thameslink, Borough Viaduct & the London Borough of Southwark

3.2.1 The new 'Borough Viaduct' would comprise the construction of 'Park Street & Hop Exchange Viaduct', 'Borough Market Viaduct', 'Borough High Street Bridge', 'Railway Approach Viaduct' and 'Station Approach Viaduct': five sections which would stretch from Metropolitan Junction/Southwark Street to London Bridge Station. To enable the construction of these sections, some buildings located along the viaduct path would need to be altered or demolished (NWR 2004a; 2005) and these comprised:

- 6 Stoney Street, 'The Wheatsheaf' (removal of second floor, extension of basement and floor plan)
- Borough Market (iron roof dismantled and placed in temporary storage)
- 2-4 Bedale Street (demolition)
- 7 Bedale Street (demolition)
- 16-26 Borough High Street (demolition)
- 1-7 Green Dragon Court (demolition)
- 11-15 Borough High Street (demolition)

3.2.5 Some archaeological work was undertaken prior to the granting of planning consent and included the compilation of an archaeological desk based assessment (DBA) (MoLAS 2003a), watching briefs on geotechnical investigations (MoLAS 2003b) and an additional DBA compiled for inclusion in the 'Thameslink 2000: Environmental Assessment' (NWR 2004a). Following granting of the Order and planning permission, a 'Scope of Works' outlining the 'archaeological baseline and proposed archaeological works' was submitted to the London Borough of Southwark in 2007 (NWR 2007).

3.2.6 The 2007 document formed the basis for the agreed Written Scheme of Investigation (NWR 2009). Following approval from Southwark Council, the archaeological mitigation for the work began in 2011 and Dr. Chris Constable, Senior Archaeology Officer at Southwark Council monitored the archaeological works throughout.

3.3 11, 13 & 15 Borough High Street and 2 London Bridge Street

3.3.1 As previously stated, the construction of Borough Viaduct, specifically the new railway bridge over Borough High Street, required the demolition of properties at 11, 13 & 15 Borough High Street and 2 London Bridge Street. The buildings themselves were not listed but were located within the Borough High Street Conservation Area and adjacent to the Grade II Listed building at 19a Borough High Street. This building is currently in use as a Post Office, however it actually represents the last remaining wing of St Thomas's Hospital (NWR 2005).

3.3.2 Proposals for the reinstatement of 11-15 Borough High Street comprised the construction of a 4-storey retail/office building. The new building design detailed a basement, ground floor and three upper floors. Whilst the basement extended throughout the entire footprint of the property, the frontage itself was designed to be set back from the existing building line so as to provide a large public forecourt. This meant that there was no requirement to replace made ground with suitable fill under the 'basement only' part of the building, thus preserving in situ a substantial area of archaeological deposits.

3.3.3 With planning permission granted, the 2009 Written Scheme of Investigation defined the archaeological impact of the Thameslink Programme at 11-15 Borough High Street as:

'The works comprise the demolition of buildings Nos. 11-15 Borough High Street and 2 London Bridge Street and replacement with a 4-storey retail/office building, plus basement (proposed basement finished floor level at 4.0m AOD). All made ground will be removed to the surface of the Terrace Gravel (subject to ensuring the integrity/stability of the adjacent structures) and replaced with suitable material prior to casting the reinforced basement slab. Some party walls will be underpinned with mass concrete; however it should be noted the No. London Bridge Street has a double basement. Key to the works is the necessity to ensure that the structure/integrity of the London Bridge Street terrace is maintained during the works, which may require large shoring systems. The existing basement walls will be retained (NWR 2009).

3.3.4 The agreed scope, sequence and method of archaeological works were defined as:

- *Principal Contractor to demolish buildings and other structures as required following completion of historic building survey*
- *Principal Contractor to underpin party walls under continuous archaeological supervision by Archaeological Supplier*
- *Principal Contractor to break out modern foundations retain exterior basement wall - and remove non-significant deposits under continuous archaeological supervision by Archaeological Supplier*
- *Excavation of archaeologically significant deposits to be undertaken by the Archaeological Supplier (NWR 2009).*

4 GEOLOGY AND TOPOGRAPHY

4.1 Geology

4.1.1 London is located within the Thames Basin, a broad syncline of chalk filled by Tertiary sands and clays, which is overlain by the Pleistocene (Quaternary) gravel terraces of the River Thames. The low-lying area to the south of the Thames was characterised as largely marshland, with ground level being c.14m lower than the north-bank (MoLAS 2003a).

4.1.2 The original river was shallower, slower and wider than its modern manifestation and flowed through braided channels which surrounded the low-lying gravel eyots located beneath modern Southwark. Archaeological excavations and geotechnical work have established that there were two principle gravel eyots, covering an area of c.16 hectares (MoLAS 2003a).

4.1.3 Thameslink Borough Viaduct is located within the boundaries of the northern eyot, which is variably known as the 'Bridgehead Island' (MoLAS 2003a) or 'Northern Island'. The island extends between Joiner Street to the east and Southwark Bridge Road to the west, Union Street and Southwark Street to the south and the River Thames to the north.

4.1.4 The Borough Viaduct sites are generally located within areas of high-ground, with the natural sands and gravels occurring between 1.00m-1.20m OD and the land set back from the tidal channels, at a distance removed from the surrounding foreshores. When untruncated natural deposits occur below these heights, it is generally an indication that the land surface is 'dropping' towards a channel edge and it can be assumed that the land would have been susceptible to flooding, especially during high-tides.

4.2 Topography

4.2.1 The site is situated at the junction between Railway Approach and Borough High Street, a position historically located towards the upper peak of the 'Northern Island'. The site is located c.0.16km south of the current south bank of the River Thames.

4.2.2 Natural deposits were only identified during localised augering works, and comprised dark grey and red sands from 0.80m OD in the north of the excavation area. It is therefore difficult to form any firm conclusions regarding the underlying topography of the Bermondsey eyot within the vicinity of the site. The horizons identified within augering works could equally represent redeposited gravels as opposed to the undisturbed island surface. The discovery of Mesolithic/Neolithic flint artefacts within later levelling deposits may support the idea that Roman quarrying has impacted upon prehistoric levels.

4.2.3 Waterlain alluvium was identified in the north of the excavation area from 1.04m OD. Further deposits indicative of flooding and exposure to bioturbation and exposure were also encountered within the southern excavation areas, which indicate that areas of the site were prone to flooding at least until the Roman period.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 Introduction

5.1.1 The archaeological and historical background for the Borough Viaduct sites has been compiled largely through reference to site excavations in the vicinity. However, a wealth of publications discussing the archaeology of Southwark, some of which are occasionally referenced in this text, do exist and will require full consideration and incorporation during the post-assessment process.

5.2 Prehistoric

5.2.1 During the prehistoric periods the area of land now occupied by Southwark was typified as a series of variably sized, sandy islands separated by a network of channels. The tidal nature of the River Thames and its associated channels would have ensured that during high tide the land remaining above sea level was significantly reduced, a limiting factor for defined prehistoric occupation and settlement. However, the marshland environment created within the tidal range would have provided significant economic attractions and it is probable that prehistoric communities exploited the island landscape at low tide (Sidell *et al.* 2002, 7).

5.2.2 The 350m length of the Borough Viaduct covered by Assessments 1-7 and 9 is located within the boundaries of the northern island. Within this area there is a relatively small amount of evidence for in situ prehistoric activity and that which exists is largely clustered to the north-east and west. This distribution of prehistoric findspots is not entirely unexpected as these parts would have been more closely located to the economically attractive and opportunistically exploited island foreshore.

5.2.3 At the north-east extent of Borough Viaduct to the east of Borough High Street, i.e. relatively close to the north-east edges of the island, prehistoric findspots have been made around London Bridge (Fig. 4; Site 1/LBD95; Site 2/LBE95), London Bridge Street (Fig. 4; Site 3/LBB95; Site 4/LWE07; Site 5/LBN08) and St Thomas Street (Fig. 4; Site 6/4STS82; Site 7/11STS77). The corpus of evidence consists of occasional prehistoric peat and silt horizons, a small number of ephemeral cut features, quantities of burnt flint and a small assemblage of largely undated struck flint, some of it residual. A Bronze Age loomweight was amongst the finds assemblage from the London Bridge Street excavations, whilst Iron Age pottery has been found along St Thomas Street; dateable finds which may give an indication of when the eastern foreshore was being exploited. The presence of Iron Age pottery at Kings Head Yard may further support an assumption that the eastern foreshore was being exploited during the late prehistoric period.

- 5.2.4 A relative dearth of prehistoric findspots have been made to the west of Borough High Street, and indeed the only evidence of the prehistoric period is limited to the presence of flood deposits at 22 Borough High Street (Fig. 4; Site 9/22BHS88) and 15 Winchester Walk (Fig. 4; Site 10/BYI03). There are many possibilities for this lack of evidence, not least that any evidence of prehistoric activity may have been destroyed by subsequent development or even that the protected nature of the modern landscape has resulted in a lack of archaeological excavation in the vicinity. Alternatively, it is perhaps more probable that this part of the island landscape was not economically attractive and the lack of prehistoric material from areas of higher ground, i.e. the central parts of the island, simply reflects a lack of prehistoric activity.
- 5.2.5 Close to the western extent of Borough Viaduct, i.e. the south-west of the island, evidence of early prehistoric activity has been found on excavations at the former Courage Brewery, Park Street (Fig. 4; Site 11/CO87 & CO88; Site 12/CO89; Site 13/CSW85; Site 14/COSE84). Neolithic tools and fire pits, silts containing a leaf-shaped arrowhead and Late Bronze Age flints and a peat horizon were recorded, suggesting that opportunistic fishing, hunting and/or foraging occurred along the foreshore during the earlier prehistoric periods (Sidell *et al.* 2002, 60).
- 5.2.6 The Courage Brewery site also produced evidence of a Late Iron Age boundary ditch, a possible roundhouse and a fenceline; later prehistoric activity suggesting that management of the economic resources was being undertaken. Evidence of channel revetting further south on Redcross Way (Fig. 4; Site15/REW92) could also relate to late prehistoric land management, whilst a Late Iron Age boundary ditch and possible fenceline at the former Calverts Buildings on Southwark Street (Fig. 4; Site16/SKS80) may form a continuation of those recorded at Courage Brewery (Beard & Cowan 1988, 376).

5.3 Roman (AD 43-AD 410)

- 5.3.1 Despite the evidence for Late Iron Age exploitation of the Southwark landscape, it seems that the London area lay on the periphery of occupation areas at the end of the prehistoric period. Whilst many Roman towns were founded in centres of Iron Age power it is possible that the peripheral nature of the London area may have ensured it was essentially neutral and, whether by chance or through planning, this may have ultimately contributed to Roman London's subsequent importance within the province.
- 5.3.2 For many years studies of Roman London have focused on the importance of the north-bank settlement, treating the contemporary settlement at Southwark simply as a suburb. However, preconceptions and assumptions regarding the role, status and integration of Southwark within Londinium have been addressed over the past decade and the most recent map of

Roman London (MOLA 2011b) shows Roman Southwark as an integral part of Roman London.

- 5.3.3 Roman occupation in Southwark is currently accepted as beginning around AD 50. By this time a number of military roads leading from the south coast had been established, i.e. Watling Street and Stane Street, whilst a north/south orientated precursor of Borough High Street, i.e. Road 1, connected the convergence of these roads with the River Thames. A military involvement in constructing this road network is little doubted and it has been argued that a major fort would have existed in the area (Sheldon 1978, 28), however no definite evidence of a military presence has as yet been identified. Instead, rather than being military in origin, early settlement in Southwark most probably occurred as a mixture of both military and civilian endeavour, prompted by the strategic and economic importance that an established river crossing brought to the area (Yule 2005, 86; Cowan 2003, 81).
- 5.3.4 Broadly speaking initial development during the mid 1st century comprised the construction of timber buildings adjacent to the new roads, with the remainder of the island existing as intertidal mudflats bound by the naturally formed river channels (MoLAS/EH 2000, 127, 147). By the time of the Boudican revolt in AD 60/61 a bridge crossing the Thames would probably have connected the south-bank and the north-bank settlements and it is highly probable that both would have suffered during the rebellion (Drummond-Murray *et al.* 2002, 40, 46, 51).
- 5.3.5 Regardless of the impact that Southwark may or may not have suffered during the Boudican revolt, the subsequent decades were characterised by an intensification and expansion of occupation within the settlement. From the late 1st century, land between the islands was steadily reclaimed (MoLAS/EH 2000, 127, 147), channels were revetted, a second main road (Road 2) leading in a NE/SW direction from the bridgehead was established and the settlement expanded across the previously tidal mudflats (MoLAS/EH 2000, 133; Drummond-Murray *et al.* 2002, 54). Evidence indicates that the settlement was comprised of a mixture of timber and masonry buildings from the late 1st century through to the 3rd century and it seems that a diverse population resided within the south-bank settlement throughout this time (Drummond-Murray *et al.* 2002, 149; Hammer 2003, 13). As well as being places of residence, many of the buildings served a commercial or industrial purposes, whilst at least some of the masonry buildings may have served a civic or public function (Yule 2005, 86).
- 5.3.6 The Thameslink archaeological investigations of Borough Viaduct essentially transect the northern island of Roman Southwark and to enable a more coherent discussion of the available excavation data it has been necessary to identify 'zones' within the settlement, each of which is discussed below.

Road 1

- 5.3.7 The importance of Road 1 to the emergence of a Roman settlement at Southwark should not be underestimated, for as a vital connection between the important roads leading from the south coast to the river crossing the subsequent emergence of a road-side settlement was perhaps inevitable. Whilst the alignment and location of Road 1 roughly correlates with modern Borough High Street, the original Roman road was considerably narrower and was, for the most part, situated beneath and within land adjacent to the western part of the modern thoroughfare.
- 5.3.8 The archaeological remains of Road 1 have been exposed during watching briefs within Borough High Street (Fig. 4; Site 27 BSE94), excavations at 1a Bedale Street/2 Southwark Street (Fig. 4; Site 17/2SSBS85), Southwark Cathedral (Fig. 4; Site 18/MTA99; Divers *et al.* 2009, 12) and also during archaeological excavations associated with the Jubilee Line Extension (Fig. 4; Site 19/ STU92; Site 20/JSS92). Collectively, these have demonstrated that Road 1 was constructed on c.2 layers of timber, overlain by c.1.5m of road gravels representing numerous episodes of make-up and metalling. The road was flanked by road-side ditches/box drains.

The eastern frontage of Road 1 and its surround

- 5.3.9 As part of the Jubilee Line Extension, an excavation was conducted within Borough High Street at the junction with Bedale Street and St Thomas Street. The excavations demonstrated that the earliest Roman activity on site consisted of quarrying, most probably in association with the construction of Road 1. Archaeological evidence indicated that the eastern frontage of Road 1 was soon developed with timber strip buildings; however, these were destroyed before AD 70, possibly during the Boudican revolt. The timber buildings were rebuilt during the late 1st century and served a mixture of residential, commercial and industrial purposes and possibly included a 'market hall'. At the same time a colonnade was constructed between the buildings and Road 1 whilst during the 2nd century some of the buildings were rebuilt in stone, of which at least some were adorned with mosaic floors (Fig. 4; Site 21/BGH95).
- 5.3.10 To the east and north-east, evidence is coming to light which suggests that land set back from Road 1, i.e. in the London Bridge Street area and to the north of St Thomas Street, was extensively developed with high-status masonry buildings. Recent excavations at 25 London Bridge Street (Fig. 4; Site 5/LBN08) have recorded evidence of 'several' 2nd century masonry buildings, some with tessellated floors and one with a hypocaust. Elsewhere along London Bridge Street, 1st and 2nd century timber and masonry buildings have been recorded at No.8 (Fig. 4; Site 22/LOB98), whilst a 2nd century drain and postholes have been recorded at Nos.10-18 (Fig. 4; Site 23/LNB97). Excavations at No.32 (Fig. 4; Site 4/LWE07) recorded only alluvial and dumping deposits, however the presence of box flue tile within the dumped

deposits were thought to indicate the existence of a bathhouse in the vicinity (Wylie 2009; 2010).

- 5.3.11 The archaeological evidence along St Thomas Street is less extensive, however excavations conducted at Nos.1-7 in 1974 (Fig. 4; Site 24/1STS74) and Nos.11-19 in 1977 (Fig. 4; Site 7/11STS77) have demonstrated that Roman masonry buildings are present, whilst a more recent watching brief at St Thomas's Church (Fig. 4; Site 25/TAS08) found possible evidence of timber buildings. Further to the west at the junction of St Thomas Street and Borough High Street, a 1994 watching brief (Fig. 4; Site 27/BSE94) found evidence of multiple phases of mid-late 1st and 2nd century timber buildings, a late 1st/early 2nd century masonry structure and an opus signinum floor. A number of findspots have also been made at the junction of St Thomas Street and Borough High Street, including a tessellated pavement discovered 10ft below ground in 1819, a Roman stone and brick building found in 1840 and reference to Roman buildings, a ditch and a well in 1920 (Fig. 4; Site 28/GLSMR090223). In addition, a number of chance Roman finds have also been attributed to the junction of St Thomas Street and Borough High Street, including a Roman armlet, hairpins and a jet spindlewhorl (Fig. 4; Site 26/GLSMR090375/6/7).
- 5.3.12 Additional evidence of multiple phases of mid-late 1st century and 2nd century timber buildings along the eastern frontage of Road 1 have also been found during watching briefs further south along Borough High Street (Fig. 4; Site 29/BUG94; Site 30/BTJ93). In addition, a short distance to the east of these, 1st century timber buildings with 2nd century masonry additions were recorded to the rear of 4-26 St Thomas Street (Fig. 4; Site 6/4STS82). Further evidence of masonry buildings set back from the main street frontage were recorded at King's Head Yard in 1879-81, 1945 and 1982 (Fig. 4; Site 8/KHYST82) whilst further evidence of buildings were recorded at White Hart Yard in 1985 (Fig. 4; Site 31/WHY85).

The north-east marshland & waterways

- 5.3.13 The north-east is defined as the area of land situated behind the Road 1 frontages and its extended surround (see above), being bound to the north by the Thames foreshore and to the east by Guy's channel. This area of land was naturally marshy and as a consequence it is unsurprising that Roman waterlain deposits and drainage features have been encountered on numerous excavations along the eastern parts of London Bridge Street (Fig. 4; Site 4/LWE07; Site 32/LBJ95; Site 33/LBA95; Site 35/NLB91) and St Thomas Street (Fig. 4; Site 36/TOM95), as well as the Joiner Street (Fig. 4; Site 34/LBH94; Site 37/MSA92) and London Bridge Station (Fig. 4; Site 1/LBD95; Site 2/LBE95) areas.
- 5.3.14 Beyond the marshy land, archaeological evidence indicates that parts of the southern frontage to the Thames and the western frontage of Guy's channel were developed with buildings. Along Tooley Street the remains of timber and masonry buildings fronting onto the

Thames have been recorded (Fig. 4; Site 38/DHS75), whilst at the northern extent of Guy's channel the remains of a 1st century timber structure and a 2nd century masonry building with mosaic floor have been recorded at Joiner Street (Fig. 4; Site 37/MSA92). Further to the south, a 2nd century masonry building, was recorded at London Bridge Street (Fig. 4; Site 2/LBE95) and additional evidence of a masonry building close to Guy's channel was found during excavations at 25 London Bridge Street (Fig. 4; Site 35/NLB91). Excavations at 20-26 London Bridge Street exposed the remains of a robbed-out mid/late 1st century masonry building, with subsequent late 1st century and 2nd century timber buildings (Fig. 4; Site 39/LBI95).

- 5.3.15 The river and its channels undoubtedly served an important role as a trade and communication supply, well demonstrated by the existence of the abandoned barge within Guy's channel and preserved in situ beneath Guy's Hospital (Fig. 4; Site 40/GYH10). The 1st and 2nd century development of the river and channel frontages was most probably associated with the use of the waterways for trade and it is unsurprising that at least one of the buildings has been interpreted as a warehouse (Fig. 4; Site 39/LBI95).

The western frontage of Road 1

- 5.3.16 Development along the western frontage of Road 1 is poorly understood, for the proximity of Southwark Cathedral, Borough Market and the listed status of many of the buildings in the area have resulted in an inevitable lack of archaeological investigation. Nonetheless a number of excavations were conducted before 1990, whilst more recently archaeological excavations have been undertaken at Southwark Cathedral (Fig. 4; Site 18/MTA99; Divers *et al.* 2009) and a number of archaeological watching briefs have been carried out in the general area.
- 5.3.17 Excavations at the northern extent of the western street-side frontage in the Southwark Cathedral area have revealed evidence of 1st century timber buildings (Fig. 4; Site 42/SCC77) and a Roman burnt horizon (Fig. 4; Site 41/GM437), as well as a tessellated pavement recorded in 1833 and painted wall plaster recorded in 1911 (MoLAS 2003a). Nearby in the Montague Close area, archaeological evidence of early Roman quarrying and timber buildings fronting Road 1 have been found (Fig. 4; Site 43/BWMC74; Site 44/MON90). These excavations, and also the recently published excavations at Southwark Cathedral (Fig. 4; Site 18/MTA99; Divers *et al.* 2009), have demonstrated that a second intra-mural road, Road 2, led from the bridgehead in an NE-SW direction (discussed below) and land situated to the south-east of Road 2 may have also fronted onto the western frontage of Road 1.
- 5.3.18 Further to the south, a 1988 excavation at 22 Borough High Street provides a useful indication of development to the west of the road, with evidence for timber buildings recorded at c.2.5m distance from the edge of Road 1 and five phases of timber building recognised.

Likewise, the 1985 excavations at 1a Bedale Street/2 Southwark Street (Fig. 4; Site 17/2SSBS85) allude to the nature of western street-side development with two phases of late 1st-2nd century timber building recorded. Timber buildings associated with either the western frontage of Road 1 or the Southwark Street channel have also been recorded during watching briefs at 52 Borough High Street (Fig. 4; Site 45/BRQ08) and 10-16 Southwark Street (Fig. 4; Site 46/10SS81).

The frontages of Road 2, Bankside channel & Southwark Street channel

- 5.3.19 Archaeological excavations at Montague Close (Fig. 4; Site 43/BWMC74) and Southwark Cathedral (Fig. 4; Site 18/MTA99; Divers *et al.* 2009) found that a second main road, Road 2, led NE/SW from the bridgehead and had been established prior to AD 60, with multiple episodes of subsequent resurfacing in evidence. Amongst the many important sites associated with Road 2 are the remains of a high-status masonry building complex at Winchester Palace, which was located adjacent to the north-east extent of the road and close to the Thames foreshore (Fig. 4; Site 47; Yule 2003).
- 5.3.20 The south-west extent of Road 2 may be implied by the location and alignment of a NNW/SSE aligned side road and timber buildings encountered during excavations at Courage Brewery. A short distance to the north, excavations at 18 Park Street (Fig. 4; Site 48/PRK90) found evidence of mid/late 1st century ditches, including a possible palisade trench, and later 1st and 2nd century timber buildings, whilst at 28 Park Street (Fig. 4; Site 49/PKZ07; Site 50/28PS84) buildings and the remains of a channel-side jetty/landing were found. Further evidence suggestive of the continuation of Road 2 was found during excavations at 51 Southwark Street where timber piles may represent the remains of a bridge crossing Bankside Channel (Bird & Graham 1978, 517-26). Collectively, these excavations suggest a concentration of development close to Road 2 and the frontage to Bankside channel, i.e. adjacent to two potentially important trade and communication routes.
- 5.3.21 Excavations were conducted at 15-23 Southwark Street in 1980 (Fig. 4; Site 16/SKS80) with further investigation conducted in 2005 (Fig. 4; Site 51/RXW05) and demonstrated that the remains of a high-status late 1st-4th century masonry building, built above an earlier burnt timber building, was present. In addition, two phases of late 1st/early 2nd century timber buildings, an early 2nd century masonry building and late 2nd century masonry associated with a tessellated floor was recorded at a nearby site on Redcross Way (Fig. 4; Site 53/RWT93). Additional excavations along Redcross Way (Fig. 4; Site 52/RWG94) recorded evidence of a pre-2nd century building and a late 2nd century hexagonal masonry building, whilst a timber building was recorded at O'Meara Street (Fig. 4; Site 54/OMS94). Evidence of robbed out Roman masonry has also been found at 52-54 Southwark Street (Fig. 4; Site 55/52SOS89) and the remains of a demolished masonry building has been recorded at 51-53 Southwark Street (Fig. 4; Site 56/FSS96) (Killock 2005).

- 5.3.22 Some of this evidence may relate to standard buildings fronting the southern edge of Road 2, however there is little doubt that some of the masonry represents part of a high-status building, possibly a mansio, located to the southeast of Road 2, adjacent to the Southwark Street channel and close to the southern extent of Road 1 (Fig. 4; Site 16; Cowan 2002).
- 5.3.23 With regards to the southern frontage of Road 2, it should not be discounted that evidence of buildings thought to be associated with the western frontage of Road 1 (see above) could also be associated with the southern frontage of Road 2. The 'multiple Roman finds' discovered in Stoney Street during the 19th century (Fig. 4; Site 57/GLSMR090378) seem likely to relate to a building fronting the southern edge of Road 2.

The Late Roman settlement

- 5.3.24 Following the development, prosperity and stability of the earlier Roman periods, the late Roman period within Southwark, i.e. the late 3rd-early 5th century, is characterised by the fragmentation and contraction of the settlement south towards a religious landscape situated close to the mainland (Fig. 4; Site 58; Killock & Shepherd in prep) and north towards the bridgehead (MoLAS/EH 2000, 147). One possible reason for the contraction of the settlement may be that whilst the north-bank settlement was encircled by a defensive wall and ditch, in contrast Southwark appears to have been left largely undefended, which may have required that the focal points of the earlier settlement had to be more contained.
- 5.3.25 Archaeological evidence suggests that the settlement also contracted towards the main roads, for late Roman dark earth has been recorded on previously developed sites in locations set back from the frontage of Road 1 (Fig. 4; Site 5/LBN08; Site 7/11STS77; Site 43/BWMC74). There is also evidence of late 3rd/4th century robbing of masonry buildings to the east (Fig. 4; Site 2/LBE95) and west of the road (Yule 2005). Late Roman burials cut into the masonry building at 25 London Bridge Street (Fig. 4; Site 5/LBN08) further indicate the retraction of the settlement.
- 5.3.26 To the south, further evidence of 3rd/4th century robbing of masonry buildings has been found at Kings Head Yard (MoLAS 2003a). Further to the south-west, 3rd century demolition deposits (Fig. 4; Site 53/RWT93), late Roman dark earth horizons (Fig. 4; Site 48/PRK90; Site 50/28PS84; Site 52/RWG94; Site 53/RWT93; Site 59/38BHS79), late Roman masonry robber cuts (Fig. 4; Site 52/RWG94; Site 55/52SOS89) and late Roman burials (Fig. 4; Site 15/REW92; Site 16/SKS80; Site 51/RXW05; Site 52/RWG94) have been recorded within land close to the south-west extent of Road 2. The presence of this type of archaeological evidence suggests that the high-status masonry buildings were no longer in use and that much of the land had reverted to 'open spaces' at the end of the Roman period (MoLAS/EH 2000, 146).

5.4 Saxon (AD 410-1066)

- 5.4.1 Archaeological evidence for activity dating between the early 5th-mid 9th century is largely absent within Southwark, with the previously settled area seemingly abandoned during this time (MoLAS/EH 2000, 191). However, some structural vestiges of the Roman settlement seem to have remained standing throughout this period, in particular the masonry building at Winchester Palace (Fig. 4; Site 47; Watson *et al.* 2001, 56; Yule 2005, 78). In addition, there is evidence to suggest that elements of the buildings to the east of Road 1 around London Bridge Street (Fig. 4; Site 5/LBN08; Site 22/LOB98) and St Thomas Street (Fig. 4; Site 24/1STS74) also remained standing throughout this time.
- 5.4.2 The Burghal Hidage (c.AD 911-919) details a burh named ‘Suthringa geweorche’, (variously translated as ‘the southern work’ or ‘the work of the southern people’ or the ‘[defence] of the men of Surrey’), which may refer to Southwark (Sheldon 1978, 48; MOLAS/EH 2000, 191; Watson *et al.* 2001, 53). The location of the Southwark burh is largely hypothesised, however it is probable that the bridgehead area, adjacent to the river frontage and close to Road 1, was reoccupied during the Late Saxon period. The first record of a market in the area dates to 1014 when it is recorded that fish, grain, vegetables and cattle were being sold on the bridge (MoLAS 2003a).
- 5.4.3 It is probable that an attack on London in AD 994 may have initiated a rebuilding of the bridge and, in turn, the fortification of Southwark (Watson *et al.* 2001, 53). These works may have utilised pre-existing Alfredian burghal defences. Southwark’s Late Saxon defences are detailed in Snorre Sturlason’s 13th century description of an 11th century attack on Danish-held London Bridge. A translation reads:

‘...They steered first to London, and sailed into the Thames with their fleet; but the Danes had a castle within. On the other side of the river is a great trading place, which is called Sudvirke. There the Danes had raised a great work, dug large ditches, and within had built a bulwark of stone, timber, and turf, where they had stationed a strong army. King Ethelred ordered a great assault; but the Danes defended themselves bravely, and King Ethelred could make nothing of it. Between the castle and Southwark (Sudvirke) there was a bridge, so broad that two wagons could pass each other upon it. On the bridge were raised barricades, both towers and wooden parapets, in the direction of the river, which were nearly breast high; and under the bridge were piles driven into the bottom of the river. Now when the attack was made the troops stood on the bridge everywhere, and defended themselves. King Ethelred was very anxious to get possession of the bridge, and he called together all the chiefs

to consult how they should get the bridge broken down... (Sturlason c.1225 - Para.11. 'Death of King Svein Forked Beard')

The account continues:

'... The piles were thus shaken in the bottom, and were loosened under the bridge. Now as the armed troops stood thick of men upon the bridge, and there were likewise many heaps of stones and other weapons upon it, and the piles under it being loosened and broken, the bridge gave way; and a great part of the men upon it fell into the river, and all the others fled, some into the castle, some into Southwark. Thereafter Southwark was stormed and taken...' (Sturlason c.1225 - Para.12. 'The Sixth Battle')

- 5.4.4 The location, extent and orientation of these defences has caused much debate in recent years (Dawson 2011; 2012a; 2012b; Watson 2009; 2011/2), with one theory suggesting that the alignment of Montague Close and St Mary Overy Dock could represent the approximate location and orientation of the defences (Watson 2009). The location and alignment of any defensive earthworks on the eastern side of the settlement are also unknown; however, it is possible that St Thomas Street and the historic extent of Joiner Street could reflect their continuation.
- 5.4.5 The evidence of late 9th/early 10th century occupation in Southwark is by no means extensive, however, that which does exist is largely located within the proposed boundaries on the bridgehead settlement as discussed above (Watson *et al.* 2001, 53, 56). Elements of the masonry buildings located at Winchester Palace, London Bridge Street and St Thomas Street seem to have stood throughout the Saxon period and evidence of Late Saxon occupation/exploitation has been recorded around these areas. A Late Saxon pit, bone comb and loom weight were discovered at 8 London Bridge Street (Fig. 4; Site 22/LOB98) and possible Late Saxon gullies, pottery and an Alfredian coin have been recorded along St Thomas Street (Fig. 4; Site 7/11STS77).
- 5.4.6 In addition, Late Saxon robbing of Roman buildings has been recorded at London Bridge Street (Fig. 4; Site 5/LBN08; Site 22/LOB98) and at Winchester Palace (Fig. 4; Site 47; Yule 2005) which may suggest that the building material was being removed for construction elsewhere within the bridgehead settlement. The presence of post-Roman silt horizons, dumps and dark earth deposits elsewhere within the proposed Late Saxon boundaries (Fig. 4; Site 9/22BHS88; Site 33/LBA95; Site 60/20LBS75) suggests that areas of the settlement remained unoccupied open land. Beyond the proposed boundaries of the bridgehead settlement there is a general absence of evidence for Late Saxon activity.

5.5 Medieval (1066-1485)

- 5.5.1 Reference to Southwark in the Domesday Book (1086) suggests it was an un-manorialised settlement without a direct lord. At the beginning of the medieval period the settlement is described as comprising 'several dozen houses, a trading shore, a dock, a fishery and a 'Monesterium', the latter of which is thought to be the site of the Priory of St Mary Overy, present day Southwark Cathedral (MoLAS 2003a).
- 5.5.2 It is possible that the medieval boundaries may be reflected in the modern street pattern, in particular the location and alignment of parts of Montague Close, Bedale Street, St Thomas Street and Joiner Street (see above). An E/W aligned ditch recorded at 1a Bedale Street (Fig. 4; Site17/2SSBS85) and a channel recorded at 32 London Bridge Street (Fig. 4; Site 4/LWE07) may represent part of the same medieval earthwork. The location of Winchester Palace (residence of the Bishops of Westminster) immediately to the west of the proposed boundary may suggest that secondary settlement boundaries existed, the location and alignment of which could again be reflected in the modern street pattern, i.e. the parallel 'curves' of Stoney Street and Park Street. With this as a consideration, it may be of interest that medieval channels, some of them revetted, have been recorded at 28 Park Street (Fig. 4; Site 50/28PS94).
- 5.5.3 During the medieval period the development of Southwark was dictated by the important trade routes into London from the south and south-east, with the main medieval settlement inevitably focused around the High Street leading up to the bridgehead (Carlin 1998, 18). Medieval London Bridge was constructed during the 12th century and prior to the construction of Westminster Bridge during the 18th century, the nearest river crossing was located at Kingston. Southwark's many inns benefitted from the numerous passing travellers and traders, and the population developed an eclectic demographic with numerous occupational groups and residents from all over Europe (MOLAS/EH 2000, 212; Carlin 1998, 169-171, 191, 209; Knight 2002, 12).
- 5.5.4 Documentary sources indicate that the 14th century townhouse of Lady Cobham was located at Green Dragon Court which after being bequeathed to the Priory of St Mary Overy in 1370, became an inn known as 'Cobham's Inn' and later as 'Green Dragon Tavern' (MoLAS 2003a). The late medieval 'The Swan Inn' (originally known as 'The Swan with Two Necks') stood just to the north of St Thomas's Hospital, structural evidence of which has been found on excavations to the north of London Bridge Street (Fig. 4; Site 3/LBB95; Site 33/LBA95).
- 5.5.5 Religious institutions played an important role in Southwark's development, being responsible for 'religious activity, promoters of learning and culture, administrators of local charity, purchasers and employers of local goods and landlords to hundreds of local residents' (Carlin 1998, 67). The major religious institutions of medieval Southwark were located within the

proposed boundary of the bridgehead settlement and include the Priory of St Mary Overy (Southwark Cathedral) to the west of Borough High Street, with St Olave's church and St Thomas's Hospital to the east.

- 5.5.6 St Thomas's Hospital was originally founded in 1106 on the western side of Borough High Street by the Bishops of Winchester and within the grounds of the Priory of St Mary Overy, however, the hospital was relocated to the eastern side of Borough High Street at the beginning of the 13th century (MoLAS 2003a). The stone walls of a cellar/undercroft, a relieving arch and buttresses were recorded at 11-19 St Thomas Street (Fig. 4; Site 7/11STS77) and are thought to represent part of the medieval hospital precinct. Likewise, 13th century pits and part of a medieval building recorded at 4-26 St Thomas Street (Fig. 4; Site 6/4STS82) are also thought to be related to the hospital. A short distance to the north, pits and medieval masonry recorded at 10-18 London Bridge Street (Fig. 4; Site 23/LNB97) and an 'arched foundation' at 20-26 London Bridge Street (Fig. 4; Site 32/LBJ95) may also be associated with the medieval hospital. Further evidence of medieval masonry (Fig. 4; Site 19/STU92; Site 25/TAS08; Site 28/GLSMR090223; Site 34/LBH94) and evidence of occupation (Fig. 4; Site 2/LBE95; Site 5/LBN08; Site 22/LOB98; Site 36/TOM95) have also been found at multiple other locations around the London Bridge Street/St Thomas Street area and once again may also be associated with the hospital precinct. Medieval chalk masonry found at Joiner Street (Fig. 4; Site 37/MSA92) could potentially be associated, or alternatively, may represent part of a building located close to the north-east extent of the bridgehead settlement.
- 5.5.7 It would appear that the settlement extended south of the immediate bridgehead during the later medieval period. To the west of Borough High Street and south of Bedale Street, excavations at 15-23 Southwark Street (Fig. 4; Site 16/SKS80) have produced evidence of medieval pitting. To the east of Borough High Street, south of St Thomas Street, chalk masonry (Fig. 4; Site 31/WHY85), late medieval ditches (Fig. 4; Site 21/BGH95) and evidence of medieval property boundaries (Fig. 4; Site 29/BUG94) have also been recorded, indicating settlement expansion to the south occurred on both sides of the High Street.

5.6 Post-medieval (1485-20th century)

- 5.6.1 London Bridge remained of economic importance to the development of Southwark during the post-medieval period, with the bridge providing direct access to the important markets of the City of London (MoLAS 2003a). Cartographic sources indicate that tenements lined the eastern frontage of the high street, with St Thomas's Hospital occupying the land immediately to the east. Below ground elements of the post-medieval hospital have been recorded along St Thomas Street at Nos.4-26 (Fig. 4; Site 6/4STS82), Nos.11-19 (Fig. 4; Site 7/11STS77), at St Thomas's Church (Fig. 4; Site 25/TAS08) and also at 8 London Bridge Street (Fig. 4; Site

22/LOB98). A stone well recorded as part of the Jubilee Line Extension excavations (Fig. 4; Site 21/BGH95) may also be associated with the hospital. Evidence of post-medieval buildings elsewhere along London Bridge Street at Nos.20-26 (Fig. 4; Site 32/LBJ95), No.32 (Fig. 4; Site 4/LWE07), No.25 (Fig. 4; Site 5/LBN08) and within watching brief trenches (Fig. 4; Site 21/BGH95; Site 27/BSE94) may be associated with the post-medieval hospital or perhaps nearby buildings of contemporary date. In situ human burials at 25 London Bridge Street (Fig. 4; Site 35/NLB91), 20-26 London Bridge Street (Fig. 4; Site 39/LBI95) and London Bridge Station (Fig. 4; Site 1/LBD95) probably form part of St Thomas's Hospital burial ground/the Flemish churchyard of St Olaves (NWR 2009a).

5.6.2 To the west of the high street, elements of late 15th-early 19th century buildings have been recorded during investigations at Bedale Street (Fig. 4; Site 17/2SSBS85), Borough Market (Fig. 4; Site 61/BKT01), Stoney Street (Fig. 4; Site 62/MKY08) and Borough High Street (Fig. 4; Site 45/BRQ08). Of specific relevance to Green Dragon Court (TAA3) is a 1560 lease for the 'Green Dragon Tavern' (see above), which was granted to the wardens of St Saviour's Church with St Saviour's Grammar School opened in 1562 (MoLAS 2003a).

5.6.3 The accessibility of the city, yet Southwark's geographical separation from it, encouraged the growth of industrial trades, with the area increasingly exploited for industrial uses. Land to the west of the High Street seems to have been particularly well utilised, with Delftware kilns recorded at Southwark Cathedral (Fig. 4; Site 18/MTA99; Site 41/GM437; Divers *et al.* 2009), which are possibly associated with sizable quantities of delft pottery found at Montague Close (Fig. 4; Site 43/BWMC74; Site 44/MON90). Evidence for glass making and molasses refining has also been recorded around Winchester Walk (Fig. 4; Site 10/BYI03; Site 63/WIE02), whilst further to the south a clay pipe kiln has been recorded at 15-23 Southwark Street (Fig. 4; Site 16/SKS80).

5.6.4 On May 26th 1676 c.500 of Southwark's dwellings and inns were destroyed when a fire started in an oil shop on the high street. An article of the time described the aftermath of the fire as:

'Three Crown Court (relates to TAA5) is rubbish and ashes, the Meal Market standing in the middle of the street is consumed, and no sign is left to know where it stood. ...Fronting south to the east and west the church was enveloped in flames. All Foul Lane (relates to TAA3 & TAA4), the churchyard buildings, several alleys, one side of the street over to St Mary Overies Dock are gone. Twenty or more people are killed and many wounded' (cited in MoLAS 2003a)

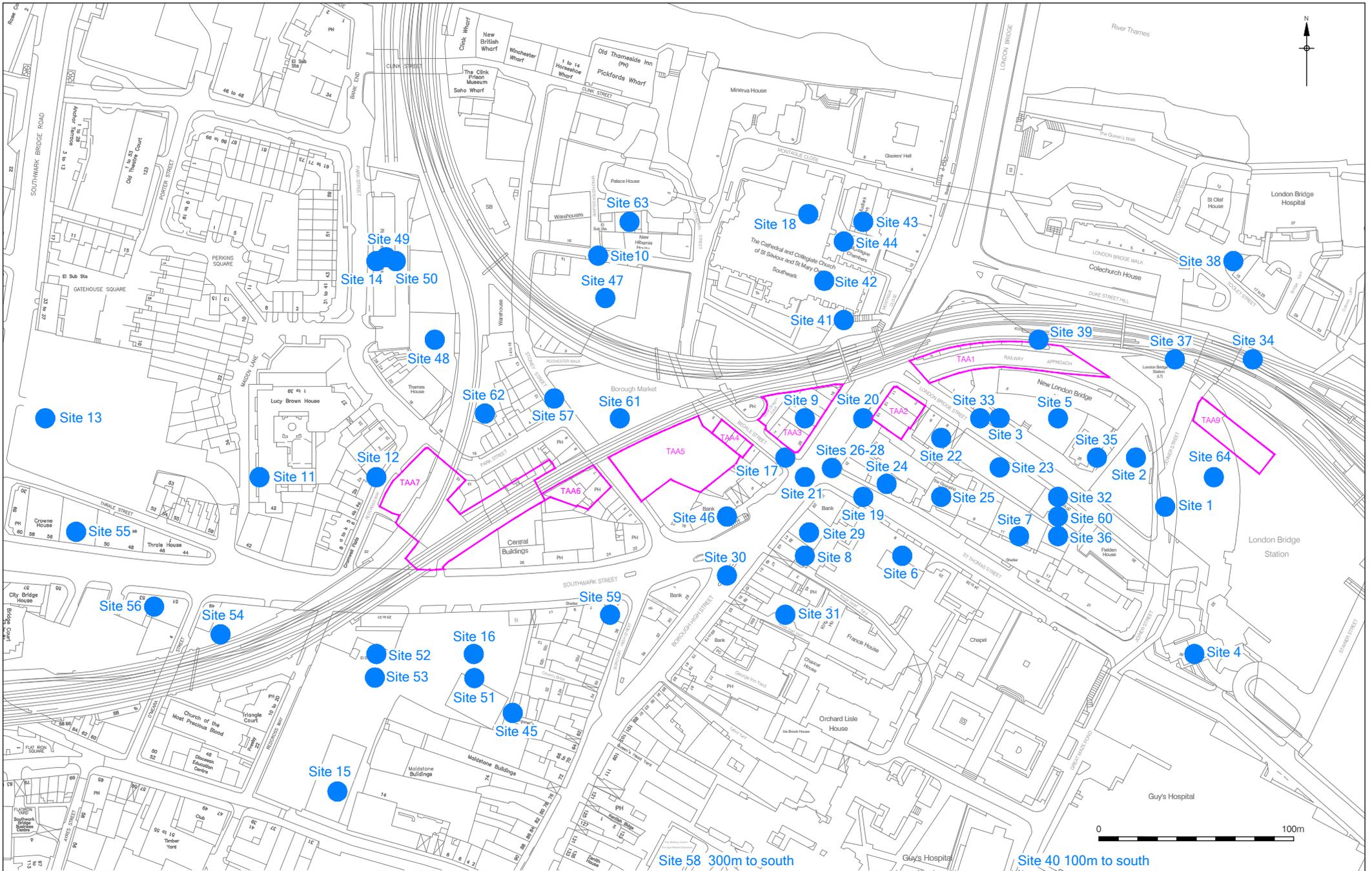
5.6.5 An Act of 1754 identified the High Street market as a serious obstruction to trade and commerce and from 25th March 1756 the street market was banned. At the same time,

commissioners were appointed to acquire land within which to set out a new market, this being a block of land called 'Rochester Yard' (TAA5) which was described as:

'A convenient place in a spot called the Triangle, abutting on a place called the Turnstile, on the backside of Three Crowns Square, on Fowle Lane, on buildings in Rochester Yard and Dirty Lane, and towards Deadman's Place' (cited in MoLAS 2003a)

- 5.6.6 The trade in hops bought in from Kent inevitably led to Southwark being heavily involved in the brewing industry (MoLAS 2003a), with much of the produce presumably sold in the many inns which lined the high street, side streets and streets surrounding the new market. Two hop merchants are listed on Stoney Street during the 18th century and two public houses, the 'Harrow' on 'Harrow Corner' and a public house at 6 Stoney Street, which may have been connected via an alley named the 'Whores Nest', were licensed during this period. The alley is no longer present in the modern street plan and the two public houses are now respectively known as 'The Market Porter' and 'The Wheatsheaf' (TAA6).
- 5.6.7 In 1584 the Abbot of Waverley's town house was acquired by Thomas Cure, saddler to the queen, who constructed almshouses for 16 poor parishioners (Malden 1912). A burial ground was subsequently established in the late 18th century and during the early 19th century were known as 'St Saviours Almshouse' and 'St Saviours-Almshouse-Burial Ground' (MoLAS 2003a; TAA7).
- 5.6.8 The 19th century brought significant changes to Southwark, with London Bridge rebuilt in the early 19th century and Borough High Street widened and realigned at a contemporary date. Large parts of St Thomas's Hospital were also demolished and only the southern buildings/wing were retained, with new tenement buildings fronting onto the realigned high street and side streets built in other parts of the former hospital precinct.
- 5.6.9 During the mid 19th century, large tracts of land were compulsorily purchased throughout Southwark for the construction of the South Eastern Railway, London Bridge-Cannon Street/London Bridge-Charing Cross line (MoLAS 2003a). Further alteration of the street pattern was undertaken to the east of Borough High Street, whilst to the west a new thoroughfare, Southwark Street, was established in 1864. The Hop Exchange, the commercial centre of the English hop trade, was built on the northern side of Southwark Street in 1866 (MoLAS 2003a).
- 5.6.10 Post-medieval masonry recorded at Joiner Street (Fig. 4; Site 37/MSA92) and around London Bridge Station (Fig. 4; Site 1/LBD95; Site 2/LBE95, Site 64/JNE99; Site 35/NLB91), as well as that recorded during recent Thameslink excavations around London Bridge Station

(BVC12; BVM12) represent the remains of post-medieval buildings which were compulsory purchased and demolished prior to the construction of the new railways. Further evidence of 19th century railway construction has been recorded elsewhere along the length of Borough Viaduct.



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JB 29/01/13

Figure 4
Archaeological sites referred to in the text
1:2,500 at A4

6 ARCHAEOLOGICAL METHODOLOGY

6.1 Introduction

6.1.1 With the exception of test pits excavated on site in 2009 (MOLA 2011a), the remainder of the archaeological works at 11-15 Borough High Street formed part of the agreed scope, sequence and method of archaeological works defined in the 2009 WSI (NWR 2009). The programme of works agreed between Network Rail and the London Borough of Southwark comprised:

- Principal Contractor to demolish buildings and other structures as required following completion of historic building survey
- Principal Contractor to underpin party walls under continuous archaeological supervision by Archaeological Supplier
- Principal Contractor to break out modern foundations retain exterior basement wall - and remove non-significant deposits under continuous archaeological supervision by Archaeological Supplier
- Excavation of archaeologically significant deposits to be undertaken by the Archaeological Supplier

6.1.2 The 2009 test pits (BVY09) and the historic building survey (Standing Building Survey - BVA08) have been previously described (MOLA 2010; 2011) and as a consequence the methodologies are not detailed in this report. Instead the methodologies described herein are concentrated on the extended programme of archaeological excavation and watching brief undertaken by OA-PCA at 11-15 Borough High Street between January and November 2011.

6.1.3 The approved design for the reinstated buildings at 11-15 Borough High Street required differential depths of excavation across the site with the consequence that archaeological deposits in the western third would be minimally impacted, whilst the eastern two thirds of the site required extensive archaeological mitigation (NWR 2009). The footprint of the site would be further sub-divided by the installation of extensive temporary works which were required to ensure not only the stability of standing buildings at 19a Borough High Street (3-storey) and 4 London Bridge Street (4-storey), but also the busy thoroughfares of Borough High Street and London Bridge Street. As a result of the reinstatement design and the temporary works design and the divisions caused by the walls and footings of 11-15 Borough High Street the site was sub-divided into the following four areas (Fig. 2):

- Area A1 (11 Borough High Street - eastern two thirds)
- Area A2 (13 Borough High Street - eastern two thirds)
- Area B (15 Borough High Street - eastern two thirds)
- Area C (11, 13 & 15 Borough High Street - western third)

6.1.4 Sporadic watching briefs associated with the installation of temporary works in the eastern two thirds of the site were conducted in Area A1, Area A2 and Area B in January and February 2011 whilst a mitigation watching brief was conducted within Area C during March 2011. An additional pre-start watching brief was conducted within Area A1, Area A2 and Area B between 4th August and 2nd September 2011, whilst archaeological excavation and mitigation watching briefs were undertaken in Area A1, Area A2 and Area B between 15th August and 15th November 2011.

6.2 General

6.2.1 In all instances, no site work took place until the appropriate H&S documentation had been provided and approved by OA-PCA, Skanska and Network Rail. Relevant elements of the H&S policies are incorporated into this document, however a full breakdown of the H&S criteria for archaeological work at 11-15 Borough High Street can be found in project archive document 'Task Briefing 1108' (Skanska 2011).

6.2.2 Archaeological recording was undertaken using the single context recording system as specified in the Museum of London Site Manual (MoL 1994) and Pre-Construct Archaeology's Operation Manual I (Taylor & Brown 2009). Plans were drawn at a scale of 1:20 and full or representative sections at a scale of 1:10. Contexts were numbered sequentially and recorded on *pro-forma* context sheets. A full photographic record was maintained throughout the entirety of the archaeological work.

6.2.3 The completed archive comprising artefactual material and written, drawn and photographic records for site codes BVG10, BVY09 & BVA08 will be deposited at the 'London Archaeological Archive and Research Centre' (LAARC) where it will be accessible for public consultation.

6.3 Temporary Works Watching Briefs

6.3.1 Demolition of the standing buildings at 11-15 Borough High Street was undertaken during the latter part of 2010 and the first archaeological watching briefs were conducted on site in the early months of 2011. The initial watching briefs monitored the mechanical excavation of a number of deep trenches required for the installation of temporary works, with the need to ensure the immediate stability of adjacent properties and street frontages being of paramount importance.

6.3.2 As a consequence, despite the considerable depth of the trenches and the archaeological risk posed, controlled archaeological excavation was impossible. Instead the mechanical removal of archaeological deposits was monitored from the trench edge, with finds collected from the generated spoil when possible. Plans, sections and context sheets detailing the

archaeological sequences were compiled as far as was possible and a full digital photographic archive was maintained throughout.

6.4 Area C Mitigation

- 6.4.1 The design for the reinstated 11-15 Borough High Street building required only minimal below ground impact within the western third of the property, i.e. Area C. As a consequence archaeological mitigation for this part of the site was carried out under watching brief conditions during March 2011.
- 6.4.2 The watching brief monitored the mechanical removal of the modern concrete basement floor and c.0.90m thickness of low-grade 'make-up' deposits beneath it across an area measuring 17.50m north-east south-west by 6.5m north-west south-east. The removal of the low-grade 'make-up' deposits exposed the uppermost archaeological horizon across much of Area C and a multi-context plan of the entire area was compiled. The concrete floor slab was present at 3.90m OD and the eventual machine horizon was c.3m OD.
- 6.4.3 In addition, the Area C mitigation watching brief also monitored the rapid hand excavation of a manhole within the northern part of the area. The manhole measured 2.60m by 2m and was excavated to a depth of 1.70m, with the base of the trench present at 1.83m OD. The trench was safely accessible throughout and detailed recording of the exposed archaeological sequence was undertaken in both plan and section.

6.5 Pre-Start Watching Brief

- 6.5.1 Preparations for the main phase of archaeological work began in August 2011 when three test pits were excavated against the party walls in Area B to assess underpinning requirements for the foundations shared with 19a Borough High Street and 4 London Bridge Street. The test pits measured 1m² and were hand excavated by the contractor under the observation of an attendant archaeologist. Excavation continued until significant archaeological deposits or a depth of 1.20m below ground level was reached. Detailed recording of the exposed archaeological sequence was undertaken following the completion of the test pit.
- 6.5.2 The pre-start watching brief also monitored the removal of the modern basement concrete slab and any soft low-grade deposits beneath through the use of a 360° mechanical excavator fitted with a flat bladed ditching bucket. The low grade material was reduced in c.200mm horizontal spits under the observation of an attendant archaeologist. Modern concrete and brick obstructions were left in situ to protect the surrounding archaeology and also to avoid destabilising the surrounding structures. The watching brief ceased once the upper archaeological horizon was reached, at which point the archaeological excavation commenced.

6.6 The Archaeological Excavation

- 6.6.1 Engineering and Health & Safety restrictions required that the archaeological excavation of Area A1, Area A2 and Area B were sub-divided into two 'stages, with Stage 1 project depth being 2.20m OD and Stage 2 project depth being 1.20m OD. However, the discovery of highly significant archaeological remains led to a reassessment of the depth of fill required to support the approved building, a redesign that once implemented resulted in variable 'project depths' being employed across the site and within individual areas (Fig. 3).
- 6.6.2 Area A1 comprised a 5.35m by 10.8m area, excavated from 15th August 2011 to 8th September 2011 (Stage 1) and then from 17th October to 1st November 2011 (Stage 2). Area A2 covered a 5.86m by 11.22m area excavated from 2nd September 2011 to 17th September 2011 (Stage 1) with Stage 2 works taking place between 8th September and 20th September 2011. The lower Stage 2 excavations took place within a 2.49m wide trench at the eastern limits of the excavation area, hereafter referred to as the 'Eastern Sondage'. Area B was excavated between the 22nd August and 3rd October 2011 (Stage 1) and resumed again on the 17th October to 6th November 2011. The latter covered an 11.15m by 6m excavation area.
- 6.6.3 A continuous 5m grid was established throughout Area A1, Area A2 and Area B at the start of each stage of works, and was maintained and reinstated throughout the entirety of the excavations as necessary. The grid was located to the National Ordnance Survey using a Total Station Theodolite (TST). The awkward orientation of the site resulted in a decision to adopt a 'site north' for baselines and grids. The generated paper archive, i.e. plans, sections, context sheets etc, relate to 'site north' and have been re-orientated to 'Grid North' during the post-excavation process.
- 6.6.4 Masonry context numbers were maintained across the two stages of excavation and where possible cut numbers were too. Where fills and layers occurred in both stages of excavation, separate context numbers were assigned and cross referenced on the appropriate context sheets.
- 6.6.5 All archaeological excavation was by hand, with cleaning, examination and recording both in plan and section. Archaeological sections were excavated no deeper than 0.70m without stepping. Environmental samples were taken as both bulk samples (40 litres) and column samples, with the latter located on appropriate sections. A hand auger was used to assess the upper height of the natural horizon.

6.7 Mitigation Watching Briefs

6.7.1 Extensive watching briefs were conducted within Area A1, Area A2 and Area B during the course of the excavations. Some of the watching briefs had been envisaged prior to the start of the excavation, i.e. underpinning (NWR 2009b), whilst others were necessitated by the redesign of the basement. Both types of watching brief were undertaken concurrent with the excavation and form an integral part of the archaeological mitigation. The watching brief methodologies are detailed below.

Structural Underpinning Watching Brief

6.7.2 Insufficient foundations beneath the London Bridge Street frontage ensured that underpinning was required, a programme of works which was undertaken during an interlude between the Stage 1 and Stage 2 excavations in Area A1. Whilst the main impetus during these works was the safe and efficient strengthening of the wall, the underpinning also provided a valuable opportunity to investigate the archaeological sequence beneath the street. The structural underpinning watching brief entailed:

- 1m sections were measured along the wall and these were then numbered with the sequential order in which they were to be excavated. To ensure the integrity of the wall only 25% of the underpinning pits could be 'open' at one time and 'open' underpinning pits could not be located adjacent to each other. The excavation of each set of underpinning pits was completed by the contractor in approximately half a day.
- Once the sequence had been established, the attendant archaeologist watched as the underpinning pit was rapidly hand-excavated adjacent to the wall being underpinned. In general, the attendant archaeologist did not enter the underpinning pit, however limited access was permissible in exceptional circumstances. The generated spoil was monitored throughout and where possible, finds were collected by context or the underpinning pit number.
- Once the base depth of the underpinning pit had been reached the attendant archaeologist was given access to compile location plans and to record sections. The section directly beneath the underpinned wall was recorded in each instance so that a single composite section could be compiled after the underpinning was complete.
- Having completed the rapid recording, the attendant archaeologist then watched as the contractor hand-excavated the pit beneath the width of the standing wall. Any mass concrete was left in situ and incorporated into the underpinning.
- No archaeological access to the underpinning pit was permissible once excavation had proceeded beneath the standing wall, however the generated spoil was monitored and finds were either collected by context or the underpinning pit number. Location plans

for the underpinning pits beneath the extant walls were extrapolated from measurements and recorded through digital photography.

- Timber shuttering and iron rebar was then installed beneath the exposed foundation and filled with wet concrete. Once the concrete had fully set (c.2-3 days), the pit adjacent to the wall was backfilled and the excavation of the next 25% of underpinning pits was carried out. This process was repeated until the underpinning was complete.

Structural Consolidation Watching Brief

6.7.3 The party walls shared with 4 London Bridge Street and 19a Borough High Street were of sufficient depth to not require underpinning, however relieving arches had been utilised during their construction and as a consequence isolated areas of structural consolidation were required. The structural consolidation watching brief entailed:

- 'Bulk sections' were maintained adjacent to the retaining arches during each stage of archaeological excavation. Retaining arches were present along the foundation length of 19a Borough High Street in Area B and 4 London Bridge Street foundation in Area A1, Area A2 and Area B.
- Once each stage of excavation had been completed, a watching brief was then maintained whilst the contractor removed the archaeological 'bulk section' and also c.0.20m width of soft deposits from beneath each retaining arch. Existent archaeological walls and foundations were incorporated into the structural consolidation where possible. The generated spoil was monitored throughout and where possible, finds were collected by context or retaining arch number.
- Once complete, the attendant archaeologist compiled location plans and recorded the newly exposed section. Timber shuttering was then installed beneath the retaining arch, before being filled with wet concrete and allowed to set.

Dynamic Probe Watching Brief

6.7.4 The discovery of highly significant archaeological remains in Area A1 led to a reassessment of the thickness of fill required beneath the basement to support the new building in an effort to preserve the archaeological remains in situ. To do this it was necessary to demonstrate that the underlying archaeological soils were of sufficient strength to support the new building and as a consequence twelve dynamic probes, were taken across Area A1, Area A2 and Area B. The dynamic probe watching brief entailed:

- The attendant archaeologist ensured that all exposed archaeological horizons were boarded over for protection, following which a small tracked drilling rig was 'dropped' into the excavation area.
- The attendant archaeologist then watched as the drilling rig 'hammered' a steel rod into the ground until either natural gravel or an archaeological obstruction were reached. The dynamic probe did not produce soil samples, however the number of hammer blows were recorded every 100mm increment and the blow count provided a calculation of the depth reached.
- Four probes were excavated in each of the areas and all were located relative to the site grid. The protection boards were removed once all of the probes within an excavation area had been taken and the drilling rig had been removed.

Watching Brief on the Reburial of In Situ Archaeology

6.7.5 The final archaeological watching brief undertaken as part of the mitigation of Area A1, Area A2 and Area B involved the reburial of in situ archaeological remains. The manner of reburial varied across the site and comprised:

Area A1 - Room 4

- Sterile sand (Type SS01) was deposited above the floor and against/above the walls of Room 4 until a point that the structural elements were completely covered.
- The footprint of Room 4 was then covered with c.0.20m thick layers of compacted 'Type 2 crushed concrete' deposited until a height of c.2.50m OD was reached.

Area A1 - Rooms 1, 2 & 3

- A c.0.10m thick layer of sterile sand was deposited within the footprint of Rooms 1, 2 & 3. The sterile sand and in situ archaeological masonry were then covered with several layers of Terram sheeting.
- Wet concrete was poured into Rooms 1, 2 & 3
- Once the poured concrete was set, c.0.10m of sterile sand was deposited above any archaeological masonry which was still visible and then c.0.20m thick layers of compacted 'Type 2 crushed concrete' deposited.

Area A2 & B

- A c.0.10m thick layer of sterile sand was deposited above the exposed archaeological horizons in the central and western parts of the areas and archaeological walls were cut down to a height of c.2.5m OD
- In the eastern parts of both areas, Terram sheeting was laid and timber shuttering was constructed. In Area A2 the shuttering was constructed within the Stage 2 trench

and within Area B the shuttering was 'built up' and supported within the excavation area. The chalk pile located in the south-east corner of Area B was located within the shuttered area and was therefore also wrapped in Terram sheeting.

- Once complete, wet concrete was then poured into the shuttering. After the wet concrete had set, 'Type 2 crushed concrete' was then deposited throughout the entirety of Area A2.

7 THE ARCHAEOLOGICAL SEQUENCE

7.1 Introduction

7.1.1 The deposits and structures encountered during the investigations have been ascribed to broad phases, and the results are presented below in chronological order. Six phases of activity were defined across the site. The phasing is provisional and site-specific. It may however be refined in the light of evidence produced from a detailed analysis of the dataset.

- Phase 1 Natural Drift Geology
- Phase 2 Prehistoric
- Phase 3 Roman
- Phase 4 Post-Roman
- Phase 5 Medieval
- Phase 6 Post-Medieval

7.2 Phase 1 and 2: Natural/Prehistoric

Area A1

7.2.1 Natural sands and gravels were only identified within localised augering. Conclusions regarding the underlying topography of the wider area are therefore difficult to establish with any certainty. Boreholes 1 and 2 were located to the east and west respectively. The former recorded sterile, dark, grey silty sands [1639] from 0.80m OD, overlying coarse yellow sands [1640] from 0.80m OD. By contrast, Borehole 2 encountered clean sandy clay [1641] from 0.88m OD, overlying sterile, red sands [1642] at 0.74m OD. These sands extended over 0.20m in thickness whereupon the auger hit an obstruction. It is likely that the obstruction comprised naturally compacted gravels.

7.2.2 Deeper excavations within underpinning locations revealed a sequence of water-lain alluvium along the northern limit of excavation. Layers [1305] and [1361]=[1306]=[1280] were identified from 1.04m OD and comprised brown-grey silty clays with mica inclusions.

7.3 Phase 3a: Roman 1st Century (Fig. 5)

Areas A1, A2 and B

7.3.1 Dumped deposits of mineralised and waterlogged sandy silt and gravel [1627]=[1607] extended across the south-western and central limits of Area B from 1.32m OD. These exhibited a gradual downwards slope towards the south-east where they were sealed by levelling deposits of brownish-red brickearth [1606]=[1416] from c.1.3m OD. Dump layer [1606] contained small fragments of pottery dated between AD 50 and AD 70 and a small

copper object, or block, of unknown function (SF202). A greater concentration of sand was identified within levelling deposits [909]=[1523] recorded at the south-eastern limits of Area B. These were recorded from a comparable elevation and therefore considered to represent a continuation of the same widespread phase of ground raising and levelling. No finds were recovered from these layers with which to firmly establish dating.

- 7.3.2 A comparable sequence of levelling deposits was identified within the Eastern Sondage of Area A2 and within underpinning trenches to the north of Area A1. Friable sands [983] were recorded in section from 1.23m OD and sealed by a 0.23m thickness of sandy silt [984] and brickearth [985] in turn. The latter deposit was identified from between 1.38m OD and 1.23m OD and may represent a continuation of deposit [1606] to the south. A 0.20m thick horizon of dumped sands and gravels [1298], [1315]=[1304] and [1295] were also recorded along the northern limits of Area A1. Pottery dating between AD 50 and AD 80 was retrieved from sandy gravel [1304], suggesting these deposits to be roughly contemporary with those recorded from Area A2.

7.4 Phase 3b: Roman mid to late 1st Century (Fig. 6)

Area A1

- 7.4.1 Activity attributed to this phase was initially demarcated by a distinctive burnt horizon, which extended across the northern limits of excavation between 1.21m OD and 1.40m OD to the west and east respectively. The layers comprising this horizon [1568], [1560], [1314]=[1303] and [1293]=[1294]=[1318] were composed of black and red sandy ash with lenses of brickearth, burnt bricks, charcoal and degraded ceramic material/burnt clay. Environmental samples (Appendix 19) taken from deposits [1314] (S540), [1293] (S538), and [1294] (S538) revealed inclusions of 'refractory' sands of Thames origin, and suggested these to represent a constructional layer ([1314]), with the presence of burned fuel likely to derive from clay surfaces and hearth spreads. Additional inclusions within the matrix of these deposits were occasional sherds of pottery dating from AD 60 to AD 100, and fragments of a folded and melted, waste copper alloy sheet (SF188). A heavily truncated patch of burnt material [1581] was also identified to the south-east and may represent a continuation of this horizon. The burnt material covered an approximate extent of c.8m by c.3m north-west to south-east, with a thickness of 100mm to 150mm. The latter deposit sealed dumped silty clay [1599] and crushed mortar [1582] at project depth of 1.20m OD, and therefore the full nature or interpretation of these deposits is not possible. A similar sequence of clay levelling [45]/[47] with burnt deposits [46] were recorded to the west within Area C. These were only identified in section, from a comparable elevation, and suggest a continuation of this industrial activity.
- 7.4.2 Organic silty clay layers [1556]=[1313] and [1597] overlay the burnt horizon in the east of the excavation area. These deposits contained pottery dated between AD 50 and AD 100 in addition to oyster shell and charcoal. The occupation layers were subsequently sealed by

further dump layers of sandy gravel [1553]=[1302] from 1.55m OD. In turn, these dump layers were truncated by sub-circular pits [1555] and [1561]=[1321]. These extended 0.80m and c.1m in diameter respectively by c.0.25m in depth and were filled by silty sands and gravel ([1554], [1562] and [1320]) within which fragments of pottery dating from AD 50 to AD 100 were recovered.

- 7.4.3 The latter pits were sealed by a thin 0.10m spread of dumped mixed gravels [1552], ash [1301] and clay [1300] containing late 1st century pottery (dated AD 70 to AD 100). Sub-rounded pit [1558] truncated these deposits from 1.68m OD and extended c.0.80m in diameter by 0.20m depth, and continued beyond the northern limit of excavation. The pit exhibited concave sides and a flat base and may represent a continuation of stepped cut [1312] as seen in section. The latter extended over 2m in width north-west to south-east and was filled by a deposit of organic brownish-grey sandy silt [1311]=[1557]. Cultural material, including Roman pottery dated between AD 50 and AD 160 was recovered from the latter, and fragments of copper waste were recorded from the former (S540). A similarly dated assemblage of material was encountered within gravel and clay dump layers [1480] and [1483] in the south-east of the excavation area. Although these deposits were heavily truncated, it is likely that they represent part of a wider spread of dumped material attributed to this phase of activity.

Area A2

- 7.4.4 All features ascribed to this phase were identified during excavation works within the Eastern Sondage, and therefore the majority may be assumed to continue beyond both eastern and western limits of the sondage. Early occupation was recognised within this area in the form of brickearth 'floor' [971] at 1.14m OD. This was only partially revealed, covering an exposed area of 2m by 1.45m and was 100mm thick. The floor was sealed by a 0.20m thick deposit of silty sand and sandy gravel levelling material [963], [964], [682], and [913]. These levelling deposits were generally free of cultural material, however the few fragments of pottery recovered from [913] suggested an AD 50 to AD 100 date range, and were found in association with fragments of copper alloy plates or strips (SF85).
- 7.4.5 Deposits of burnt brickearth [679] and charcoal [681]/[962], and a second brickearth slab [961]/[688] sealed the gravel dumps from 1.48m OD and 1.55m OD respectively and appear to demarcate a construction horizon. The latter was overlain in turn by a 0.16m thick occupation layer [960] from 1.65m OD. Brickearth partition wall [930] (Plate 1) was identified at a similar elevation and extended over 1.35m in length by 0.13m in width and 0.13m in height on a north-west south-east alignment. Postholes [952] and [954] were directly sealed by [930] and therefore likely to be associated with the construction of this partition wall. The profile and size of both features would suggest them to have been created by driven stakes 120mm in diameter. No dating evidence or traces of timber were however retrieved from the respective backfills [951] and [953]. A possible rough mortar surface associated with this

partition was identified to the south of the feature. Coarse light grey-green mortar [927] extended 60mm in thickness and contained occasional fragments of pottery with a date range of AD 50 to AD 120. A similar sequence of burnt deposits [219] overlain by opus signinum surfaces [218] and levelling material [217], [224] and [223] were identified in section in the far west of the excavation area. These were recorded at a comparable elevation of c.1.50m OD and suggests a continuity of construction

- 7.4.6 The area to the north of partition [930] was subsequently truncated by large cut feature [915]=[689]. The cut exhibited concave sides and a flat base, and was only partially revealed in plan at over 1.36m diameter by 0.49m depth from a truncated height of 1.65m OD. Backfills [914], [680] and [678] contained inclusions of oyster shell, pottery and CBM dated between AD 55 and AD 160. The full limits of the latter pit were heavily truncated by the excavation of north-west to south-east aligned linear feature [887] to the south. This was recorded from 1.65m OD with a 1.82m width. The possible ditch exhibited a distinctive profile, with a gradually sloping northern side and steep, concave southern side, and flat base at 1.34m OD. Mixed deposits of silty sand, with clay and charcoal [912], [890] and [886] filled the ditch in turn. Primary fill [912] contained mixed cultural material including pottery dated between AD 65 and AD 85, and several copper objects from both primary and secondary fills. These included a tack (SF83), melted waste (SF84), wire fragments (SF81) and fragments of a possible seal box with hinge (SF82). Other indications of copper working within the vicinity were encountered within samples (S514, S513) taken from the secondary and tertiary fills. These highlighted the presence of cassy material with cinder, copper alloy and iron, and fragments of vitrified hearth lining.
- 7.4.7 Upper fill [866] was truncated by two small postholes [955] and [889], measuring 100mm and 140mm in diameter respectively. Decayed wood [1008] indicative of a driven stake was only found within the former cut, whereas only clean sandy silt [888] devoid of cultural material was recorded within the latter. It is unclear what structure or function these timbers relate to, however the north-east to south-west alignment they formed runs directly perpendicular to brickearth partition wall [930] which may suggest this division/boundary remained in use following the excavation and subsequent abandonment of ditch [887]. The continuation of occupation following the disuse of [887] is further suggested by a 0.32m thick brickearth slab [880] recorded from 1.68m OD which directly overlay the former ditch and postholes.

Area B

- 7.4.8 Additional structural remains were identified in the north-west of this excavation area. Brickearth partition wall [1528] extended 0.94m north-west south-east before returning to an observed distance of 0.58m north-east south-west. The partition was truncated to the north and west by post-medieval basements and measured between 80mm and 160mm thickness, and over 70mm height from 1.67m OD. This demarcated an internal space sized 0.50m north-east south-west by 0.92m, to the north and presumably extended further north-east and

north-west. No occupation deposits or surfaces were identified as associated with this feature due to project depths. A dump of burnt material [1630] to the south of this partition may be assumed to post-date its construction, but as both features were left in situ the stratigraphic relationships remain unproven.

- 7.4.9 The area to the south of [1528] appears to have been primarily used for industrial processes. A sub-circular hearth was identified with a base of red, hardened sandy silt and clay [1628] at 1.40m OD. The base appeared sub-circular in plan, and covered an area 0.72m by 0.48m on a rough north-west south-east alignment. It is noteworthy that analysis revealed no evidence of ironworking (Appendix 10). The outer wall/lining of the hearth [1620]/[1616] (Plate 2) extended around the perimeter of the base, leaving a 0.24m wide access point to the south-west, and comprised a mottled red/purple clay c.130mm thick by 0.17m high. An encrusted coin dating from the 1st to 2nd centuries AD was recovered during the processing of S594 from [1616]. This was sealed by a secondary lining or repair [1615] which covered an area 0.35m in diameter at the centre of the feature, and contained microslag presumably brought in the with clay used for its construction (Appendix 10). A series of burnt deposits demarcated the disuse/abandonment of the hearth. A 0.12m thick spread of mottled light brown and red burnt clay sealed the hearth [1625]/[1614]/[736]/[735], covering an area c.1.20m diameter and was interpreted as hearth collapse. This, in turn, was overlain by a 2.28m by 1.16m spread of dark grey/black silt and charcoal [1605] rake out material. Few finds were recovered from these deposits, but included a fragment of lead sheet (SF200, [1614]) and several flint flakes, including a narrow blade ([1605]). An additional find of note was recovered from S570 ([1605]) and comprised a small bone handle in the form of a bird (Appendix 8).
- 7.4.10 Another hearth, [1624], was revealed to the south-east which extended 1.58m by 1.28m and 0.20m in depth and appeared roughly circular/key-hole shaped in plan. The cut was recognised from 1.33m OD and exhibited concave sides and base. The pit was backfilled by numerous deposits of reddish brown/grey silty clay with charcoal, and variable quantities of copper waste inclusions, or copper staining ([1623], [1613], [1612], [1611], [1610], [1609], [1608] in turn). Analysis of residues from the fills (Appendix 10) highlighted the presence of occasional lead fragments, fired clay possibly from hearth moulds, microslag, and hammerscale flakes indicative of hot working of iron. Further analysis of soil monoliths (Appendix 19) also highlighted the presence of burned sands and potentially inwashed peaty fuels within [1609] and [1608]. Other finds of note included a potentially residual Mesolithic ground implement flake (Appendix 5, [1623]), and a possible copper lock bolt (SF203, [1608]).
- 7.4.11 Adjacent to [1624] was unexcavated sub-rectangular pit [1634]. This extended 0.54m by 0.60m and had been backfilled by a compacted deposit of silty sand containing flecks of copper alloy and charcoal [1633]. Pit [1636] was identified as truncating the same horizon as

[1634] and similarly remained in situ. The pit extended c.1.60m in diameter and had been backfilled by clayey-silt [1635]. The upper fill of [1636] had been truncated by rake out pit [1618], which was only partially excavated. This extended c.2.50m in diameter with gradually sloping sides. A dumped deposit of greenish-grey sandy silt [1619] backfilled the feature and contained copper waste inclusions, including microslags from smithing (Appendix 10) and a trimmed amphora sherd. The north-western limits of pit [1618] were truncated by a second, smaller rake-out pit [1622]. This appeared sub-rectangular in plan, similar to [1634], with steeply sloping sides, had been backfilled with sandy silt with copper waste fragments [1621]/[1617], and also remained only partially excavated. Analysis of residues from [1621] highlighted the presence of some small fragments of lead, which may indicate the production of leaded copper alloy (Appendix 10).

7.5 Phase 3c: Roman Late 1st Century (Fig. 7)

Area A1

- 7.5.1 Greenish-grey silty clay occupation layers [1551]=[1319] extended throughout the north-western limits of the excavation area. These contained pottery and building material with an AD 70 to AD 95 and AD 60 to AD 80 respective date range, with hearth/fuel waste (S540, Appendix 19). Furthermore, an incomplete balance arm (SF182) comprising the central part of an arm with suspension point, was recovered from [1551]. Dumped deposits of gravel and mixed sandy silts [1550]=[1549], [1604] and [1603] sealed the latter from an uppermost elevation of 1.87m OD with a combined depth of 0.20m. Pottery recovered from these dump layers dated from AD 50 to AD 90. Additional dump layers [1287]=1297] were identified during underpinning works to the immediate north. These extended 0.36m in thickness from 1.96m OD and contained fragments of mid to late 1st century pottery, building material, hearth/fuel waste (Appendix 19, S540) and a copper coin (SF126) dated from AD 69 to AD 79. Although the latter differed slightly in composition from deposits recorded in plan, these were interpreted as part of the same phase of dumping.
- 7.5.2 A north-east south-west aligned linear feature truncated all previously mentioned deposits from c.1.80m OD. Possible ditch/gully [1548] extended over 1.80m in length by 0.59m in width and 0.12m in depth, and exhibited concave sides and a flat base. This was filled in its entirety by dark green-grey sandy silt [1547] which contained occasional fragments of building material and pottery with an AD 70 to AD 100 date range.
- 7.5.3 Occupational evidence for this period was encountered in the south-east of the excavation area. Grey-green sandy silt levelling layer [1478] was sealed by 0.12m thick opus signinum surface [1454] from 1.46m OD. Pottery dated between AD 50 and AD 100 was recovered from levelling deposit [1478] and both features had been severely truncated by later pitting, making any inferences about original room/area size difficult to establish.

Area A2

- 7.5.4 All features within this phase were encountered within the Eastern Sondage, and as such may be assumed to extend beyond the limits of excavation. Cut features [925] and [864] were recorded in the south and north of the sondage; too little of either feature was exposed with which to establish their complete shape in plan. The former extended over 0.85m in diameter, with near vertical sides to over 0.17m in depth, and remained partially excavated. This had been backfilled with brown-grey silty-sand [924], from which pottery dated between AD 50 and AD 160 was retrieved. Northern pit [864] truncated clay silt levelling deposit [865] and was backfilled by greenish-grey sandy silt [863] which contained a mixed assemblage of building material, oyster shell, charcoal and mortar fragments. Pottery recovered from levelling deposit [865] suggested an AD 50 to AD 120 date range.
- 7.5.5 The upper fills of the pits and the former space created by earlier wall [930] were overlain by a 0.25m thick spread of levelling material. Dump layers [926] and [879] in turn covered the southern extent of the sondage and contained mixed cultural material, including fragments of chalk, mortar, charcoal flecks, oyster shell and pottery. Pottery recovered from these dump layers dated between AD 50 to AD 100 and AD 60 to AD 70 respectively, and respected wall [930] suggesting this division remained in use at this time.
- 7.5.6 Almost the entirety of the sondage was overlain by silty-clay and sand levelling deposit [860]. This extended to a maximum thickness of 0.16m and contained a mixed assemblage of material including oyster shell, animal bone, charcoal, mortar, glass, pottery (dated between AD 90 and AD 100) and a small sheet of folded copper (SF57) and iron T-staple (SF58). The latter was sealed by opus signinum surface [858], which covered a 3.10m by 2.50m area and was recorded between 1.82m OD and 1.64m OD. Within the composition of this surface were a small copper plate (SF56) and pottery dated between AD 70 and AD 100.

Area B

- 7.5.7 All previous industrial features were overlain by a series of dumped levelling deposits. The entire western extent of the excavation area was sealed by brickearth slab [1600]=[1629] which extended over 0.29m in thickness and covered an area c.4.86m by c.3.70m. Numerous inclusions of cultural material were recovered from the deposit, and included 6 fragments of melted copper alloy (SF189, SF190, SF191, SF192, SF193, SF194) as well as pottery fragments with an AD50 to AD120 date range. This may represent an internal floor surface from a timber framed building, of which nothing of the superstructure was identified. The slab was truncated by irregular, linear feature [1602], which extended 1.8m by 0.36m on a north-east south-west alignment. This possible gully or beamslot, displayed irregular sides with a flat base and was backfilled by a combination of silty sand and charcoal [1601]=[740]. The presence of a dog or cat coprolite (Appendix 20, S566) within [1601] may suggest this had been left exposed, and the backfilling was perhaps more of a gradual process. Posthole

[1589] was recorded as cutting the same horizon as [1602] and may represent further evidence of a structure. The former had a diameter of c.0.24m and was filled by a natural accumulation of degraded organic material [1588] and occasional fragments of copper and iron. These inclusions may suggest that the structure may have been associated with the industrial processes taking place during Phase 3b.

7.5.8 Earlier cut features were overlain by a 60mm to 100mm thick dumped deposit of rake-out material. Dump layer [1587]=[1534] covered the entirety of the brickearth slab and comprised dark grey-black, sandy silt with frequent inclusions of charcoal, clay lenses, degraded wood and copper fragments. A particular concentration of burning was noticeable towards the south-western extent of the deposit, and semi-spherical concretions were identified within environmental samples (Appendix 20, S564) suggesting the potential for industrial activity. Pottery recovered from this horizon suggested an AD 70 to AD 80 date range and copper coin SF173 dated from the 1st to possible 2nd centuries. Burnt deposit [1522] was recorded in the south-east of the excavation area and contained frequent inclusions of charcoal, burnt wood and copper slag, and may also represent dumped industrial debris. Two copper objects were recovered from the latter deposit (SF158/SF159), and comprised a poorly preserved folded strip and a hollow curved object of uncertain function.

7.5.10 The eastern extent of the excavation area was overlain by a 0.25m thickness of sandy gravel levelling material [1593]=[1415]. This contained brickearth lenses and moderate inclusions of copper fragments, mineralised wood (Appendix 20, S561) pottery dated between AD 50 and AD 90 and building material with an AD 100 to AD 180 date range. A large working hollow subsequently truncated the latter deposit, extending across the excavation area, truncating the brickearth slab to the west. Cut [1412]=[1592]=[1586] extended c.6.20m north-west to south-east by 0.90m width and 0.43m depth. This feature had irregular, concave sides and an irregular base, where seen. Primary fill [1411], [1598] and [1585] comprised a brownish-grey/black clay-silt with charcoal, flint, CBM and pottery inclusions. The deposit exhibited a distinct downwards slope from south to north, and the pottery recovered suggested an AD 50 to AD 100 date range. Several copper objects were also recovered from this fill, including an undateable copper coin (SF187) and curved strip of copper (SF199), possibly belonging to a hoop or collar. Secondary fills [1410], [1591], [1584] and upper fill [1409] sealed the remainder of the cut and comprised mixed sandy silt and silty clay with animal bone, pottery and charcoal inclusions, as well as an early Roman copper Aucissa brooch (SF184, Appendix 8). Pottery recovered from these deposits inferred an AD 70 to AD 90 date range. Further evidence of copper working was evident within secondary fill [1584], which contained cinder, copper alloy and ferruginous concretions (S560).

7.5.11 Upper fills of the working hollow were overlain to the east by a series of dumped levelling deposits [1414]=[1538] and [1503]. These represented a combined depth of 0.25m of brown-grey silty gravel and sandy clays. Within the composition of these deposits was a wide

variety of cultural material, including animal bone, pottery (dated between AD 120 and AD 140), glass, a copper coin (SF186, in use between AD 69 to AD 79) copper tweezers (SF185), and a worn domestic rotary quern of lava (Appendix 12). Dump layers [909]=[1521] and [907]=[1520] were identified to the south-east of the excavation area and are likely to represent a continuation of [1538]. The former extended 0.30m in thickness and comprised sandy silt and clay containing a similar assemblage of pottery (dated between AD 50 and AD 100), charcoal and animal bone.

- 7.5.12 Later occupation deposits sealed the latter phase of levelling and were represented by a 2.53m by 1.08m spread of organic silty sand [1501] which was, in turn overlain by heavily truncated opus signinum surface [1499]. The latter was recorded from an uppermost elevation of 1.87m OD with a distinct slope/slump towards the west. The elevation and stratigraphic position of [1499] suggests that it may represent a continuation of the surface, or scheme of works, represented by surface [858] within Area A2. Pottery recovered from the occupation layer immediately below the surface gave an AD 50 to AD 100 date range, whereas pottery recovered from the surface itself dated between AD 70 and AD 100.
- 7.5.13 Additional structural remains may be indicated by a number of postholes to the south-west of the excavation area. Cuts [1579], [1576] and [1578] were all identified as cutting the same horizon and appeared sub-squared in plan. Posthole [1579] lay directly within the footprint of beamslot [1602] and may therefore represent later alterations to a previous property/room division. All postholes measured between 0.30m and 0.50m in diameter and were filled by a natural accumulation of sandy silt [1580]/[1575]/[1577]. The only dateable material was recovered from fill [1575] and comprised a few fragments of pottery with an AD 50 to AD 300 date range.

7.6 Phase 3d: Roman Late 1st/Early 2nd Century (Fig. 8)

Area A1

- 7.6.1 No features were attributed to Phase 3d within Area A1.

Areas A2 and B

- 7.6.2 This phase is initially demarcated by a rough gravel surface [1559]=[734]=[1514]. This was recorded from c.1.80m OD and roughly corresponds with earlier brickearth slab [1600]=[1629] attributed to Phase 3c, extending c.4.7m north-south by 3.7m east-west. The surface continued to respect brickearth partition [1528] and offers further support for a timber framed structure within this area. A wide variety of copper objects and other cultural material were recovered from the surface, and included a 1st/2nd century coin (SF183), a small strip or block (SF196), two melted copper objects (SF197, SF198), a tubular object (SF172) and a small cosmetic or medical probe (SF171). Small fragments of pottery were recovered from

these deposits with a variable date range of AD 60-100, and AD 50-160. Dumped deposits of grey-brown silty clay [1545] and [1544] overlay the gravel surface in turn to a combined depth of 0.18m. These dump layers contained variable quantities of pottery, one fragment of which had been inscribed with graffiti (Appendix 3), animal bone and oyster shell fragments indicative of domestic refuse. Pottery retained from the earlier deposit was dated from AD 70-100, and was found in association with a block of copper waste SF180. Later deposit [1544] contained other copper objects including a trumpet brooch (SF178) and coin (SF179) dating from the 1st to 2nd centuries, as well as large numbers of pottery fragments with an AD 120-140 date range.

- 7.6.3 Occupational debris encountered in the north of the excavation area comprised dump layers [1504] and [1505] which were located external and internal to brickearth partition [1528] respectively. External deposit [1504] comprised a grey sandy silt, relatively clean of cultural material and contained no dateable finds. Internal occupation layer [1505] by contrast contained frequent charcoal lenses, oyster shell, fragments of building material, and pottery dated c.AD 50-100, within a grey-brown clay silt matrix. It is noteworthy that a lense of burnt wood directly overlay this deposit and may represent a remnant of in situ collapse. The latter may be related to burnt horizon [733] identified within a trial pit in close proximity.
- 7.6.4 Activity within the eastern limits of the excavation area was initially limited to a number of cut features. Partially excavated pit [1543] appeared sub-rounded in plan with an approximate diameter of 0.60m by over 0.17m depth. No dateable material was recovered from sandy gravel backfill [1542] and the pit was therefore attributed to this phase on the basis of its stratigraphic relationships with surrounding features.
- 7.6.5 Linear feature [1541] truncated earlier levelling deposits from 1.65m OD and extended over 5.20m in length along an east-west alignment by 1.60m width and 0.30m depth. The cut exhibited concave sides and a flat base and was interpreted as a possible ditch or property boundary. Unfortunately later truncations destroyed the western limits of the cut, and it remains unclear whether the feature ended to the immediate west or altered its alignment at this point. Fill [1540] contained a very mixed assemblage of animal bone, pottery, charcoal, metal and oyster shell inclusions within a grey-green silty clay matrix. The pottery fragments indicated an AD 70-80 date range whereas fragments of building material were initially assessed as being mid 2nd to 3rd century, but are thought to be intrusive.
- 7.6.6 The majority of the site was subsequently overlain by a 0.20m thick spread of levelling material. Greenish-brown clayey-sandy silt [1413]=[1532]=[1537]=[732], contained charcoal, animal bone, fragments of worked stone and glass inclusions, with some evidence of flood sediment and composted cess (Appendix 19, S526). Inclusions of charcoal and fine mortar were noted within [732], interpreted as being employed to 'sweeten' the cess (Appendix 19). Additional material recovered from this layer included melted lead waste (SF100), a large number of pottery fragments with an AD 120-140 date range, and building material dated

between AD 100 and AD 260. Copper objects retrieved included, a small coin (SF175) tentatively dated to the 2nd century, a copper needle (SF177), copper tack (SF176) and melted copper waste (SF99). These deposits were overlain by small mortar spread [1531] to the east. The latter lay within the footprint of former ditch [1541] and contained no dateable inclusions. This spread was therefore considered as part of the same scheme of levelling as previously mentioned deposits. All levelling deposits were capped by a 0.10m to 0.20m thick brickearth slab [906]=[1519]=[1408]=[1525]=[1524]=[1527]=[1055]=[1057]=[1498] (not illustrated). This covered an area c.11m north-west south-east by c.5.8m within Area B and continued into Area A2 as [931]. The redeposited brickearth contained few inclusions of cultural material; pottery retained gave a date range of AD 70-100/160, and several examples of Pedalis/Lydion brick were recovered from [1055]. The extent of the slab and relatively level upper boundary at 1.88m OD suggested it may represent a former surface. The discovery of three variants of tegulae at the upper horizons of [1527] may support this interpretation (Appendix 11).

- 7.6.7 A second linear, drainage feature [1511] truncated the brickearth slab from 1.81m OD. This followed the same alignment as earlier feature [1541] albeit 1m further south, and extended over 2.6m in length by 0.6m in width with near vertical sides and a flat base. Similarly to [1541], this feature was truncated by a post-medieval cess pit to the west and by modern intrusions to the east. A loose deposit of naturally accumulated orange-brown silty sand [1510] filled the drain, and contained late 1st century pottery dating between AD 70 and AD 90. A discrete dump of redeposited brickearth [1502] measuring c.1.2m in diameter by 100mm thickness capped the drain. Pottery with an AD 50-100 date range, and building material dating between AD 50 and AD 80, was recovered from the latter and may suggest a relatively rapid infilling of [1511] following its abandonment.
- 7.6.8 Abandonment of the drain was followed by an episode of dumping and levelling, mainly concentrated to the east of the excavation area. Mixed deposits of CBM rubble [1496] were overlain by mortar-rich levelling [1497] and silty-clay rubble and ash [1407]=[1471], [1479] and [1461] in turn. These were recorded from c.1.90m OD and raised the ground level by approximately 0.20m. Pottery retrieved from these dumps gave an AD 70 to AD 160 date range. Discrete, isolated dumps of comparable material [1517]=[903], [1518], [904], [905], [1513] and [1371] were encountered across the remainder of the excavation area. Pottery recovered from deposits [1517] and [1371] was dated to AD 50-100 and AD 70-100 respectively.
- 7.6.9 Earlier dumping was overlain by a c.5m by 2.4m trampled occupation surface [1441]=[1406] which extended into the eastern limit of excavation. The deposit comprised a greenish-brown clay-silt, and was considered to represent a series of thin surfaces overlying dumped material, with evidence of bioturbation and exposure at the lower boundary of the layer (Appendix 19, S605). Cultural material recorded within the matrix of the surface included oyster shell,

animal bone, pottery dated between AD 120-150, building material with an AD 55 to AD 160 date range, and fragments of vitrified hearth lining. This was truncated to the west by a small circular pit [1446]. The pit measured 0.50m in diameter by 0.15m in depth with vertical sides and a flat base. This had been deliberately backfilled by a coarse sandy silt [1445] containing building material and gravel. The brick and tile fragments were dated between AD 55 and AD 160 and pottery retrieved from the fill gave a comparable AD 120 to AD 160 date range.

- 7.6.10 Pitting attributed to this phase was also evident within the western limits of the area. Partially exposed cut [1056] appeared to be sub-circular in plan, extending over 2.10m in diameter by 0.31m depth with gradually sloping sides and a flat base. The pit had been deliberately backfilled by sandy silt deposits particularly rich in mortar, brick and stone indicative of demolition material. Primary fill [1401]=[731] contained pottery dated between AD 90 and AD 100, a folded copper sheet (SF101) and building material, including a Lydion brick and tegula mammata, dated AD 55-160 with some residual mid 2nd century material. Upper fills [1402]=[1042] contained large mortar fragments potentially derived from a demolished floor surface but was otherwise relatively clean of cultural material.
- 7.6.11 A particular concentration of postholes was identified in the north-west of the excavation area and may imply a continuation of building following the abandonment of the earlier brickearth partition. Stakehole [1492] and postholes [1495] and [1476] followed a roughly north-east south-west alignment and all appeared rounded in plan, with near vertical sides and a concave base. These extended 90mm, c.0.35m and 0.40m in diameter and had been backfilled by naturally accumulated silty-sand ([1491], [1494] and [1475]). A slight change in alignment / function of the area was indicated by the excavation of two larger postholes [1486] and [1488] which extended on the same north-east south-west alignment from north to south respectively. These features continued beyond the western limit of excavation, measured c.0.50m in diameter by 0.12m in depth and had been backfilled with silty clay packing material [1485]/[1487] containing large fragments of building material (dated from AD 55-160). Pottery dated between AD 50 and AD 100 was recovered from the fills.
- 7.6.12 A thin, 100mm thick, dumped deposit of clay-silt rich in ash and charcoal [1468] sealed the upper fills of the cut features and was in turn truncated by posthole [1456] and pit [1490]. Pottery and building material recovered from [1468] were found in association with a possible coprolite (Appendix 20, S547) and respectively dated from AD 70-100 and AD 55-160. Circular posthole [1456] extended 0.30m in diameter by 80mm depth, and was filled by [1455], the heavily degraded remnants of a post, with a number of burnt bones possibly indicative of opportunistic disposal of kitchen waste (Appendix 14). The posthole overlay the footprint of an earlier feature, and may therefore represent the replacement of [1495]. Pit [1490] measured c.1.10m in diameter and appeared sub rounded in plan. Naturally accumulated silty clay [1489] filled the pit and was sterile of cultural material.

7.6.13 Dumped deposits of green sand [898] and mortar-rich demolition debris [976] and [982] were encountered within Area A2 and attributed to this phase. These were located to the immediate north of the sequence of postholes described above and raised the ground level by 0.20m to c.1.98m OD. Pottery recovered from [982] was dated between AD 70 and AD 160, and building material retrieved from dumped sand layer [898] was assessed as having an AD 50-250 date range.

7.7 Phase 3e: Roman Early 2nd Century (Fig. 9)

Areas A1 and A2

7.7.1 This phase is largely defined by the construction of a masonry building, of which at least four rooms were identified. It should be noted that the walls and the majority of levelling deposits pre-dating their construction were not fully excavated or revealed due to project depths.

7.7.2 The earliest deposits attributed to this phase comprise a series of levelling/ground raising layers encountered in the north of the excavation area. Layers [1567], [1569]=[1570] and [1572] were all identified at c.1.20m OD and covered a combined area of 3.8m north-west by 1.3m south-east. These comprised loose deposits of sand and silty-clays and contained occasional fragments of pottery with an AD 50-160 date range. Partially exposed pit [1564] was left in situ, and measured c.1.94m diameter and truncated dump layer [1572]. Fill [1563] similarly remained unexcavated and comprised yellow brown sandy-clay, from which fragments of pottery and building material were recovered, and dated between AD 50 and AD 160. The function of the pit remains unclear.

7.7.3 All previously mentioned levelling deposits were truncated by the construction of wall [525]. The wall survived to an uppermost elevation of 2.36m OD and was constructed using red Bessalis bricks, of which four courses remained, over a ragstone foundation, bonded with a yellow-grey sandy mortar (Section 47, Fig. 22). Wall [525] appeared 'H' shaped in plan and extended to a maximum of 3.40m north-east south-west and 10.60m north-west south-east by c.0.60m in width. The construction cut was identified along the northern and eastern faces only as cuts [1574] and [1566] respectively. These extended 0.53m and 0.30m from the internal faces of the wall and had been backfilled by stone-rich packing material [1573] and [1565]. Pottery fragments recovered from the latter were dated from AD 50 to AD 100, and building material derived from both backfills dated between AD 55 and AD 160.

7.7.4 The fragmentary and heavily truncated remains of wall [516] were identified to the south of [525]. This was constructed from Pedalis/Lydion and Bessalis bricks over a ragstone foundation, bonded with a hard reddish-yellow sandy mortar. Wall [516] formed the southern boundary of Room 3, with the northern, eastern and western limits of the space bound by [525]. The space extended 4m by 2.4m, with the only traces of a former floor surface being

inferred by scarring along the south face of [525] at 2.10m OD. The upper limits of the foundation courses for both walls were recorded at 2m OD.

- 7.7.5 Room 2 was located to the immediate north of Room 3, bound to the south, west and east by wall [525], and extended beyond the northern limit of excavation. The space extended c.4.3m north-west south-east by over 1.6m in width, as seen. The room, and construction cut backfills were sealed by a 0.33m thick levelling deposit of yellow-brown clayey-sandy silt [1509]. This contained a wide variety of cultural material including pottery dated from AD 70-90, building material dated from AD 55-160 and Roman glass. Also recovered from the layer were six coins (SF160, SF161, SF162, SF163, SF164, SF165), a rectangular copper buckle frame (SF166), copper needle (SF167), copper wire/hook of uncertain function (SF168) and melted lead waste (SF169). Three of the six coins were roughly dated to the 1st to 2nd centuries, one was unclear and two were 1st century (Domitian AD 86 (SF163) and Nero AD 66-69 (SF161)). It is also noteworthy that the layer contained a large amount of undiagnostic iron slag, presumably redeposited from elsewhere.
- 7.7.6 Rooms 1 and 4 were located in the north-west and south-west of the excavation area respectively. Room 1 was bound to the east by the northern projection of [525] and to the south by wall [555], the northern and western limits of the space continued beyond the limit of excavation. The room covered an area of c.5.25m north-west south-east by over 1.8m in width. The earliest identified deposits relating to the function of this room comprised ground raising/levelling layers [1546] and [1539] in turn. These deposits of green-grey sandy silt and gravel raised the ground level by c.0.25m. A small copper needle (SF181) was recovered from the latter deposit, in combination with pottery dated from AD 100-120. Earlier deposit [1546] contained pottery and building material with an AD 120-160 and AD 140-260 date range. Both layers were overlain by a rough mortar surface [1535]=[1536]. The surface was identified from an uppermost elevation of 2.11m OD but noticeably undulated with a general downwards slope towards the east to 1.75m OD. It is possible that the undulations and slope may be attributed to slumping. No dateable material was recovered from either deposit.
- 7.7.7 Wall [555] delimited the northern boundary of Room 4 and was constructed in a comparable method to other walls attributed to this phase. The wall was aligned north-west south-east, and continued beyond a modern truncation to the west as [579], and to the south into Area A2 as [916]=[933]. The construction method of upper courses of Bessalis brick capping a foundation of roughly hewn ragstone was comparable to walls [525] and [516]. Three courses of brickwork survived to an uppermost elevation of 2.51m OD, but due to project depths neither the full depth of the foundations nor any associated construction cuts were exposed. Furthermore, the vertical joint between [525] and [555] meant that it is impossible to determine with any certainty which wall was constructed first. Despite the comparable construction technique, wall [555] differed significantly in appearance from other examples of masonry

attributed to this phase. The wall bound an area with a round internal area, and squared external faces, forming a thick insulating boundary.

- 7.7.8 The construction of [555] was followed by the installation of brick floor [658]=[5] within Room 4. This was recorded from 2.24m OD and exhibited a distinctive southern slump, possibly caused by the installation of post-medieval walls to the south. The red brick floor was bonded with a soft, grey-brown silty clay and comprised one course of bricks, 20mm in thickness, over a 10mm thick opus signinum bedding layer. A second curvilinear wall [589] was constructed directly over the floor and extended 0.45m in width, with a maximum of 8 courses of brickwork remaining. The bricks were predominantly laid in stretcher bond using a compacted yellowish-pink sandy mortar. A distinctive lip/moulding was evident at the base of the wall directly sealing the brick floor (Plates 3 and 4). Slumping also impacted upon this feature and parts of the wall were cracked as a result. The construction of these inner walls against [555] gave Room 4 its distinctive circular appearance in plan, which extended c.4.9m in diameter (Plate 5). Building material retrieved as samples from [916] and [933] indicated an AD 55-160 date range. Activity and use of this space was suggested by a thin patina of limescale which covered the majority of the brick floor, and lipped up the southern face of [589].
- 7.7.9 Additional evidence of occupation was encountered within the Eastern Sondage of Area A2 and comprised a series of successive floor surfaces and cut features. The earliest feature attributed to this phase was small round posthole [857], 0.45m in diameter by over 0.26m depth. The base of this feature was not established due to project depths. A deliberate backfill of clayey silt and rubble [856] filled the posthole, from which fragments of pottery and building material dated between AD 50-100 and AD 55-160 were recovered. It is unclear what this posthole relates to. This feature was sealed by a c.0.12m thick dump of levelling material [859]/[848], consisting of yellowish-brown sandy silt. Pottery and building material recovered from the latter deposit was dated from AD 70-100 and AD 140-250 respectively, and included a rare example of a tripod bowl. Burnt horizon [850] sealed the southern limits of the sondage at 1.84m OD and appeared clean of cultural material.
- 7.7.10 Several extremely ephemeral/degraded opus signinum surfaces, [959] and [958], overlay the burnt horizon and were identified in section at 1.85m OD and 1.99m OD respectively. No dating evidence was retrieved from either deposit. However, these were separated by a 0.13m thick sandy silt occupation layer [849] from which pottery, high status building material (Purbeck marble wall veneer/inlay, Appendix 12) and a coin (SF46) were retained. These were dated from AD 120-140, AD 55-160 and AD 96-99 respectively. Mortar surface [830] was more substantial and covered a 0.64m by 1.1m area and extended 0.15m in thickness. This was identified in the south of the excavation area and may be associated with [958]. Pottery fragments dating between AD 50 and AD 100 and building material with an AD 55-160 date range were recovered from the surface.

Area B – Phase 3e(i)

- 7.7.11 The earliest deposits ascribed to this phase were a series of sandy gravel/mortar [1500]=[1054], [1005], [1249], [902] and [994] levelling deposits overlain by brickearth [1188]=[1247], [1261], [1262], [1516]=[901] and [730]. These extended across the majority of the excavation area and raised the ground level by a combined depth of c.0.30m and c.100mm respectively. Gravel layer [1249] may represent a rough surface, confined to the eastern limits of the study area and contained fragments of high status building material (parts of a Purbeck marble paving slab, Appendix 12), lenses of ash rake out (Appendix 19) and pottery consistently dated from AD 120 to AD 140, including one ceramic cylinder possibly deliberately fashioned into a phallus (Appendix 3). Two parallel lines within the gravel surface set c.0.40m apart and aligned north-east south-west may be wheel ruts. It is noteworthy that [1249] contained the highest number of tesserae from the site (Appendix 12), which may have originally overlain the surface. Cultural material retained from discrete deposits of sandy-gravel, were similarly dated to no later than AD 150. By contrast, the brickearth layers were generally clean of dateable material. Deposits [1516], [1262] and [730] were the exception to this, and included pottery dated from AD 70-120/AD 100-150, contemporary building material, including high status material such as Purbeck marble floor tile, a copper waste block (SF125) and cessy lenses (Appendix 19). Remnants of a red tiled floor [1248] capped brickearth [1247] within the same area as rough gravel surface [1249]. The tiles had been set directly into the brickearth, with no evidence of bonding material. The fabric of the tiles was dated between AD 50 and AD 250, and it remains unclear what area these had originally extended to.
- 7.7.12 Indications of a former building were identified in the west of the area. Construction cut [1506] appeared linear in plan, extending 2.80m in length along a north-east south-west alignment, by 0.66m in width, and it is possible that the wall returned to towards the west at its southern limits. The base or full extent of this feature was not established due to later truncations and project depths. Foundation material [1422] comprised roughly hewn Ragstone fragments within a yellow sandy mortar, and extended to an observed depth of 0.25m. The construction of this wall roughly defined an area over 2.2m north-east south-west by over 1.10m in width (Room 5). The entirety of this internal area was subsequently overlain by dump layers [1451] and [1436] in turn. These deposits extended to a combined depth of 0.15m and consisted of greenish-grey clayey silt and sand containing mixed cultural material such as oyster shells, charcoal, pottery and building material. The fragments recovered from these deposits contained building material of comparable AD 55-160 date, whereas the pottery from the primary layer dated between AD 70 and AD 100 and that of upper deposit [1436] dated between AD 100 and AD 120.
- 7.7.13 A potential change in use/function of the area external to the building was indicated by a number of pits which truncated earlier gravel surfaces/levelling. Circular pit [1466] extended

0.60m in diameter with concave sides. This feature was at least 0.33m in depth and had been deliberately backfilled with friable sandy silt [1465] which contained large quantities of demolition material, including painted wall plaster fragments, mortar, occasional tesserae, glass, building material, animal bone and pottery. The pottery recovered from backfill [1465] dated from AD 120-160 and the building material gave a comparable date range of up to AD 160. Fill [1465] was overlain by a 4.20m by 2.20m burnt horizon [1444] which extended up to Room 5. Among the few finds retrieved from [1444] were a bone needle (SF145), tesserae and pottery dating between AD 70 and AD 160.

7.7.14 A number of isolated postholes were identified to the south-east, [1425] and [1392], of uncertain function. These measured c.0.30m and 0.47m in diameter respectively and had naturally backfilled with sandy silt [1424] and [1391]. Small fragments of pottery recovered from the latter dated between AD 50 and AD 100. Posthole [1392] truncated a very partially exposed feature [1432] tentatively interpreted as a pit. This measured c.0.30m in diameter and was similarly backfilled with naturally accumulated sandy silt [1431]. An additional series of stakeholes [1390], [1464] and [1477] were identified at roughly the same horizon. These were c.90mm in diameter and were filled by clay silts [1389], [1463] and [1462] devoid of cultural material. The precise function of these stakeholes remains uncertain.

7.7.15 It is noteworthy that the postholes and small pit described above followed a north-north-west south-south-east alignment mirrored by the spread of overlying dump layer [1184]. This distinctive horizon comprised compacted oyster shells within a silty-sand matrix, with trampled ash deposits possibly from a hearth spread (Appendix 19, S604), and covered an area 3.36m by 3.94m and was 80mm thick. It is also noteworthy that the deposit contained the greatest concentration of oyster shells from any feature across the excavation, which appeared to derive from 'wild' as opposed to managed beds (Appendix 18, S536). Material recovered from [1184] included a 1st to 2nd century coin (SF142) and pottery with an AD 120 to AD 150 date range. The clear, sharp eastern boundary of this deposit and continuity of the alignment of earlier postholes may suggest an ephemeral structure/land boundary once occupied this space. It should also be noted that the alignment differs significantly from the masonry structures attributed to this phase.

Area B – Phase 3e(ii)

7.7.16 Sub-squared pits [1395] and [1359] were located to the east of the excavation area. The larger of the two contained an intrusive 4th century coin (SF140) within a deliberate backfill [1394] rich in demolition material. Among the cultural material recovered from [1394] were pottery fragments dated between AD 90 and AD 100, fragments of opus signinum, a bone hairpin (SF141), a possible crucible (SF174) and building material with an AD 55-160 date range. By contrast [1359] backfilled naturally with [1358] and contained very occasional small inclusions of pottery and building material dated from AD 140 to AD 160.

- 7.7.17 Isolated occupation and cess layers [1189], [1187], [1185], [1260] and [1430] overlay [1184] which were in turn overlain by numerous dumps of levelling material and sandy mortar [1238]=[1179], [1242], [1230] and [1239]. The primary episode of occupational debris covered an area c.4.7m by c.1.2m by 100mm thick and contained material consistently dated from AD 120-150, and a single residual coin (SF144) dating from AD 69-79 (from [1430]). The levelling material comprised a 100mm thick spread of greenish sandy silts and mortar, with pottery inclusions all dated to c.AD 120-160. A small copper brooch, or strip (SF119) was recovered from [1179], in association with fragments of a rare mica-dusted ware vessel (Appendix 3), and large numbers of oyster shells. Further analysis of the latter (Appendix 19, S604) highlighted the presence of land reclamation deposits over a flood horizon. These were overlain by further occupation debris and cess layers [1182], [1191] and [1183]=[1227]=[1237]. Pottery retained from [1183] and [1237] yielded a consistent c.AD 120-150 date range, with mid 1st to mid 2nd century building material. One fragment of pottery retained from [1237] appeared to have been imported from the Rhineland and comprised a bowl decorated internally and externally with red painted stripes (Appendix 3). A bone pin (SF120), and bone needle (SF121) were also recovered from the latter. Pottery dating from AD 150-200 and a copper stud or rivet (SF117) were retained from [1227], but the pottery may represent intrusive material. An additional sequence of gravel levelling [1172] overlain by dumped deposits [1171] and [1170] of sandy silt and mortar demolition material sealed occupation layers to a combined depth of c.100mm.
- 7.7.18 Heavily truncated mortar and gravel surfaces [1041] / [729] were located in the west of the excavation area. These were identified from c.2.20m OD, and contained very few inclusions. Fragments of building material recovered from [1041] inferred an AD 140-350 date range. The higher elevation and later date of the material would suggest these deposits to be part of a separate, later event from gravel surface [1249]. These surfaces were overlain by a series of clayey sand dump layers [1034], [1007], and [996], and burnt deposit [997] to a combined depth of c.0.20m. The pottery recovered from layers [1034] and [1007] was consistently dated between AD 50 and AD 160.
- 7.7.19 Ground raising deposits and surfaces were truncated by pits [967] and [987]=[1033] in turn. Both pits were heavily truncated making it impossible to determine their original dimensions. Pit [967] exhibited vertical sides and continued in depth over 0.45m and beyond the limit of excavation. This had been backfilled sequentially by clay-silt with burnt debris [978], and silty-gravel [966] and [965]. Earlier fill [978] contained a pre-Flavian 1st century coin (SF91), and roughly contemporary pottery and building material dated to AD 70-100 and AD 55-160 respectively. Pottery recovered from upper fill [965] inferred a later date range of AD 120-250 and was truncated to the south by [987]. The latter pit continued to the south as [1033] and measured 2.87m long by 0.70m wide and 0.39m deep. Primary fills [1013] and [1003] appeared to represent natural accumulations of silty-clay and sand. These contained a small fragment of intrusive 3rd century pottery and building material dating from AD 55-160 and

fragments of vitrified hearth lining (Appendix 10). The remainder of the pit had been backfilled by sand and charcoal rich deposits [1001], [1002], [1000] and [986]=[1403] in turn. The only deposit to yield dating material was upper fill [1403] which contained pottery fragments dating to AD 50-100. The pit was subsequently capped by a small dump layer of sandy silty clay [977] which contained pottery with an AD 120 to AD 400 date range.

7.7.20 The entire sequence was overlain by a number of burnt deposits rich in charcoal, [900]=[1515], [1190]=[1159] and [1236]. These were all identified from c.2.10m OD and were generally clean of cultural material. Pottery fragments recovered from [1236] were dated between AD 120 and AD 160.

7.8 Phase 3f: Roman Mid/Late 2nd Century (Fig.10)

Area A1

7.8.1 Modifications to pre-existing Rooms 1, 2 and 3 were attributed to this phase. The greatest changes were evident within Room 1 in the north-west of the building complex. The ground level of the Room was initially raised by 0.30m by dumped deposits of sandy silt and brickearth [1529] and [1526]. Pottery dated from AD 50-70 and AD 70-100 was recovered from each layer respectively. Other finds of note included a small copper object of uncertain function (SF170) from [1526].

7.8.2 Irregularly shaped, flat based cut [1377] truncated the eastern limits of [1526] and extended to the northern and western internal faces of walls [555] and [525]. This formed the construction cut for the installation of structure [1372] (Section 38 Fig. 22; Plates 6 and 7). Structure [1372] comprised a foundation course [1512] of Pedalis/Lydion bricks, overlain by a Lydion and opus signinum base [1440], which contained Tegula Mammata, and in turn was sealed by bounding Pedalis/Lydion and Sesquipedalis brick walls [1442] and [1443], and finally capped by a tile cover slab [1447]. The structure extended 0.85m in width by 2.17m length, with an internal width of 0.24m. One course of [1512] and two courses of [1440] survived, and utilised building material with a consistent date range of AD 55-160. The insertion of the lower course was followed by the dumping of grey-brown sandy silt [1376] as construction cut backfill. This mixed deposit contained frequent mortar fragments, 1st century pottery (AD 50-100) and building material dating between AD 55 and AD 120. Walls [1442] and [1443] bound the eastern and western limits of the structure and extended 0.30m in width, of which four courses survived, laid in regular course, bonded with hard pinkish mortar with chalk inclusions. The cover slab was formed by one course of irregularly shaped/broken red Sesquipedalis bricks, bonded using an off-white mortar containing chalk inclusions.

7.8.3 Following the construction of drain [1372] the remainder of the room was levelled with large angular rocks as packing material [1375], secured in place with fine, sandy silt. A copper medicinal spatula probe (SF129), a Vespasian coin (SF143, AD 69-79) and pottery dated

from AD 70-100, including fragments of a rare pulley-rim flagon, were recovered from the silt. An accumulation of black-brown silt [1374] was excavated from within the drain, and presumably represents a build up of material during the use of [1372] as well as material that accumulated following its abandonment. Finds of note recovered from [1374] including large numbers of tesserae, pottery dated between AD 100 and AD 160, copper wire and pin (SF150, SF151), a bone pin (SF152) and a copper object of unknown function (SF153).

7.8.4 Activity within Room 2 at this time was limited to robbing and ground raising. Potential robbing cut [1595] was identified in section and appeared to trench along the internal, northern face of wall [525], to a maximum width of 100mm. This truncated earlier ground raising deposits and had been backfilled deliberately with a firm deposit of silty-clay, clean of cultural material [1596]. The cut was sealed by an 80mm thick deposit [1533] of comparably clean silty clay, and the entirety of the room overlain by surface [1493]. Opus signinum surface [1493] measured 40mm in thickness from 1.65m OD and displayed a slightly uneven upper boundary, which appeared to lip up towards the west and south. This discrepancy in surface level may indicate the presence of former surface treatments along the internal faces of wall [525] which have since been removed. Small fragments of building material recovered from within the make-up of the surface were dated between the mid 1st and mid 2nd centuries.

7.8.5 The function and use of Room 3 remains unclear. Features attributed to this phase include a series of heavily truncated pits and an ephemeral layer of ground raising material. Pits [1481], [1638] and [1472] were only partially excavated and exposed, meaning their function and full dimensions cannot be estimated with any certainty. All were filled by deposits of brown silty-clay with few inclusions [1482], [1637] and [1473]. A few fragments of building material with an AD 140-250 date range were recovered from the latter, but given the lack of excavation, it is unclear whether this represents intrusive material. Levelling [1452] sealed the upper fills of the pits and comprised a 0.25m thick layer of sandy gravel, presumably intended to cap the pits and raise the ground level. Mid 1st to mid 2nd century building material and pottery dated between AD 50 and AD 100 were recovered.

Area A2

7.8.6 No archaeological features from this area were ascribed to Phase 3f. Clay levelling material [44] was however identified in section during Area C excavation works to the immediate west of Areas A1 and A2. This material was overlain by an opus signinum surface [50] from 2.19m OD and would correspond to this phase of modifications to pre-existing rooms.

Area B – Phase 3f(i)

7.8.7 All activity attributed to this phase was confined to the eastern limits of the excavation area, and constituted two phases of drainage, or changing land use. It is therefore unknown

whether Room 5, in the west, remained in use at this time. The earliest feature ascribed to this phase comprised rough gravel surface [1224] (not illustrated), which contained no cultural material and was overlain by occupation debris [1219]. The latter was particularly rich in charcoal, but contained no cultural material. These were subsequently truncated to the south by the excavation of a square (2m wide by 0.66m deep) cess pit [1418], which exhibited vertical sides and a flat base. Organic rich fills [1417] and [1405] of silty clay and green sand suggested a gradual accumulation of material. Upper fill [1405] contained a much greater concentration of debris, including oyster/mussel shells, mortar and CBM, and may represent a deliberate capping of the cess below. Pottery dated between AD 50 and AD 150 was recovered from primary fill [1417] and 2nd century building material was retained from [1405].

- 7.8.8 The location of a cess pit in this location, may suggest that surfaces ascribed to this phase were external. Two roughly linear cuts were identified immediately adjacent to the cess pit and are of uncertain function. Both cuts [1460] and [1245] were filled by organic rich silt [1459] and [1246], and followed the same north-east south-west alignment. The former was excavated with vertical sides of the same length as the cess pit. Later cut [1245] by comparison extended 0.58m in length by 0.40m in width. Later fill [1246] was clean of cultural material, but numerous small finds and pottery were recovered from [1459]. These included a glass bead (SF146), melted copper alloy waste (SF147, SF148, SF149) and pottery dated between AD 50 and AD 140. Cuts [1460]/[1245] may represent re-cuts associated with the cess pit, or an entirely different scheme or works, such as a truncated beamslot.
- 7.8.9 Sub-circular pit [1243] / [1429] truncated the upper limits of all previously discussed cut features and measured c.1m in diameter with gradually sloping sides and a flattish base. Silt deposits [1244] and [1428] rich in gravel and pea grit had been utilised to deliberately backfill the pit. Fill [1428] yielded 1st century pottery (AD 50-100) and building material with an AD 55-160 date range.
- 7.8.10 Discrete dumps of ground consolidation and levelling material [1259], [1216], [1228], [1236], [1163], [1178] and [1233] were identified throughout the area at c.2.30m OD. These were represented by sandy silt deposits with variable quantities of cultural material. Pottery retained was consistently dated to c.AD 120-160 and fragments of building material from AD 55-160 (from [1228], [1236], [1163], [1178] and [1197]). Melted copper waste (SF118) and radiate (SF27) were recovered from [1228] and [1178] respectively. The latter coin, however, was dated from AD 250-296 and may represent intrusive material. Layer [1228] similarly contained intrusive 3rd century building material; both features were heavily truncated and located adjacent to the limits of excavation. A further find of note was a fragment of pottery with evidence of graffiti.

- 7.8.11 Levelling deposits were overlain by sandy mortar [1258] / [1158] / [1232]=[1234] / [1197] which were interpreted as the remnants of former surfaces, or the bedding layers associated with a surface. These were identified from c.2.40m OD, were between 20mm and 100mm thick and were generally clean of finds. The few fragments of pottery and building material recovered (from [1159] and [1232]) were contemporary to the levelling layers described above.
- 7.8.12 The area was sub-divided by the excavation of linear cut [1165] to the east. This extended over 1.14m in length by 0.52m in width and 0.20m in depth with near vertical sides and flat base and followed a north-east south-west alignment. A deliberate backfill [1164] rich in mortar and gravel filled the cut. Within the deposit were fragments of pottery dating from AD 120 to AD 160. Initially interpreted as a drainage feature, the cut may equally represent a beamslot and could have functioned with [1460]. This would have created a space over 4.7m length by 1.97m width. A heavily truncated posthole [1162] was identified to the immediate west of [1165], and may have been associated with the beamslot's construction. No dating evidence was recovered from the sandy gravel backfill [1161].
- 7.8.13 The space was subsequently overlain by levelling/occupation debris [1231] and gravel surfaces [1223], [1214] and [1150] in turn. These deposits contained pottery with an AD 150-250 and AD 140-160 date range. Burnt deposit [1222] covered a 1.02m by 0.57m area, directly over gravel surface [1223]. This contained mid 1st to mid 2nd century pottery fragments and was rich in charcoal and oyster shells. No indications of scorching were visible below or in close proximity to the deposit and it was therefore interpreted as a discrete dump of burnt material.
- 7.8.14 A series of intercutting pits ([1226], [1221], [1217]) of mixed functions truncated earlier surfaces and levelling deposits. These all measured c.0.50m in diameter and had been backfilled by organic silty deposits [1225], [1221] and [1218]. No dateable material was recovered from the backfill of cess pit [1221], but pottery dating from AD 120-150 and AD 50-100 was retained from fills [1225] and [1218] respectively. A small spread of levelling material [1212] rich in oyster shells capped the pit fills.

Area B - Phase 3f(ii)

- 7.8.15 A second phase of use attributed to this phase was demarcated by the excavation of a west-north-west east-south-east aligned drainage feature [1204]. This measured 3.66m in length by 0.42m in width and 0.26m in depth with vertical sides and a flat base. The base of this feature exhibited a distinctive downwards slope from north-east to south-west, falling in level over 0.16m from north to south, and had been lined with wood [1210] 100mm thick. The wood was too poorly degraded to be able to retain any fragments for further analysis. Green-brown silty-sand [1203] and silty clay [1202] filled the remainder of the cut, and were distinctive in profile. The discrete, rounded boundary between the deposits suggested that

[1202] filled an earlier void, perhaps one created by a pipe, with [1203] and [1175] representing the packing material. The only dateable material derived from the latter and comprised AD 100-150/140-160 dated pottery, Roman glass, a bone gaming counter (SF114) and copper plate fragment (SF116).

- 7.8.16 No further surfaces or occupation horizons were attributed to this phase. It appears that activity was limited to isolated pitting and dumping. Silty clay dump layers [1213]=[1192]=[1157] contained burnt material, but were clean of finds, and overlain by mortar and opus signinum rich sandy dump layer [1140]. The latter was also clean of dateable material. Irregular pit [1147] truncated the upper horizons of [1140] and extended 0.65m by 0.48m by 0.17m in depth. This had been truncated to the north by later robbing and filled entirely by silt and burnt clay [1141]. In turn, the pit was sealed by a 100mm thick dump layer of silty gravel [1125]=[1139].
- 7.8.17 Truncated pit [1229] was located in the south-east of the excavation area, and measured 1.70m by 1.04m by 0.39m in depth. The western edge of the pit was sharp and suggested the full shape of the feature to be either squared or linear. It is noteworthy that the pit truncated earlier beamslot [1165] and also mirrored its north-east south-west alignment. Deposits of dark brown, organic rich sandy silt [1030]=[1031]=[1032] filled the pit. Small fragments of 2nd century building material and pottery dated from AD 120-140 were recovered from [1030]. Further analysis of [1030] (Appendix 19) highlighted this to have been comprised of numerous fine layers containing traces of copper.

7.9 Phase 3g: Roman Late 2nd Century (Fig. 11)

Area A1

- 7.9.1 North-west south-east aligned robbing cut [1439] was trenched along the northern face of wall [555], and measured 0.18m in width by 0.13m in depth. In profile the cut displayed gradual sloping sides and a concave base, and had been backfilled with sandy-clay and gravel [1450]. The latter contained inclusions of 1st century pottery (AD 70-100) and mid 1st to mid 2nd century building material. The cut was interpreted as one related to robbing facings from the southern boundary of Room 1 and may indicate a change in use/function of the space.
- 7.9.2 Levelling deposits [1530]=[1347]=[1396] sealed the entirety of the Room 1 in turn. These layers of green-grey sandy silt extended 50mm in depth and were clean of cultural material. The levelling deposits were overlain by an opus signinum and tile feature [1373] and opus signinum surface [507] in turn. Deposit [1373] was interpreted as the heavily truncated remnants of a flue or water channel 0.29m in width, constructed following the abandonment and disuse of earlier structure [1372]. Red tiles created a flat surface at c.2.04m OD and were laid over a 50mm thick deposit of crushed pottery and rounded pebbles bonded with lime mortar. Several intrusive fragments of building material dated from the 12th century

were recovered from this deposit, but are likely to have derived from later medieval and early post-medieval construction to the immediate north. Opus signinum surface [507] was identified from 2.65m OD and extended up to 0.50m in depth. This was covered with impressions of tiles that had been pressed into the surface, two of which suggested these to have been tegulae (Appendix 13). Some of the impressions lay at different levels which suggested that the opus signinum may have formed a base for a tile and mortar structure.

7.9.3 Modifications to Room 2 were also attributed to this phase. The earliest feature comprised a 0.10m thick levelling deposit [1467]=[1308] of silty clay that contained a number of copper objects. A copper tubular object (SF155), a tapered copper object of uncertain function (SF156) and bone needle (SF157) were recovered in association with pottery dated from AD 70-150 and mid 2nd to 3rd century building material, including a small group of painted plaster fragments which illustrated some variety in terms of both colour combination and design (Appendix 13). This deposit may alternatively represent occupational debris/trample following the installation of opus signinum surface [1493] attributed to earlier Phase 3f. Comparable levelling deposits [746], [1291]=[1316] and [1292]=[1317] were encountered during underpinning works to the immediate north and therefore ascribed to this phase. Pottery recovered from [1291] dated from AD 70-100 with some intrusive 3rd century building material. Further environmental analysis of [1292]=[1317] suggested these to represent the highly subsided remnants of a Fe-P stained clay floor (Appendix 19, S538). The subsidence was quite pronounced with the upper horizon sloping from 1.52m OD to 1.46m OD from west to east. A small fragment of pottery with graffiti was also recovered from this horizon, dated from AD 50-80, in association with mid 2nd century pottery and building material.

7.9.4 Robber cut [1470] truncated the upper limits of [1467] from 1.85m OD and trenched along the eastern and northern faces of wall [525]. The cut extended 80mm in width from the face of each wall, and extended with vertical sides 0.61m in depth to an irregular base. Sandy silt backfill [1469] filled the entirety of the cut and contained pottery inclusions dated from AD 90-100 and mid 1st to mid 2nd century building material. Similarly to robber cut [1439] within Room 1, cut [1470] was interpreted as the robbing of materials which had previously faced the bounding walls. The robbing was subsequently overlain by opus signinum surface [1453]=[745]=[1283]. This 0.11m thick surface covered the full limits of the space and contained building material and pottery fragments dating from AD 55-160 and AD 70-100 respectively. The upper boundary of the surface appeared 'pitted' indicative of wear and tear during its use.

7.9.5 A second phase of use for Room 2 was indicated by the insertion of rock layer [1426]=[1309] sealed by a secondary Opus Signinum floor [1404]=[578]. Levelling deposit [1426] covered the entirety of the space and comprised large, roughly hewn and worked blocks of Reigate stone, evenly spaced, set within a clay-silt. The layer extended c.0.20m in thickness and it was noteworthy that some of the stones were soft and blackened indicating exposure to heat.

Very few fragments of pottery were recovered from the silt between the stones, and were dated between AD 50 and AD 300. A 60mm thick opus signinum surface [1404]=[578] sealed the underlying stones from 2.10m OD and contained mid 1st to mid 2nd century building material.

- 7.9.6 The installation of a possible stone flue [577]=[1370] / [1369] may indicate a tertiary phase of use for the space. Each fragment of masonry was constructed with roughly hewn ragstone fragments with opus signinum and bonded with a brown sandy mortar. Both fragments were bedded directly over surface [1404] and bound the western and eastern respective limits of a flue 0.45m in width, expanding to 1.20m to the north. It is unclear how this functioned with bounding wall [525] to the south. The flue was entirely filled by ash rich sandy silt [1367]. A partially revealed wall fragment [1284] was identified during underpinning works to the immediate north of Room 2. This masonry fragment utilised Lydion bricks bonded with sandy mortar and preserved to three courses in height. This was initially interpreted as an internal wall, but how it relates to the flue, or wider functioning of Room 2 remains unclear.
- 7.9.7 Modifications were recorded within Room 4 during this phase. A brickearth repair [657] was located to the west of the room and extended c.0.70m in diameter by 30mm in thickness. This contained pottery with an AD 150 -400 date range and appeared to seal an area of damage to the underlying brick floor. A very small 0.56m by 0.38m exposure to the west of the circular room exposed an opus signinum surface [757] overlying a bedding layer [761]. The limited exposure and location below a later truncation means that any further interpretation as to how this surface functioned with pre-existing brick floor [658] is extremely difficult. No cultural material was recovered from either deposit with which to help establish date or function.
- 7.9.8 The function of the area to the immediate south of Room 4, within Area A2 remains unclear. Evidence attributed to this phase comprised heavily truncated pit [854], and a series of levelling deposits. The pit had been entirely backfilled by a 0.40m thick deposit of organic clay-silt [853] that contained 1st century pottery and mid 1st to mid 2nd century building material. This was sealed by clay-silt levelling deposit [851] from 2.38m OD. The latter contained building material with an AD 140-300 date range, and was likely to be associated with sand rich levelling deposits [923] and [956] identified to the immediate east. The only deposit to yield cultural material was the former, which contained pottery dated between AD 60 and AD 160.
- 7.9.9 A sequence of burnt deposits [79], [77], [76], [65] and [62] were identified during ground reduction works to the west within Area C. These were separated by numerous deposits of clay and mortar levelling material [48]/[49]/[43]/[63] from an uppermost elevation of between 2.46m OD and c.2.90m OD. An opus signinum surface [52]/[42] sealed these deposits from 2.66m OD and were in turn overlain by burnt debris [41]. In the absence of dating material

with which to refine these interpretations, the respective elevations would be consistent with the Phase 3g modifications to pre-existing spaces, as seen in Rooms 1 and 4,

Area B

- 7.9.10 The presence of masonry buildings were indicated by numerous examples of stone foundations encountered across the excavation area. Ragstone foundations [934] and [847] extended in a north-west south-east alignment, and formed the northern and southern limits of Room 7. These extended to a maximum length of 3.30m by c.0.60m in width, giving an internal space roughly 1.4m by 2.1m, if it is assumed that both features originally abutted wall [1422] to the west. The stones appeared roughly hewn or unworked, and had originally been bonded with a white sandy mortar. These deposits had been severely disturbed by later robbing, but survived within construction cuts [1419] and [950] to a maximum depth of 0.30m. Fragments of building material and pottery recovered from the foundation material were consistently dated from the 1st to 2nd centuries, and a heavily encrusted coin possibly of Vespasian (SF40) was retained from [934] with an AD 69-79 date range. The latter foundation survived slightly better by comparison to [847] and retained clay-silt backfill [949] which contained a few fragments of pottery dating from AD 50-160. A third potential stone foundation [1115] was revealed in the south-east of the excavation area. This utilised comparable ragstone foundation blocks, loosely bonded, and similarly to previously discussed foundations, but followed a more east-west alignment to a maximum length of 0.84m by 0.98m. It is difficult to determine the full extent of this feature, or its function due to the extremely limited exposure and extensive later truncation.
- 7.9.11 A series of dump layers rich in mortar, CBM [989], [988] and [981] or copper [1173] were encountered to the north-west of the area within Rooms 6 and 5 respectively. The former dump layers contained high status building material with an AD 55-160/250 date range, including a white marble string course (Appendix 12), and pottery dated from AD 120 to AD 200. These dumped deposits raised the ground locally by a combined depth of 0.16m. Levelling deposit [1173] filled the entirety of Room 5 and raised the ground level by 0.20m. The sandy silt layer included melted copper alloy fragments (SF112, SF113), a copper button (SF111), 1st century pottery and late 1st to mid 2nd century building material.
- 7.9.12 Numerous deposits of brickearth [1070], [1122], [1097], [1146], [1186], [980], [1160] and [1154] were identified across the site from c.2.40m OD and suggest a widescale effort at ground raising/levelling. Pottery and building material recovered from the majority of the deposits were dated between AD 100 and AD 160, with some earlier, AD 50-100 dated pottery fragments. Deposits [1146] and [980] were clean of cultural material. Brickearth layers [1160] and [1154] in turn raised the ground level of Room 5 by 0.41m, and contained a comparable assemblage of 1st century pottery in association with mid 1st to mid 2nd century building material, and melted copper alloy waste (SF109). Room 5 was subsequently sealed by opus signinum floor [846] from 2.54m OD (Plate 8). This 0.20m thick surface was

notable for the 'pitting' of the upper limits, interpreted as the impressions from hobnail boots. The number of impressions suggested a significant amount of walking on the surface whilst the mortar was still soft (Appendix 13). The quality of the surface however suggested that this was not visible in the finished structure.

- 7.9.13 Activity within Room 6 following the installation of brickearth slab [980] was limited to the insertion of opus signinum floor [1083] and occupation layer [979]. The floor surface covered a 0.84m by 1.12m area and was 100mm thick, and would infer this space to extend over 5m in length (north-west south-east). Occupation layer [979] comprised a friable deposit rich in silt, with very little cultural material. One object of note however was a small bone pin or stylus (SF90).
- 7.9.14 The area to the immediate south of Room 5 was tentatively interpreted as Room 8, but may more likely have been an open area. Evidence attributed to this phase is limited to sand and gravel levelling deposits [995]=[727], overlain by dumped burnt debris [726] and sandy-clay levelling [728] in turn. These deposits extended to a combined depth of 0.32m and contained building material dated from AD 140-260 with mid 1st to mid 2nd century pottery. Further analysis of [728] (Appendix 19, S526) revealed this to be rich in charcoal, possibly a trampled spread of material capping cess. Pit [794] truncated these deposits and was filled by deliberate clay silt backfill [793] containing mortar and possible demolition material. Within the backfill were pottery sherds dated from AD 120-250 and an intrusive coin (SF36) dating from AD 335-341 depicting soldiers and a standard. The pit extended 0.26m in depth with concave sides to a flat base. Substantial truncations to the east and south make interpretations regarding full size and function difficult to establish with any certainty. This pit was cut from roughly the same horizon as adjacent cess pit [623]. Roughly circular pit [623] extended over 1m in diameter with vertical sides to over 1.27m in depth. The pit had been backfilled with organic rich sandy silts [741] / [1400]=[624]=[738] in turn. The only deposit to yield cultural material was upper fill [1400], which contained mid 2nd to 3rd century pottery.
- 7.9.15 The south-eastern extent of the excavation area appears to have been subjected to an increase in activity during this phase. Soakaway [1215] was excavated with vertical sides, measuring c.1.60m in diameter by over 0.40m in depth and was lined with timber [1209], which was heavily decayed. The full depth of this feature was not established. Sandy silt backfill [1211] filled the cut and contained gravels with a number of retouched flint pieces (one of which had a thick piercer-like projection), a dog coprolite (S532), a melted copper alloy waste (SF115), pottery dated from AD 120-160 and 2nd to 3rd century building material. Thin, 50mm-150mm thick deposits of dumped gravel [1208] / [1194] overlaid the southern limits of the upper fill. Both exhibited a greenish tinge indicative of cess and contained pottery with an AD 120-250 date range. These deposits immediately preceded the re-cutting of the soakaway.

- 7.9.16 Cut [1200] appeared sub-rounded with a slightly smaller diameter of 0.95m by comparison to [1215]. The re-cut extended over 0.53m in depth with near vertical sides, and was backfilled with silty-clays [1379]/[1207]=[1378]/[1199] in turn. Pottery recovered from fills [1379] and [1378] dated from AD 170-200 and suggested a relatively rapid backfilling of the feature. Other finds of note derived from [1199] included vitrified fragments of hearth lining, cinder and a number of flint bladelets. The soakaway was then re-cut a second time by [1198]. This sub-squared shaft extended 0.70m in width and over 0.53m depth with vertical sides, and similarly to earlier cuts was not fully bottomed. Organic clay-silt backfill [1196]=[1368] contained very few inclusions of cultural material. A few fragments of pottery recovered, however, and were dated from AD 120-160, and a dog coprolite was encountered during processing (Appendix 20, S530).
- 7.9.17 Isolated dumps of occupation debris [1089]=[1090]=[1148]/[1062] and cess [1201] were encountered across the remainder of the area, and extended between 100m and 150mm in thickness. These mixed deposits of silty-sand contained degraded fragments of pottery dating between c.AD 100 and AD 160, charcoal and very fragmentary pieces of 1st/2nd century building material. Deposit [1062] sealed an isolated posthole [1069] of unknown function. The flat-based posthole extended c.0.33m in diameter, and had been backfilled with sterile silty-sand [1068]. This feature may relate to a structure which extended beyond the southern limits of excavation.
- 7.9.18 A number of surfaces were subsequently lain within this vicinity of the excavation area, and illustrated repeated episodes of activity/wear and tear followed by re-surfacing. Three rooms were identified as 9, 10 and 11. Room 9 was defined primarily by various surfaces and levelling deposits, bound to the west by postholes [611], [613] and [615] which extended along a north-east south-west alignment, from north to south respectively. These squared postholes were filled by degraded wood [610], [612] and [614] respectively, and covered an area roughly 3m by 2m. Primary gravel surface [1180] / [1176] comprised compacted gravel within a silty sand matrix, 70mm thick, and related to this space. Both deposits appeared heavily worn and truncated, and sterile of cultural material. These were overlain by occupation deposit [1181] containing mid 2nd century pottery, and dump layers [1193] and [1169] in turn. Dump layer [1193] comprised a reddish deposit of stone rubble 0.67m thick and contained occasional fragments of pottery dating between AD 120 and AD 200. This discrete dump layer appears to have been backfilling a void or depression caused by an earlier drain, and was overlain by silty sand [1169] which was particularly rich in oyster shell (S528). The latter covered a 1.29m by 1.08m area, 20mm thick, but was clean of cultural material. A burnt horizon of reddish silts and charcoal [1153], [1177], [1156] and [1195] overlay earlier dumping from c.2.37m OD. Pottery dating between AD120 and AD 200 was retained from [1195].

- 7.9.19 Sandy gravel and brickearth levelling deposits [1149] and [1116] prepared the ground for a second phase of surfaces, also within Room 9. A copper object (SF106), copper alloy waste (SF107) and mid 2nd to 3rd century pottery were recovered from the former, and contemporary pottery with an intrusive possible 4th century coin (SF104) were retrieved from the latter. Gravel and mortar surfaces [1092]=[1093] and [1155] covered a 2.45m by 1.80m area, aligned north-east south-west, 50-100mm thick. Pottery fragments retained from [1093] were dated from the early to mid 2nd century (AD 120-150). Additional occupation layers [1079] and [1078] and dumped mortar [1074] demarcated the latest activity within Room 9 dated to the later 2nd century. Pottery fragments retained from these deposits suggested an AD 150-160 date range.
- 7.9.20 Beamslot [1109] demarcated the northern boundary of Room 9 and truncated gravel levelling deposit [1091] which contained pottery dating from AD 120. The beamslot extended 1.18m in length, by 0.20m in width along a north-east south-west alignment, with 60mm deep concave sides to a flat base. Gravelly silt backfill [1110] contained no cultural material with which to help establish a date of abandonment. It is likely that the excavation of this beamslot replaced an earlier division, and therefore despite truncating gravel surfaces [1092] / [1093] / [1155] these also functioned with this boundary. Mortar floor [1104] respected the northern limits of the beamslot, and related to Room 11. The 100mm thick mortar spread was recorded from 2.60m OD, comparable to earlier surfaces, but was clean of cultural material. The full extent of Room 11 is difficult to determine due to extensive truncations and limited excavation. Opus signinum surface [1077] also functioned within Room 11, but was similarly heavily truncated. This was recorded from a comparable elevation to [1104] and may represent a continuation of the latter.
- 7.9.21 Other indications of activity within this space were limited to three stakeholes [1108], [1095] and [1106] which followed a rough north-east south-west alignment. Each stakehole measured between 60mm and 80mm in diameter. No traces of degraded timber were encountered within fills [1107] / [1094] / [1105], which comprised clay silt with very occasional fragmentary Roman pottery inclusions. It is possible that these features relate to a fence line from a later phase of use, or part of an ephemeral internal installation. It is noteworthy that their alignment as a group differs from that of the beamslots and surrounding architecture.
- 7.9.22 Opus signinum surface [1029] was adjacent to gravel surface [1092], within Room 10. This continued beyond the eastern limit of excavation at a comparable elevation to the secondary gravel surfaces and followed their general alignment. A former property/room division is likely to have existed between these two spaces, now inferred by a void rather than any remnants of a structure. The lipping up of an 80mm wide opus signinum sill along the western boundary of the surface supports this. Modifications to the area were indicated by pit [1168] which truncated this division. The flat bottomed pit appeared circular in plan, 0.60m in diameter, and had been backfilled with silty clay [1167] containing oyster shell, a copper

circular mount fragment (SF110) and pottery inclusions dating from AD 120-160. The frequency of mortar fragments towards the upper limits of the fill suggests that an alternative interpretation is that the feature was overlain by floor [1029], which over time created a void, and subsequent slumping of the floor.

7.9.23 Floor [1029] was repaired at least once by the installation of an opus signinum sill [1166]. This repaired and reinforced a small section of the sill to the north with additional opus signinum and red tile packing/support to the east. Occupation layer/surface [1028] of silty-charcoal covered the entirety of Room 10 to a maximum thickness of 20mm. Further analysis suggested this to have been a beaten/domestic floor layer (Appendix 19, S519). The charcoal was particularly concentrated to the north-west of the space, lensing out towards the south. No evidence of heat scarring was evident on the underlying surface however, suggesting this to be a dump of burnt debris rather than evidence of an internal hearth. Heavily truncated pit [1052] was located to the east of the space and may relate to the disuse of the room, or represent a backfilled emplacement. The pit extended over 0.30m in diameter by 0.12m depth, and had been backfilled sequentially by crushed mortar [1051], and CBM rubble [1050]/[1049]/[1048]. All fragments of building material recovered from the backfills dated from the mid 1st to mid 2nd century, and appeared to represent demolition material.

7.10 Phase 3h: Roman Late 2nd/Early 3rd Century (Fig. 12)

Areas A1 and A2

7.10.1 The only features attributed to this phase, were modifications to Rooms 4 and 2. Dumped deposits [668] and [656] in turn sealed the brick floor of the room. These comprised mixed silt rich layers containing fragments of Opus Signinum, mortar, charcoal and pottery, with a combined depth of 0.20m. Pottery recovered from upper layer [656] dated from AD 50-100.

7.10.2 A change in function/use of Room 2 was similarly demarcated by dumped levelling material [564] overlain by opus signinum surface [562]. Levelling material comprised a 0.15m thick deposit of clean silty clay containing no cultural material. The overlying surface [562], sealed the latter from 2.32m OD, extended 0.10m in thickness, and contained occasional fragments of 1st century pottery.

7.10.3 No features within Area A2 were attributed to this phase of activity.

Area B

7.10.4 The earliest activity attributed to this phase comprised a series of pits. Similarly to earlier Phase 3g, the greatest concentration for this activity lay within the south-eastern corner, within the footprint of the timber framed building. Sub-circular pits [1119] and [1065] ranged from 0.66m to 1.45m in diameter and both exhibited steeply sloping sides to a concave base.

These extended to a maximum depth of 0.15m and 0.27m respectively. A dark brown-grey deposit of silty clay [1118] filled [1119] and contained pottery fragments with an AD 120-200 date range, including a rare lamp fragment. Larger pit [1065] had been backfilled with clay silt [1072] and [1064] in turn. Primary fill [1072] contained pottery dated between AD 120 and AD 160, and pottery fragments retained from upper fill [1064] were dated from AD 170-200. Worked oyster valves of unknown function were identified within S525 from [1064].

- 7.10.5 Postholes [1075] and [1152] were also identified at this horizon, of uncertain function. Cut [1075] was heavily truncated horizontally and only extended 50mm in depth to a flat base, by 0.47m diameter. Backfill [1076] comprised gravel rich sandy silt, which contained pottery fragments dated from AD 120-300. Posthole [1152] was located to the south-east of the former and extended c.0.28m in diameter, with 0.20m deep vertical sides to a flat base. An organic deposit [1151] filled the cut and may represent heavily degraded timber with traces of packing material. No cultural material was recovered from the latter.
- 7.10.6 The postholes described above were divided by linear cut [1066]. The irregular base and sides of the cut suggested it to be a gully, perhaps for localised drainage. The feature extended 1.30m in length, along a rough north-east south-west alignment, by 0.40m in width and 50mm in depth. Similarly to the postholes, the shallow depth would also infer some degree of horizontal truncation to the gully. Naturally accumulated sandy silt with a greenish hue [1067] backfilled the gully, and contained pottery inclusions dated from AD 140-200. Dumped deposits of greenish silty sand [1063] and orange clay-silt [1053] sealed the gully and the immediate area with a combined thickness of 0.37m from 2.60m OD. Both layers contained variable quantities of cultural material including animal bone, glass, and metal fragments. Pottery recovered from the deposits was dated from AD 120-150 and AD 120-200 respectively. A potentially intrusive coin (SF98) dating from AD 330-335 depicting soldiers and two standards was found within [1053] and copper wire/melted copper waste (SF102) was recovered from [1063].
- 7.10.7 Additional discrete dump layers were encountered to the east of the excavation area. Reddish deposits of silty sand [1047] / [1084] and clay [1111] were identified from 2.49m OD. These contained a mixed assemblage of painted plaster [1047], charcoal, fragments of opus signinum, mortar, and mussel shells [1084]. Dump layer [1111] was particularly rich in Oyster shells, and contained a few fragments of 1st century pottery. Pottery recovered from [1084] was dated from AD 120-250.
- 7.10.8 Earlier levelling deposits may have been utilised to raise the ground in isolated areas, as preparation for a brickearth slab. The slab [1061] / [1043] / [1015] / [1027] / [1044] / [1046] covered a 4m north-west south-east by 4.2m area with an average thickness of 0.12m. The majority of these deposits were clean of cultural material. Small fragments of pottery and building material were recovered from [1015] and [1027] which dated from AD 120/170-250

and AD 120-160 respectively. The former deposit also contained a small copper alloy plate fragment (SF103).

7.10.9 North-east south-west aligned beamslot [1019] truncated the brickearth slab from c.2.60m OD. The cut extended 1.40m in length by 0.20m in width, and exhibited vertical sides and flat base 0.14m in depth. It is noteworthy that this extends along an identical alignment and in an identical location to the boundary between Rooms 9 and 10, as discussed within Phase 3g. The cut is stratigraphically higher than deposits attributed to either room but demonstrates a continuity of use of these spaces. A deliberate dump of soft clay silt [1018] filled the beamslot, and contained pottery and building material dated from AD 150-160. The brickearth slab and beamslot were subsequently overlain by a 0.15m thick opus signinum surface [845]=[1060] from 2.79m OD. Occupational debris [1059] associated with the surface was only identified to the far south of the excavation area. No cultural material was recovered from the latter organic deposit of silty clay.

7.10.10 Room 5 was modified at this time by the excavation of beamslot [1073]. This linear cut, with vertical sides and flat base extended the full length of the room, as seen, by 0.10m in width and 0.10m in depth. The beamslot truncated earlier opus signinum surface [846] and had been backfilled by orange-grey clay-silt [1024], which was clean of cultural material.

7.11 Phase 4a: Late 4th Century (Fig. 13)

Area A1

7.11.1 Features and horizons attributed to this phase are assumed to post-date the functioning of the masonry structure encompassed by the excavation area, and relates to a period of abandonment. All reference to former room numbers is therefore for ease of location and reference only and in no way assumes that occupation of these spaces continued at this time.

7.11.2 A sub-rectangular pit [1354] was identified to the south of Room 1 to the west of Area A1, and may have partially truncated wall [555]. This extended 1.12m by 0.80m and was 0.49m in depth as seen, the feature was not fully bottomed, nor was it fully exposed in plan due to project depths and modern intrusions. The pit exhibited near vertical sides, and had been backfilled with dark grey-brown clay-silt [1353] containing frequent inclusions of roughly hewn ragstone, chalk, oyster shell, animal bone, building material and pottery. The concentration of building material within the pit suggested it may have been associated with robbing, or utilised to dispose of demolition material. The material recovered from [1353] was consistently dated from the mid 4th century, and included an incomplete coin (SF134) in use from AD 341-348.

7.11.3 Within Room 2, the void to the north of the earlier masonry flue (Phase 3g) was backfilled with dark brown clayey silt [1351]. This deposit contained a mixed assemblage of mortar,

opus signinum fragments, charcoal, oyster shell and pottery, suggesting a combination of demolition and refuse material. Pottery recovered from [1351] was dated from AD 270-400. Pit [1282] was identified in section to the immediate north of the room. The pit had been backfilled by deposits of silty clay [1281] and overlain by occupation debris [1290]. No dateable material was recovered from either the fill or the occupation deposit. These features were therefore attributed to this phase based upon their stratigraphic position and assumption that they post-dated the use of the space and structure as a whole.

- 7.11.4 A small sondage was excavated to the west of Room 4 in order to investigate the area of truncation to the brick floor. As such the nature and full extent of pits [758] and [756] are difficult to establish. Earlier pit [758] appeared sub-rounded, over 0.60m in diameter, with a sloping base and was tentatively interpreted as a robbing cut. A 0.20m thick deposit of dark grey-brown silty clay [759] filled the cut, and in turn was overlain by a 90mm thick dump layer of pinkish clay [760] from 2m OD. Both fill and dump layer were clean of cultural material. A second pit [756] truncated [760] from 1.96m OD and was left in situ. This had been backfilled with sterile silty clay [755].
- 7.11.5 Demolition layer [640] extended across the eastern limits of Room 4 to a maximum thickness of 0.20m. This comprised crushed opus signinum and mortar with inclusions of painted plaster, shell, pottery and building material. The pottery dated from AD 270-400 and building material to the 3rd century. A few fragments of intrusive 10th century pottery were also recovered, but are likely to have derived from one of the many truncations to the deposit. Lenses of natural silt within the deposit inferred this to be a gradual accumulation of debris and collapse. The room was subsequently sealed by a 0.25m thickness of organic sandy silt [664] and dumped sandy clay [591] in turn. These respectively contained pottery dating from AD 250-400 and AD 350-400 with 2nd to 4th century building material and fragments of a smithing hearth bottom (one of only two to have been recovered from the site). It is noteworthy that the largest group of wall plaster fragments from the site was recovered from [591], and furthermore these fragments of single colour blocks showed extensive evidence of renovation (Appendix 13). The latter also contained a contemporary coin of a fallen horseman in use between AD 350 and AD 364 and a bracelet decorated with crenellations (SF6).

Area A2

- 7.11.6 The earliest activity attributed to this phase comprised a series of cut features. Pits [918], [776], and potential postholes [827] and [821] were identified from c.2m OD and extended between 0.60m and 0.95m in diameter. Only [918] was left partially excavated, but all other features exhibited concave sides and flat base. Silty backfill [917] of the latter filled the pit as seen, to a maximum depth of 0.26m. Pottery and building material recovered from the fill inferred a mid 3rd century to AD 400 date range. The remaining cut features were all located to the east of the area. Pit [776] had been backfilled by a primary fill of pinkish gravel and

mortar [881], overlain by silty clay [775] with the combined depth of 0.68m. Pottery recovered from the primary fill was all 1st century, with melted copper alloy waste (SF69), and the pottery and building material from the upper fill was consistently dated from the mid 2nd to mid 3rd century. Postholes [821] / [827] contained clay sand and sandy silt backfills [820] and [826] respectively. Only [820] contained cultural material, pottery and building material dated from the mid/late 1st century to the mid 2nd century.

7.11.7 The immediate vicinity of the postholes was occupied by dumped, levelling deposits. Oyster rich shell midden [806] was overlain by brickearth slab [957] with a combined depth of c.0.30m towards the east of the area. Neither deposit contained cultural material with which to establish date. Sandy clay levelling material [677] and demolition layer [676] were identified in section from c.1.85m OD. Pottery recovered from the latter dated from AD 120-300. A similar sequence of demolition rubble [943] and levelling material [944] was identified within the central part of the excavation area, external to the former boundary of Room 4. Both deposits remained in situ.

7.11.8 Partially exposed linear cut [938] extended over 1m along a north-west south-east alignment to the south of Room 4. The cut was not excavated and had been backfilled with a loose fill of sandy silt [937]. The alignment of the cut mirrors that of the surrounding architecture, and it is possible that this represents a robbing cut, demarcating the southern limits of Room 4. Dumped deposits of brickearth [932] and demolition material [929] lay adjacent to the cut, which was overlain by a 0.30m thick dumped sandy silt [870] from c.2.60m OD. Pottery recovered from [932] and [929] dated from the mid 2nd to mid 3rd century. Dump layer [870] contained slightly later material, and contained mid 4th century pottery in association with mid 2nd to mid 3rd century building material, a bone hairpin (SF88) and a fragmentary coin (SF60) in use from AD 250-296.

Area B

7.11.9 Extensive robber trenches throughout the area suggested the locations and limits of earlier features. These both truncated and were truncated by numerous episodes of pitting. Heavily truncated pits [975], [800] and [1088] roughly followed the line of north-west south-east aligned masonry wall [934], and were cut into a 0.15-0.20m thickness of demolition material [1423], [1004] and [990]=[1006]. The demolition material comprised mortar rich deposits of rubble containing 3rd and 4th century pottery. Sub-rounded and squared pits [975], [800] and [1088] extended c.0.20m in depth and were filled by silty-clay [974], [801] and [1087]. Pottery recovered from [974] and [801] dated from AD 120-300 and AD 250-400 respectively.

7.11.10 Robber trench [868] extended 5.75m in length following the north-west south-east alignment of wall [934] by 0.79m in width and 0.64m in depth. The cut returned to the west to a maximum length of 3.47m north-east south-west and protruded 0.57m to the south at the eastern limits of Room 7. The trench therefore removed the northern, eastern, western and

southern limits of Room 7 and eastern limits of Room 5. The cut also partially defined the north-western corner of Room 11. Trench [804] identified to the east represents the easternmost continuation of [868] giving the robber trench a total combined length of 8.83m as seen. The latter had been backfilled by loose silty mortar [803] containing pottery with a mid 2nd to mid 3rd century date range. Primary fill of [868] comprised blackish silty sand [1386] containing fragments of mid 2nd century pottery and building material with a coin (SF139) dated from the 3rd to 4th century and copper fragments (SF138). A small amount of residual 10th century material was also recovered, and is likely to be intrusive from one of the many modern truncations in close proximity. The backfilling of [868] may have been an accumulative process as opposed to a single event, as suggested by the numerous backfills of clay silt [840], [896], [885], [884] and [799] capped by clay-sand [833]. The date of the material culture was variable ranging from mid 1st to mid 2nd century for the earlier deposits and pottery recovered from [840] and [844] dating from the mid 3rd/4th century to AD 400. The latter fill also contained four coins (SF49, SF53, SF54, SF55), all in use from the mid 3rd century (AD 250-296). Residual earlier material was also evident within [896] by the inclusion of a Purbeck marble moulded wall veneer (Appendix 12).

7.11.11 A dumped deposit of silty-sand [655] sealed the upper limits of [868] from 2.23m OD and contained a 3rd-4th century coin (SF23) in association with contemporary pottery dated from AD 270-400. Rubbish pits [652] and [774] subsequently were excavated along the northern limits of the robber cut, within former Room 6. These may therefore represent secondary robbing events. Both features appeared sub-rectangular in plan and extended to a maximum depth of 0.52m. These had been deliberately backfilled with sandy silt and rubble [651]=[998]=[1362] and [773] which contained frequent inclusions of pottery and building material. Cultural material recovered from [773] inferred a mid 3rd to 4th century date range, and included a coin (SF34) dating from this period. The backfill of [652] by comparison contained cultural material with a wider date range, the pottery tended to date from the late 2nd to 3rd century with building material dated between the mid 3rd to early 4th century. Other finds of note from [651] included thin fragments of copper plate (SF19) and a minim (SF18) in use from AD 350+.

7.11.12 The south-eastern corner of the excavation area contained a series of intercutting rubbish and cess pits, many of which had been heavily truncated by modern intrusions and later features. Pits [814], [717], [1010] and [1112] were only partially exposed due to these intrusions, making their full size/shape in plan impossible to determine. These had been backfilled by accumulated organic sandy silt [813], [716], [1009] and [1113] respectively to a maximum depth of 0.50m. Within the fills were numerous fragments of pottery and building material (Pedalis/Lydion brick) generally dated from the mid 2nd to mid 3rd centuries, in addition to a small copper rivet (SF43) recovered from [813].

7.11.13 Larger sub-rounded rubbish pits [878] and [719] were located in the south-east of the area, with an average diameter of 1.30m and c.0.50m depth. Pit [878] had been backfilled initially with sandy lime mortar [919] and then sequentially by mixed clay-silt and mortar [895], [894], [877] and [876]. The fills contained a mixed assemblage of pottery, building material, metal objects and hammerscale/microslag (from [877]). An iron T-staple (SF89) and 1st century pottery were recovered from primary fill [919], and two 1st century coins (SF86, SF87) were recovered from overlying fill [895]. The pottery assemblage from the remaining fills generally dated from the mid 2nd to 4th centuries.

7.11.14 A number of postholes and stakeholes were identified across the area from c.2.40m OD in the east to c.2.70m OD in the west. Many of these truncated floor surfaces attributed to Phase 3h and therefore demarcate a separate phase of use. Postholes [1011], [808]=[1099]=[1241] and [812]=[1103]=[1388] follow a rough north-west south-east alignment along a total length of c.2m. This alignment matches that of the former southern boundary of Room 7 and may suggest the continuity of an ephemeral property boundary or later phase of occupation. The latter posthole [1241] with adjacent posthole [810]=[1101] followed a north-east south-west alignment, following the former alignment of beamslot [1019] and similarly suggests a continuity of use for this eastern boundary to Room 9. Each posthole was c.0.20-0.25m in diameter and exhibited near vertical sides to a tapered base, indicative of driven posts/stakes. Natural accumulations of sandy silt [1012], [807]=[1098]=[1240], [811] [1102]=[1387] and [809]=[1100] had backfilled each of the features. Many of the inclusions within the backfill were too fragmentary to be able to provide dating evidence. Pottery and small fragments of building material recovered from [1012], [811], [809] and [1100] however were dated from the mid 1st to mid 2nd and mid 3rd to late 4th centuries respectively.

7.11.15 It is likely that Bessalis brick surface [1251]=[832] functioned with the boundaries described above, and was located within Room 9. The surface effectively capped earlier pit [878] from 2.79m OD and extended to a maximum length of 1.60m by 0.60m and 0.20m depth. The surface utilised a sandy lime mortar bonding material and red bricks, the fabric of which dated from AD 55-160. The use of the surface may however have been relatively short lived, as this was truncated by refuse pit [1252]=[796]. The location of this sub-rectangular feature would almost suggest it to be a re-cut of earlier pit [878]. Pit [1252]/[796] extended 1.45m by 1.30 on a slight north-west south-east alignment, was 0.30m in depth with irregularly shaped sides and base. Deliberate backfills of clay-silt and domestic debris [1250] and [795] contained pottery dated from AD 160-250, fragments of vitrified hearth lining, fuel ash slag (S507), and a small amount of 1st century building material from [1250] and mid 3rd to 4th century pottery, and a coin depicting a fallen horseman (SF41) dating from AD 350-364 from [795].

7.11.16 A second grouping of postholes were identified to the west of the excavation area, roughly corresponding with Room 5. Squared posthole [1145] appeared to be associated with

rounded postholes [1127] and [1121] along a north-west south-east alignment. An additional post/stakehole [1143] was located to the immediate south of this alignment and serves an unknown function. These features all exhibited steeply sloping sides to a tapered base and had naturally backfilled with sandy silt [1144], [1126], [1120] and [1142] respectively. Cut [1121] was the largest of the grouping, extending c.0.37m diameter, whereas all other features measured c.0.15m. The only fill to yield cultural material was [1120] which contained small fragments of 1st/2nd century building material. The western limits of the postholes were overlain by a series of occupation ([1023] and [207]) and demolition ([1022] and [1021]) material to a combined depth of 0.18m. Occupation debris [1023] contained a varied assemblage of metal objects including a moulded copper dome (SF92), two copper objects and an iron rod (SF93, SF94, SF95) and an iron nail (SF96). Primary demolition layer [1021] was interpreted as the fragmentary remnants of a collapsed wall, and small fragments of plaster and marble were recovered from the deposit. Bessalis brick [209] and mortar [204] surfaces identified in section from c.2.90m OD adjacent to Room 5 may correspond to a later phase of use for this space.

7.11.17 A number of unusual cut features were recorded within the eastern limits of the excavation area. Intercutting circular cuts [1025] and [1016] in turn, extended c.0.20m in width, with an estimated internal diameter of c.1m (Plate 9). The function of these features remains unknown. Deposits of orange sandy clay [1026] and [1017] filled the entirety of the respective cuts. The later of the two fills [1017] contained occasional fragments of building material and pottery with an AD 200-250 date range.

7.11.18 Garden soil [802]=[700] covered a 5.3m east-west by 2.5m area from 2.80m OD. These 0.15m thick organic deposits contained mid 3rd to late 4th century pottery, a copper object (SF25), copper bracelet with piecrust decoration (SF26) and coin (SF29) dated from AD 350. These were overlain by dumped demolition deposits rich in mortar [1058], [1071] and [699], sand levelling material [899] and a further layer of garden soil [687] from 2.83m OD. The garden soil was the only one of these deposits to yield dateable cultural material, and pottery dated from AD 350-400 and mid 2nd to 3rd century building material were recovered. Additional deposits of garden soils were identified during the Area C excavation works. These deposits ([28], [4], [216], [222], [17], [18], [203] and [220]) extended across the western limit of excavation and indicated a build up of garden soils between 2.40m OD and c.3m OD.

7.11.19 Numerous refuse pits marked the latest activity attributed to this phase. Large squared pit [601]=[911] extended beyond the eastern limit of excavation and was over 1.76m in width, with vertical sides beyond 1.60m in depth. The greenish hue to the silty-sand fills [910], [1340] and [825] may infer this to have been used as a cess pit. Pottery dating from AD 300-400 and a copper strip (SF136) were retrieved from [1340]. In close proximity to the latter, rounded pits [642], [719] and [644] were identified, extending up to a maximum of 2.10m in diameter and 0.44m in depth. All pits had been excavated with concave sides to a flat base

and backfilled with comparable silty clay deposits containing a mixed assemblage of demolition material, pottery and small copper objects. Pottery recovered from fills [641], [718] and [643] dated respectively from the mid 3rd to late 4th century, mid 2nd century and early to mid 4th century. Coins (SF7, SF32) dating from the 3rd to 4th centuries were also recovered from [641] and [718] and small copper objects (SF33, SF28) retained from [718] and [643]. Additional pit [1257] was identified in section only to a maximum depth of 0.33m and approximate 0.55m diameter. This was backfilled by greenish silty clays and sands [1256], [1255], [1254] and [1253] in turn. These upper fills were truncated by a single posthole [790], 0.30m in diameter. Three copper objects (SF64, SF65 and SF66) and late 3rd century pottery were recovered from the silty backfill [789].

7.11.20 Linear cut [875] extended 1.72m on a north-north-east south-south-west alignment by 0.64m with vertical sides to a flat base 0.40m depth. The alignment is slightly off that of earlier walls. This may either represent a beamslot pertaining to later occupation suggested by the posthole alignments described previously, or a robbing trench. This had been backfilled sequentially by reddish-brown silt [873] and grey-blue silt [874]. Pottery recovered from both fills was consistently dated between the mid 2nd and mid 3rd centuries with later 3rd/4th century building material. A coin (SF67) dated to the 4th century was also recovered from the primary fill, and a metal pin (SF68) and copper strip (SF70) recovered from the upper fill.

7.12 Phase 4b: Post Roman 10th/11th Century (Fig. 14)

Area A1

7.12.1 This phase of activity was predominantly represented by intercutting pits, localised to the south-eastern corner of the excavation area (roughly corresponding with former Room 3). The concentration of pits in this area may be significant in itself and explain why so little remained of the former space in terms of surfaces or occupation debris. Intercutting pits [1437], [1434] and [1448] were not fully exposed in plan, nor were they fully excavated. Each feature appeared to be roughly sub-rounded with gradually sloping sides. The pits were filled by silty-clay with sand lenses and refuse material [1438], [1435], [1433] and [1499]. No cultural material was retained from [1449], the remaining fills contained a combination of 1st and 2nd century pottery in association with pottery with an AD 970-1150 date range. Building material was recovered dating from the 1st century up to AD 380, and may represent some of the discarded robbing material.

7.12.2 Semi-circular pit [1399] clearly truncated the northern bounding wall of Room 3 [525], and extended 1.97m along the wall's length by 1.3m width and 0.48m depth. The pit displayed irregular sides, near vertical along the northern face of the wall and sloping towards the south, with a concave base. The feature had been backfilled sequentially by brown and black silty sand deposits [1398] and [1397]. Primary fill [1398] contained a single coin (SF195) in use

from the 3rd to 4th centuries, and pottery dating from AD 350-400, and 3rd century building material was retained from upper fill [1397].

- 7.12.3 Dump layers [558]=[1349], [574], [535] and [501] sealed Room 3 and the eastern limits of Room 2 from c.2.37m OD. These layers of mixed silty-clays extended to a combined depth of c.0.20-0.25m and contained a mixed assemblage of late Roman (AD 300-400) and early medieval pottery with a 1080-1150 date range, and a fragment of a smithing hearth bottom. Slightly later material dating from 1140-1200 was recovered from uppermost deposit [501]. An additional find of note included a copper strap end (SF137) recovered from [1349].
- 7.12.4 Linear cut [567] followed a north-east south-west alignment adjacent to the eastern bounding wall of Room 3 to a maximum observed length of 3.5m by 1.22m in width. The alignment mirrored that of earlier walls suggesting this to be a robber cut. The organic silt backfill [568] was noticeably clean of cultural material however. The southernmost limits of fill [568] were truncated by sub-circular pit [546]. This was only partially exposed with an estimated diameter of 1.50m. A deliberate backfill of greenish clay-silt [545] filled the feature and contained frequent charcoal and shell inclusions indicative of domestic refuse.

Area A2

- 7.12.5 No features within this area were ascribed to Phase 4b.

Area B

- 7.12.6 Similarly to Area A1, this phase was mostly represented by a series of intercutting pits. These were concentrated in the north-eastern corner of the excavation area, and roughly followed the alignment of the robbing cuts [804]=[868]. It is perhaps noteworthy that this group of pits was exclusively located to the north of the former wall. The earliest of the group [838] extended 0.34m in depth with an irregular base and steeply sloping sides. A combination of 2nd to 3rd century pottery and pottery sherds dating from AD 900-1050 were recovered from organic peat primary fill [837]. This was overlain by a 0.30m thick dump layer [797] of domestic debris. The latter contained predominantly late Roman material, including a coin (SF47) depicting the wolf and twins in use from AD 330-335, and pottery with an AD 250-400 date range.
- 7.12.7 Sub-circular pits [788] and [792] subsequently truncated the western and eastern limits of [838]. These were backfilled sequentially by [787]=[1324] and [805] and [1336]=[831], [1323]=[819], [1322]=[818], [817] and [791] respectively. Primary fill of [788] comprised a greenish organic silt containing 2nd/3rd century pottery and a small coin (SF39) dated to the late 3rd century (AD 293-296). Silty peat upper fill [805] contained charcoal flecks, oyster shell and a single coin (SF48) dated from AD 330. Pit [838] contained a primary fill of clay silt containing numerous copper objects (SF130, SF131, SF132, SF133) and pottery dating

from 900-1050. This was overlain by mixed organic silt and brickearth fills containing Roman pottery of the 2nd to 4th centuries, late Saxon pottery dating from 900-1050 and occasional fragments of 12th century building material. Uppermost fill [791] contained numerous coins (SF38, SF51) dating from the 4th century, copper alloy and hammerscale (S506), an unknown copper object (SF37) and a combination of 3rd/4th and 10th/11th century pottery. Building material with an AD 240-380 date range was also recovered from the latter fill.

7.12.8 The upper limits of pit [792] were truncated by pits [649] and [648] in turn. Primary silty clay fill [650] contained 1st to 2nd century Roman pottery and building material, and was overlain by a similar clay deposit [647]. The latter contained three small copper objects, including waste, a tapered spike and parts of a plate (SF5, SF13, SF24), and 2nd century pottery fragments. Later pit [648] had been backfilled sequentially by clay silt [637], [636], [628] and [620]. The fills contained variable quantities of charcoal and oyster shells indicative of domestic refuse. These contained a roughly contemporary assemblage of pottery dating from 970-1050 with residual Roman pottery and building material dating from the 1st to mid 3rd centuries. Fill [637] was found to contain the largest assemblage of fish remains from across the site (Appendix 15) and a squashed dog coprolite (S503). One small coin (SF4) was recovered from tertiary fill [628] dated from the 3rd to 4th century.

7.12.9 Partially exposed circular and squared pits [862] and [815] were located in the north-west of the excavation area. These were tentatively interpreted as a rubbish and cess pit, and had been backfilled respectively by organic silty-peat [861]=[1360] and grey silty clay [816]=[1348]. Pottery recovered from [861] was dated to the mid 2nd century, whereas pottery recovered from later fills [816]=[1348] was consistently dated from AD 970-1050 with some residual Roman pottery with an AD 50-250 date range. Adjacent to these features was a small spread of sand levelling material [970], [969] and [968], which extended to a combined depth of 70mm from 2.28m OD. A small amount of pottery was recovered from [970] only and dated between 970 and 1150.

7.13 Phase 5a: Medieval 11th/12th Century (Fig. 15)

Area A1

7.13.1 Evidence of 11th to 12th century construction was evident within the south-eastern corner of the excavation area. Chalk walls [541] and [1338] survived to a height of 2.44m OD and extended along a north-east south-west alignment to a maximum length of 2.6m by 0.78m in width and 0.63m in height. The wall was constructed using roughly hewn chalk blocks, bonded with a sandy mortar in random courses. A secondary construction [1594] lay directly over [1338] and utilised roughly hewn chalk blocks, Kentish ragstone and re-used Roman tiles. These elements had been bonded with a sandy mortar in regular courses (alternate courses of tile and chalk) to a maximum preserved height of c.1m. It is noteworthy that the material suggested a roughly contemporary date for [1338] and [1594] and that although the

walls had been constructed within shallow construction cuts [540] and [1355] the bulk of the construction had been founded directly over the earlier Roman foundations. The materials utilised within [1594] suggested an 1180-1800 date range. Soft deposits of crushed chalk [517]=[1381] were utilised as construction cut packing material and contained fragments of building material dating to the 13th century.

- 7.13.2 Large chalk pier [511] was also located to the south-east of the excavation area. This extended 1.03m by 1.35m in plan (sub-squared) and over 1.30m in height from 2.47m OD. Roughly hewn, uncoursed, chalk blocks, were bonded with a sandy mortar, and the entire structure had been constructed within cut [554].
- 7.13.3 A thin, 0.12m thick layer of demolition material [1289]=[1307] was identified within underpinning trenches to the north-east of the area. These deposits comprised sandy silt with frequent inclusions of brick and tile fragments, with oyster shells and mortar. The material culture recovered from this horizon included pottery dating from 1050-1150, later 12th century building material, and a small amount of late Roman (AD 300-400) pottery. This horizon was attributed to this phase on the basis of the dateable material culture, and it remains unclear how this relates to the masonry elements recorded to the south.

Area A2

- 7.13.4 Two isolated fragments of stone masonry attributed to this phase were identified in the north-west and south-east of the excavation area. Wall [920] was recorded in the north-west, constructed from roughly worked fragments of ragstone bonded with a sandy mortar, within construction cut [1020]. Only one course of stonework survived to a maximum height of 0.25m, and extended 0.90m north-west south-east by 0.60m in width. The wall appeared to run along a north-west south-east alignment and, similarly to contemporary masonry within Area A1, was located in close proximity to earlier Roman foundations. No occupation horizons or surfaces were firmly identified as being associated with this feature.
- 7.13.5 Ragstone wall [948] lay in the south-east of the excavation area and was constructed using roughly hewn blocks, bonded with a white lime mortar. As seen the wall extended 1.10m width north-west south-east by 1.52m in length and over 0.15m in height. The wall extended beyond the eastern and western limits of excavation and appeared to follow a comparable north-west south-east alignment as [920]. Rebuild [684] sealed [948] from 1.42m OD, and extended 0.36m in depth. This utilised ragstone, sandstone, flint nodules and red brick within its construction, bonded with a pinkish lime mortar, and had been founded at c.1.15m OD. Further extrapolation is not possible due to a lack of excavation. Similarly to [920], no occupation horizons or features associated with this construction have been firmly identified.

Area B

- 7.13.6 No masonry fragments were identified within Area B that could firmly be attributed to the 11th and 12th centuries. Activity was limited to refuse pits and accumulations of garden soil. Earlier squared refuse pit [601] (Phase 4a) was re-cut with sub-circular cut [772]. This extended c.1.49m in diameter, entirely within the footprint of the previous pit, and over 1.19m in depth. The pit exhibited concave sides and had been backfilled sequentially by mixed silty clays interspersed with demolition debris [824]=[1333], [633], [632], [631], [599] and [630]. Little cultural material was retained from 0.38m thick primary fill [824]=[1333], other than a few small fragments of 1st century Roman pottery. Silty fill [631] contained moderate quantities of animal bone, charcoal and pottery dated between 1050 and 1150 indicative of domestic waste. This was overlain by mortar and stone demolition debris [599] containing Roman pottery and building material, and underlain by chalk and ragstone demolition debris [632] containing a single metal object (SF31) and Roman brick and tile. The feature was capped by the insertion of large roughly hewn stone blocks [630] from 2.45m OD, but not completely backfilled at this stage.
- 7.13.7 Large pit [648] from earlier Phase 4b went out of use during this period. A 70mm thickness of silty-sand and clay [619] and [618] filled the upper limits of the cut from 2.76m OD. These deposits contained pottery with a 970-1150 date range with brick and tile dating from the late 12th century in addition to a few fragments of Roman material dating from the 2nd century. A 30mm thick layer [607] of degraded wood suggested an initial attempt at capping the pit. This was overlain by clay-sand [606] which contained frequent oyster shell inclusions with mortar fragments and very fragmentary sherds of Roman pottery and building material.
- 7.13.8 Sub-rounded pit [609] (not illustrated) was located adjacent to the pit grouping identified in Phase 4b. The pit extended 1.50m by 0.80m with steep sides to a concave base c.1m in depth. Deposits of dark brown clay silt [1346] and [608] had been utilised to deliberately backfill the feature. Primary fill [1346] appeared to be cassy material, with very few cultural inclusions such as mortar flecks and fragments of Roman pottery. This was sealed by upper fill [608] which contained pottery with an 1080-1200 date range, in addition to some residual Roman pottery, a coin (SF12) in use from the 3rd to 4th century, a copper fragment (SF8) and building material of the 12th century mixed with some Roman material of the 2nd/3rd centuries.
- 7.13.9 Sub-circular pits [743] and [866] lay in the west of the excavation area, and extended c.1m in diameter. The former exhibited vertical sides over 0.58m in depth, backfilled by sterile organic silty clay [1365] and refuse material [744] in turn. Upper fill [744] contained a mixed assemblage of ragstone demolition debris, pottery dated from 1050-1200, 2nd/3rd century building material and some residual early Roman pottery fragments with intrusive 15th/17th century brick and Flemish floor tile. Adjacent pit [866] was backfilled by organic cassy clay silt [867]. This contained occasional charcoal flecks and mortar, but was otherwise sterile of cultural material.

7.13.10 The north-eastern extent of the excavation area was overlain by a 3.20m by 4.80m spread of garden soil [635]. This 0.15m thick deposit was recorded from 2.43m OD and contained a mixed assemblage of pottery, dating from AD 270-400 and c.1000-1150, building material dated from 1180, including fragments of medieval limestone inlay/veneer (Appendix 12), oyster shell, and three coins (SF14, SF15, SF16). The coins dated respectively from the 4th century, AD 350+ (both minims), and AD 271-274.

7.14 Phase 5b: Medieval Late 12th/Early 13th Century (Fig. 16)

Areas A1 and A2

7.14.1 A late 12th century phase of pitting was evident within both areas, as post-dating the construction of the masonry elements attributed to Phase 5a. Within Area A1 pits [1420] and [1341] truncated chalk walls [511] and [1394] respectively. Pit [1420] trenched around the perimeter of the wall at a distance of between 0.60m and 1m from the faces of the wall. The pit extended 2.30m in overall diameter, over 0.80m in depth and continued beyond project level. A single fill of firm, silty clay [1421] was excavated from the cut which contained a few residual fragments of 1st century pottery with medieval sherds dating from c.1050-1150, and brick and tile dated between 1200 and 1800. This suggests the pit was excavated roughly contemporary to or not long after the construction of the wall itself, and may therefore relate to a modification rather than a robbing event. Pit [1341] appeared sub-rounded in plan, measured 1.45m by 0.95m and extended with vertical sides over 0.65m in depth. This was not fully excavated due to project depths. The feature had been backfilled by gravel and silty clay fills [1342] and [1384] in turn. Cultural material dated from the mid 11th to mid 12th century was recovered from [1342] only, and included some residual late Roman pottery dating from AD 300-400.

7.14.2 Cuts [783] and [893] within Area A2 similarly appeared to target earlier masonry. Semi-circular cut feature [783] truncated a c.0.30m thickness of levelling material [785]/[897] and trenched along the southern face of stone wall [920]. The levelling deposit included a mixture of mortar rich demolition material and garden soils with fragments of Roman pottery dating from the mid 2nd century. The deliberate backfill [784] of cut [783] comprised a mixed assemblage of Roman brick and tile (AD 50-160), mortar flecks and late Roman pottery dating from AD 250 to AD 400. One fragment of pottery from [783] had evidence of graffiti. Sub-squared, flat bottomed pit [893] appeared to target Roman foundation [916]. This had been deliberately backfilled with mortar, brick, tile, shell and pottery within a clay silt matrix [892], over an earlier fill of sterile, naturally accumulated silty clay [973]. Much of the material was too fragmentary or degraded to provide any firm dating evidence. A few brick and tile fragments however were roughly dated to the 2nd century.

7.14.3 An additional sub-squared pit [921] was identified to the south, but was only partially exposed due to later intrusive masonry. The pit could not be fully excavated due to project depths,

and had been backfilled by deposits of dark blackish-brown clay silt [928] and sandy silt [922] in turn. Pottery recovered from earlier fill [928] inferred a date range of c.970-1150. A comparable deposit utilised as levelling material was identified adjacent to the pit. Deposit [972] was left in situ due to project depths and was tentatively interpreted as a levelling layer, from which no cultural material was recovered.

Area B

- 7.14.4 The re-cut refuse pit [772], attributed to Phase 5a, went out of use during this period. A 0.45m thickness of cassy material [600]/[598] capped the upper limits of the cut. Pottery dating from the mid 13th century up to 1350 was recovered from [600], as was a small amount of residual Roman pottery dating to the mid 2nd century. Towards the southern limits of the excavation area a small, 1.10m by 1.20m patch of garden soil [671] was identified from 3.32m OD. The 0.20m thick layer sealed a small rounded pit [686] measuring c.0.50m in diameter by 0.23m in depth. Clay silt backfill [685] and garden soil [671] contained roughly contemporary pottery dating from the late 11th century to 1220. The garden soil however contained more residual Roman pottery and building material dated from the late 3rd century.
- 7.14.5 The build up of garden soils was followed by the construction of a series of large chalk piers, which extended across the entire southern boundary of the excavation area as [592] to the east (Section 75, Fig. 22) and [742] to the west, to a maximum width of 1.31m and height of 2.29m. These continued beyond the limit of excavation as chalk arches [201] and [210]. Each of the two observed piers was constructed with roughly hewn/faced blocks of chalk bonded with a sandy lime mortar in random courses (Plates 10 and 11). The upper horizons of the feature, survived to a height of 3.49m OD and appeared vaulted, suggesting this to be a pier foundation linked by relieving arches following a roughly north-west south-east alignment. The materials utilised within the construction were dated from the later 12th up to the 15th century. The two piers had been constructed within a presumably linear construction cut [663]=[855] which extended an additional c.0.50m from the southern face of the pier. This had been backfilled by mixed deposits of sandy silt and clays [737], [1081], [1080], [842] and [836] and chalk rubble [1096]. The recovery of fragments of Roman pottery and building material dating from the mid 2nd century up to AD 300 suggested that a combination of waste construction debris and perhaps material excavated during the construction had been utilised as backfill.
- 7.14.6 Linear cut [667] truncated the upper limits of chalk pier [592] from 3.37m OD. This 1.19m by 0.36m wide cut had steep sides and a flat base, 0.19m deep. A loose deposit of silty sand [666] filled the cut, which was interpreted as a possible beamslot, indicative of modifications to the chalk pier. No cultural material was recovered from the backfill with which to refine the date of this activity.

7.14.7 Other cut features attributed to this phase included intercutting pits [1632] and [1265] identified in section only. Earlier pit [1632] exhibited vertical sides to a flat base, c.1m depth, the upper horizons of which were truncated by the steep sides of [1265], which extended over 0.75m depth and was not bottomed. These were respectively backfilled by sterile clay silt [1631] and clay silts containing small fragments of mortar, charcoal, pottery and building material. Pottery recovered from fills [1264] and [1263] were dated from c.1140-1350. These cuts were subsequently interpreted as cess pits.

7.15 Phase 5c: Medieval Late 13th to 15th Century (Fig. 17)

Area A1

7.15.1 A later phase of robbing attributed to the later 12th to 15th centuries was evident within the southern and south-eastern limits of the excavation area. Large, sub-squared pit [566] measured 2.36m by 3.9m in plan, and extended 0.56m in depth with steep sides to a flat base. The pit clearly trenched along the southern faces of Roman walls [525] and [555] and partially truncated the upper courses of the latter. A primary fill of sandy silt and mortar [698] contained a single undated coin (SF135) and filled the bottom 0.15m of the cut. This was overlain by c.0.30m of silty sand [561] and sandy clay [526] which both lensed out towards the west and contained pottery dating from the mid 12th to early 13th century and dating from the later 14th to early 16th centuries respectively. Building material recovered from both fills was consistently dated to c.1350-1450, and included a number of Penn floor tiles dated from 1330 to 1390. A few fragments of late Roman pottery dating from AD 250-400 were also recovered from these deposits, as were a number of later 15th century Flemish floor tiles.

7.15.2 The eastern limits, and fill [561], were truncated by four postholes which defined a 1.17m by 0.30m area. Postholes [533], [529], [527] and [531] measured c.0.15m in diameter by 0.25m in depth and all appeared rounded in plan tapering to a concave base, indicative of driven stakes. These were backfilled with clay sand fills [534], [530], [528] and [532], clean of cultural material.

7.15.3 Deposits of clay sand and ash [515] and greenish sands [503] sealed the postholes and capped the upper 0.15m of pit [566]. Pottery retained from these deposits dated respectively from 1140-1350 and 1380-1500, which may suggest that the temporary structure indicated by the group of postholes described above was relatively short lived. Building material dating from the 13th to 14th centuries was also recovered from [515].

7.15.4 Also attributed to this phase was a 0.20m thick layer of demolition material. Layer [502] was identified adjacent to robbing pit [566], directly overlying chalk pier [511]. The deposit contained loose mortar and chalk fragments, but no cultural material. As such, this may indicate the disuse of [511]

Area A2

- 7.15.5 Activity relating to the later medieval period within Area A2 was limited to pit [786] and a number of levelling deposits. Similarly to [566], pit [786] appeared sub-squared in plan with rounded corners, steep sides and a concave base, extending to a maximum of 0.73m in depth. The pit also truncated the eastern limits of earlier wall [920] suggesting this to be a robbing cut. Deposits of ash [782], demolition rubble [781] and silty clay refuse material [780], [779], [778] and [777] in turn backfilled the feature. Pottery recovered from all fills was consistently dated from c.1350-1500, and the fragments of building material were generally dated from the 13th to 15th centuries. Other finds of note included a post Roman coin (SF61) and copper alloy waste (SF63) from primary fill [782], a copper needle (SF59) from secondary fill [781], a lead strip (SF62) from tertiary fill [780] and a complete 'Westminster' type patterned tile dating from 1225 to 1300 (Appendix 11).
- 7.15.6 A series of levelling deposits [771], [762] and [754] sealed the upper limits of pit [786] and sealed earlier masonry with a combined depth of c.0.24m. Deposits [771] and [762] comprised greenish sands and mortar rich demolition material, clean of cultural material. Upper deposit [754] however, was a distinctive reddish hue, comprised of compacted sandy silt with mixed inclusions of chalk, charcoal, medieval glass and building material dated from 1180 to 1450. A few fragments of residual Roman pottery also derived from this layer. The even flat upper boundary of the layer and compaction suggested this to have been a potential bedding layer for a surface.

Area B

- 7.15.7 No horizons or archaeological features were firmly recognised as relating to Phase 5c within Area B.

7.16 Phase 6a: Post-medieval Late 15th/Early 17th Century (Fig. 18)

Area A1

- 7.16.1 Early post-medieval construction and occupation was limited to the westernmost extent of the excavation area. North-east south-west aligned wall [556] was constructed directly over Roman masonry to the north and within construction cut [582]. The 2.8m long wall extended 0.40m in width and was preserved to a maximum height of 1m, being founded at c.2.36m OD. A combination of red brick, ragstone and re-used opus signinum fragments were utilised to construct the wall, bonded with a brown sandy mortar. These fabric types were roughly dated to the 16th to 17th centuries. Flat based construction cut [582] was backfilled, where seen, with a loose deposit of reddish black clay and rubble [583] to a maximum depth of 0.14m.

- 7.16.2 Fragmentary remains of red brick steps [621] and [539] were potentially related to [556]. The fabric of [621] was roughly dated from 1450 to 1700, with no mortar bonding surviving. The steps comprised one course of brickwork each to a maximum elevation of 2.33m OD. It is noteworthy that these examples were constructed directly over and adjacent to Roman masonry [555] suggesting that Roman architecture was still at least partially visible into the post-medieval period.
- 7.16.3 Additional masonry elements were identified in section, along the northern limit of excavation, adjacent to the features described above. A brick lined soakaway [1278]/[749] utilising red unfrogged bricks was recorded within construction cut [1279] and backfilled with organic silty deposit [1277]. The fabric of [1278] gave a suggested date range of 1400-1660, and building material dating from the 13th to 15th centuries was contained within backfill [1277]. It is likely that the soakaway functioned with the property represented by bounding wall [556] and the red brick steps. Demolition material [723] comprised of crushed pink mortar and 15th to mid 17th century building material was identified to the east of these features, in section. The inclusion of crushed opus signinum and mid 2nd century Roman material may suggest that elements of the large Roman structure were levelled off at this time.

Area A2

- 7.16.4 Construction within this area was similarly concentrated within the western limits of the excavation area. Wall fragments [660], [37] and [654] followed a north-west south-east alignment with a southern return towards the east which compares well with the alignment of [556] within Area A1. The wall was exposed to a maximum length of 3.85m with a 0.85m return and extended 0.42m in width. Red brick and chalk fragments were utilised in the wall's construction, laid in alternate courses, bonded with a sandy mortar to a maximum height of c.1m. The fabric types utilised inferred a 16th to 17th century date, and the presence of Roman pottery within [654] suggests the re-use of some materials. No construction cut was identified relating to the walls, which appeared to be founded directly over levelling material of organic sandy silt [1014], [947] and [945] at c.2m OD. A tile surface [61] was identified in section, and suggested an internal floor relating to [37] had been constructed from c.2.17m OD.
- 7.16.5 North-east south-west aligned brick and ragstone wall [665] and southern north-west south-east return [711] survived to a maximum elevation of 2.84m OD. These extended 3.5m in length with a 0.90m return by c.0.35m in width. A few isolated glazed bricks were incorporated into the construction, alongside smoothed/worked re-used medieval Reigate stone ashlar blocks and red bricks, which gave a rough date range of 1450-1700. Fragments of late 15th century material were also recovered from the silty backfill [752] of linear construction cut [753]. Only one course remained of the structure, and it therefore remains unclear whether this represents an internal division or the foundation for a bounding wall. It

is, however, noteworthy that the wall was not founded at a uniform level, which may suggest different phases of construction. Traces of a similarly aligned unfrogged brick wall [74] with associated brick floor [75] were identified in section adjacent to [711], and may represent a continuation of this property boundary. Internal divisions were represented by traces of chalk walls [3], [8] and [6] identified in section.

- 7.16.6 Several bricks [942] were identified within the central excavation area along a north-west south-east alignment. These were not fully excavated and were poorly preserved, but given the comparable alignment to previous walls attributed to this phase, were tentatively interpreted as the remnants of a foundation. This was overlain by levelling deposits [675] and [941] which extended across the remainder of the excavation area, similarly left in situ. These comprised mixed layers of sandy clay with mortar and brick rubble, which contained some residual Roman material dating to the mid 2nd century.

Area B

- 7.16.7 Stone wall [763] was located to the north-west of the area and extended 1.40m in length along a comparable north-west south-east alignment to previous examples discussed. The wall utilised roughly hewn blocks of sandstone and ragstone, laid in random courses with a sandy mortar to a maximum surviving height of 0.38m. This had been trench built within construction cut [764] from a founding level of c.2m OD. The stonework inferred a 16th to 17th century construction date range.
- 7.16.8 To the immediate south of [763] was a square, stone lined cess pit. Only the northern [1364] and eastern [1363] walls survived within a square cut [1329]. The stone walls extended c.0.50m in width and 0.25m in height giving the soakaway an approximate internal dimension of 1.10m by 1m. The roughly worked sandstone blocks had been laid randomly with a grey lime mortar, and included occasional fragments of re-used Roman masonry.
- 7.16.9 A series of pits were identified in the east of the excavation area, which may suggest this to have been open ground at this time. Furthermore the pits are concentrated within a north-west to south-east aligned area of land extending 8.5m by 1.5m in width. This could represent a space between properties, display a preference for excavating into softer underlying ground (the former alignment of Roman walls lies immediately adjacent to the northern limits of the pit group), or represent a later phase of robbing. The largest, most easterly pit [594] extended 3.20m by 1.36m with concave sides and base, 0.55m depth. This had been backfilled with silty clay and rubble [593], which contained pottery dating from 1480-1525 with some residual mid 3rd century Roman pottery and 16th/17th century building material. Other pits within this alignment were squared pit [626], and sub-rounded pits [616] and [638]. These had been backfilled respectively with silty ash [627] and clay silt [617] and [639] containing Roman pottery dated from the 1st to mid 2nd centuries and a small amount of mid 13th to 15th century building material. Other finds of note included a small glass

object (SF9) recovered from [617] and fragments of vitrified hearth lining and hammerscale from [627] (S502).

7.16.10 Postholes [770], [768] and [605] truncated the upper horizons of a number of these pits. All of these were rectangular in form with vertical/near vertical sides to a tapered base and followed a north-west south-eastern alignment to the immediate north of the group of pits described above. Cultural material recovered from the silt backfill [767] and [769] included pottery with an 1480-1550 date range, building material from the 13th to 16th centuries, and residual Roman pottery dating from the mid 2nd century. The backfill [604] of posthole [605] was clean of cultural inclusions.

7.17 Phase 6b: Post-medieval Mid to Late 17th Century (Fig. 19)

Area A1

7.17.1 Construction attributed to this phase continued to follow the north-west south-east alignments of Phase 6a, and represent modifications to these properties. The western limits of earlier wall [556] were reinforced by the construction of [549] along the same alignment. The 0.50m wide chalk, brick and ragstone wall survived to 1m in height and continued almost the complete length of [556]. The wall was constructed in random courses, bonded with sandy silt. Internal partition [537] was constructed against the western face of [549] at a right angle to the bounding wall. This 1.28m long wall extended 0.56m in width and 0.42m in height, and had been constructed with roughly hewn chalk fragments and unfrosted yellow and red brick, bonded with a light grey lime mortar. This assortment of building material suggested a 16th to 17th century date range for its construction. As with earlier post-medieval masonry within this area, the northern limits of [537] appeared to respect Roman masonry, adding further support that Roman constructions remained visible into the post-medieval period.

7.17.2 No firmly identified floor surfaces or occupation horizons were identified as being associated with the masonry described above. Extensive modern intrusions are likely to have removed many of these remains. To the immediate west of the walls was rectangular pit [543] which extended 0.17m in depth with vertical sides to a flat base. This was backfilled with black charcoal [542], clean of other cultural material, and sealed in turn by a 50mm thick dump layer [544]. The latter comprised a loose deposit of clay silt, also clean of dateable material. This could represent a levelling deposit associated with this phase of construction.

7.17.3 The north-west south-east alignment of [537] was mirrored in walls [505], [32], [506] and [504] identified along the northern limits of excavation (Plate 12). Primary wall [505] comprised regular courses of roughly hewn chalk and ragstone blocks, and red brick laid in header and stretcher bond with sandy mortar. This was capped with small rebuild [506] which utilised the same variety of construction materials, and the entire 2m length subsequently sealed by chalk wall [504]. The chalk wall comprised large roughly hewn blocks laid in random courses to a

maximum thickness of 0.66m. This set of rebuilds contained building material dated from the 16th to 17th century and may represent a series of modifications carried out over a relatively short space of time. Heavily truncated brick and chalk wall [580] was identified to the east of the excavation area, along the same alignment as [504], [505] and [506] and is likely to represent a continuation of this northern wall, which as seen extended to a combined length of 12.30m with wall [32] to the west.

7.17.4 A series of features were identified to the south of wall [504], [505] and [506] which represent the use of an internal space bound by these walls to the north and Roman masonry [555] to the south. This 1.15m wide space was tentatively interpreted as a corridor, and had been initially prepared with the dumping of 100mm thick deposit [524] rich in mortar. The deposit could represent a rough surface or a preparatory deposit for a more formal surface, and had been partially truncated by a small rounded pit [522]. This partially excavated feature extended c.0.40m in diameter and had been backfilled with sterile clay-silt [521]. The pit was overlain by burnt horizon [509] and mortar bedding layer [514] in turn, with a combined thickness of 0.20m. Cultural material recovered from [514] included 17th to 18th century clay tobacco pipe, 18th century glass, and building material dating from the 12th to 15th centuries. Red brick floor [508] sealed [514] from 2.33m OD and utilised orange unfrogged bricks, bonded with a yellow-brown mortar. The morphology and fabric of the bricks inferred a 17th/18th century date range for the floor.

7.17.5 Additional features attributed to this phase were identified in section. These included steep sided pit [1382] which had been backfilled with a 0.35m depth of silty clay and chalk [1383], and dump layers [1285] and [1286] of sandy clay and demolition material.

Area A2

7.17.6 Similarly to Area A1, a number of masonry structures were attributed to this phase, which represented modifications to the properties already defined during Phase 6a, and therefore remained concentrated to the western limits of the excavation area. Within the centre of this area was partially excavated brick lined cess pit [702]. This feature was built within construction cut [703] with an internal area of c.1.40m in width, and utilised orange bricks in use between 1450 and 1700, laid in regular courses. The disuse of the cess pit was demarcated by mortar and demolition material backfill [701] which contained building material contemporary to brick lining [702] and intrusive pottery dating from the late 18th to early 19th centuries.

7.17.7 Truncated and partially exposed brick walls [706] and [714] lay to the east of brick cess pit [702]. Wall [706] had been constructed directly over earlier wall [665] and extended 0.81m in length north-east south-west, with a 0.54m north-west south-east return. The wall preserved to a maximum of two courses in height and may represent a localised repair to the earlier wall, or infer a later sub-division of space. The function of wall [714] also remains slightly

unclear. The wall extended c.1.2m in length along a north-east south-west alignment, with returns to the north and south at a rough 120 degree angle. The wall utilised red brick with no bonding material and was recorded from a lower elevation than [706], it is possible this relates to a chimney or hearth but a lack of exposure means this is difficult to prove with any certainty.

- 7.17.8 Activity to the east of the area was limited to large cut features indicative of both robbing and refuse disposal. Sub-rounded pit [829] was excavated within the Eastern Sondage and extended with concave sides to a flat base 0.31m in depth by over 1.76m diameter. This had been deliberately backfilled with sandy silt [828]=[674] which contained fragments of residual Roman building material including a slab/veneer of Purbeck marble (Appendix 12), pottery, a stone object (SF45) and an undated coin (SF44). The upper limits of the feature had been truncated by a large, unexcavated pit [939] which had been backfilled with silty clay [940].
- 7.17.9 Linear robber cut [695] extended across the southern limits of the sondage and was recorded in section only; it targeted medieval wall [684]. The flat based cut measured c.0.70m in depth and had been backfilled with loose brick, tiles and mortar [694] and capped with sandy silt [693]. Cultural material retained from the backfill was dated from the late 15th to early 18th century. Upper fill [693] was truncated in turn by squared pit [692]. This partially excavated feature had been backfilled with sandy silt [691] and mortar rich silt [690] in turn to a maximum observed depth of 1m. Clay tobacco pipe retained from fill [690] was dated to c.1680 to 1710, and a small copper clasp/fitting (SF35) was recovered from the same deposit. Residual 14th century Penn floor tiles were also recovered from the fills.

Area B

- 7.17.10 The construction of chalk walls [1274] and [991] along the southern limit of excavation suggest that an exterior wall was constructed at this time, following a rough north-west south-east alignment. These fragments utilised roughly hewn chalk blocks, randomly coursed and bonded with grey mortar and extended to a maximum combined length of 4.8m by 0.44m width, preserved to a maximum height of 1.83m. The walls had been constructed within a linear construction cut [1275] and [992], which was not fully excavated, and backfilled with firm silty clay [993].
- 7.17.11 A previously excavated cess pit, to the west of the area, was modified at this time with the construction of brick lining [1327] over pre-existing stone walls [1363] and [1364]. The unfrogged red bricks had been laid in header bond with a grey lime mortar and survived to a maximum height of 1m by 0.28m in width. The fabric and morphology of the bricks suggested an 1450-1700 date range. Dumped deposits of loose sandy silt [1328] and brown silty sand [1326] filled the interior of the brick lined tank in turn. These deposits were relatively clean of cultural material, and only a few fragments of residual Roman pottery were recovered.

7.17.12 A second brick lined cess pit of slightly bigger proportions was identified to the east of the latter. Single skin unfrosted red brick lining [596] incorporated worked/moulded Reigate stone fragments (reused from a high status medieval structure) and later 15th century Flemish floor tiles, and had been laid predominantly in header bond, bonded with a grey lime mortar with charcoal inclusions (Plate 13). The internal faces appeared stained from their exposure to cess, and had been constructed directly within squared construction cut [602], which extended c.2.5m in width by over 1.19m in depth. The cut had been backfilled with grey-brown sandy silt [603] which contained fragments of pottery dated between c.1700 and 1850 with fragments of contemporary building material utilised as packing.

Area C

7.17.13 Walls [505] and [504] continued into Area C as wall [32] which measured 3.5m in length. It returned to the south-west as wall [37] which then returned to the south-east to meet wall [660] in Area A2. These walls appeared to form the western frontage of the property along Borough High Street.

7.18 Phase 6c: Post-medieval Late 17th/Early 18th Century (Fig. 20)

Area A1

7.18.1 Red brick wall [518] was recorded to the north of the excavation area, and incorporated re-used Roman brick within the coursing, bonded with an ashy grey mortar. This had been constructed against the northern face of walls [504] and [505] and may indicate a second property or expansion to the north. This north-west south-east aligned feature extended to a maximum observed length of c. 4m by 0.55m in width and survived to a maximum height of 1.4m. The feature had been constructed within linear cut [1335] and founded from c.1.81m OD, over a thin deposit of soft sandy silt and mortar bedding material [1334]=[1229]. These developments are likely to coincide with the continued backfilling of earlier soakaway [749] attributed to Phase 6a, with loose mortar-rich demolition rubble [852].

7.18.2 A small 0.38m by 0.38m buttress [581] was constructed against the southern face of [518], formed of red brick with roughly hewn blocks of chalk and Reigate stone bonded with sandy mortar. These component parts inferred a 16th to 17th century date range. Sandy clay [557] was subsequently dumped against the southern face of [518] as levelling material. Cultural material recovered from this included a copper coin (SF3) dating to the 3rd century AD, and mid 17th to early 18th century building material.

7.18.3 Chalk and unfrosted red brick wall [500] ran perpendicular to [518] and appeared to subdivide a pre-existing space (as defined by walls attributed to Phase 6b and 6a). The materials utilised in the construction would suggest a late 17th to early 18th century date range. The masonry survived to a height of 2.93m OD and extended over 1.32m in length by

0.38m in width and 0.78m in height. The wall had been trench built within linear construction cut [590] from a founding level of c.2.04m OD. Modern truncations to the north and south prevent the full dimensions of this feature being established.

- 7.18.4 Sub-rounded pit [551] was located to the east of the previously mentioned walls, and as such this area may have been open space to the rear of a property at this time. The pit extended c.0.90m diameter by 0.22m and had been backfilled with silty sand and rubble [550] which contained building material in use during the 17th and 18th centuries. A potential southern boundary to this external space was suggested by walls [512] and [536] which followed a comparable alignment to [518] and ran along the southern limit of excavation. Similarly to other walls of this period, [512] was constructed from roughly hewn blocks of chalk and ragstone, combined with unfrogged orange and purple bricks, bonded with a white sandy mortar. The northern observed limits of the wall had been repaired or infilled with unfrogged orange and purple bricks [536] for a length of c.0.22m. The materials suggested a 17th to 18th century date range for the wall, which had been trench built within linear construction cut [513].

Area A2

- 7.18.5 Modifications to pre-existing masonry followed the same alignments, but suggest expansion to the east. North-west south-east aligned orange brick walls [653] and [662] survived to a maximum height of 0.90m to 2.69m OD and bound an area c.5.40m in width. The materials utilised in the construction of [662] suggested a mid to late 17th century date. Southern boundary [662] had been trench built within linear cut [697] and the northern face packed with clean silt [696]. Northern boundary wall [653] was left in situ.
- 7.18.6 The western limits of the area were modified by the construction of north-east south-west aligned red and yellow brick wall [659], which lay perpendicular to [653] and [662]. This survived to 1m in height at 3.23m OD, and the founding level was not established. The wall had been trench built within construction cut [891], then modified with the insertion of walls [708] and [710] at 70° and 100° angles from the internal face of the latter. These red/orange brick walls survived to 3.14m OD, c.3 courses in maximum height, bonded with a cemented grey mortar. Northern wall [708] appeared to have been bonded over [659] whereas its southern counterpart [710] had been cut into the wall with irregularly shaped cut [883] and backfilled with sandy mortar rubble [882]. It is unclear whether these represent planned modifications or repairs.
- 7.18.7 The area encompassed by the previously mentioned walls may have remained in use as the rear of a property fronting onto Borough High Street at this time. Earlier cess pit [702], ascribed to Phase 3b, was modified by the insertion of brick drain [750] which extended over 0.70m in length at a 140° angle from the cess pit, on a roughly north-south alignment. The drain had been built within linear construction cut [751]. It is unclear whether this occurred at

the same time as the construction of the cess pit, and it was therefore tentatively interpreted as a later modification within a later phase.

Area B

- 7.18.8 A series of modifications to earlier cess pit [596] were ascribed to the later 17th century. It should be noted however, that these may equally represent part of the original design, as attributed to Phase 6b. The earliest of these additions comprised brick pillar [1332] constructed within the north-eastern corner of the cess pit, presumably for stability. The column was constructed from unfrogged red bricks, in use from the mid 17th to mid 18th centuries, bonded with a light grey mortar and extended 0.34m² by 0.76m in height and survived to 2.39m OD. The internal south face of the pit was subsequently lined with red peg tile [1339] bonded with a grey lime mortar, and a floor laid of unfrogged red bricks [1331] over the base of the pit at c.1.25m OD (Plate 13). Due to project depths, it could not be established to what depth the original pit had been excavated beyond this floor.
- 7.18.9 Adjacent cess pit [1327], attributed to Phase 6b, fell out of use during this period. This was backfilled with silty sand [1325] which contained a mixed assemblage of Roman (AD 50-100), 11th to 12th century and later 18th century pottery. Other finds, including glass and building materials were consistently dated from the mid 17th to early 18th century.

7.19 Phase 6d: Post-medieval 18th to 19th Century (Fig. 21)

Area A1

- 7.19.1 The later 18th and 19th centuries saw an increase in development and sub-division of pre-existing properties, pitting (refuse disposal) and ground raising/levelling. Squared, flat based pits [1343] and [552] had been respectively backfilled with building rubble and silt [1356] and [1344] and sandy rubble [553]. Late 18th to 19th century fragments of clay tobacco pipe were recovered from capping silt [1344]. Squared, flat bottomed cess pit [587] was located in the north-west of the excavation area and extended c.1.9m by 1.00m. This had been deliberately backfilled with cassy clay [588], from which pottery dated to the mid 17th to 18th centuries, glass from pharmaceutical bottles (Appendix 7) and clay tobacco pipe dated to the late 18th century, were recovered. One of the clay tobacco pipe bowls was stamped 'WC' which could relate to William Collins of Southwark, who died in 1686 (Appendix 6). All of the previously mentioned cut features were identified from c.2.25m OD. At the same horizon, a rounded posthole [520] of 0.36m diameter was identified. This extended 70mm in depth and was filled entirely by black charcoal [519] which could suggest burning in situ. It remains unclear what structure this belonged to or what function the posthole served.
- 7.19.2 The upper horizons of cess pit [587] were truncated by the construction of trench built wall [586] within cut [584]. This red brick and concrete wall followed a north-west south-east

alignment to a maximum observed length of 3m, preserved to 3.28m OD at 1.23m in height. The construction cut had been backfilled with reddish black sand clay with brick rubble [583]. The wall effectively bound an area 3m by c.3.40m with earlier Phase 6b walls bounding the eastern and northern limits. An unfrosted red brick wall [834] was identified in section and was attributed to this phase of development.

- 7.19.3 A number of levelling/ground raising deposits were recorded throughout the site between c.2.50m OD and 3m OD. These were generally rich in mortar and demolition material ([1337], [722] and [1288]). Soakaway [749] (attributed to Phase 6a) was fully backfilled at this time with rubble [748] and [747] in turn. These contained a very mixed assemblage of 18th century clay tobacco pipe and glass, and 13th to 15th century building material. The clay tobacco pipe was all dated from 1700 to 1780, and some examples had been decorated with small relief star stamps, or small stylised crowns (Appendix 6). The pottery assemblage was also varied and included 1st and 2nd century Roman pottery, in addition to examples dating from 1680 to 1800. A similarly variable pottery assemblage was retained from levelling deposit [1276], and may indicate extensive disturbance during construction of the later 19th century properties which defined the limits of excavation. Glass and building material dating from the 18th and 19th centuries was retrieved from [1276] in association with pottery dating from the early 1st century AD, from 900 to 1050, 1140 to 1220, and up to 1770 to 1830.

Area A2

- 7.19.4 A red brick floor [707], dated to the 18th/19th centuries was laid at 2.77m OD between oblique walls [708] and [710]. The bricks had been bonded with a grey mortar over a 0.25m thick levelling deposit of silty clay [712] which contained contemporary fragments of building material and pottery plus a few residual fragments of Roman pottery. Red brick floor [661] was considered to be roughly contemporary to [707] and was located to the immediate north-west at a comparable elevation of 2.78m OD. This covered a 0.84m by 0.82m area and utilised unfrosted red bricks bonded with a yellow brown mortar containing pottery dated from c.1770. A north-east south-east aligned wall repair [709] to the east of the latter floor presumably relates to this phase of modifications. The surface lain wall had been constructed from red brick and roughly hewn chalk blocks and survived to 3.17m OD over a 0.20m thick levelling deposit of clayey rubble [713].
- 7.19.5 Linear and circular cuts [673] and [935] were located to the east of the excavation area. These were interpreted as a robber cut and a posthole respectively and had been backfilled with loose mortar [672] and sandy gravel [936]. Pottery dating from c.1825 to 1900 was retained from mortar fill [672].
- 7.19.6 Extensive deposits of sandy gravel levelling [634] and [946] and demolition rubble [622] were recorded across the excavation area. Pottery dating from the 16th to 19th centuries and a coin of Britannia (SF10, Appendix 9) dating from the 18th/19th century were retrieved from

gravel layer [634]. Other material recovered from demolition rubble [622] included residual Roman Pedalis/Lydion bricks (Appendix 11).

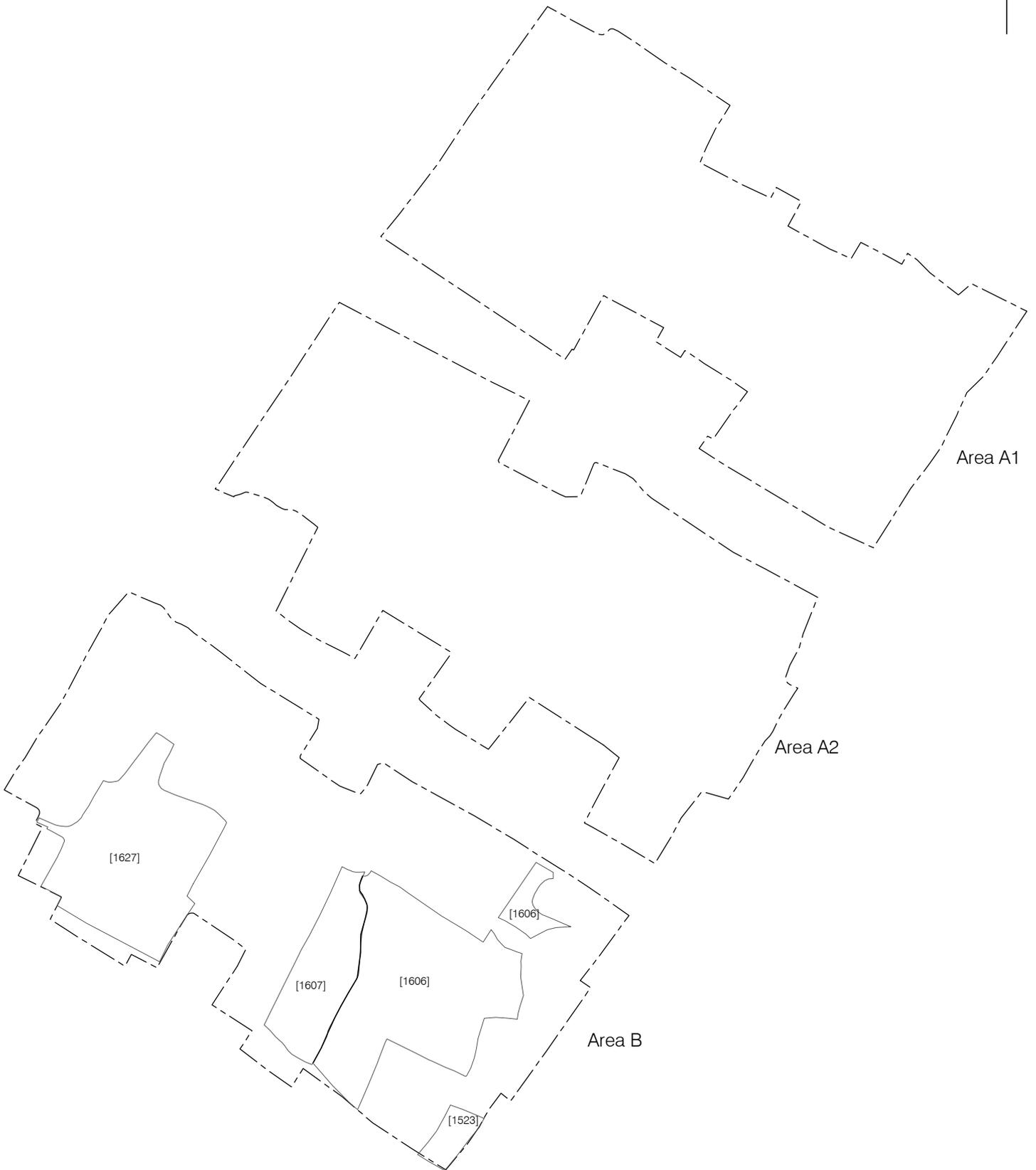
Area B & C

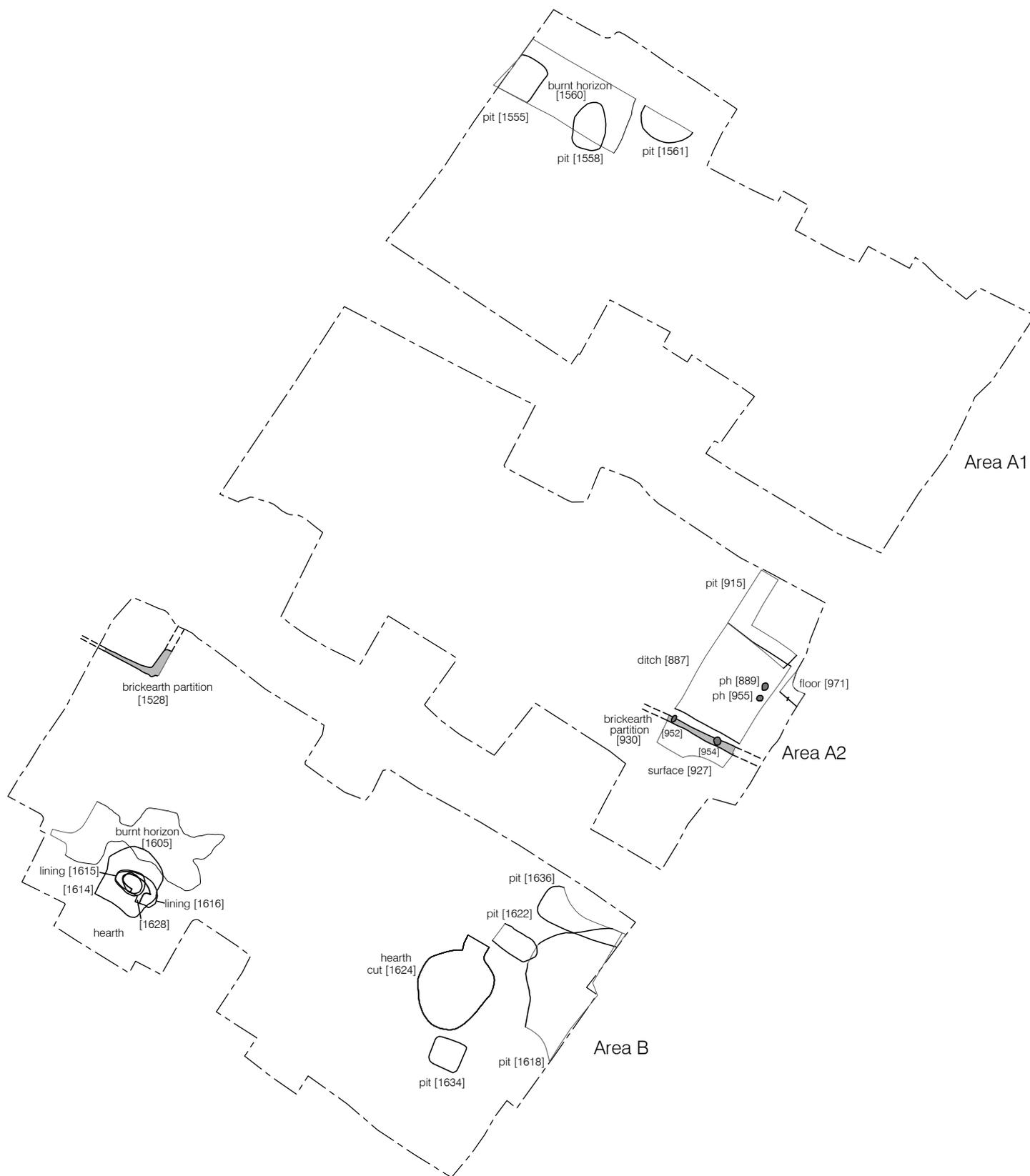
7.19.7 Earlier Phase 6b/Phase 6c cess pit [596] was capped with silt and rubble [1330] and [1366] at this time. The former deposit contained decorative clay tobacco pipe (SF127), a residual 1st to 2nd century coin (SF128) and early to mid 19th century pottery fragments. The wider area of the squared cess pits was then enclosed by walls [705], [595] and [669]=[13] to the north, east/south-east and south respectively. These constructions utilised red brick, tile, chalk and roughly hewn stone (sandstone and ragstone) blocks bonded with a yellowish sandy mortar. All had been trench built within construction cuts [715], [646] and [720], from a rough founding level of 2.30m OD where seen. Southern wall [669] was unique in being founded over a 0.15m thickness of mortar [724]/[725] within the construction cut, and the incorporation of unglazed 17th/18th century quarry floor tiles within the body of the wall (Appendix 11). A slight southern return to the eastern limits of [669] and position of a brick tank [15] along the southern face, may suggest that this wall related to a property which extended southwards. The internal, southern, face of the wall had been modified with the insertion of brick facing [670] within linear construction cut [721]. The construction of brick cellar [12] against the northern face of [13] would appear to relate to the northern property bounded to the east by [595].

7.20 Phase 7: Modern

7.20.1 By the mid 19th century the entire site was redeveloped; earlier properties were demolished and the area landscaped as part of the precinct of St Thomas's Hospital (as depicted cartographically from at least 1846). It is likely from this scheme of redevelopment that much of the demolition and occupation material recorded during underpinning excavations derive ([1273], [1272], [1271], [1270], [1269], [1268], [1267] and [1266]). These were all located along the southern limit of excavation and contained clay tobacco pipe, consistently dating from the 18th and 19th centuries. Further environmental analysis suggested deposits [1270], [1269] and [1266] to represent a series of clay internal floors (Appendix 19, S537). However, the stratigraphic location of these features would suggest these are more likely to have been constructional layers associated with the latest phase of development, i.e. the construction of 11-15 Borough High Street. An additional depth of demolition material was identified along the eastern limits of excavation. Deposits [25], [36], [34], [59], [60], [35], [72], [2], [221], [16], [11], [19], [68], [69] and [214] contained early 19th to early 20th century material and is also likely to represent the demolition of earlier 19th century properties.

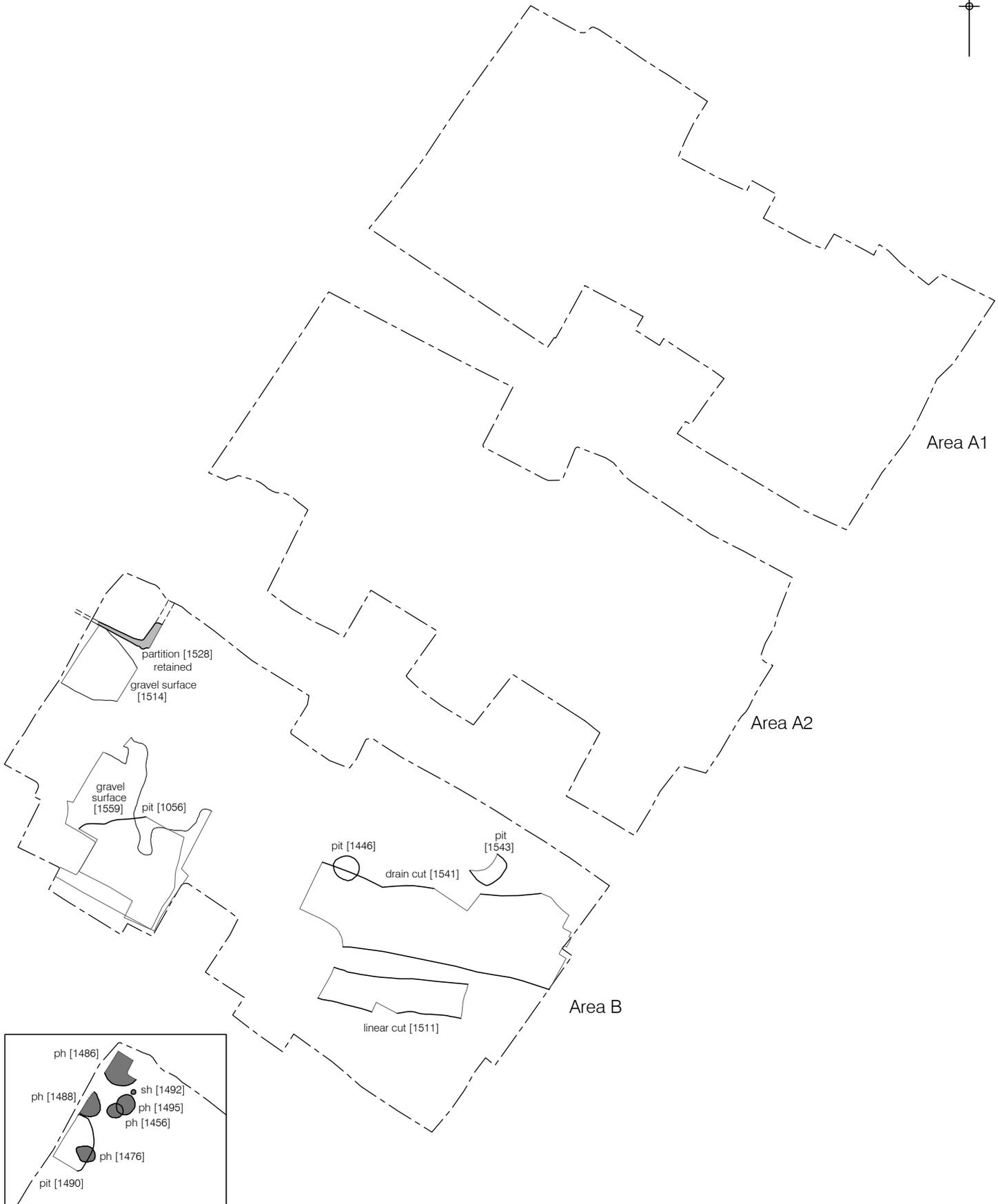
7.20.2 The terrace that comprised 11-15 Borough High Street was constructed by 1863-73 (Figure 22). These basemented properties had a major impact, and effectively subdivided the Site into three distinct areas due to deep footings (Areas A1, A2 and B). This terrace survived until its demolition in 2010/2011.





0 5m





Inset to illustrate later Phase 3d features in NW corner of Area B





Area B Key

 Phase 3e ii features

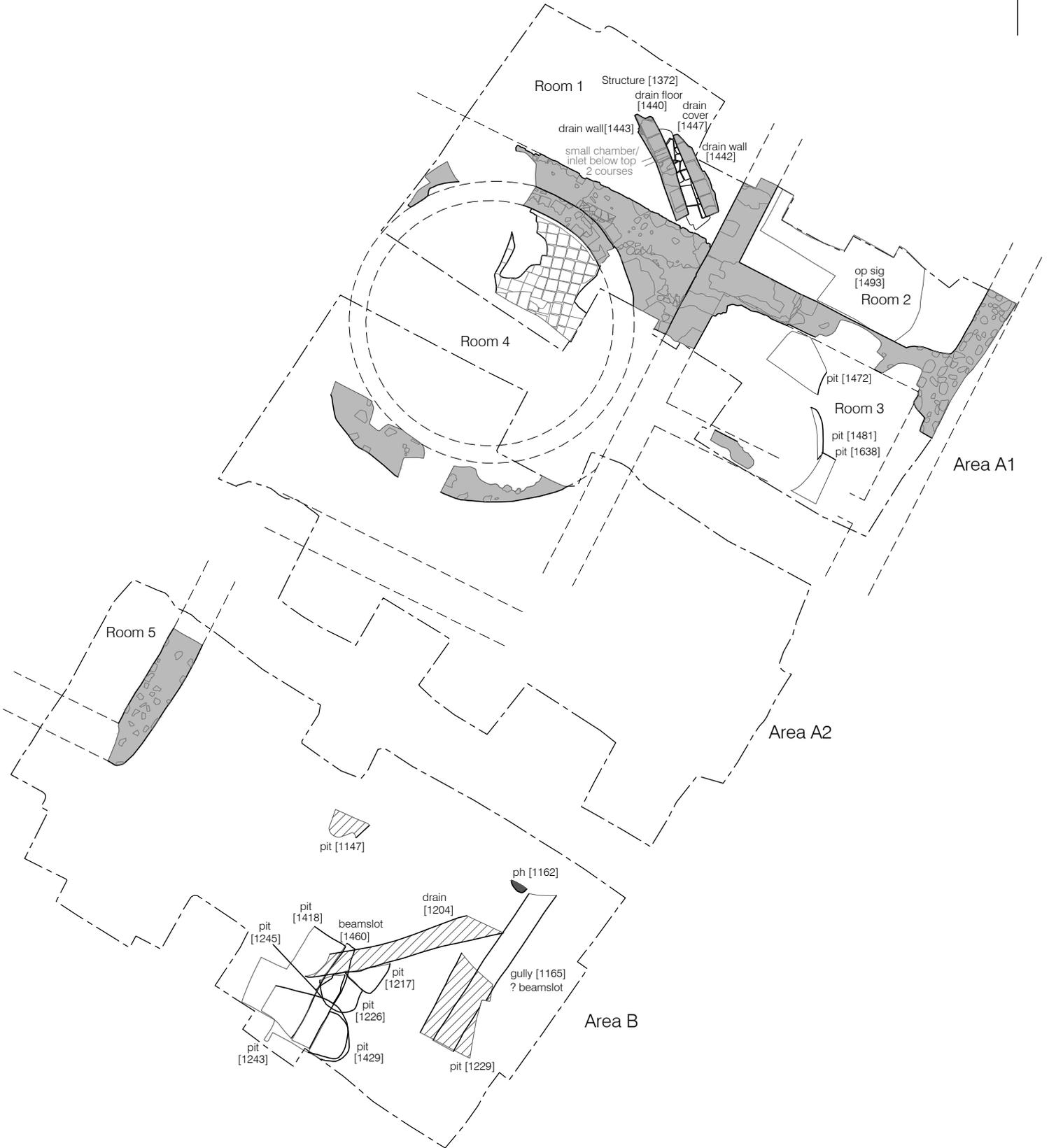
All other features are Phase 3e i



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Figure 9
Phase 3e
1:100 at A4



Area B Key

 Phase 3f ii features

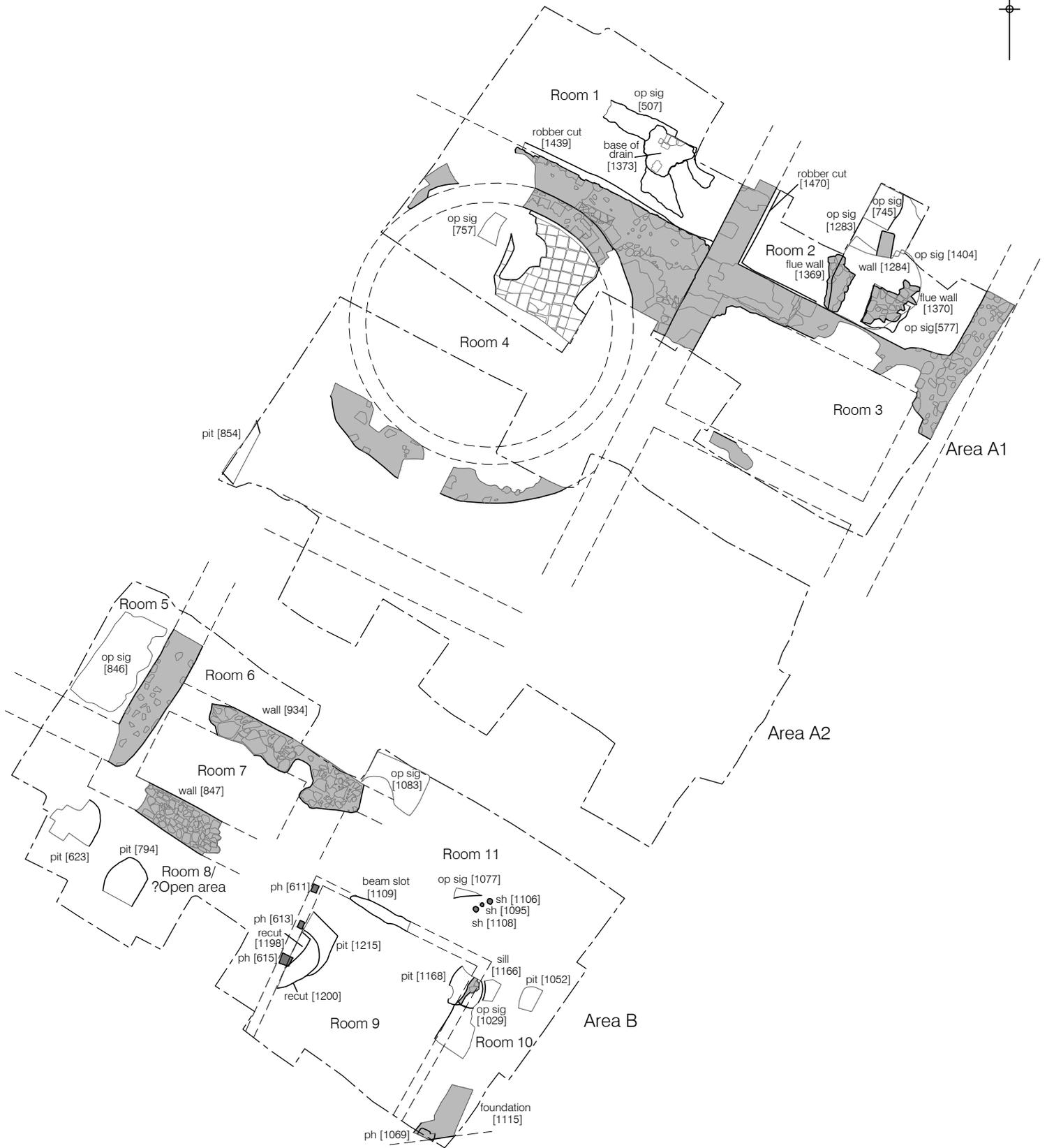
All other features are Phase 3f i

0  5m

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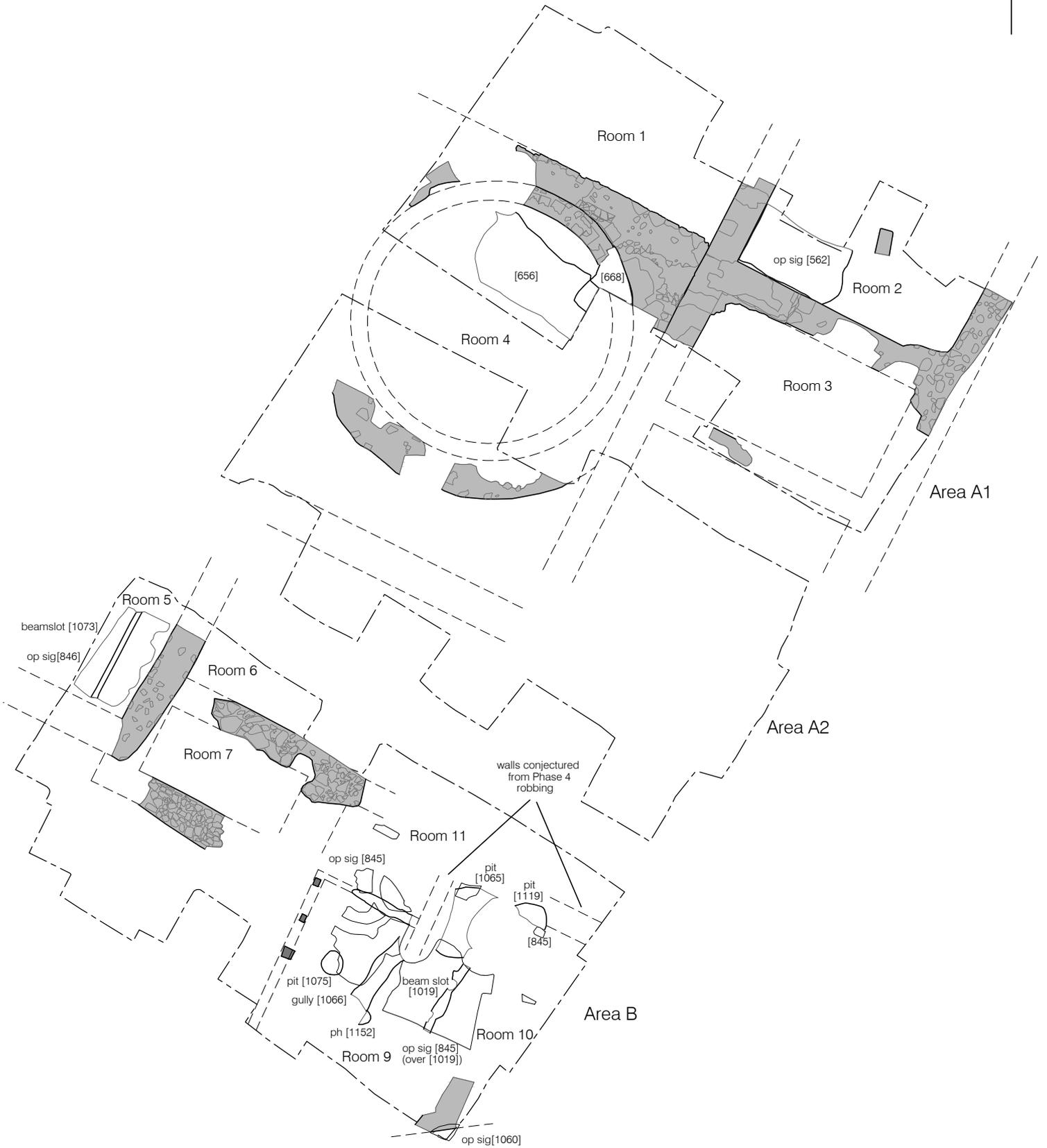
Figure 10
Phase 3f
1:100 at A4



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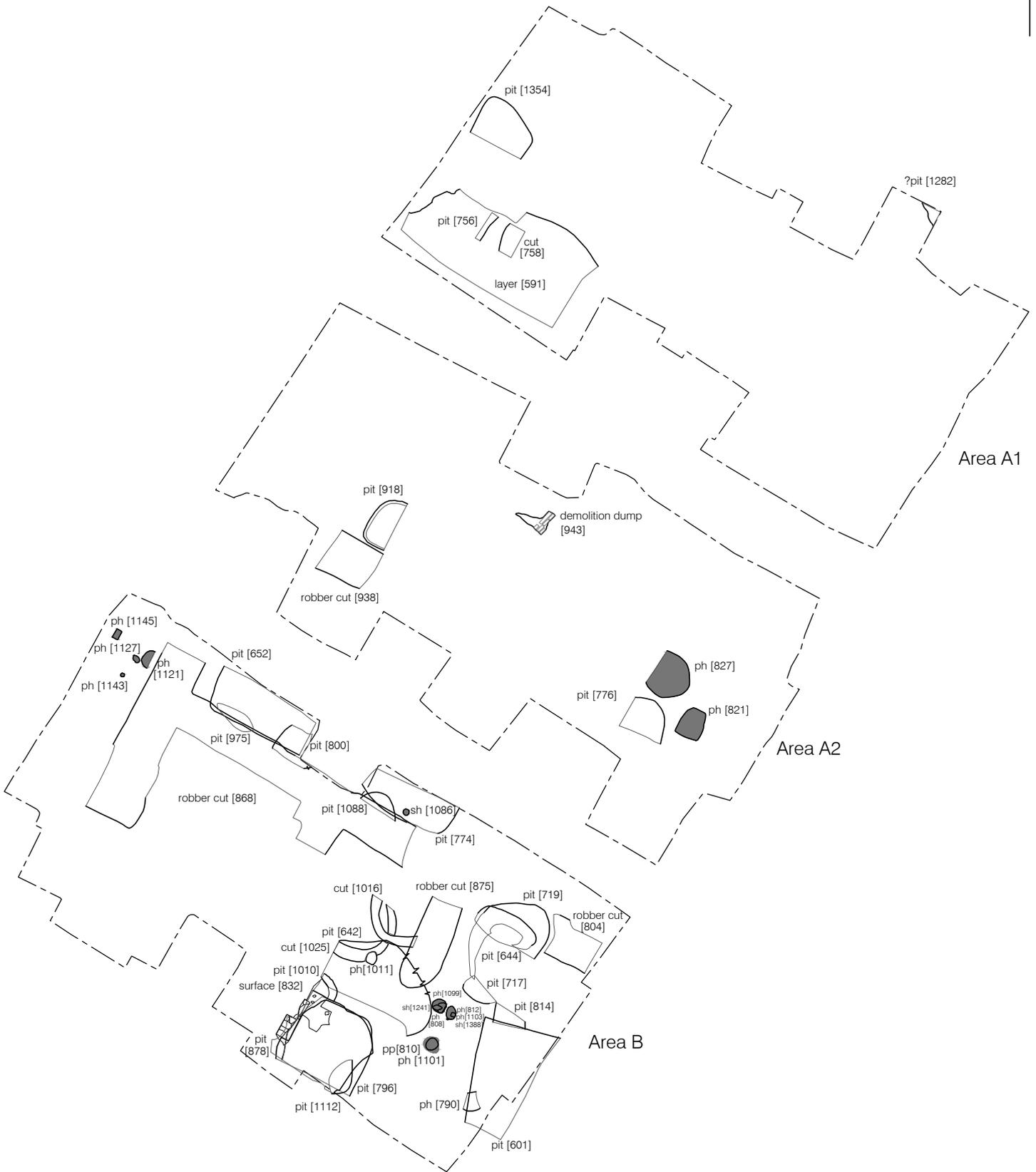
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Figure 11
Phase 3g
1:100 at A4



0 5m

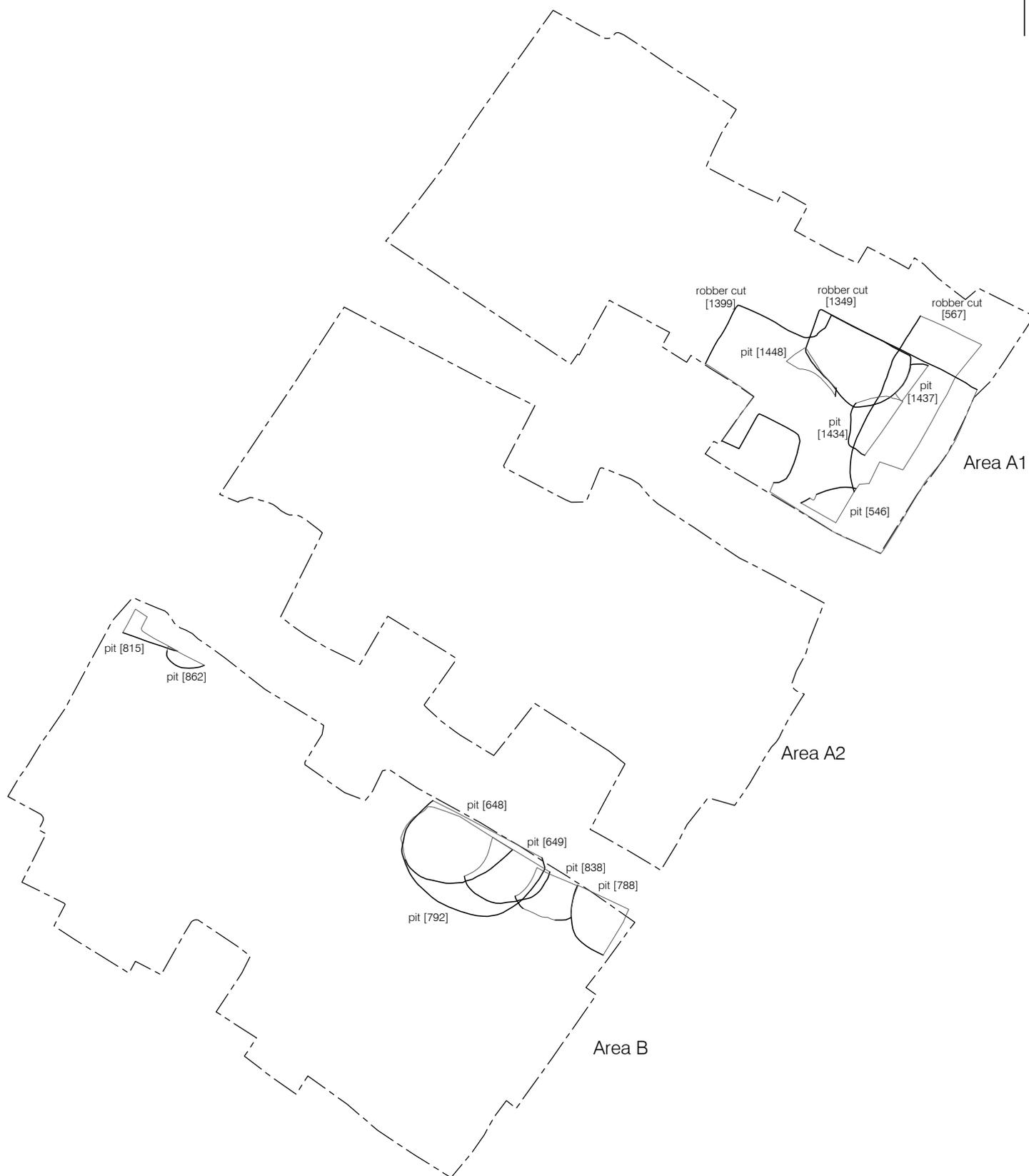
Figure 12
Phase 3h
1:100 at A4



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Figure 13
Phase 4a
1:100 at A2

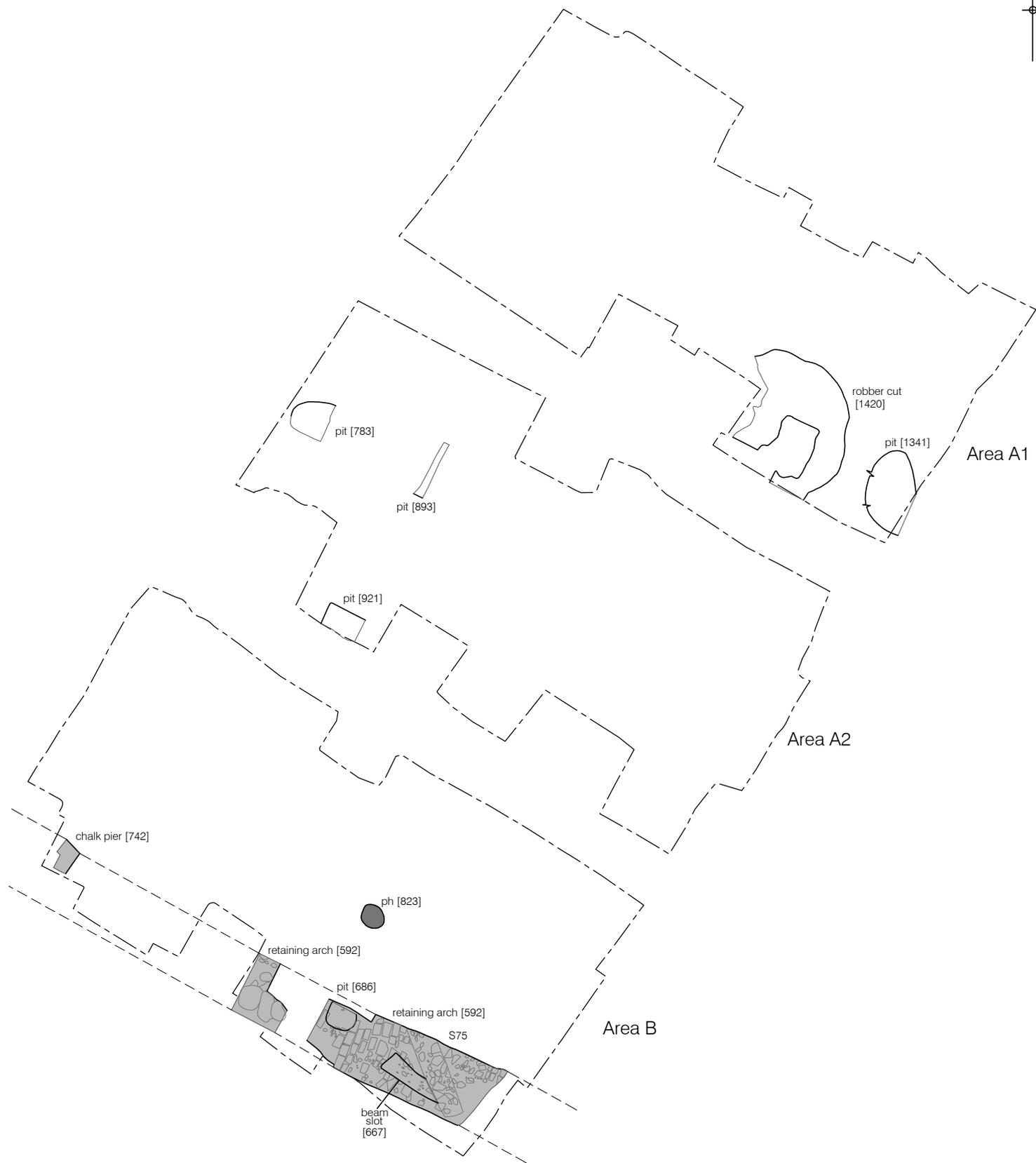


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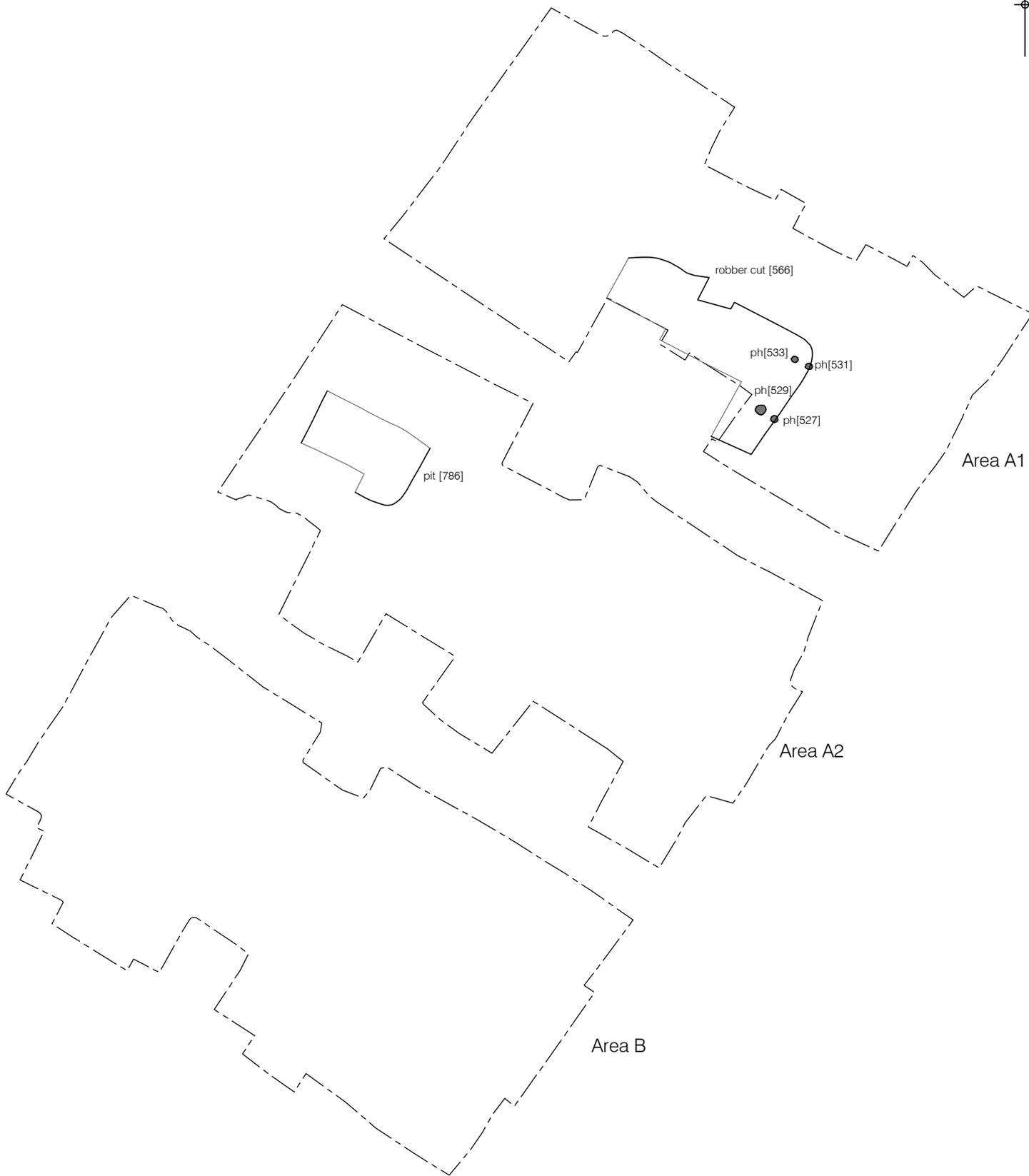
Figure 14
Phase 4b
1:100 at A4





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Figure 16
Phase 5b
1:100 at A4

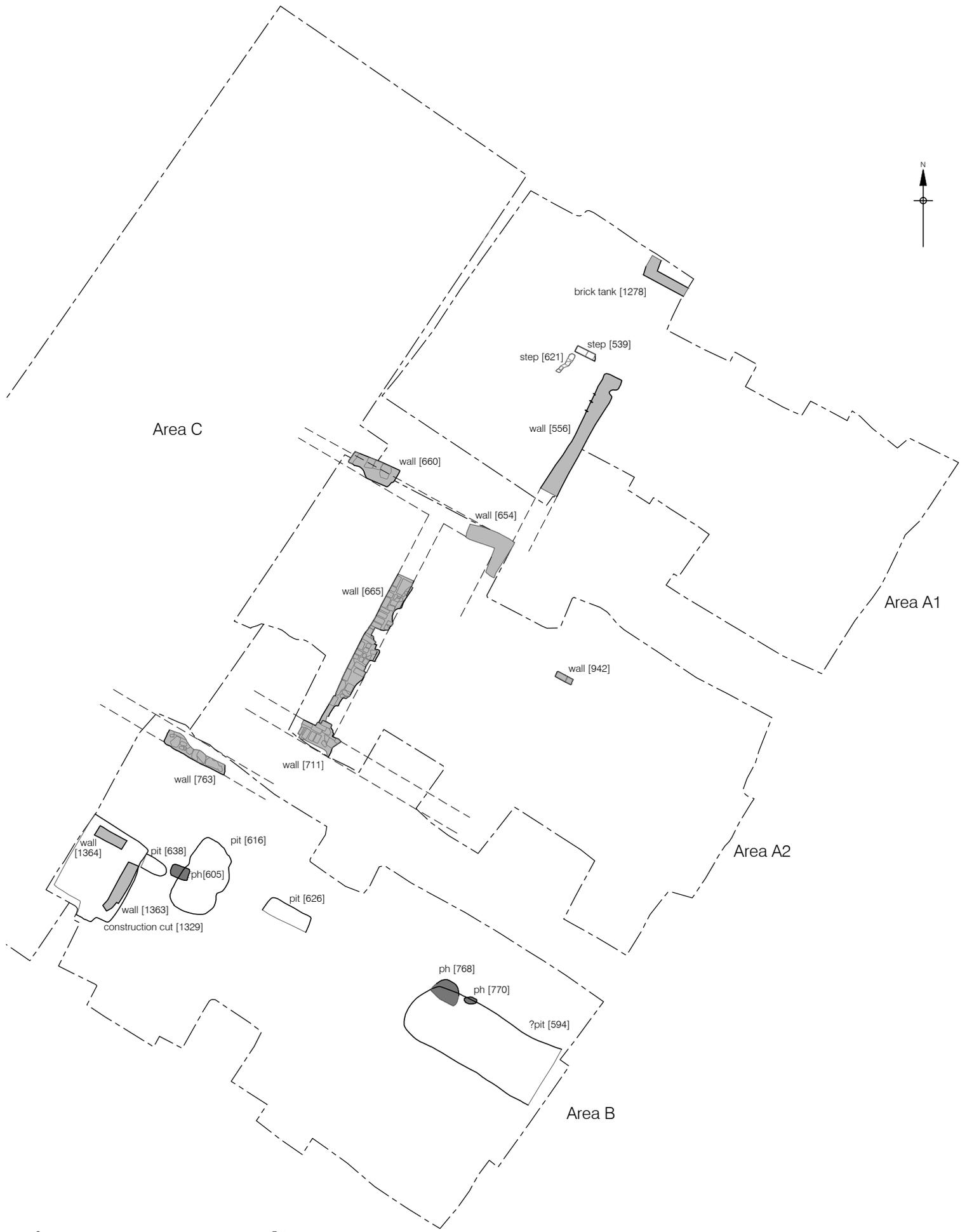


0 5m

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Figure 17
Phase 5c
1:100 at A4



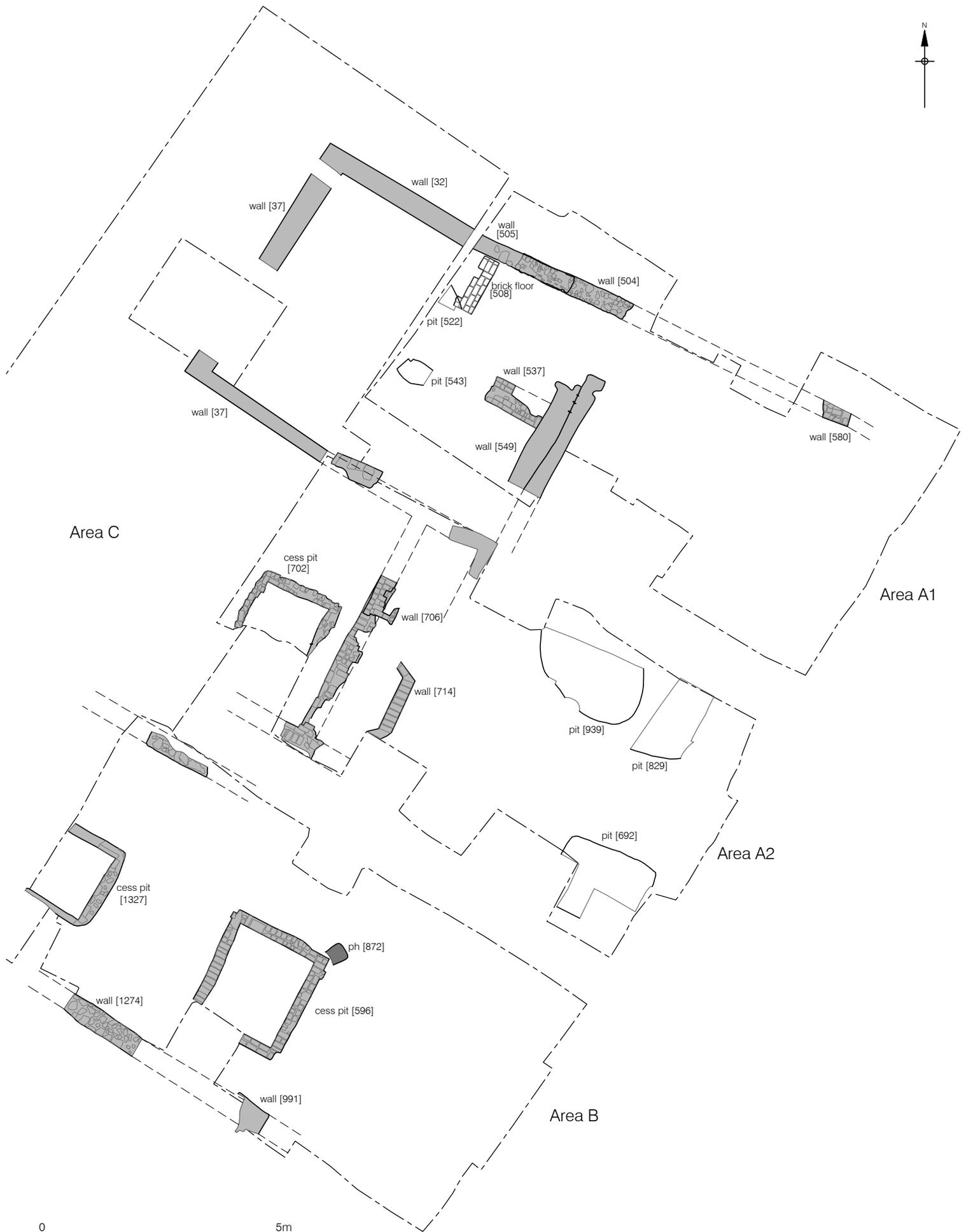


Figure 19
Phase 6b
1:100 at A4

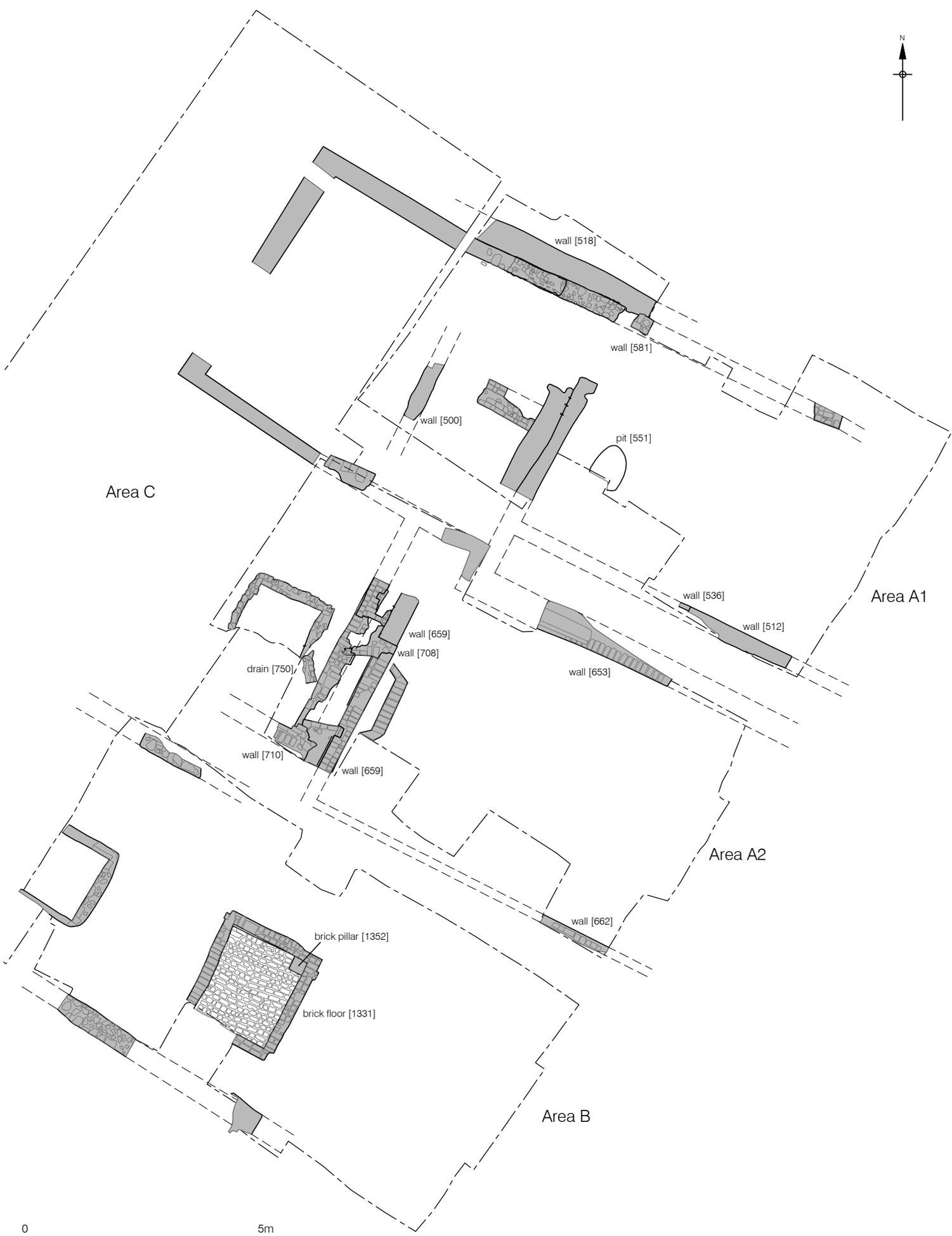
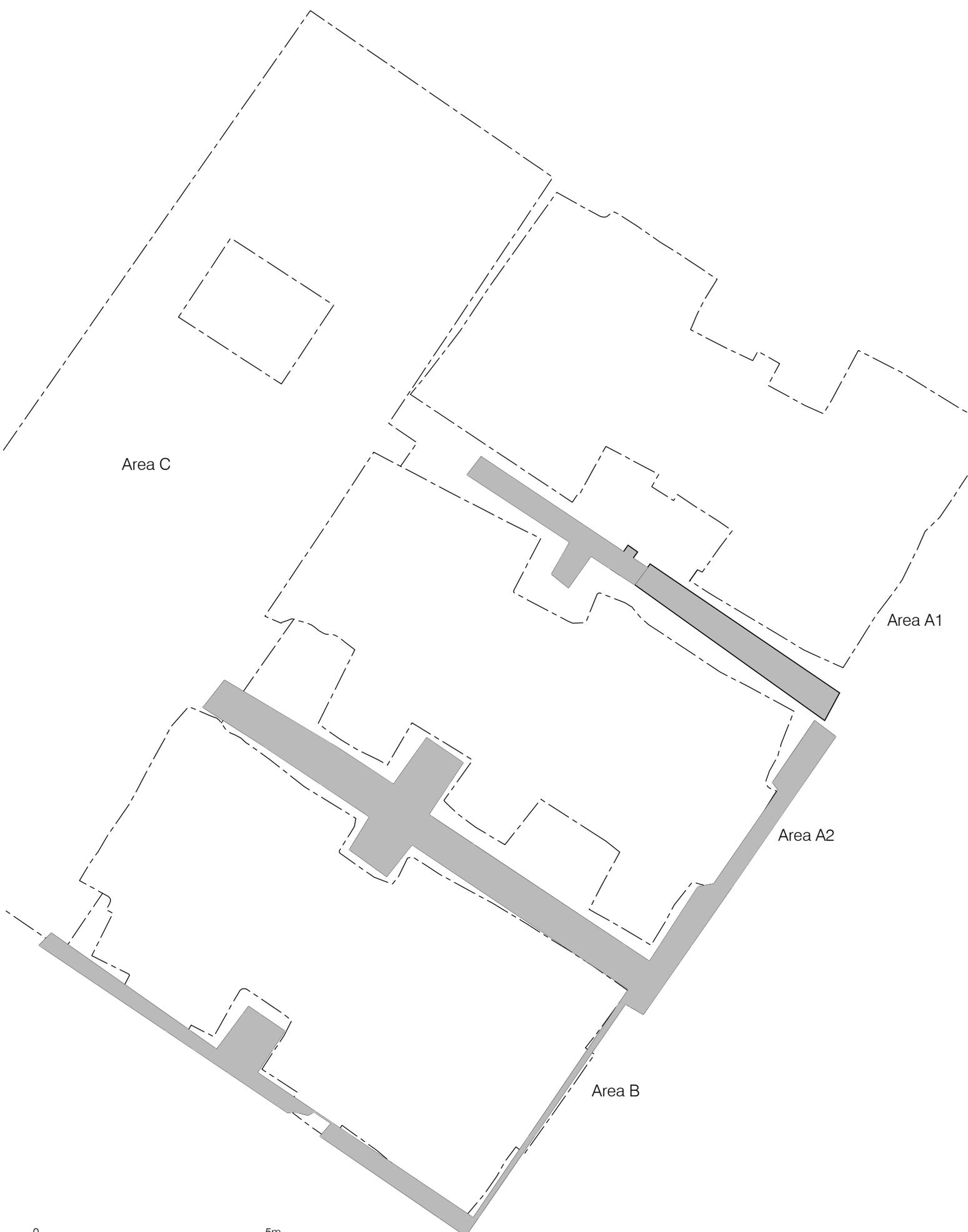


Figure 20
Phase 6c
1:100 at A4





Area C

Area A1

Area A2

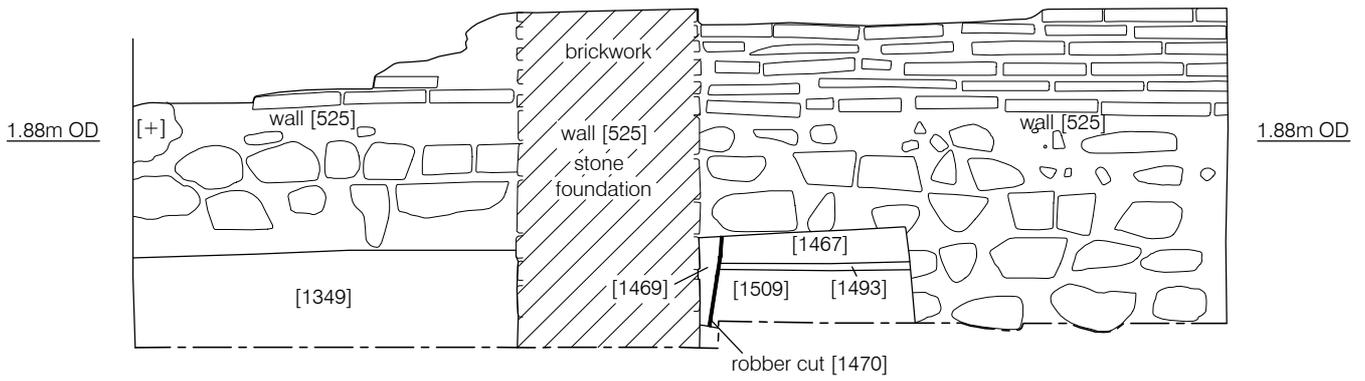
Area B

0 5m

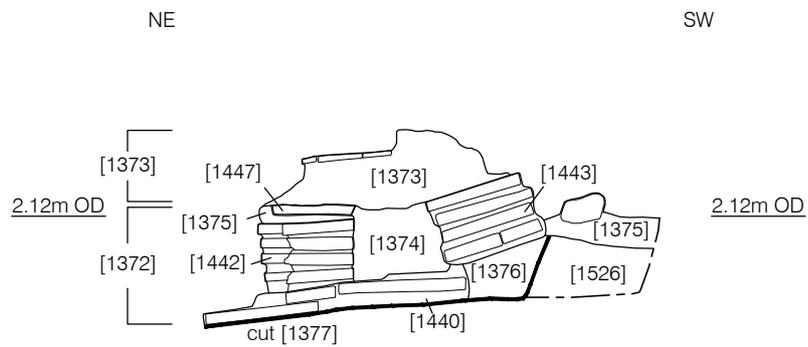
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JB 06/08/13

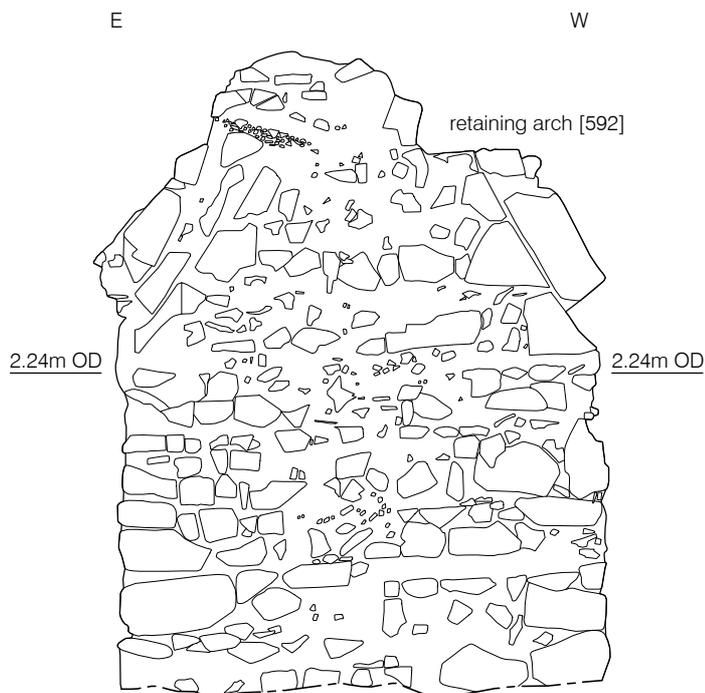
Figure 22
19th century walls and footings
1:100 at A4



Section 47
Area A1
East facing elevation of wall [525]



Section 38
Area A1
Northwest facing section through brick flue/drain



Section 75
Area B
North facing elevation of retaining arch [592]





Plate 1: Brickearth partition [930], Area A2, view to north-east, 0.5m scale.



Plate 2: Clay hearth lining [1620]/[1616], Area B, view to north-east, 0.20m scale.



Plate 3: Opus Signinum 'lip' against curvilinear wall [589] over floor [658], Room 4, Area A1, view to north-east, 0.5m scale.



Plate 4: Illustrating construction of outer curvilinear wall [589] against insulating wall [555], Room 4, Area A1, view to north-west, 0.5m scale.



Plate 5: 'Laconicum'/Room 4, Area A1. Brick floor [658] in foreground, view to east, 0.5m scale.



Plate 6: Room 1, Area A1, illustrating drainage feature [1372], view to south-west, 2m scale.



Plate 7: Interior of drain [1372], Area A1, view to south-south-east.



Plate 8: Opus Signinum floor [846], Area B, view to south-east, 1m scale.



Plate 9: Intercutting curvilinear cut features [1016] and [1025] to left and right of frame respectively, Area B, view to south-east, 0.5m scale.



Plate 10: Vaulted chalk pier [592], Area B, view to south-west.



Plate 11: Chalk pier [592] Area B, view to south-west, 1m scale.



Plate 12: Post-medieval brick and chalk wall [505]/[504], Area A1, view to north-east, 2m scale.



Plate 13: Post-medieval cess pit [596] with brick floor [1331] and buttress [1332], Area B, view to north-west, 1m and 0.5m scale.

8 PHASED DISCUSSION

8.1 Natural/Prehistoric (Phase 1/2)

Deposits relating to natural/prehistoric activity were wholly encountered within localised augering, or underpinning trenches. The earliest horizon identified comprised fluvial sands from 0.80m OD to the north of the excavation area, and were overlain by silty sands. Underpinning along the northern limit of excavation revealed waterlain alluvium from c.1.04m OD. These interventions were too limited in terms of size or scope in order to be able to establish any wider trends regarding underlying topography, or establish with any certainty whether these represent undisturbed or natural horizons. The discovery of worked flint consistent with a Mesolithic/Neolithic date within later deposits may suggest that the natural topography of the Island was truncated or landscaped during the Roman period.

8.2 Roman: Pre-Bath house Late 1st to early 2nd Century

8.2.1 Early Roman activity across the site comprised an initial episode of ground raising/consolidation followed by industrial activity dating from the mid 1st century. This was evident in the southern excavation Area B in the form of rake-out pits and hearths indicative of copper working. Environmental processing of the backfills of these features suggested that the production of leaded copper alloy was taking place, with ironworking taking place in close proximity. It is therefore possible that Area B was located within an area primarily utilised for industry at this time.

8.2.2 A distinctive burnt horizon was identified across the northern limit of excavation and extended southwards into adjacent areas. This was initially thought to represent a conflagration horizon related to Boudica's destruction of Roman Southwark. However, inclusions of copper alloy waste and burned fuel inferred this to be a constructional layer, and part of an ongoing industrial process as opposed to a single event.

8.2.3 Brickearth partition walls identified within Areas A2 and B formed the earliest evidence for construction on the study site. The latter example is likely to have related to a parade of buildings/ribbon development along the Roman road (Road 1) that lay to the west. The partition within Area A2 however would have lain some distance from Road 1, but followed a comparable alignment to the walls within Area B. It is possible that this structure was located along a subsidiary road or track extending perpendicular from the road to the east. Mortar surfaces and brickearth floors illustrated numerous phases of use for this property.

8.2.4 Copper waste and vitrified hearth lining fragments recovered from occupation deposits associated with the brickearth partition in Area A2 suggested that copper working within the immediate vicinity continued during the lifespan of this building. The structure appears to have fallen out of use by the early 2nd century and was overlain by ground raising deposits

and demolition debris. These layers might signify the preparation of the ground for the next phase of development.

- 8.2.5 Towards the later 1st century, roughly between AD 70 and AD 90, copper working continued, but at a reduced scale than previously identified. This reduction in industrial activity correlated with an increase in domestic occupation and development. The change in activity was represented in Areas A1 and A2 by heavily truncated opus signinum surfaces, refuse pits and levelling deposits. It remains unknown whether the various opus signinum surfaces were part of the same structure, albeit within different rooms, or part of different buildings.
- 8.2.6 A greater concentration of activity, initially industrial and then increasingly domestic was also observed within Area B. A brickearth slab was installed in the west of the site, possibly representative of a former surface, of which nothing of the superstructure was identified. This appeared to respect the structure in the north-west represented by the brickearth partition. Evidence of industrial processes was inferred by the copper alloy waste inclusions within the brickearth slab itself, and by a large working hollow that truncated the slab. Copper alloy and cinder were contained within the hollow, and rake out material with burnt debris directly sealed the slab. The change in activity to a more domestic nature was indicated by an opus signinum surface overlying the rake out material, and levelling material that contained copper tweezers and part of a worn lava rotary quern.
- 8.2.7 It appears that the structure represented by the brickearth partition in the north-west of Area B remained in use during the industrial activities and subsequent redevelopment taking place in the immediate vicinity. Similar to the structural remains identified within Area A2, the building seems to have fallen out of use by the early 2nd century. The interior of the space was sealed by debris and burnt wood, potentially representing in situ collapse. A second phase of development for this space was suggested by a number of postholes that truncated the burnt debris, but remained within the footprint of the former space. The demolition rubble within adjacent pits might have derived from the destruction of the earlier structure.
- 8.2.8 The eastern limits of Area B however, did not reflect quite the same increase in domestic activity. Following the disuse of the earlier hearth and subsequent ground raising, the area was primarily occupied by an east-west aligned ditch. This was notable for the differing alignment from the structural remains and was thought to represent an early property boundary. Alterations to the boundary were clear from the installation of a brickearth slab, which sealed the ditch, followed by a second linear drainage feature which followed the same alignment as the earlier ditch but 1m to the south. The numbers of tegulae recovered from the initial brickearth slab suggested this to have been a former surface, but the nature or extent of the former structure or property this was connected to remain unknown.

8.3 Roman: Bathhouse construction and occupation 2nd century

- 8.3.1 The construction of a high status masonry building dominated the northern excavation Area A1 and partially extended into adjacent Area A2. This building/complex had been constructed with Bessalis brick walls over ragstone foundations, and was tentatively dated to the early 2nd century. Unfortunately due to project depths, the full depths of the foundations were not established and construction cuts were only identified within one of the four rooms. The observed construction cut had been backfilled with stone packing material containing sherds of 1st century pottery. The four rooms were numbered 1 to 4 from the north-west corner extending clockwise. A clear vertical join was visible in the masonry that separated western Rooms 1 and 4 from eastern Rooms 2 and 3, and it therefore remains unclear which wall was constructed first, or whether all rooms were part of the same original scheme. However, given the comparable construction materials, techniques and elevations, the rooms have been interpreted as being contemporary.
- 8.3.2 Room 4 was the most distinctive and unique in plan from the other spaces. The circular room was defined by a thick insulating outer wall, overlain by a brick floor and a second curvilinear wall constructed against the outer wall. Laminated limescale residues over the floor surface suggested that the room had been subjected to repeated episodes of moisture and damp conditions during use. Furthermore, the inner wall 'lipped' over the floor surface, and had been coated with opus signinum, indicating a requirement for waterproofing. The unique appearance in plan and presence of limescale suggested this to have been a Laconicum, or sweating room. The inner curvilinear wall would have originally included seating, and it is possible that these had been removed by robbing or later intrusions. The remainder of the complex was therefore regarded as part of a bathhouse.
- 8.3.3 The function of the remaining rooms was less certain. Levelling and rough mortar working surfaces represented the earliest identified activity within Rooms 1 and 2. These contained numerous copper objects and pottery with an uppermost date range of AD160. Both rooms were modified at least twice; first during the mid/late 2nd century and again during the late 2nd century. Modifications to Room 1 comprised the installation of drain [1372] that ran diagonally across the space, terminating in the south-eastern corner. Stone packing material raised the ground level around the drain, and contained a copper medicinal spatula probe and Vespasian coin within the silt the stones were bedded into. Tesserae, a bone pin and copper wire were recovered from a silt accumulation within the drain. It is not entirely clear how the drain functioned with the adjacent Laconicum (Room 4 to the immediate south), and it was assumed that a downpipe had originally been installed at the south-eastern corner, as no breaks in brickwork were visible to suggest it fed through the wall. Towards the later 2nd century, further changes to the room were evident. Robbing cuts trenched along the internal wall faces, presumably to remove wall facings or veneers, followed by levelling and an overlying opus signinum and tile flue. Tegula impressions recorded from the surface of the latter suggested this may have formed the base of a tile and mortar structure. How the room functioned with this structure in place remains uncertain.

- 8.3.4 Robbing and ground raising events were also identified within Room 2 and may indicate several changes in function. Comparable robbing cuts to those seen in Room 1 were observed, which trenched along the internal faces. These were similarly interpreted to have removed wall facings/veneers. Surfaces within this space were recorded at the level of the foundation courses for the bounding wall. It seems unlikely that the stonework would have been visible in the finished structure, which adds further support for the robbing of wall veneers. During the later 2nd century the room was modified again. Levelling deposits containing quantities of painted plaster were laid down, and overlain by a heavily pitted opus signinum surface. It is possible that, given the appearance of the opus signinum, this was never intended to be seen in the finished design. An additional phase of modification, involved the deposition of heat blackened stones, capped with an opus signinum surface, followed by the construction of a stone flue. The flue was filled with ash, but how this functioned with adjacent Room 3 is problematic and uncertain at present.
- 8.3.5 Room 3 was positioned to the south-east of the identified complex. This was the poorest preserved from the complex, with the majority of the space being truncated by later intrusions. Scarring along the internal face of the northern boundary wall however did infer that earlier floors had existed. Partially identified pits and levelling deposits were encountered within the space, and contained mid 1st to mid 2nd century material. It is entirely possible however, that given the extent of the truncations that these could be attributed to an earlier phase of use, pre-dating the complex. No further features or horizons survived with which to help establish the function of this room.
- 8.3.6 Modifications to the rooms might suggest that even if the complex was initially constructed/designed as a bathhouse, it may not have remained in use as this throughout its lifespan. Repairs within Room 4 might support this. A brickearth repair was identified to the floor, in the west of the room. The repair lay flush with the surrounding brickwork, and it therefore seems unlikely that additional material were overlaid onto this. The use of brickearth might conflict with the nature of the room, if this was still functioning as a Laconicum, which would presumably require a waterproof or moisture resistant floor.
- 8.3.7 Dumped deposits dating from the late 2nd to early 3rd century within Room 4 suggests that parts of the complex had fallen out of use by this time. However, the installation of an opus signinum surface over such debris within Room 2 would suggest that not all rooms had fallen out of use. It is likely that by the 3rd century the complex had ceased functioning as a bathhouse, but not all spaces within the complex had been completely abandoned.

8.4 Roman: Areas A2 and B during the 2nd to early 3rd Century

- 8.4.1 Numerous ephemeral and truncated surfaces were identified within Areas A2 and B dated to the early 2nd century. These were formed of opus signinum, gravel and tile and multiple overlying surfaces were recorded from both areas indicative of several phases of use. It is

noteworthy that a number of the dump layers separating the surfaces contained high status building material such as Purbeck marble wall veneer/inlay and Purbeck marble paving slab fragments. Whether these derived from the bathhouse or a similarly high status complex within the immediate vicinity is unclear. The comparable elevation of the Area A2 and B surfaces to those identified within Area A1, and the construction of a masonry structure in the north-west of Area B (replacing the earlier brickearth partition) would suggest that widescale development was taking place during the early 2nd century across the majority of the Site. The masonry building within Area B also illustrates some continuity of land use, and perhaps the continuity of land/property boundaries.

- 8.4.2 Pits backfilled with demolition material truncated the upper horizons of the previously mentioned surfaces and suggest that these had fallen out of use by the mid 2nd century. The south-eastern limits of Area B then appeared to have been utilised as a dumping ground (refuse and oyster shells) and for the disposal of cess. The multiple gravel 'surfaces' recorded dating to this period, may represent ground consolidation and capping material as opposed to formal floors or surfaces. Drainage was also a concern at this time, and two phases of drainage cuts were identified, one of which retained the impression of the former pipe that ran the length of the cut.
- 8.4.3 An increase in construction was apparent within Area B towards the mid/late 2nd century, by which time at least 7 distinct spaces were in use. These may have been rooms within a single complex, or part of separate structures. A difference in construction techniques was apparent between those rooms identified to the west of the site (Rooms 5, 6 and 7) and those to the east (Rooms 9, 10 and 11) that may argue for the latter interpretation.
- 8.4.4 Western rooms 5, 6 and 7 were primarily defined by the remnants of ragstone foundations at the base of robber trenches. It was therefore considered that Rooms 6 and 7 abutted Room 5, but this cannot be proven. Occupation of Rooms 5 and 6 was inferred by the levelling deposits overlain by brickearth slabs and opus signinum surfaces within each of these spaces. The levelling layers contained material culture with an uppermost date range of AD 160 and fragments of high status material, including a marble string course. The opus signinum surface within Room 5 was distinctive due to the upper face being heavily pitted by hobnail boot impressions. This was not likely however to have been intended to be seen in the finished structure.
- 8.4.5 By the later 2nd/early 3rd century, the structure to which Room 5 belonged was modified by the insertion of a linear beamslot. Although this compares well with the original boundary wall, the placement would have narrowed the room to such an extent that if the eastern boundary were maintained, the space to the east of the beamslot would have been too narrow to be functional. It is possible that the beamslot demarcates a reduction in the earlier property's boundaries.

- 8.4.6 Rooms 9, 10 and 11 are thought to represent spaces within a timber framed building, occupying the south-eastern extent of Area B. These spaces were divided by north-east south-west and north-west south-east aligned beamslots, and defined by multiple phases of levelling material and mortar surfaces. The slumping of some of these deposits into voids created by the removal of earlier phase partitions suggested that the complex had been redeveloped/rebuilt at least 2-3 times over a c.50 year period.
- 8.4.7 Room 10, at the south-east of the timber framed building survived significantly better than the other spaces. An opus signinum surface and sill was observed to lip up towards the west, offering further support for a removed partition. An area of damage or slumping in the north of the Room was repaired with an opus signinum sill suggesting the room may have experienced some longevity of use. A possible internal emplacement was also identified in the form of a small truncation through the surface, which had been backfilled with demolition debris. The eastern boundary for this room was re-established at least once during the late 2nd/early 3rd century, following the installation of a brickearth slab across the remainder of the building. An additional opus signinum surface was then laid within the footprint of the room, and continued use of the space suggested by overlying occupation debris.
- 8.4.8 The nature of features in the south of Area B (Room 8/Open Area) inferred this to have been an external area. Layers of trampled occupation material and levelling deposits were found in association with a multi-phase cess pit. The latter was re-cut several times and seemed to have been gradually backfilled with cess, copper waste and a number of dog coprolites.
- 8.4.9 It appears that activity decreased slightly during the late 2nd/early 3rd century from earlier in the 2nd century. Property boundaries established during the earlier period were maintained, but modified. It is possible however that the extensive robbing within Area B may have masked further alterations in the overall settlement plan during this period. The maintenance of property boundaries to the south-east may be significant, as these are some distance from the frontage of Road 1. It is possible that a subsidiary road either bisected the site or ran parallel to Road 1, to the east, beyond the limit of excavation.

8.5 Roman: Late 3rd/4th Century Occupation decline

- 8.5.1 Robbing trenches dated to this period were identified within Areas A2 and B. The example from Area A2 would be well placed to define the southern limits of Room 4, whereas those within Area B, as stated previously, roughly defined a series of rooms. Within the backfill of one of the larger robbing trenches in area B was high status building material (Purbeck marble wall veneer) and numerous 3rd/4th century coins. These robbing events may have been responsible for the large quantities of demolition material identified within the rooms of the bathhouse, and across Area A2. The largest amount of wall plaster was recovered from one of these demolition dumps, within Room 4. These fragments illustrated numerous

episodes of renovation works, were single colour blocks, and were likely to have been originally set within one of the adjacent rooms.

8.5.2 Whereas the demolition material identified within northern excavation Areas A1 and A2 appeared to suggest abandonment; the same was not true for Area B at this time. Although demolition material was identified within the area, this was found in association with stake/postholes, refuse pits and in one area a Lydion brick surface. The stake and postholes (within former Room 5) could demarcate a later phase of use/occupation of the area, within the boundaries of the earlier structure.

8.5.3 The pits encountered within former Room 6 of Area B, appeared to trench alongside earlier wall partitions. These may therefore be indicative of secondary robbing events, and may have facilitated the process of robbing material from the walls. The presence of refuse and cess pits in the south-east of Area B offers further support for continued occupation at this time.

8.6 Post Roman/Late Saxon Transition

8.6.1 A number of intercutting refuse pits were identified within Areas A1 and B dated to between 970 and 1150 and 900 to 1050 respectively. These features were extremely localised and may suggest particular property boundaries may have remained in use, despite widespread robbing of elements of the superstructure. The pits within Area B were clustered to the north of the former alignment of an earlier stone wall and those within Area A1 were entirely located within the footprint of former Room 3.

8.7 Medieval: 11th to 13th Centuries

8.7.1 An increase in development was apparent across the majority of the site during the 11th and 12th centuries. This comprised an initial phase of chalk construction, evident along the eastern limit of excavation of Area A1 and in the south of Area B. The chalk walls within Area A1 utilised Roman tile within the construction, illustrated two phases of construction over a relatively short period and had been founded directly over Roman foundations.

8.7.2 A series of vaulted chalk piers were also constructed across the southern limits of Area B, of comparable construction to that identified within Area A1. Later cartographic sources place this area of the site along the boundary of St Thomas's Hospital precinct. The chalk walls may therefore relate to the medieval layout of the hospital. How, or if the chalk pier within Area A1 functioned with those identified within Area B, however, remains unclear.

8.7.3 The masonry identified within Area A2 ran along a north-west south-east alignment, and therefore would have ran perpendicular to the chalk walls within Area A1 and roughly parallel to the chalk relieving arches within Area B. The difference in materials however, might suggest this to have been part of a different structure or differing scheme of works. Similarly

to the chalk walls within Area A1, however, the stone walls exhibited rebuilds indicative of several phases of use over a relatively short time period. Also comparable to Area A1 was evidence of roughly contemporary pitting that truncated both stone and chalk walls. The material culture was dated to roughly the same period as the walls themselves (later 12th century), and may therefore indicate a further phase of modifications rather than robbing events.

- 8.7.4 The land to the north of the chalk relieving arches (Area B) was utilised differently, with no evidence of the substantial construction schemes recorded in close proximity. Garden soils were identified in these areas, and contained a mixture of late Roman material up to later 12th century high status building material. A number of earlier phase, late Roman, pits were re-cut at this time, backfilled and capped with timber or stone. A second series of pits dating from the late 12th century were also identified in the east of the area, and appeared to have gradually been backfilled up to the mid 13th century. This refuse disposal could have derived from properties fronting Borough High Street, or from subsidiary buildings associated with the precinct of St Thomas's Hospital.

8.8 Medieval: 13th to 15th Century

- 8.8.1 Only the northern excavation Areas A1 and A2 contained evidence relating to this period. Squared robbing trenches targeted Roman walls and earlier medieval walls in both areas and had been backfilled with ash and demolition rubble dated from the early 14th to early 15th centuries. A complete 'Westminster' type patterned tile dating from 1225 to 1300 was recovered from the southern robbing pit, and Penn tiles dating from 1330 to 1390 were recovered from the northern. The presence of decorated encaustic floor tiles would indicate the presence of buildings of some status in the vicinity, possibly related to a religious establishment (Appendix 11).
- 8.8.2 Additional evidence for this period comprised a series of postholes in the north (Area A1) that encompassed an area 1.17m by 0.30m. These appeared to relate to a relatively short-lived structure or boundary, the exact purpose of which is unclear.

8.9 Post-medieval: Late 15th to Early 17th Century Development

- 8.9.1 Construction and occupation relating to this period was almost exclusively located within the western half of all excavation areas. It is likely that the features encountered related to the rears of properties that formerly fronted onto Borough High Street. Within Area A1 an eastern wall had been constructed directly over earlier Roman masonry from 2.36m OD and suggested that elements of the Roman masonry complex were visible into the post-medieval period. The wall incorporated re-used materials, such as ragstone and opus signinum within the construction. Associated with this wall were red brick steps and a soakaway to the north, dated between the 15th and 17th centuries. A demolition horizon in the immediate vicinity

contained contemporary building materials with crushed opus signinum suggesting that Roman horizons were impacted upon, and potentially levelled off at this time.

8.9.2 Walls within Areas A2 and B followed the same alignment as those within Area A1, and similarly to A1 masonry incorporated Roman materials within the construction. Other walls within the southern excavation areas were constructed in chalk, ragstone, and reused ashlar blocks, inferring a 16th to 17th century date range.

8.9.3 It is possible that the stone wall identified to the north of Area B defined the southern limit of a particular concentration or terrace of properties. To the south of this feature, the only features dated to this phase comprised a stone lined cess pit and a series of refuse pits. The area to the north of an earlier medieval wall, and to the rear of properties lining Borough High Street may have therefore been open/waste land at this time.

8.10 Post-medieval: Mid/Late 17th Century to 18th Century Modification

8.10.1 A series of chalk, brick and ragstone walls extended across all excavation areas. These were, similarly to the early 17th century constructions, confined to the west and related to at least 2-3 former properties that fronted onto Borough High Street. A potential northern boundary wall relating to this terrace was encountered to the north of Area A1, and extended over 8.60m along a north-west south-east alignment. The wall included at least three separate builds, all of contemporary material and may suggest a series of modifications carried out over a relatively short time span. An internal 1.15m wide corridor may have lain to the immediate south of this, where a red brick floor had been lain over levelling debris. It is noteworthy that the floor appeared to function with earlier Roman masonry to the south, reinforcing the notion that Roman masonry was not only visible, but utilised and incorporated into construction schemes of the early post-medieval period.

8.10.2 Additional works attributed to this period included the construction of a secondary wall against an earlier 17th century construction, and an internal division perpendicular to this. This secondary wall could either suggest a localised reinforcement or the subdivision of an earlier space. It is likely that these features lay within the basement area of the property, and a squared pit filled with charcoal and coal might suggest this to have been a storage area. Further modifications were made during the late 17th/early 18th century, and indicate further expansion and sub-division of the pre-existing property. Many of these walls incorporated earlier materials, such as Roman bricks, suggesting further re-use of demolished masonry and structures within the vicinity.

8.10.3 A possible southern boundary wall for the terrace was recorded along the southern limits of excavation. To the north of this, and extending into Area A2, were a series of three brick-lined cess pits, all along a comparable alignment, presumably reflecting the properties to which they were attached. Within Area A2 the cess pit appeared to be roughly contemporary

to localised repairs to the eastern boundary wall. Mortar and demolition rubble had been used to backfill the pit and presumably sweeten the cess. These cess pits were modified and backfilled into the early 18th century.

- 8.10.4 Activity within the eastern limits of the excavation area was of an entirely different nature. Robbing cuts within central Area A2 dated to the mid/late 17th century targeted medieval masonry and were backfilled with demolition rubble. Further refuse pits were also located here which contained residual fragments of high status Roman building material. This may suggest Roman horizons, and/or high status medieval buildings which incorporated re-used materials, were being demolished in the near vicinity. Evidence of high status medieval masonry derived from the construction of one of the southern cess pits. A large piece of moulded stone of medieval origin was incorporated in the brickwork. The most likely source for these materials was the precinct of St Thomas's Hospital.
- 8.10.5 The first evidence of construction within the eastern excavation areas since the medieval period, dated to the late 17th/early 18th century. A series of parallel walls bound a c.5.4m wide area, which respected the alignment of earlier post-medieval properties. The lack of prior development may be due to preservation differences, or alternatively may be due to different land management/ownership.
- 8.10.6 A map of Southwark of 1755 would suggest that the northern boundary identified within Area A1 respects the alignment of a terrace extending eastwards from Borough High Street following a subsidiary road. The entirety of the south-eastern quadrant of the excavation is depicted within the precinct of St Thomas's Hospital, which may explain the lack of activity/development within the eastern excavation limits during the earlier 17th century. Analysis of the building material (Appendix 11) for this period highlighted that the assemblages were dominated by early post-medieval material of Tudor or Stuart date within in situ buildings. This suggested that this earlier period was a major phase of development in the area, with the materials from this period re-used extensively during later redevelopment phases.
- 8.10.7 Modifications attributed to the late 17th and early 18th centuries however most closely resembles that of properties depicted on Horwood's map of 1819. This depicts properties fronting onto Borough High Street to the west, with the south-eastern quadrant of the excavation area remaining within the open precinct of St Thomas's Hospital. The former terrace to the north of the excavation area has since been abutted by further development to the north and east. Walls are also illustrated extending east which relate to a wing of St Thomas's Hospital that abuts the rear of the western properties. This would directly correspond to the eastern walls identified within Areas A1 and A2.

8.11 Post-medieval: 18th to 19th Century

- 8.11.1 Towards the later 18th and 19th centuries, further development reflected increases in population and the encroachment into previously undeveloped areas. Within the northern excavation area, the internal space attributed to the 17th/18th century was further modified. A southern boundary wall was constructed and areas to the immediate north utilised for refuse disposal and dumping of levelling material. The incorporation of 13th to 15th century building material within these dump layers might suggest that these modifications coincided with the destruction of earlier property boundaries. The latter area coincides with that of an earlier Roman circular room (Room 4) and may explain the poorer preservation of Roman remains within the south-western corner of the space.
- 8.11.2 Activity within the central excavation Area A2 was primarily focussed within the footprint of the earlier property to the west. A brick floor was installed and repairs made to the eastern boundary wall. Additional levelling deposits within close proximity comprised large amounts of demolition rubble and may, similarly to Area A1, reflect the demolition of earlier properties, or earlier boundaries during the course of these modifications.
- 8.11.3 Brick walls were recorded to the south of the excavation area, which enclosed the former area taken up by the brick-lined cess pits. The northern, eastern and southern limits were enclosed, with brick linings suggesting that an additional structure lay to the immediate south of this. This enclosure wall may therefore have represented part of a terrace which extended southwards.
- 8.11.4 The southern enclosure wall within Area B most closely resembles the alignment of property boundaries depicted cartographically on Horwood's map of 1819. This suggests that the property boundaries identified within Areas A2 and B relate to No. 6 Borough High Street. Archaeological evidence suggests further construction to the south, yet the map depicts an entrance or open space leading into forecourt of St Thomas's Hospital in this area. This may either have represented a short-lived extension not depicted cartographically or the lining identified along the southern face of the Area B enclosure walls related to an external face.

8.12 Modern

- 8.12.1 All properties within the boundary of the excavation area are known to have been demolished by 1846 during a scheme of landscaping associated with the modification of St Thomas's Hospital. Courtyards were inserted and the Site appears to have been encompassed by landscaped gardens (as shown in a map of 1853), with a boundary wall or gate posts adjacent to Borough High Street/'Wellington Street' to the west. These gardens were relatively short-lived, and properties 11-15 Borough High Street were constructed by 1863-73. St Thomas's was almost completely demolished at this time, barring a few subsidiary buildings along St Thomas's Street.

9 RESEARCH OBJECTIVES

9.1 Original research objectives - General (NWR 2009b)

9.1.1 Geological/Topographic

- Does the untruncated surface of the natural sands and gravels survive? If so, can the information be used to determine the site formation processes and reconstruct the post-glacial topography of the area?

Natural gravels and sands were only encountered within extremely localised augering. The wider topography of the area, and any firm indications of whether these represent undisturbed/untruncated deposits can not be determined at this stage. Further comparisons to levels of undisturbed natural horizons at adjacent excavation areas could help refine this further.

9.1.2 Prehistoric

- Is there any evidence for a prehistoric presence? If so what is the stratigraphic context and the likely date range?

The only indications of a prehistoric presence derive from potential Mesolithic/Neolithic flint implements within later gravel levelling deposits. This may indicate terracing or quarrying which disturbed earlier prehistoric horizons; activity that is likely to have taken place most significantly during the early Roman period. Excavation limitations due to project depths meant that activity prior to the early Roman period was not exposed, and could not be investigated in any detail.

- Do late prehistoric flood clays survive on the site?

Waterlain alluvium was encountered along the northern boundary of the site from an elevation of 1.04m OD. It is unclear, due to limited finds retrieval and project depths, whether these can be attributed to the prehistoric or early Roman period.

9.1.3 Roman

- Do the finds from the site support a suggested date of c.AD 50 for the foundation date of Roman Southwark?

No finds were retrieved from any of the Roman sub phases of activity with a pre AD 50 date. The lack of ephemeral find spots of earlier material, or residual pieces even within later deposits would support a founding date of c.AD 50.

- Is there evidence of organized apportionment leading up to the earliest Roman occupation of the site, including enclosure ditches, fence lines etc?

The earliest activity identified in plan across the site as a whole, as opposed to within localised deeper excavations or underpinning trenches, was dated to the early Roman period. It is therefore not possible to determine whether the alignments identified at this time respected pre-existing alignments or were entirely new.

- Is there evidence of an organized programme of land preparation, such as the digging of drainage ditches etc?

n/a

- Can the logic behind the earliest building, street and property alignments adopted be determined?

n/a

- To what extent was the layout determined by topographic features such as natural channels and existing road alignments?

No firmly recognized water channels were identified within the study site itself, and therefore the extent to which these may have shaped the layout of the area remains unknown. The north-west south-east alignment of the buildings and rooms identified however would appear to reflect and respect the alignment of Road 1 to the east. Occupation identified in the east of the excavation area respects this alignment but is some distance from Road 1. It is therefore likely that these properties fronted onto or respected subsidiary roads running either parallel or perpendicular to Road 1.

- Are boundaries and alignments strictly maintained from one phase of occupation to the next?

The property alignments identified across all excavation areas followed a north-west south-east orientation. These alignments remained in use from the late 1st to the late 4th centuries. An exception to this was an east-west aligned ditch attributed to the late 1st/early 2nd century, located to the south-east of the excavation area. This lay within an area previously undeveloped. It is possible that this represents a different property boundary, unrelated to the ribbon development along Road 1, and was re-established at least once before falling out of use.

- What are the maintenance cycles of features associated with drainage, water supply and organized access?

n/a

- What was the form, function and character of Roman Southwark? In particular, can industrial, commercial or other specialized uses be identified?

Further research is required to place the activity identified at the subject site within the wider landscape of Southwark. However, the early Roman period at the site appears to have been primarily of an industrial nature, particularly with regard to copper working. Copper working continued, to a lesser degree into the later 1st century whereupon development of a more domestic nature encroached across the site. By the 2nd century the masonry and material culture would suggest a high status property existed in the north of the site, with a potentially separate complex to the south.

- Do the ceramic and environmental assemblages point to any specialized functions for the area?

The ceramic assemblages did not point to any specialized functions for the area, and contained a combination of domestic and industrial artefacts. However, numerous levelling deposits and fills of cut features attributed to the mid to late 1st century contained quantities of hammerscale, copper waste and cinder indicative of copper working within the vicinity. A potential construction horizon comprised of burnt clay and ash was also identified and offered further support for early industry. A reduction of copper waste within later deposits suggested that production continued at a lesser scale into the early 2nd century. This industrial use for the area however appears to have decreased as occupation increased and properties were expanded.

- In what ways did the Southwark Suburb differ from *Londinium*?

The subject site presents a limited exposure of the nature of Southwark at this time. Further work is therefore required to place the site within the context of Southwark before any meaningful comparisons can be made.

- What building techniques are represented during the Roman period and how do these change through time?

The earliest construction attributed to the Roman period comprised brickearth partitions with clay and beaten earth and mortar floors. By the early 2nd century a large masonry complex

had been constructed to the north of the excavation area utilising stone foundations overlain by Bessalis bricks. The internal faces of the rooms had originally been faced, possibly with marble inlay, or had been plastered with coloured and/or decorated designs. Masonry walls were also identified to the south of the excavation area, but had been heavily robbed during later periods. By the mid to late 2nd century a clay and timber building had been constructed within the south-eastern limits of the excavation area. This was defined by a series of beamslots and postholes, with associated mortar and opus signinum surfaces. Lensing of material between these beamslots, and the re-excavation of these features suggested that the complex had been repaired or rebuilt at least three times over its lifespan. Construction during the later Roman period is not apparent within the excavation area. Numerous post/stake holes and occupation debris across the area might suggest that previously defined spaces were re-used at this time with minor modifications to layout, rather than any wholly new construction schemes.

- Is there any evidence of the Boudican revolt of AD 60/61 in the archaeological record? If so, do post-Boudican structures reflect continuity from the early period, or a change in the nature or status of the area?

Burnt horizons were encountered across the site but the current dating is later than the Boudican revolt and an industrial cause is suggested. Further analysis may lead to a refining of the date of the burnt horizons however.

- Is there evidence for a period of expansion in the late 1st century AD?

An increase in construction towards the late 1st and early 2nd centuries would support the notion of this being a period of expansion. This is supported by the density of material culture dating to this period, indicative of an increase in occupation.

- What evidence is there for higher status buildings of Roman date?

The masonry complex to the north of the area comprised four rooms, constructed in high status materials to a planned design. The discovery of high status materials within close proximity, such as Purbeck marble wall inlay/veneers, marble paving slabs and painted plaster within demolition debris supports this interpretation. It is unknown whether these materials derived from this precise structure, but the fragility of the plaster would argue against these deriving from anywhere other than in close proximity to their place of disposal. Furthermore, the extent of robbing within many of the areas, would suggest that good quality, high status materials were being targeted for reuse during later periods.

- What evidence is there for land reclamation and consolidation/control of natural channels throughout the Roman period?

The earliest Roman activity identified comprised an initial phase of ground raising and consolidation dating from the mid 1st century. A number of drainage channels were identified at different phases which may represent attempts at water management. However, no definite evidence of substantial water channels was identified as extending into the subject site.

- What processes of change can be identified during the later Roman period?

n/a

- Is there evidence that the settlement of Roman Southwark contracted during the late Roman period, i.e. in the form of late Roman burials in previously settled areas?

No Roman burials were identified within the subject site. Assessments of the material culture would suggest that occupation was at its peak during the late 1st to early 2nd century, decreased during the late 2nd or early 3rd centuries, then increased again from the mid 3rd and remained at this level into the mid 4th century. Therefore rather than a retraction of settlement during the late Roman period, activity increased at this time at the subject site. This is likely as a result of the site being located at the bridgehead area of Southwark, and the increase in activity may have occurred as a retraction of settlement from other parts of the borough.

- Is dark earth present? If so, can it provide further information on the formation processes involved? What is the relationship between the nature of later Roman occupation and the 'dark earth'?

No firmly identified deposits of dark earth were encountered during the investigations, however several deposits described as garden soils may in fact be part of this phenomenon.

9.1.4 Saxon

- Is there any evidence of the Saxon occupation of north Southwark? If so, what is the date?

The study site presented the largest assemblage of Late Saxon pottery by comparison to any of the other Thameslink assessment areas. This would suggest at the very least a Saxon presence in close proximity to the site, if not within the boundaries of the site itself. Activity ascribed to the post Roman period (Phase 4b) comprised the re-use and perhaps re-occupation of earlier structures, systematic robbing of masonry and extensive pitting. The

locations of the concentrations of pits would suggest that selective earlier property boundaries may have been maintained throughout this period.

9.1.5 Medieval

- What is the nature, extent, character and identification of medieval buildings or structures on the sites?

Medieval walls identified across the subject site took the form of stone foundations, chalk piers and chalk walls. The most substantial of these were the chalk piers. One isolated pier lay to the north-east, whereas to the south a series of vaulted chalk piers were observed to run the full width of the excavation area. The latter was interpreted as defining a property boundary/basement. Material culture found within close proximity to these features contained high status material indicative of a religious establishment. The scale of construction observed would suggest these to have represented part of the medieval complex of St Thomas's Hospital. Furthermore a series of modifications appeared to almost immediately post-date many of these constructions. The Hospital is historically documented as moving during the early 13th century soon after a fire. Slight charring observed on some of the chalk fragments utilised in secondary works may therefore relate to this phase of construction and suggest the re-use of materials. Chalk boundary walls to the north-east of the excavation area were not only founded directly over Roman foundations, but incorporated Roman tile within the construction.

- To what extent did the medieval town plan follow or vary from the Roman layout?

The buildings identified within the subject site, as mentioned above, appear to define a larger complex which extended to the south and east, and demarcate the rears of properties fronting Borough High Street. As such inferences about the medieval town plan cannot be made from the available evidence alone. Further work and comparison to other Thameslink sites with contemporary structures may shed more light on this. However, the founding of medieval walls directly over Roman masonry and the comparable alignments of both medieval and Roman properties would suggest that certain property boundaries were retained.

- Are historical records for the socio-economic nature of Southwark borne out by the historical evidence?

n/a

- Can environmental evidence from pit assemblages be used to reconstruct dietary and economic details?

Further analysis and comparison to other Southwark assemblages is required before any meaningful extrapolations can be made from the pit fills with regards to diet and economy. Assessment of the animal bone assemblage (Appendix 14) suggested that a combination of both household and butchery waste was present on the site during the medieval period. These included cattle, sheep/goat, pig, domestic fowl, rabbit, goose and duck. However, the dataset was too small to be able to make a secure interspecies analysis.

9.1.6 Post-medieval

- Are there any surviving remains of post-medieval date? If so, how does the archaeological evidence compare with the cartographic evidence?

Property boundaries, internal sub-divisions and subsequent repairs and modifications to pre-existing structures from late 15th century up to mid 19th century were identified across the site. After this time the site was cleared firstly to make way for improvements to St Thomas's Hospital and then cleared again prior to the construction of 11-15 Borough High Street after 1865. Cartographic sources pre-dating the mid 18th century are highly schematic and stylised making the precise identification of properties difficult. Particular properties, including an extension to a wing of St Thomas's Hospital are however clearly demarcated on Horwood's map of 1819. Walls bounding this wing were identified archaeologically within northern excavation Areas A1 and A2. Furthermore, cartographic sources suggest that the south-east quadrant of the excavation area lay within the former precinct of St Thomas's Hospital until the early 19th century, and therefore explains the lack of activity archaeologically attested within this area. Contemporary maps suggest that the properties identified to the west of the excavation area primarily related to No. 6 Borough High Street. All such properties are known to have been demolished by 1846 to make way for the modification of St Thomas's Hospital.

- Do the archaeological remains provide any information on the use and relative status of the properties represents?

Few artefacts could provide evidence of the status of the inhabitants in the post-medieval period. However, further analysis of the finds and environmental remains may help to provide such information.

- Is there any evidence of continuity of layout from the medieval period?

Whilst the medieval and post-medieval wall lines occupied much the same area, suggesting a continuity in property boundaries, there was no evidence of structures continuing from the medieval into the post-medieval period.

- What evidence is there for post-medieval industries?

No evidence of post-medieval industries was encountered on the site.

9.1.7 Other

- To what extent has the archaeological sequence been truncated or disturbed by existing structures?

The archaeological sequence was subjected to extensive, yet localised truncation within the footprints of the foundations relating to properties 11, 13 and 15 Borough High Street. These truncations effectively sub-divided the excavation area. The excavation of these footings had also caused adjacent archaeological features, including brick floors and masonry to subside and slump.

9.2 **Original Research Questions: 11-15 Borough High Street**

9.2.1 Roman

- What is the character and date of Roman deposits beneath the site?

Roman deposits dating from the mid 1st to the late 4th century were encountered beneath the site. These comprised evidence of both industrial and domestic activity, in addition to high status architecture consistent with a bathhouse complex.

- Do street frontage buildings extend back from Roman Road 1?

It is highly likely that the property boundary identified to the north-west of Area B represented the rear of a building which extended back from Road 1. This boundary was roughly maintained until the later Roman period, albeit modified and reinforced with masonry construction in later periods.

- Are there any open areas: what were they used for?

Open areas were identified within the central and eastern limits of southern excavation Area B. This appeared to have been initially utilised for copper working and industry, and then later as an area for the disposal of such waste. The abandonment or reduction of these activities was followed by the area being overlain by rough gravel surfaces. Additional gravel surfaces were laid over the area, interspersed with episodes of pitting for refuse and cess disposal. The inclusion of mortar within overlying gravel spreads was utilised to sweeten the cess.

- Is there any evidence for the alleys or minor roads perpendicular to Roman Road 1?

Roman construction towards the eastern limits of the excavation area could feasibly represent property fronting onto a subsidiary road or alley. The buildings identified followed the same alignment as those believed to front Road 1, and therefore it is likely they followed part of a wider system of land apportionment and development. However, little evidence other than isolated mortar spreads and conjectured alignments were identified to suggest the possible locations of such roads.

- Is there a back street parallel to Roman Road 1?

As mentioned above, the location and alignment of buildings towards the eastern limits of the excavation area could have fronted a road running parallel to Road 1. No traces of such a road were however identified and is likely to have lain beyond the limits of excavation.

- Is there any evidence of Boudican destruction?

See above.

9.2.2 Medieval

- Can any deposits and structures be associated with the foundation and development of St Thomas's Hospital?

As mentioned above (para 9.1.5) chalk piers identified across the north-eastern and southern limits of the site appeared to relate to a substantial complex. The dating of these is consistent with a medieval foundation of St Thomas's Hospital. A number of north-west south-east aligned stone foundations within the central excavation area however were heavily truncated, with no indications of surfaces relating to these. The differing construction technique, albeit of a comparable date range, may relate to a separate property. Further analysis is required.

No formal floor surfaces or internal room divisions were firmly identified as being associated with the hospital. However, within dump layers and pit fills were a number of high status fragments of building material indicative of a religious establishment within close proximity. This is consistent with the hospital's early associations with the priory of St Mary Overie, and possible original founding within the priory itself.

- Is there any evidence for any medieval street frontage buildings?

The medieval street frontage is likely to have lain to the west of the site. Therefore, the back lots or rear boundaries of such properties are all that is likely to have extended within the site. The pitting, dump layers and garden soils attributed to this phase would support the idea of the land being predominantly open at this time, or used as a refuse area. However, it is possible that later truncation has removed evidence of medieval structures in these areas.

- Can they be correlated with any known buildings on the east side of 'Long Southwark'?

As mentioned above, not enough of such properties or their boundaries preserved within the limits of the site to be able to make any meaningful comparisons.

9.2.3 Post-medieval

- Does the burial ground at 8 London Bridge Street extend into the site?

No human remains were encountered during the excavation works. There was no indication of a burial ground either within the footprint of the subject site, or within close proximity (as suggested by residual/disarticulated remains within later deposits).

9.3 **Additional Research Questions**

9.3.1 Roman

Phases 3a, 3b, 3c

- Can the profile of ground raising/leveling deposits identified as part of Phase 3a infer anything about the underlying topography of the north eyot?
- What do the results of the investigation suggest about the nature and extent of copper production during the early Roman period?
- How do these findings fit with our wider understanding of the Roman occupation and development of Southwark?
- Is there any evidence for 'zoning' of particular activities/industries within Southwark during the early and later Roman periods? How does the subject site compare to these areas?
- Are there any sites within close proximity from which the iron working waste could have come from?
- Could the spread of gravel identified to the north of brickearth partition [930] (Phase 3b) represent the remnants of a subsidiary road or track perpendicular to Road 1?

- Can the burnt debris to the north of the excavation area be firmly established as relating to industry and/or a construction horizon? Could the burnt bricks identified be associated with the Boudican destruction horizon? Can these suppositions be refined following further analysis of residues?
- Opus signinum floor [1454] was assigned to Phase 3c on the basis of dating from material culture overlain by the floor and on the basis of its elevation, i.e. comparable to other surfaces to the south. Could this have been associated with the function of Room 3 (Phase 3e) despite its low level, and despite floor scarring at a higher elevation? Are there parallels for this? Could the mortar scarring be misleading and represent a much later phase of use and modification?

Phase 3e

- What other examples of 1st/2nd century high status masonry buildings have been encountered within Southwark? How does the complex identified within the site compare to these?
- How does the complex identified in the north of the site compare with other contemporary bathhouses both in London and in other parts of Britain?
- Would the assemblage of material culture retrieved from the site suggest that the complex remained in use as a bathhouse throughout its life history? Or is there anything to suggest a significant change in function? If so, what was this?

Phase 3g

- How does the development of Area B during the mid to late 2nd century fit with the 'market area' recorded to the south?
- Does the complex identified to the north within Area A1 and A2 abut or absorb Area B masonry at any stage?
- Can the size of rooms/access points be used to infer function/purpose?

Phase 3h

- Were any of the pits identified immediately below brickearth slabs – e.g. those within Phase 3h, associated with the construction process? Was there any evidence for on site mixing/preparation associated with timber framed buildings? How might this be recognised archaeologically?

9.3.2 Late Roman & Post-Roman

- Can the location/extent of robbing trenches shed light on the type and extent of re-use of building materials?
- Why does Area A1 masonry survive so much better in terms of elevation and extent than other areas?
- What is the nature of the circular cuts identified within Area B? Are these industrial? Are there parallels?
- How did Room 5 (Area B) function following the insertion of beamslot [1073]? Was the boundary wall to west still in use at this stage or was this boundary erased and the room expanded?
- Why is the pitting dated to the late Roman/late Saxon period concentrated to the east of the site? Is this due to development to the west? Is this concentration significant in any way?
- How does the increase in activity during the 9th and 10th century reflect wider socio-economic trends, such as the retraction to the bridge head?

9.3.3 Medieval

- How does the medieval development as identified within the subject site fit with the development of St Thomas's Hospital precinct to the east?
- To what extent were the land/property boundaries influenced by the presence of the Hospital?
- Are any of the former parish boundaries reflected archaeologically?

9.3.4 Post-medieval

- Can any of the post-medieval masonry elements identified be related to individual properties?
- Do any of the modifications/alterations to structures reflect wider changes within the borough, such as the coming of the railways?
- Are there parallels for the re-use of Roman masonry into the post-medieval period?
- What do the results of investigation suggest about the re-use of high status medieval and Roman building material? Was there a selection process involved?
- Does the above explain the high survival level of Roman material in certain locations?

10 CONTENTS OF THE ARCHIVE

10.1 BVK11

10.1.1 The BVA08 and BVY09 archives have been previously detailed (MOLA 2010; 2011) and are not reiterated in this document. Instead, the following section of this assessment is concerned solely with detailing the BVK11 archive.

10.1.2 Paper Records

- Context Sheets 1295 sheets
- Environmental Sheets 102 sheets
- Registers 54 sheets
- Plans & Sections c.760 sheets

10.1.3 Finds

- Pottery 65 boxes
- CTP 1 box
- Building material 42 crates, 1 box
- Plaster 1 box
- Animal bone 48 boxes
- Glass 6 boxes
- Small Finds/Metal objects 9 boxes
- Lithics 1 box
- Slag 1 box
- Shell 1 box

10.1.4 Photographic Record

- Digital 59 folders
- Black & White (35mm) 8 films
- Colour Slide (35mm) 5 films
- Black & White (medium format) 10 films
- Colour (medium format) 17 films
- Geo-rectification data sheets 1 film

11 IMPORTANCE OF THE RESULTS & FURTHER WORK

11.1 Importance of the Results

- 11.1.1 The results of the excavation have provided evidence of archaeological activity from the Roman, medieval and post-medieval periods. The results of this work, despite being limited in scope, were of intrinsic value and importance to a wider understanding of the changing landscape throughout these periods. The most important remains were those associated with a large masonry previously unknown Roman bathhouse and medieval St Thomas's Hospital.
- 11.1.2 Extensive evidence of Roman occupation, and industry was identified throughout all excavation areas dating from the mid 1st up to the late 4th century. The differential uses, alignments and density of occupation throughout and over the course of these periods provides an important contribution to the understanding of the growth of Southwark throughout the Roman period.
- 11.1.3 The earliest activity identified across the site comprised a series of clay and timber buildings dated to the mid/late 1st century with associated evidence of industrial activity. This activity primarily focussed on copper working, with residual material indicative of iron working in the near vicinity. Industrial activities appeared to peak at this period, but continued into the later 1st/early 2nd century at a much reduced scale. It is likely that the buildings identified were in use for a combination of residential and industrial purposes. These provide an important insight into early Roman occupation and industry within Southwark.
- 11.1.4 The construction of a large, high status masonry building during the late 1st/early 2nd century is of undoubted significance. The use of high status materials and distinctive room designs point to a possible interpretation as a Bathhouse. The discovery of a previously unknown bathhouse in Southwark has the potential to make a highly significant contribution to current understanding of the development of Southwark, in addition to contributing to current understanding regarding the distribution of such examples of high status architecture across London and throughout the Romano-British landscape. The position of this property towards the upper limits of the northern eyot is also significant and suggests that prominence within the landscape may have been a governing factor. It is noteworthy that many of the rooms that comprised this structure had been altered numerous times indicative of either modification/repair, or changes in function. This interpretation is supported by the discovery of plaster fragments with tool markings indicative of numerous phases of re-working. The plaster associated with these rooms varied between monochrome, polychrome, floral and marbling patterns. The changing function of these spaces and potential corresponding changes in interior design and wall facings also has the potential to make a valuable contribution to the study of high status Roman architecture within Southwark and within the wider vicinity of London. Such a study could provide further information with which to inform

on the life span of Roman masonry buildings and the extent to which these were modified and adapted over time.

- 11.1.5 Extensive robbing of masonry walls occurred during the post-Roman period. However, an increase in the density and variety of material culture dated to the late Roman/late Saxon period infers that occupation increased at this time, and therefore the area was not completely abandoned. The evidence of this increase in occupation provides an important contribution to the notion that settlement retracted to the bridgehead area at this time.
- 11.1.6 A series of large chalk walls and piers, including a substantial vaulted chalk pier were recorded across the excavation area. These clearly related to a significant, high status structure, most likely related to St Thomas's Hospital. The discovery of elements of the early layout of St Thomas's Hospital has the potential to provide valuable contributions to the understanding of the construction, extent and position of the hospital during the medieval period. Furthermore, it is significant that Roman masonry was incorporated into the fabric of the walls, some of which were founded directly over Roman masonry. The hospital is documented as being described as ancient by the medieval period. The use of Roman masonry and possibility that the Hospital was in part founded directly over a Roman bathhouse is of undoubted significance, and may help to explain these early descriptions.
- 11.1.7 Numerous phases of post-medieval development were identified dating from the late 15th century up to the mid 19th century, whereupon the entirety of the immediate vicinity of the site was demolished to make way for improvements to St Thomas's Hospital. The longevity of occupation and development of street frontage properties along Borough High Street, can offer valuable contributions to the understanding of the urban development of this part of Southwark prior to the coming of the Railways. Furthermore, the northernmost of these properties clearly utilised and respected earlier Roman masonry within the design of the building. The incorporation of Roman masonry was also identified during medieval periods, and this may represent a unique example of the utilisation of Roman masonry up to such a late date.

11.2 Further work

General

An attempt will be made to refine the dating and interpretation of the Roman archaeological activity and to place the site into context through the study of other sites in the vicinity. Other Thameslink excavations are of particular relevance, as too are excavations by MOLA to the north at New London Bridge House, 25 London Bridge Street, where substantial Roman masonry remains including a hypocaust were encountered which may be associated with those found on the present site (Wylie 2011, 32). Further analysis and incorporation of specialist data may be utilised to attempt to identify room function and purpose for the late

1st/early 2nd century Roman structural remains. Particular emphasis will be placed upon comparing the layout with further examples of Roman bathhouses, both within the Greater London vicinity and elsewhere within the British Isles. Examples from other parts of the Roman Empire may need to be referenced for comparative purposes.

Archaeological evidence for the late Roman/Saxon period will be compared with other sites in the vicinity. The increase of activity identified within the study site during these periods will be incorporated with the results of surrounding excavations to test the hypothesis of a retraction of population to the bridgehead area at this time.

Attempts will be made to refine the dating of the Phase 5 masonry and also to understand how these related to the precinct of St Thomas's Hospital. The archaeological evidence for this period will be compared with other sites in the vicinity in combination with cartographic and documentary study. Cartographic and documentary study will also be undertaken to determine how this precinct developed into the early post-medieval period and whether these changes can be traced archaeologically. Further cartographic and documentary study will be carried out to attempt to determine which post-medieval buildings the structural remains can be attributed to. Emphasis will be placed on identifying occupants and areas of industry or commerce.

Historical Research

There is somewhat limited potential for the site history since it is internal to the Hospital and it may be very difficult to identify individual properties within the precinct without a map or survey, and these had all been removed by the railway era for the new hospital buildings. The earlier hospital records are in London Metropolitan Archives (LMA), and the later Medical School records are in King's College London. If the nature of the archaeology warrants, it would be worth checking for early property records and building plans of the Hospital in LMA, otherwise the map regression may provide most of the answer.

Roman Pottery

The Roman pottery will make a valuable contribution to the understanding of ceramic supply and use in Roman Southwark. Analysis of the data will be further enhanced with comparison with other assemblages from Southwark, both from the Thameslink project and other sites in the area. Site BVK contained a number of large groups that, supported by stratigraphic phasing, provide well-dated 'snapshots' of pottery supply, use and deposition. Presentation of such groups in the form of data tables and/or illustrations would support the main patterns of occupation and use. However, similar attention will also be given to pottery from significant features or deposits, notably mid/late 1st century (Phase 3b) burnt deposits and a large masonry building dated to Phase 3e-h.

In addition, a catalogue of stamped and decorated samian will be compiled. During recording, rubbings were made of some 70 decorated samian vessels. These will be invaluable during cataloguing, but a selection will be scanned and placed alongside their catalogue entries in the final publication. Rubbings were also taken of 20 samian stamps, but for publication reference will be made to the corpus of samian stamps by Hartley and Dickinson (2008-2012) and if necessary illustrated using a purpose-made samian font. Three amphora stamps and six mortarium stamps were also recorded.

A number of pieces are inscribed with graffiti, show aspects of use or are rare forms, and are of intrinsic interest and worthy of further analysis and, in some cases, illustration. Graffiti, or potential graffiti, were recorded on sherds from contexts [784], [1178], [1317] and [1545]. Unusual forms included a flanged bowl from context [1237] decorated with red painted stripes internally and externally and probably imported from the Rhineland (Gose 1976, tafel 18, no. 260), a grey ware pulley-rim flagon from context [1375], a fragment from a tripod bowl from context [848], two unusual local mica-dusted ware vessels from context [1179], and a Drag. 36 samian dish with unusual barbotine decoration around the rim (unstratified). Other pieces of note include a trimmed sherd from a Dressel 20 amphora from context [1619], a white-slipped oxidised ware lamp from context [1118], and a fragment of a pipeclay figurine from context [1430]. An unusual object, a ceramic cylinder, flat at one end, rounded at the other, was recovered from context [1249]. Though it resembles a broken amphora handle, the object seems to have been fashioned deliberately into its current form before firing, possibly as a phallus.

Recommended further work would be to analyse and report on pottery from BVK11, including compilation of samian catalogues, research, comparative work, selection and checking of pottery for illustration, which would number c 150 vessels.

Post Roman Pottery

As the assemblage has been fully catalogued, little, if any, further cataloguing work will be required here. Though of modest size, the Late Saxon and early medieval assemblage here is one of the most significant from the Thameslink scheme and should be analysed in more detail. Evidence of cross-joins here should be further investigated as these may shed light on pottery disposal patterns and site taphonomy. The character of the Saxo-Norman/early medieval assemblage from BVK11, including the sprinkle of imports and crucibles, is similar to that observed on the Assessment 3 Site BVX09 - across the road - suggesting, perhaps, the two areas may have been connected somehow. They may perhaps have been part of the same contemporary settlement and industrial zone, whose occupants had access to Continental pottery and probably other goods brought to the port of London. Amongst the later pottery some individual post-medieval vessels are of note and should be illustrated - including some of the high-quality early 19th century tablewares. Further documentary research might clarify the background to some of these later pottery groups. A more detailed

summary report should be produced for all the Assessment 2 pottery with more detailed sections or appendices focusing on a small number of key contexts that add significantly to our understanding of the site or to the typology of individual wares. A few of the more significant vessels have already been selected for illustration, and it is recommended that around 25 vessels should be illustrated.

Lithics

There is little requirement for further work here, the natural fragments and the burnt unworked flint can be discarded. Some of the key elements may require illustration and/or photographing for any final report. Similarly, a short report highlighting the discoveries, particularly those of the blade forms and the tool, set alongside a discussion of our current understanding of prehistoric activity within greater London would be required.

Clay Tobacco Pipe

A more detailed summary report of the assemblage should be produced with all marks and heel decoration researched in more detail. In particular, the unusual and well-preserved 'WC' marked pipe of c. 1680-1710 from Context [588] should be further researched in order to clarify which of the two known London 'WC' pipemakers this product belongs to. This is probably the only piece in the assemblage that deserves illustration, as the others are all fairly generic types.

Glass

The glass from BVK11 comprises a substantial assemblage composed largely, but not exclusively of Roman glass. The Roman glass assemblage should be published with a brief text describing its composition and character and a summary catalogue, with selected vessels illustrated. In addition to the Roman glass there is a small quantity of glass of later date. The small number of sherds from post Roman contexts is residual Roman material and the glass from medieval contexts is unremarkable. It should be noted that there is a sherd of moulded glass of medieval date with optic blown teardrop bosses from context [931] (Phase 3d). Of more interest is the small post-medieval assemblage of glass, mostly dating from the 18th century and early to mid 19th century from Phase 6d. Much of this glass comprises bottles and in particular wine bottles and might be worthy of brief report with some selected illustrations if relevant to overall project research design.

Small Finds

The Roman small finds from BVK11 comprises a numerically large assemblage but one that has a limited range of objects. The assemblage lacks domestic objects, tools and craft objects. There are a few personal items, including small groups of hobnails. Almost all the finds are stratified, but much of the assemblage comes either from dumped levelling or infill

deposits and clearly includes a substantial residual element. This may be reason why there is such a high proportion of nail stem fragments and also numerous undiagnostic fragments. A small number of objects of Roman date have been identified and could be published. The Roman finds assemblage should be published with a brief text characterising its composition and a summary catalogue, with selected vessels illustrated.

Roman Coins

This is much the largest Roman coin assemblage from any of the Thameslink sites, which collectively make a significant contribution to the body of Roman coin data for Southwark (cf. Hammerson 2002, 232). Overall, the assemblage may span most of the Roman period, but there is a strong early Roman emphasis, as would be expected. The apparent absence of coins dating after the mid 4th century may be significant (coinage of the House of Valentinian and even the House of Theodosius occurs in some of the other, smaller Thameslink groups), although this situation could change in the light of further cleaning. Further work will be dependent on cleaning. All the coins except SF 134 and context [591] need to be cleaned if their identifications are to be refined at all, although in the case of some of the more eroded pieces this might not add much new information. Subsequent to cleaning and revision of identifications a summary report would be undertaken.

High Temperature Debris

The emphasis on this site should be on the copper-alloy working and the possible use of lead to produce a leaded bronze. As the quantity of slag iron slag is so small, the possibility of some ironworking having taken place should be mentioned and the presence of ironworking microslags flagged up. After publication, the assemblage could be discarded.

Ceramic Building Material

A report incorporating the results from the assessment should be produced on the ceramic building material of all phases. This should additionally include an analysis of the assemblage in relation to the stratigraphy and structures to inform the character, possible function and status of the buildings, together with a comparison with assemblages from other sites within the project and elsewhere in Southwark. Illustrations should include the Roman tile with keying and signature marks and the decorated medieval floor tiles.

Stone

It is recommended that a report be prepared which discusses the assemblage in the light of finalised phasing and in relation to other material classes. The assemblage should also be compared to adjacent sites. It may also be desirable to submit the white marble string course [989] and the possible Cipollino verde to a marble specialist for identification.

Wall Plaster, Opus Signinum and Mortar

Apart from information on the composition of the opus signinum and mortar there is little further information to be gained unless a more detailed chemical analysis of the mortars from in situ structures is considered significant in understanding those structures. It is recommended that the assessment report forms the basis for the final report, with more detailed analysis of the painted plaster in relation to in situ buildings, to enhance the understanding of their construction, function and status.

Animal Bone

The Roman and post-Roman assemblages have good potential to inform us of diet and animal utilisation in this area of Southwark. While several of the assemblages from the individual phases may be too small on their own for a valid analysis, these could be combined with contemporary assemblages from the Borough Market area of Southwark to provide useful information on animal use in this area. The medieval and post-medieval assemblages contain relatively few bones identified to species level and they would need to be combined with contemporary assemblages from Southwark in order to be able to yield useful information on animal utilisation from these periods.

A visit to a large bird bone reference collection, for example the National History Museum, Tring, is warranted in order to attempt an increase of the number of identified avian species.

Due to the small number of published data on faunal remains from Southwark, particularly for the medieval and post-medieval periods, a brief analysis and publication of the dataset for the two assemblages is warranted.

Fish Remains

The fish assemblage from 11-15 Borough High Street is small, but for the Roman period this is typical (Locker 2007). As is the case from other Roman sites in this project, for its size, the assemblage contains a diverse and interesting range of taxa, some of which are likely to be imported fish. The fish assemblage will form one of only a small number of Roman assemblages reported from Southwark and consequently results from this study should be published both together with other material from this site and as part of an overall discussion of Roman fish remains associated with sites from the Thameslink project. The assemblage can be compared with published and unpublished reports from sites in London such as Winchester Palace, Southwark (Yule 1989; 2005), Parnell Road (Locker 1998) and the Babe Ruth Site (Armitage 2005).

A small number of the finer soil sample residues remain to be fully sorted, and it is recommended that where these are from Roman deposits full sorting should be undertaken.

Wood Charcoal

It is recommended that the assessment data is consolidated, with a small number of critical identifications added/checked, so this evidence can be included in the later wood charcoal analysis report. Up to thirty-seven samples should be rapidly analysed with particular emphasis placed on identifying of the full range of non oak taxa present. A final report should be prepared to include the data from 64 samples.

Macrofossils

Although the majority of the flots and residues assessed from the whole site contain identifiable plant remains, many of them occur in very small quantities. These small assemblages do not warrant a further analysis process, but have value as a collective assemblage from across the site and in comparison with assemblages recovered from the other Thameslink sites. Therefore, it is recommended that these remains are tabulated based on these assessment results and discussed in the full analysis report and in any synthesis of all sites from the Thameslink excavations.

Collectively the plant macrofossil data from this site may address the following research questions: The character of food remains on the site; evidence of economic crops; the exploitation of natural resources; the character of the local environment; potential changes in local vegetation types throughout the occupation of the site; comparisons with the plant assemblages from other areas of excavation and other sites on a local and regional scale.

The remains would provide additional information concerning the food resources available to the inhabitants of from Southwark in the Roman and medieval periods and could usefully be compared to assemblages from other sites in Southwark and wider London. Full analysis of the waterlogged, charred and mineralised seeds from the six samples is therefore recommended.

Shell Assessment

Several of the sampled deposits included a large collection of shells, all of which are currently phased as Roman. The range of sizes and shapes of shell suggest that shells were collected from natural, "wild" rather than managed beds. Sieved to 0.5mm, the samples include shells from both the larger mature individuals and from younger shellfish, the latter usually overlooked in hand collected material (which form the great majority of published assemblages). It is therefore unfortunate that many of the valves are fragmentary and therefore not measurable, since biometric analysis provides a means of studying the population structure of the collected shellfish so allowing conclusions to be drawn concerning the type of bed exploited, the means of collection and the possible location of the harvested beds (the last point would also draw on evidence of infestation and encrustation). The only sample likely to include >100 measurable left valves is sample 536, although measurable shells from sample 535 could be added, since these appear to be from a layer closely related in time and space. Sample 528 includes around potentially 90 measurable shells and may be

worthy of further analysis. Presuming that the contexts contain securely phased dumps of shell, full recording and analysis of these larger assemblages would enable comparison with other analysed oyster assemblages from London including the (Saxon) Royal Opera House (Winder and Gerber Parfitt 2010), Pudding Lane (Winder 1984), Moorgate (Winder 1987a) and Guildhall House (Winder 1987b). It would be preferable if this further work was carried out by a specialist in the analysis of oyster shells.

Soil Monoliths

A number of themes can be investigated at this BVK11 site, including clay constructional material and floors, fire installations and occupation waste management. The suggested methods are thin section micromorphology (including energy dispersive X-ray spectrometry – EDS) and bulk soil analyses (LOI [estimated organic matter], fractionated Phosphate-P, magnetic susceptibility including MSmax and particle size analysis [PSA]). Monoliths will have to be subsampled for bulk soil studies and cut up for thin section processing. One caveat is that micromorphology can only be best employed on intact samples – some were quite fragmented. Extra resin conservation may be required.

11.2 Publication Proposal

- 11.2.1 It is proposed that the results of this assessment report will be considered together with those from other Thameslink Borough sites (TAA1-7 & 9). All of all the recommendations from the specialists within the separate assessments will be summarised and brought together in one report incorporating an overall assessment and updated project design. This report will consider the archaeological results as a whole and make detailed recommendations regarding the content and scope of the publication. At this stage it is suggested that the archaeological results and finds will be presented in one or more monographs of the Borough area of Southwark.

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APPENDIX 1: CONTEXT INDEX

Site Code	Context	Area	Grid Square	Plan	Section	Type	Description	Details	NS	EW	Depth	High	Low	Prov Date	Summary Phase	Assessment Phase
BVK11	1	Area A2	n/a	TW1	sketch [1]	Masonry	Brick wall (E/W - collapsed)	Red brick, white yellow mortar	n/a	3.5	1.3	3.7	n/a	Post-medieval	6a	6c
BVK11	2	Area A2	n/a	TW1	sketch [1]	Layer	Demolition layer	Friable, light pink cream, mortar rubble	n/a	3.5	1.1	3.7	n/a	Post-medieval	6b	6d
BVK11	3	Area A2	n/a	TW1	sketch [1]	Masonry	Chalk wall (E/W)	Chalk, yellow sand mortar	0.15	0.45	0.9	2.4	n/a	Post-medieval	5	6a
BVK11	4	Area A2	n/a	TW1	sketch [1]	Layer	Gardensoil	Dark brown	n/a	3.5	0.6	2.4	n/a	Post Roman	3	4a
BVK11	5	Area A2	n/a	TW1	sketch [1]	Masonry	Bessalis surface	Bessalis bricks set into op sig - lime accumulation on surface	1.45	1.6	n/a	1.8	n/a	Roman	2	3e
BVK11	6	Area A1/A2	n/a	TW2	2	Masonry	Chalk wall (E/W)	Chalk, yellow sand mortar	0.3	0.7	0.8	3.75	n/a	Post-medieval	5	6a
BVK11	7	Area A1/A2	n/a	TW2	2	Masonry	Brick wall (E/W)	Red brick, indurated mortar	0.7	0.4	1.85	3.75	n/a	Post-medieval	6a	6c
BVK11	8	Area A1/A2	n/a	TW2	2	Masonry	Chalk wall (E/W) within construction cut [8]	Chalk, yellow sand mortar	0.3	0.7	1.75	3.75	n/a	Post-medieval	5	6a
BVK11	9	Area A1/A2	n/a	TW2	2	Cut	Construction cut for [8]	Shape unknown, vertical sides, base	0.8	0.7	1.85	3.75	n/a	Post-medieval	6a	6c

								not present								
BVK11	10	Area A1/A2	n/a	TW2	2	Fill	Fill of construction cut [9]	Dark black brown	0.4	0.7	1.85	3.75	n/a	Post-medieval	6a	6c
BVK11	11	Area C	n/a	GR1	n/a	Fill	Fill of cellar [12]	Firm, dark brown, clay silt	3.4	2.6	n/a	3.03	n/a	Post-medieval	6b	6d
BVK11	12	Area C	n/a	GR1	n/a	Masonry	Cellar within construction cut [81]	Red brick, indurated mortar	3.8	3.2	0.3	3.03	n/a	Post-medieval	6a	6d
BVK11	13	Area C	n/a	GR1	n/a	Masonry	Cellar within construction cut [82]	Red & yellow brick, yellow sand mortar	2	6.4	0.12	3.03	n/a	Post-medieval	5	6d
BVK11	14	Area C	n/a	GR1	n/a	Fill	Fill of cellar [13]	Firm, mid brown, sand silt	4.5	0.5	n/a	3.03	n/a	Post-medieval	5	6d
BVK11	15	Area C	n/a	GR1	n/a	Masonry	Brick tank (?) within construction cut [83]	Red brick, yellow sand mortar	1	0.6	0.1	3.03	n/a	Post-medieval	6a	6d
BVK11	16	Area C	n/a	GR1	n/a	Fill	Fill of tank [15]	Soft, dark brown, clay silt	0.5	0.6	n/a	3.03	n/a	Post-medieval	6b	6d
BVK11	17	Area C	n/a	GR1	n/a	Layer	Gardensoil	Firm, dark brown, silt clay	2.5	3.8	n/a	3.03	n/a	Post Roman	3	4a
BVK11	18	Area C	n/a	GR1	n/a	Layer	Gardensoil (?)	Soft, light brown, sand silt	1.5	2.5	n/a	3.03	n/a	Post Roman	3	4a
BVK11	19	Area C	n/a	GR1	n/a	Layer	Demolition layer (?)	Firm, mid brown, silt sand	8.5	1.5	n/a	3.03	n/a	Post-medieval	6b	6d
BVK11	20	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	21	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	22	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	23	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	24	Area C	n/a	GR1	n/a	Layer	Demolition layer	Loose, mid brown, silt	2	1.3	0.78	3.03	n/a	Post-medieval	5	6d

								rubble								
BVK11	25	Area C	n/a	GR1	n/a	Layer	Demolition layer	Firm, dark brown, clay silt	2.65	2.5	n/a	3.03	n/a	Post-medieval	6b	6d
BVK11	26	Area C	n/a	MH1	n/a	Cut	Pit	Round, steep sides, base not present	1.5	1.5	1.3	3.03	n/a	Post Roman	3	4a
BVK11	27	Area C	n/a	MH1	n/a	Fill	Fill of pit [26]	Firm, dark green brown, silt clay	1.5	1.5	n/a	3.03	n/a	Post Roman	3	4a
BVK11	28	Area C	n/a	GR1	n/a	Layer	Gardensoil (?)	Firm, light brown, sand silt	2.25	0.9	n/a	3.03	n/a	Post Roman	3	4a
BVK11	29	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	30	Area C	n/a	GR1	3a; 3c; 3d	Layer	Dump/levelling (?)	Firm, dark brown black, silty clay	3	4	n/a	3.03	n/a	Post-medieval	5	6a
BVK11	31	Area C	n/a	GR1	n/a	Fill	Fill of pit [33]	Firm, Dark green brown, clay silt	1.7	1.5	n/a	3.03	n/a	Post-medieval	5	6a
BVK11	32	Area C	n/a	GR1	n/a	Masonry	Chalk/brick wall (E/W)	Chalk & red brick, yellow sand mortar	0.35	1.75	n/a	3.03	n/a	Post-medieval	5	6b
BVK11	33	Area C	n/a	GR1	n/a	Cut	Pit	Round, sides and base not present	1.7	1.5	n/a	3.03	n/a	Post-medieval	5	6a
BVK11	34	Area C	n/a	GR1	3a; 3b	Fill	Fill of cellar [37]	Loose, light pink grey, rubble	2.75	2.75	0.4	3.03	n/a	Post-medieval	6b	6d
BVK11	35	Area C	n/a	GR1	n/a	Layer	Demolition layer	Firm, mid brown, sand silt - modern	1.4	1.25	0.6	3.03	n/a	Post-medieval	6b	6d
BVK11	36	Area C	n/a	GR1	n/a	Layer	Demolition layer	Firm, dark blue brown, sand silt	1.5	1.85	0.3	3.03	n/a	Post-medieval	6b	6d
BVK11	37	Area C	n/a	GR1	3a; 3b	Masonry	Chalk/brick cellar wall (N/S) within	Chalk & red brick, yellow sand mortar	1	0.5	n/a	3.03	1.96	Post-medieval	5	6a

							construction cut [39]									
BVK11	38	Area C	n/a	n/a	3a	Fill	Fill of construction cut [39]	Soft, mid brown, sand silt	1	0.5	0.58	3.03	n/a	Post-medieval	5	6a
BVK11	39	Area C	n/a	n/a	3a; 3b	Cut	Construction cut for [37] & [61]	Linear, steep sides, concave base	1	0.38	0.58	2.45	1.96	Post-medieval	5	6a
BVK11	40	Area C	n/a	n/a	3a; 3d	Layer	Clay layer	Firm, mid brown, clay	1.4	n/a	0.07	2.82	n/a	Post-medieval	5	6a
BVK11	41	Area C	n/a	n/a	3a; 3d	Layer	Burnt/organic horizon (?)	Firm, dark brown, clay silt	1	n/a	0.1	2.73	n/a	Roman	2	3g
BVK11	42	Area C	n/a	n/a	3a; 3c; 3d	Layer	Opus Signinum surface/ bedding	Op. Sig.	1	2	0.2	2.66	n/a	Roman	2	3g
BVK11	43	Area C	n/a	n/a	3a; 3c; 3d	Layer	Mortar surface/ bedding	Loose, pale yellow, mortar	1	2	0.14	2.46	n/a	Roman	2	3g
BVK11	44	Area C	n/a	n/a	3a; 3c; 3d	Layer	Clay layer	Firm, dark green, clay	1	2	0.2	2.33	n/a	Roman	1	3f
BVK11	45	Area C	n/a	n/a	3a; 3b	Layer	Clay layer	Firm, mid brown, clay	2.6	2	0.07	2.13	n/a	Roman	1	3b
BVK11	46	Area C	n/a	n/a	3a; 3b; 3c; 3d	Layer	Burnt/organic horizon (?)	Soft, dark black, silt clay	2.6	2	0.05	2.03	n/a	Roman	1	3b
BVK11	47	Area C	n/a	MH1	3a; 3b; 3c; 3d	Layer	Clay layer	Firm, mid yellow brown, clay	2.6	2	0.15	1.87	n/a	Roman	1	3b
BVK11	48	Area C	n/a	n/a	3c; 3d	Layer	Clay layer	Firm, dark green brown, silt clay	1.7	2	0.15	2.36	n/a	Roman	1	3g
BVK11	49	Area C	n/a	n/a	3b; 3c	Layer	Clay layer	Firm, dark green brown, clay	1.3	1.3	0.25	2.4	n/a	Roman	2	3g
BVK11	50	Area C	n/a	n/a	3c	Layer	Opus	Op. Sig.	0.6	n/a	0.13	2.19	n/a	Roman	1	3f

							Signinum surface/ bedding									
BVK11	51	Area C	n/a	n/a	3b	Fill	Fill of construction cut [39] - op sig	Firm, mid pink, crushed building material	0.55	n/a	0.25	2.35	n/a	Post-medieval	5	6a
BVK11	52	Area C	n/a	n/a	3c	Layer	Opus Signinum surface/ bedding	Op. Sig.	0.6	n/a	0.1	2.43	n/a	Roman	2	3g
BVK11	53	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	54	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	55	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	56	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	57	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	58	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	59	Area C	n/a	n/a	3a	Layer	Demolition layer	Firm, dark brown, sand silt	0.4	1.3	0.35	2.83	n/a	Post-medieval	6b	6d
BVK11	60	Area C	n/a	n/a	3a; 3b	Layer	Demolition layer	Loose, mid yellow brown, sand clay mortar	n/a	1.3	0.3	2.45	n/a	Post-medieval	6b	6d
BVK11	61	Area C	n/a	n/a	3a; 3b	Masonry	Tile surface (?) within construction cut [39]	Firm, mid yellow, tile & mortar	0.3	0.8	0.08	2.17	n/a	Post-medieval	5	6a
BVK11	62	Area C	n/a	n/a	3a	Layer	Burnt/organic horizon (?)	Firm, dark brown, silt clay	n/a	1.1	0.08	2.05	n/a	Roman	1	3g
BVK11	63	Area C	n/a	n/a	3b	Layer	Gravel surface (?)	Firm, pale grey, silt clay gravel	n/a	1.1	0.05	2.49	n/a	Roman	2	3g
BVK11	64	Area C	n/a	n/a	3b	Layer	Dump/levelling (?)	Soft, mid brown, sand silt	n/a	0.45	0.18	2.43	n/a	Post-medieval	5	6a
BVK11	65	Area C	n/a	n/a	3b	Layer	Burnt/organic	Firm, dark	n/a	0.87	0.07	2.08	n/a	Roman	1	3g

							horizon (?)	brown, silt clay								
BVK11	66	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	67	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	68	Area C	n/a	n/a	4	Layer	Dump/levelling	Firm, mid brown grey, brick mortar concrete - modern	5.1	n/a	0.8	3.7	n/a	Post-medieval	6b	6d
BVK11	69	Area C	n/a	n/a	4	Layer	Dump/levelling	Soft, mid brown, sand clay silt	0.4	n/a	0.03	3	n/a	Post-medieval	6b	6d
BVK11	70	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	71	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	72	Area C	n/a	n/a	4	Fill	Fill of construction cut [73]	Loose, white grey, brick plaster mortar	4.5	n/a	1.3	3.7	n/a	Post-medieval	6b	6d
BVK11	73	Area C	n/a	n/a	4	Cut	Construction cut for [74] & [75]	Shape unknown, vertical sides, base not present	0.38	n/a	0.3	3.7	2.5	Post-medieval	5	6a
BVK11	74	Area C	n/a	n/a	4	Masonry	Brick wall (E/W) within construction cut [73]	Unfrogged red brick, hard cream mortar	0.38	n/a	0.3	2.7	n/a	Post-medieval	5	6a
BVK11	75	Area C	n/a	n/a	4	Masonry	Brick surface within construction cut [73]	Unfrogged red brick, hard cream mortar	0.34	n/a	n/a	2.45	n/a	Post-medieval	5	6a
BVK11	76	Area C	n/a	n/a	4	Layer	Burnt horizon	Loose, dark brown black, sand silt ash	1.2	n/a	0.12	2.92	n/a	Roman	2	3g
BVK11	77	Area C	n/a	n/a	4	Layer	Burnt horizon	Firm, mid orange, burnt clay	0.5	n/a	0.05	2.75	n/a	Roman	1	3g
BVK11	78	Area C	n/a	n/a	4	Layer	Clay layer	Firm, light	0.6	n/a	0.08	2.72	n/a	Roman	1	3g

								yellow green, silt clay								
BVK11	79	Area C	n/a	n/a	4	Layer	Burnt horizon	Firm, mid red yellow, burnt silt clay	0.6	n/a	0.03	2.7	n/a	Roman	1	3g
BVK11	80	Area C	n/a	n/a	4	Layer	Dump/levelling	Soft, dark brown, silt clay	0.6	n/a	0.18	2.7	n/a	Roman	1	3g
BVK11	81	Area C	n/a	GR1	n/a	Cut	Construction cut for [12]	Linear, vertical sides, base not present	3.8	3.2	0.3	3.03	n/a	Post-medieval	6a	6d
BVK11	82	Area C	n/a	GR1	n/a	Cut	Construction cut for [13]	Linear, vertical sides, base not present	2	6.4	0.19	3.03	n/a	Post-medieval	5	6d
BVK11	83	Area C	n/a	GR1	n/a	Cut	Construction cut for [15]	Rectangular, vertical sides, base not present	1	0.6	0.1	3.03	n/a	Post-medieval	6a	6d
BVK11	200	Area B	n/a	n/a	5	Fill	Fill of robber cut [211]	Loose, silt sand, mid grey	0.5	0.59	0.27	3.55	n/a	Post-medieval	5	6a
BVK11	201	Area B	n/a	n/a	5; 6	Masonry	Chalk retaining arch (E/W) within construction cut [202]	Chalk, yellow sand mortar	0.53	1.1	1	3.55	n/a	Medieval	4	5b
BVK11	202	Area B	n/a	n/a	5	Cut	Construction cut for [202]	Linear, steep sides, undulating base e.g. For arches	0.53	1.1	1	3.55	n/a	Medieval	4	5b
BVK11	203	Area B	n/a	n/a	5; 6; 7	Layer	Gardensoil (?)	Soft, dark brown black, silt	0.72	0.72	0.5	3.4	n/a	Post Roman	3	4a
BVK11	204	Area B	n/a	n/a	5	Layer	Mortar surface/beddin	Firm, white, mortar (?)	n/a	0.36	0.05	2.9	n/a	Roman	2	4a

							g									
BVK11	205	Area B	n/a	n/a	5; 6	Layer	Bedding layer	Loose, mid yellow, sand	0.38	0.4	0.16	2.9	n/a	Roman	2	4a
BVK11	206	Area B	n/a	n/a	5; 6	Layer	Dump/levelling	Soft, mid brown, silt	0.37	0.55	0.1	2.9	n/a	Roman	2	4a
BVK11	207	Area B	n/a	n/a	5; 6	Layer	Dump/levelling	Soft, mid green brown, sand silt	0.32	0.65	0.08	2.62	n/a	Roman	1	4a
BVK11	208	Area B	n/a	n/a	5; 6	Layer	Dump/levelling	Loose, dark pink brown, silt & op sig	0.3	0.75	0.24	2.54	n/a	Roman	1	4a
BVK11	209	Area B	n/a	n/a	6	Masonry	Bessalis surface	Bessalis bricks set into sand bedding	0.38	0.1	0.05	2.76	n/a	Roman	2	4a
BVK11	210	Area B	n/a	n/a	6; 7	Masonry	Chalk cellar wall (N/S) within construction cut [212]	Chalk & ragstone, light grey yellow mortar	0.7	0.8	0.97	3.1	n/a	Medieval	4	5b
BVK11	211	Area B	n/a	n/a	5	Cut	Robber cut (?)	Shape unknown, irregular sides, irregular base	0.6	n/a	0.28	3.55	3.18	Post-medieval	5	6a
BVK11	212	Area B	n/a	n/a	6; 7	Cut	Construction cut for [210]	Linear with return, vertical sides, base not present	0.7	0.8	0.97	3.1	n/a	Medieval	4	5b
<i>BVK11</i>	<i>213</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	214	Area B	n/a	n/a	7	Fill	Fill of cellar [210]	Loose, mid brown, sand silt	n/a	0.37	0.86	3.4	n/a	Post-medieval	6b	6d
<i>BVK11</i>	<i>215</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	216	Area A2	n/a	n/a	8	Layer	Gardensoil (?)	Soft, dark grey black,	n/a	n/a	0.5	2.8	n/a	Post Roman	3	4a

								sand silt									
BVK11	217	Area A2	n/a	n/a	8	Layer	Dump/levelling (?)	Soft, dark yellow black, silt sand	n/a	n/a	0.7	2.3	n/a	Roman	1	3b	
BVK11	218	Area A2	n/a	n/a	8	Layer	Opus Signinum surface/ bedding	Op. Sig.	n/a	n/a	0.1	1.6	n/a	Roman	1	3b	
BVK11	219	Area A2	n/a	n/a	8	Layer	Burnt horizon (?)	Soft, dark grey black, sand silt	n/a	n/a	n/a	1.5	n/a	Roman	1	3b	
BVK11	220	Area B	n/a	n/a	9	Layer	Gardensoil (?)	Soft, dark brown grey, sand silt	n/a	0.47	0.15	2.85	n/a	Post Roman	3	4a	
BVK11	221	Area A2	n/a	n/a	10	Layer	Dump/levelling	Loose, mid brown, silt sand	1.3	n/a	1.3	3.85	n/a	Post-medieval	6b	6d	
BVK11	222	Area A2	n/a	n/a	10	Layer	Gardensoil (?)	Soft, mid grey brown, sand clay	1.32	n/a	0.34	2.45	n/a	Post Roman	3	4a	
BVK11	223	Area A2	n/a	n/a	10	Layer	Mortar surface/bedding	Firm, mid yellow pink white, mortar	1.32	n/a	0.23	2.1	n/a	Roman	2	3b	
BVK11	224	Area A2	n/a	TB2	10	Layer	Dump/levelling (?)	Soft, mid grey brown, silt clay	1.32	n/a	0.34	1.95	n/a	Roman	2	3b	
BVK11	500	Area A1	95/195; 100/195	pre-ex; 500	51	Masonry	Chalk/brick wall (N/S) within construction cut [590]	Unfrogged red brick and chalk, light brown mortar	1.32	0.38	0.78	2.93	2.25	Post-medieval	6	6c	
BVK11	501	Area A1	105/195; 105/200	pre-ex; 501	n/a	Layer	Dump/levelling	Firm, mid grey brown, clay sand silt	4.9	3.38	0.15	2.37	n/a	Post Roman	4b	4b	
BVK11	502	Area A1	105/195	pre-ex; 502	n/a	Layer	Demolition layer	Loose, light yellow grey, chalk mortar	1	1.38	0.2	2.43	n/a	Medieval	5	5c	
BVK11	503	Area A1	100/195;	pre-	n/a	Fill	Fill of robber	Soft, dark	2.26	2.28	0.1	2.28	n/a	Medieval	5	5c	

			105/195	ex; 503			cut [566]	green grey, clay sand								
BVK11	504	Area A1	100/200	pre- ex; 504	50	Masonry	Chalk wall (E/W)	Chalk, yellow white sand mortar	0.38	2.52	0.66	3.44	3.31	Post- medieval	5	6b
BVK11	505	Area A1	100/200	pre-ex	50	Masonry	Chalk/brick wall (E/W)	Chalk, red brick and ragstone, yellow brown sand mortar	0.38	2	1.2	3.2	1.96	Post- medieval	5	6b
BVK11	506	Area A1	100/200	n/a	50	Masonry	Chalk/brick wall (E/W)	Chalk, red brick and ragstone, yellow brown sand mortar	0.38	0.9	1	3.06	2.59	Post- medieval	5	6b
BVK11	507	Area A1	100/200	507	50; 54	Layer	Opus Signinum surface/ bedding	Op. Sig.	0.35	1.88	0.5	2.65	2.19	Roman	2b	3g
BVK11	508	Area A1	95/200; 100/200	pre- ex; 508	n/a	Masonry	Brick floor - corridor	Unfrogged orange brick, light yellow brown sand mortar	1.22	0.41	0.06	2.33	2.31	Post- medieval	6	6b
BVK11	509	Area A1	95/200; 100/200	pre- ex; 509	n/a	Layer	Burnt/organic horizon	Friable, dark black brown, clay silt	1.36	3.06	0.15	2.26	n/a	Post- medieval	6	6b
<i>BVK11</i>	<i>510</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	511	Area A1	105/195	pre- ex; post- ex (1); 511; post- ex	44; 45	Masonry	Chalk pier within construction cut [554]	Chalk, light yellow brown clay sand mortar	1.03	1.35	1.3	2.47	1.2	Medieval	4c	5a
BVK11	512	Area A1	105/195	pre- ex;	n/a	Masonry	Brick wall (E/W) within	Unfrogged orange	0.33	2.36	0.89	3.38	3.15	Post- medieval	6	6c

				512			construction cut [513]	purple brick chalk and ragstone, yellow white sand mortar								
BVK11	513	Area A1	105/195	513	n/a	Cut	Construction cut for [512]	Linear, sides not present, flat base	0.33	2.36	0.89	not present	2.5	Post-medieval	6	6c
BVK11	514	Area A1	95/200; 100/200	514	n/a	Layer	Bedding layer	Loose, light yellow brown, mortar	1.22	0.72	0.05	2.26	2.2	Post-medieval	6	6b
BVK11	515	Area A1	105/195	515	n/a	Fill	Fill of robber cut [566]	Soft, light grey, clay sand ash	0.8	0.78	0.05	2.18	n/a	Medieval	5	5c
BVK11	516	Area A1	105/195	post-ex (1); 516; post-ex	45	Masonry	Brick/stone wall (E/W) - Room 3	Roman brick and ragstone, hard light red yellow mortar	0.32	1.2	1.33	2.49	2.06	Roman	2a	3e
BVK11	517	Area A1	105/195	517	n/a	Fill	Fill of construction cut [540]	Soft, light grey white, chalk	2.42	0.32	0.25	2.06	n/a	Medieval	4c	5a
BVK11	518	Area A1	100/200	pre-ex; 518; post-ex (1)	31	Masonry	Brick wall (E/W) within construction cut [1335]	Red brick (inc reused Roman brick), ashy grey mortar	0.55	3.9	1.4	3.31	1.91	Post-medieval	6	6c
BVK11	519	Area A1	100/200	n/a	n/a	Fill	Fill of posthole[520]	Loose, black, charcoal	0.32	0.36	0.07	2.24	n/a	Post-medieval	6	6d
BVK11	520	Area A1	100/200	520	n/a	Cut	Posthole	Round, gradual sides, flat base	0.32	0.36	0.07	2.24	2.17	Post-medieval	6	6d
BVK11	521	Area A1	95/200	n/a	n/a	Fill	Fill of pit [522]	Firm, dark brown, clay silt	0.36	0.4	0.18	2.18	n/a	Post-medieval	6	6b
BVK11	522	Area A1	95/200	522	n/a	Cut	Pit	Round (?),	0.36	0.4	0.18	2.18	2	Post-	6	6b

								gradual sides, base not present						medieval		
BVK11	523	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	524	Area A1	95/200; 100/200	524	n/a	Layer	Mortar surface/bedding	Firm, light grey white (?), clay silt	1.38	2.92	0.1	2.18	n/a	Post-medieval	6	6b
BVK11	525	Area A1	100/195; 105/195; 100/200; 105/200	pre-ex; 525; post-ex (1); post-ex	46; 47; 48; 55	Masonry	Brick/stone wall (E/W) within construction cut [1566]/[1574]/[1595] (?) - Rooms 1, 2, 3 & 4	Roman brick and ragstone, hard light red yellow mortar	3.4	5.24	1.26	2.36	1.19	Roman	2a	3e
BVK11	526	Area A1	105/195	526	n/a	Fill	Fill of robber cut [566]	Soft, mid brown yellow, clay sand	2.6	1.78	0.3	2.27	n/a	Medieval	5	5c
BVK11	527	Area A1	105/195	527	n/a	Cut	Posthole	Round, steep sides, concave base	0.12	0.12	0.19	2.14	1.95	Medieval	5	5c
BVK11	528	Area A1	105/195	n/a	n/a	Fill	Fill of posthole [527]	Soft, light grey, clay sand	0.12	0.12	0.19	2.14	n/a	Medieval	5	5c
BVK11	529	Area A1	105/195	527	n/a	Cut	Posthole	Sub-round, steep sides, concave base	0.18	0.18	0.3	2.15	1.85	Medieval	5	5c
BVK11	530	Area A1	105/195	n/a	n/a	Fill	Fill of posthole [529]	Soft, dark brown grey, clay sand	0.18	0.18	0.3	2.15	n/a	Medieval	5	5c
BVK11	531	Area A1	105/195	527	n/a	Cut	Posthole	Round, steep sides, concave base	0.11	0.11	0.2	2.18	1.98	Medieval	5	5c
BVK11	532	Area A1	105/195	n/a	n/a	Fill	Fill of posthole	Soft, mid	0.11	0.11	0.2	2.18	n/a	Medieval	5	5c

							[531]	brown grey, clay sand								
BVK11	533	Area A1	105/195	527	n/a	Cut	Posthole	Round, steep sides, concave base	0.15	0.15	0.22	2.19	1.97	Medieval	5	5c
BVK11	534	Area A1	105/195	n/a	n/a	Fill	Fill of posthole [533]	Soft, mid brown grey, clay sand	0.15	0.15	0.22	2.19	n/a	Medieval	5	5c
BVK11	535	Area A1	105/195; 105/200	535	n/a	Layer	Dump/levelling	Firm, mid brown grey orange, silt clay	0.96	0.7	0.1	2.26	n/a	Post Roman	4b	4b
BVK11	536	Area A1	105/195	536	n/a	Masonry	Brick wall (E/W)	Unfrogged orange purple brick, yellow white sand mortar	0.1	0.22	0.38	2.9	n/a	Post-medieval	6	6c
BVK11	537	Area A1	100/195	pre-ex; 537	n/a	Masonry	Chalk/brick wall (E/W)	Chalk and unfrogged red and yellow brick, light grey lime mortar	1.28	0.56	0.42	3.13	2.64	Post-medieval	6	6b
<i>BVK11</i>	<i>538</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	539	Area A1	100/200	539	n/a	Masonry	Brick step (?)	Red brick, light yellow grey mortar	0.14	0.46	0.07	2.27	n/a	Post-medieval	5	6a
BVK11	540	Area A1	105/195; 105/200	pre-ex; 540	n/a	Cut	Construction cut for [541]	Linear, steep sides, base not present	2.76	0.32	0.26	2.06	1.8	Medieval	4c	5a
BVK11	541	Area A1	105/200	pre-ex; 541	n/a	Masonry	Chalk wall (N/S) within construction cut [540]	Chalk, pink orange sand mortar	0.56	0.32	0.63	2.44	n/a	Medieval	4c	5a
BVK11	542	Area A1	95/195	n/a	n/a	Fill	Fill of pit [543]	Loose, black, charcoal	0.48	0.66	0.17	2.22	n/a	Post-medieval	6	6b
BVK11	543	Area A1	95/195	543	n/a	Cut	Pit	Rectangular,	0.48	0.66	0.17	2.22	2.05	Post-	6	6b

								vertical sides, flat base						medieval		
BVK11	544	Area A1	95/195	pre-ex	n/a	Layer	Dump/levelling	Loose, black brown, clay silt	1.12	0.9	0.05	2.2	n/a	Post-medieval	6	6b
BVK11	545	Area A1	105/195	n/a	n/a	Fill	Fill of pit [546]	Firm, dark green grey, clay silt	0.74	0.76	0.25	2.35	n/a	Post Roman	4b	4b
BVK11	546	Area A1	105/195	546	n/a	Cut	Pit	Shape unknown, gradual sides, flat base	0.74	0.76	0.25	2.35	2.1	Post Roman	4b	4b
<i>BVK11</i>	<i>547</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	548	Area A1	105/195	void	void	void	void	void	void	void	void	void	void	void		
BVK11	549	Area A1	100/195	pre-ex; 549	n/a	Masonry	Chalk/brick wall (N/S) - rebuild	Chalk, brick, ragstone and sandstone, mid grey sand silt	2.44	0.5	1	3.32	3.25	Post-medieval	6	6b
BVK11	550	Area A1	100/195	n/a	n/a	Fill	Fill of pit [551]	Loose, light grey brown, silt sand	0.9	0.68	0.22	2.22	n/a	Post-medieval	6	6c
BVK11	551	Area A1	100/195	551	n/a	Cut	Pit	Sub-round, steep sides, flat base	0.9	0.68	0.22	2.22	2	Post-medieval	6	6c
BVK11	552	Area A1	100/200	552	n/a	Cut	Pit	Sub-rectangular, gradual sides, flat base	0.94	0.7	0.12	2.19	2.07	Post-medieval	6	6d
BVK11	553	Area A1	100/200	n/a	n/a	Fill	Fill of pit [552]	Loose, red brown, CBM clay sand	0.94	0.7	0.12	2.19	n/a	Post-medieval	6	6d
BVK11	554	Area A1	105/195	554	n/a	Cut	Construction cut for [511]	Sub-square, gradual then vertical	1.15	1.25	1.1	2.37	1.2	Medieval	4c	5a

								sides, base not present								
BVK11	555	Area A1	100/195; 100/200	pre-ex; post-ex	49; 52; 56	Masonry	Brick/stone wall (E/W) - Rooms 1 & 4	Roman brick and ragstone, coarse sand mortar	1.96	4.14	0.8	2.51	2.01	Roman	2a	3e
BVK11	556	Area A1	100/195	pre-ex; 556	n/a	Masonry	Brick/stone wall (N/S) within construction cut [586]	Red (?) brick, ragstone and reused op sig, orange brown sand mortar	2.8	0.4	1	3.36	3.26	Post-medieval	6	6a
BVK11	557	Area A1	100/200	557	n/a	Layer	Dump/levelling	Firm, mid yellow brown, sand clay	1.06	0.9	0.23	2.23	n/a	Post-medieval	6	6c
BVK11	558	Area A1	105/195; 105/200	558	n/a	Layer	Dump/levelling	Firm, dark brown grey, sand silt clay	4.5	2	0.1	2.28	n/a	Post Roman	4b	4b
<i>BVK11</i>	<i>559</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
<i>BVK11</i>	<i>560</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	561	Area A1	100/195; 105/195	561	n/a	Fill	Fill of robber cut [566]	Loose, mid grey brown, silt sand	2.36	3.9	0.45	2.22	n/a	Medieval	5	5c
BVK11	562	Area A1	105/200	562	n/a	Layer	Opus Signinum surface/ bedding	Op. Sig.	1.22	2.17	0.1	2.32	2.28	Roman	2c	3h
<i>BVK11</i>	<i>563</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	564	Area A1	105/200	post-ex (1); 564	n/a	Layer	Levelling layer	Soft, green grey, silt clay	1.26	2.18	0.15	2.22	n/a	Roman	2c	3h
<i>BVK11</i>	<i>565</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	566	Area A1	100/195; 105/195	566	n/a	Cut	Robber cut (?)	Sub-square (?), steep sides, flat base	2.36	3.9	0.56	2.37	1.81	Medieval	5	5c

BVK11	567	Area A1	105/195; 105/200	post- ex (1); 567	n/a	Cut	Robber cut (?)	Linear (?), concave sides, base not present	3.5	1.22	n/a	2.19	1.97	Post Roman	4b	4b
BVK11	568	Area A1	105/195; 105/200	post- ex (1); 567	n/a	Fill	Fill of robber cut [567]	Soft, dark brown grey, silt clay	3.5	1.22	n/a	2.19	n/a	Post Roman	4b	4b
BVK11	569	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	570	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	571	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	572	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	573	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	574	Area A1	95/195	574	n/a	Layer	Dump/levelling	Soft, grey brown, clay silt	1.32	0.9	n/a	2.05	n/a	Post Roman	4b	4b
BVK11	575	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	576	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	577	Area A1	105/200	post- ex (1); 577	n/a	Layer	Opus Signinum surface/ bedding - repair	Op. Sig.	0.76	0.8	0.08	2.19	n/a	Roman	2b	3g
BVK11	578	Area A1	105/200	post- ex (1)	n/a	Layer	Opus Signinum surface/ bedding	Op. Sig.	0.96	1.7	n/a	2.12	n/a	Roman	2b	3g
BVK11	579	Area A1	95/195	pre- ex; 579; post- ex	n/a	Masonry	Brick/stone wall (N/S) - Room 4	Roman brick and ragstone, coarse sand mortar	1.05	0.34	0.28	2.26	2.11	Roman	2a	3e
BVK11	580	Area A1	105/200	580	n/a	Masonry	Chalk/brick wall (E/W)	Chalk and red brick, grey brown silt sand mortar	0.26	0.63	0.48	c.2.84	n/a	Post- medieval	6	6b
BVK11	581	Area A1	100/200	581	n/a	Masonry	Chalk/brick	Chalk,	0.38	0.38	0.5	2.72	2.58	Post-	6	6c

							wall (E/W)	reigate and red brick, grey brown silt sand mortar						medieval		
BVK11	582	Area A1	100/195	582	n/a	Cut	Construction cut for [556]	Linear, graduate sides, flat base	1.7	0.54	0.14	2.27	2.08	Post-medieval	6	6a
BVK11	583	Area A1	100/195	n/a	n/a	Fill	Fill of construction cut [582]	Loose, mid brown red black, sand clay CBM	1.7	0.54	0.14	2.27	n/a	Post-medieval	6	6a
BVK11	584	Area A1	100/195	584	n/a	Cut	Construction cut for [586]	Linear, vertical sides, flat base	0.58	3	0.13	2.28	2.05	Post-medieval	6	6d
BVK11	585	Area A1	100/195	n/a	n/a	Fill	Fill of construction cut [584]	Loose, red brown black, sand clay CBM	3	0.48	0.13	2.28	n/a	Post-medieval	6	6d
BVK11	586	Area A1	100/195	n/a	n/a	Masonry	Brick wall (E/W) within construction cut [584]	Red (?) brick & concrete, yellow sand mortar	11	0.96	1.23	3.28	2.05	Post-medieval	6	6d
BVK11	587	Area A1	100/195	587	n/a	Cut	Pit	Sub-square, steep sides, flat base	1.1	1.9	0.22	2.31	2.09	Post-medieval	6	6d
BVK11	588	Area A1	100/195	n/a	n/a	Fill	Fill of pit [587]	Loose, mid brown black, sand clay cess	1.1	1.9	0.22	2.31	n/a	Post-medieval	6	6d
BVK11	589	Area A1	100/195	post-ex	52; 56; 57	Masonry	Brick curvilinear wall - Room 4	Bessalis brick, op sig moldings and mortar	1.78	0.45	0.48	2.87	2.39	Roman	2b	3e
BVK11	590	Area A1	95/195; 100/195	590	n/a	Cut	Construction cut for [500]	Linear, vertical	1.34	0.72	0.28	2.32	2.04	Post-medieval	6	6c

								sides, flat base								
BVK11	591	Area A1	95/195; 100/195	591	n/a	Layer	Dump/levelling	Soft, dark brown grey, sand clay	1.75	3.54	0.25	2.34	2.04	Post Roman	4b	4a
BVK11	592	Area B	105/180; 100/180	592	24; 25; 53; 73; 74; 75; 76	Masonry	Chalk retaining arch (EW) within construction cut [663]	Chalk, light brown silt sand lime mortar	1.31	5.08	2.29	3.49	1.20	Medieval	5	5b
BVK11	593	Area B	105/185	n/a	n/a	Fill	Fill of pit [594]	Loose, dark grey brown, clay sand silt	1.36	3.20	0.55	2.77	n/a	Post-medieval	6b	6a
BVK11	594	Area B	105/185	594	n/a	Cut	Pit (?)	Linear, steep sides, concave base	1.36	3.20	0.55	2.77	2.22	Post-medieval	6b	6a
BVK11	595	Area B	100/185; 100/180	595	n/a	Masonry	Chalk/brick wall (N/S & E/W)	Chalk, red brick and ragstone, light yellow sand mortar & light grey mortar	5.18	1.54	0.46	2.62	2.23	Post-medieval	6b	6d
BVK11	596	Area B	100/180; 100/185	596	24; 37	Masonry	Brick tank within construction cut [602]	Red and yellow brick, grey sand mortar	3.02	2.66	0.80	3.03	2.78	Post-medieval	6b	6b
<i>BVK11</i>	<i>597</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	598	Area B	105/180; 105/185	n/a	n/a	Fill	Fill of pit [772]	Soft, dark green grey, clay silt cess	1.55	0.59	0.30	2.80	n/a	Medieval	5	5b
BVK11	599	Area B	105/180; 105/185	n/a	n/a	Fill	Fill of pit [772]	Hard, light red grey, mortar and stone	0.97	0.52	0.30	2.80	n/a	Medieval	5	5a
BVK11	600	Area B	105/180;	n/a	n/a	Fill	Fill of pit [772]	Soft, dark	1.00	0.55	0.15	2.50	n/a	Medieval	5	5b

			105/185					brown, clay silt								
BVK11	601	Area B	105/180; 105/185	601	28; 77	Cut	Pit	Square (?), vertical sides, base not present	1.76	0.85	1.60	2.81	1.20	Post Roman	5	4a
BVK11	602	Area B	100/180; 100/185	602	23	Cut	Construction cut for.[596]	Rectangular, near vertical sides, flat base	3.02	2.66	1.19	2.39	1.20	Post-medieval	6b	6b
BVK11	603	Area B	100/180; 100/185	n/a	n/a	Fill	Fill of construction cut [602]	Soft, grey brown, sandy silt	1.92	0.14	0.80	2.39	n/a	Post-medieval	6b	6b
BVK11	604	Area B	95/180	n/a	n/a	Fill	Fill of posthole [605]	Soft, friable, mid green brown, silt	0.38	0.44	0.14	2.52	n/a	Post-medieval	6b	6a
BVK11	605	Area B	95/180	605	n/a	Cut	Posthole	Rectangular, vertical sides, flat base	0.38	0.44	0.14	2.52	2.38	Post-medieval	6b	6a
BVK11	606	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [648]	Soft, mid grey brown, clay sand	0.65	0.90	0.25	2.75	n/a	Medieval	5	5a
BVK11	607	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [648]	Soft, brown (?), decayed wood	0.70	0.96	0.03	2.80	2.49	Medieval	5	5a
BVK11	608	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [609]	Firm, dark grey brown, sand clay silt	1.10	1.20	0.55	2.75	n/a	Medieval	5	5a
BVK11	609	Area B	100/185; 105/185	n/a	n/a	Cut	Pit	Sub-rectangular, steep sides, concave base	0.80	1.50	1.02	2.75	1.73	Medieval	5	5a
BVK11	610	Area B	100/185	n/a	n/a	Fill	Fill of posthole [611]	Soft, brown (?), decayed wood - mostly a void	0.14	0.10	1.08	2.28	n/a	Roman	6b	3g

BVK11	611	Area B	100/185	611	n/a	Cut	Posthole	Rectangular, vertical sides, base not present	0.14	0.10	1.08	2.28	1.20	Roman	6b	3g
BVK11	612	Area B	100/185	n/a	n/a	Fill	Fill of posthole [613]	Soft, brown (?), decayed wood - mostly a void	0.13	0.10	1.03	2.23	n/a	Roman	6b	3g
BVK11	613	Area B	100/185	611	n/a	Cut	Posthole	Rectangular, vertical sides, base not present	0.13	0.10	1.03	2.23	1.20	Roman	6b	3g
BVK11	614	Area B	100/180	n/a	n/a	Fill	Fill of posthole [615]	Soft, brown (?), decayed wood - mostly a void	0.19	0.20	1.06	2.26	n/a	Roman	6b	3g
BVK11	615	Area B	100/180	615	n/a	Cut	Posthole	Rectangular, vertical sides, base not present	0.19	0.20	1.06	2.26	1.20	Roman	6b	3g
BVK11	616	Area B	95/185; 100/185	616	n/a	Cut	Pit	Sub-round, steep sides, flat base	1.60	0.95	0.47	2.36	1.89	Post-medieval	6b	6a
BVK11	617	Area B	95/185; 100/185	n/a	n/a	Fill	Fill of pit [616]	Soft, dark yellow grey, clay silt	1.60	0.95	0.47	2.36	n/a	Post-medieval	6b	6a
BVK11	618	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [648]	Soft, mid grey brown, clay sand	0.75	0.75	0.03	2.76	2.46	Medieval	5	5a
BVK11	619	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [648]	Soft, mid yellow brown black, silt sand clay	0.80	1.10	0.04	2.73	2.50	Medieval	5	5a
BVK11	620	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [648]	Soft, mid grey brown, sand clay silt	0.95	1.20	0.04	2.72	2.42	Post Roman	5	4b
BVK11	621	Area A1	100/195	621	n/a	Masonry	Brick step (?)	red (?) brick, no mortar	0.47	0.12	0.1	2.33	n/a	Post-medieval	6	6a

BVK11	622	Area A2	100/185; 100/190; 105/185; 105/190	n/a	n/a	Layer	Dump/levelling	Loose, mixed demolition rubble sand silt - generic machining number	n/a	n/a	n/a	n/a	n/a	Post- medieval	6	6d
BVK11	623	Area B	95/180; 95/185	623	15	Cut	Pit	Sub-round (?), vertical sides, base not present	1.00	0.60	1.27	2.45	1.18	Roman	5	3g
BVK11	624	Area B	95/180; 95/185	n/a	15	Fill	Fill of pit [623]	Firm, dark grey brown, sand silt	1.00	0.60	0.25	2.45	n/a	Roman	5	3g
BVK11	625	Area B	100/185	625	n/a	Layer	Levelling layer	Loose, sub angular ragstone (?) cobble	0.40	2.35	0.09	2.34	n/a	Post- medieval	6b	6b
BVK11	626	Area B	100/185	626	n/a	Cut	Pit	Sub-square (?), steep sides, base not present	0.35	0.80	0.57	2.31	1.74	Post- medieval	6b	6a
BVK11	627	Area B	100/185	n/a	n/a	Fill	Fill of pit [626]	Soft, dark brown, sand silt ash	0.35	0.80	0.57	2.31	n/a	Post- medieval	6b	6a
BVK11	628	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [648]	Firm, dark brown grey, silt clay	1.30	1.85	0.13	1.79	1.38	Post Roman	5	4b
<i>BVK11</i>	<i>629</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	630	Area B	105/180; 105/185	n/a	n/a	Fill	Fill of pit [772]	Large stone blocks embedded in [599]	0.97	0.52	0.24	2.45	n/a	Medieval	5	5a
BVK11	631	Area B	105/180; 105/185	n/a	n/a	Fill	Fill of pit [772]	Soft, mid grey brown, silt clay	1.55	0.59	0.10	2.30	n/a	Medieval	5	5a
BVK11	632	Area B	105/180; 105/185	n/a	n/a	Fill	Fill of pit [772]	Loose, white grey, chalk and ragstone	1.55	0.59	0.15	2.34	2.26	Medieval	5	5a

BVK11	633	Area B	105/180	n/a	n/a	Fill	Fill of pit [772]	Firm, light grey white, mortar	1.55	0.59	0.15	2.34	2.26	Medieval	5	5a
BVK11	634	Area A2	100/185; 105/185; 100/190; 105/190	n/a	n/a	Layer	Bedding layer	Soft, mid orange brown, sand gravel	n/a	n/a	0.1	2.1	2.01	Post-medieval	6	6d
BVK11	635	Area B	95/185; 100/185	635	n/a	Layer	Gardensoil	Firm, dark grey brown, clay silt	3.20	3.80	0.15	2.43	2.25	Medieval	6a	5a
BVK11	636	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [648]	Firm, mid brown yellow, silt clay	0.70	1.40	0.09	2.77	2.25	Post Roman	5	4b
BVK11	637	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [648]	Loose, dark grey, clay silt	1.70	1.25	0.02	2.77	2.21	Post Roman	5	4b
BVK11	638	Area B	95/185	638	n/a	Cut	Pit	Sub-round, steep sides, flat base	0.33	0.66	0.16	2.41	2.25	Post-medieval	6b	6a
BVK11	639	Area B	95/185	n/a	n/a	Fill	Fill of pit [638]	Loose, grey green, clay silt	0.33	0.66	0.16	2.41	n/a	Post-medieval	6b	6a
BVK11	640	Area A1	100/195	640; post-ex	n/a	Layer	Demolition layer	Loose, mid pink yellow brown, op sig mortar silt	1.18	1.77	0.2	2.24	n/a	Post Roman	2c	4a
BVK11	641	Area B	100/180; 100/185; 105/180; 105/185	n/a	n/a	Fill	Fill of pit [642]	Friable, dark grey brown, clay silt	1.30	2.10	0.10	2.83	2.76	Post Roman	5	4a
BVK11	642	Area B	100/180; 100/185; 105/180; 105/186	642	n/a	Cut	Pit	Sub-round, gradual sides, flat base	1.30	2.10	0.17	2.86	2.69	Post Roman	5	4a
BVK11	643	Area B	105/185	n/a	n/a	Fill	Fill of pit [644]	Soft, dark brown grey, clay silt	0.55	0.90	0.54	2.72	n/a	Post Roman	5	4a
BVK11	644	Area B	105/185	644	n/a	Cut	Pit	Sub-round, gradual	0.55	0.90	0.54	2.72	2.18	Post Roman	5	4a

								sides, concave base								
BVK11	645	Area B	100/180; 100/185	n/a	n/a	Fill	Fill of construction cut [646]	Soft, dark brown, sand silt	5.18	0.05	0.10	2.43	n/a	Post- medieval	6b	6d
BVK11	646	Area B	100/180; 100/185	646	n/a	Cut	Construction cut for [595]	Linear, vertical sides, flat base	5.18	1.54	0.62	2.89	2.27	Post- medieval	6b	6d
BVK11	647	Area B	105/185	n/a	n/a	Fill	Fill of pit [649]	Friable, dark yellow brown,	1.20	0.80	0.15	2.77	2.69	Post Roman	5	4b
BVK11	648	Area B	100/185; 105/185	648	n/a	Cut	Pit	Round, gradual sides, concave base	1.32	1.94	0.60	2.75	2.15	Post Roman	5	4b
BVK11	649	Area B	105/185	649	n/a	Cut	Pit	Round (?), steep sides, concave base	1.10	1.20	0.53	2.72	2.19	Post Roman	5	4b
BVK11	650	Area B	105/185	n/a	n/a	Fill	Fill of pit [649]	Firm, mid yellow brown, silt clay	0.90	1.00	0.37	2.56	2.37	Post Roman	5	4b
BVK11	651	Area B	100/185	n/a	n/a	Fill	Fill of pit [652]	Soft, dark black brown, sand silt	0.81	1.44	0.52	2.25	n/a	Post Roman	5	4a
BVK11	652	Area B	100/185	652	n/a	Cut	Pit	Rectangular, concave sides, concave base	0.81	1.44	0.52	2.25	1.73	Post Roman	5	4a
BVK11	653	Area A2	100/195; 105/195	post- ex	n/a	Masonry	Brick wall (E/W)	Orange brick, yellow brown lime mortar	0.5	3	0.9	2.69	n/a	Post- medieval	6	6c
BVK11	654	Area A2	100/195	654	n/a	Masonry	Brick wall (N/S & E/W)	Orange brick, grey brown sand mortar	0.86	1	0.77	2.77	n/a	Post- medieval	6	6a

BVK11	655	Area B	100/185	655	n/a	Layer	Levelling layer	Friable, light brown, silt sand	0.67	0.81	0.10	2.23	n/a	Post Roman	4	4a
BVK11	656	Area A1	100/195	656; 658; post-ex	n/a	Layer	Dump/levelling	Soft, dark brown grey, sand clay	1.5	2.42	0.1	2.2	2.01	Roman	2c	3h
BVK11	657	Area A1	100/195	658; post-ex	n/a	Layer	Dump/levelling	Firm, mid brown yellow, sand silt clay	0.74	0.7	0.03	2.19	2.03	Roman	2c	3g
BVK11	658	Area A1	100/195	658; post-ex	52	Masonry	Brick floor	Red brick, dark grey brown silt clay	1.84	1.76	0.3	2.24	1.93	Roman	2b	3e
BVK11	659	Area A2	100/190	pre-ex; post-ex	18	Masonry	Brick wall (N/S) within construction cut [891]	Red & yellow brick, yellow lime (?) mortar	3.89	0.32	1	3.23	n/a	Post-medieval	6	6c
BVK11	660	Area A2	95/195	660	58	Masonry	Chalk/brick wall (E/W)	Brick & chalk, yellow brown sand mortar	0.42	1.04	1.04	3.12	2.45	Post-medieval	6	6a
BVK11	661	Area A2	95/190	661	n/a	Masonry	Brick floor	Unfrogged red brick, yellow brown mortar	0.84	0.82	0.06	2.78	n/a	Post-medieval	6	6b
BVK11	662	Area A2	105/185	662	59	Masonry	Brick wall (E/W) within construction cut [697]	Orange brick, grey white lime mortar	0.22	1.46	0.45	2.13	n/a	Post-medieval	6	6c
BVK11	663	Area B	100/180; 105/180	663	25	Cut	Construction cut for [592]	Linear, vertical sides, flat base	1.31	5.08	2.21	3.41	1.20	Medieval	5	5b
BVK11	664	Area A1	95/195; 100/195	658; post-ex	n/a	Layer	Dump/levelling	Soft, dark grey brown, organic sand silt	1.3	2.2	n/a	2.05	2	Post Roman	4b	4a

BVK11	665	Area A2	100/190	pre-ex; 665	62	Masonry	Brick/stone wall (N/S) within construction cut [753]	Red brick and ragstone, mid grey brown sand silt mortar	3.5	0.27	0.32	2.78	n/a	Post-medieval	4c	6a
BVK11	666	Area B	105/180	n/a	n/a	Fill	Fill of beamslot [667]	Loose, light brown, silt sand	0.36	1.19	0.19	3.37	n/a	Medieval	5	5b
BVK11	667	Area B	105/180	667	n/a	Cut	Beamslot	Rectangular, steep sides, flat base	0.36	1.19	0.19	3.37	3.18	Medieval	5	5b
BVK11	668	Area A1	100/195	658; post-ex	25	Layer	Dump/levelling	Firm, dark brown grey, sand silt	1.35	1.02	0.015	1.8	n/a	Roman	2c	3h
BVK11	669	Area B	95/180; 100/180	669	n/a	Masonry	Chalk/brick wall (E/W & N/S) within construction cut [720]	Unfrogged red brick and chalk, grey mortar	0.98	2.72	0.22	2.64	2.42	Post-medieval	6b	6d
BVK11	670	Area B	95/180; 100/180	670	16	Masonry	Brick wall (E/W) within construction cut [721]	Unfrogged red brick, light grey yellow silt sand mortar	0.14	2.08	0.20	2.64	2.45	Post-medieval	6b	6d
BVK11	671	Area B	100/180; 105/180	n/a	16; 53	Layer	Gardensoil	Firm, dark brown grey, sand silt	1.10	1.20	0.20	3.32	3.27	Medieval	5	5b
BVK11	672	Area A2	105/190	pre-ex	13	Fill	Fill of robber cut [673]	Loose, grey white, mortar	0.7	0.37	0.42	2.03	n/a	Post-medieval	5	6d
BVK11	673	Area A2	105/190	pre-ex; 673	13	Cut	Robber cut (?)	Linear, gradual sides, sloping base	0.7	0.37	0.42	2.03	1.58	Post-medieval	5	6d
BVK11	674	Area A2	105/190	n/a	13	Fill	Fill of pit [829]	Firm, dark brown grey, sand silt	n/a	0.1	0.1	2	n/a	Post-medieval	5	6b
BVK11	675	Area A2	105/190	pre-	13;	Layer	Occupation	Firm, mid	3.09	2.56	0.2	2.1	n/a	Post-	5	6a

				ex; 675	65; 66		layer	orange grey, sand silt clay						medieval		
BVK11	676	Area A2	105/190	n/a	13	Layer	Demolition layer	Loose, light brown yellow, sand mortar	1	1.15	0.1	1.85	n/a	Post Roman	2c/3	4a
BVK11	677	Area A2	105/190	n/a	13	Layer	Dump/levelling	Firm, mid brown grey, sand clay	1	1.15	0.12	1.79	n/a	Post Roman	2c/3	4a
BVK11	678	Area A2	105/190	n/a	13	Fill	Fill of pit [689]	Soft, orange grey brown, sand clay	1	1.15	0.4	1.7	n/a	Roman	2b	3b
BVK11	679	Area A2	105/190	n/a	13	Layer	Burnt horizon	Firm, light brown pink, clay	n/a	0.28	0.1	1.48	n/a	Roman	2b	3b
BVK11	680	Area A2	105/190	n/a	13	Fill	Fill of pit [689]	Firm, mid yellow grey, gravel silt sand	n/a	0.2	0.1	1.39	n/a	Roman	2b	3b
BVK11	681	Area A2	105/190; 105/195	TP9	13	Layer	Dump/levelling	Firm, mid grey black, silt clay	1	1.15	0.15	1.44	n/a	Roman	2b	3b
BVK11	682	Area A2	105/190	n/a	13	Layer	Levelling layer	Soft, light brown yellow, sand	n/a	0.23	0.03	1.29	n/a	Roman	2b	3b
<i>BVK11</i>	<i>683</i>	<i>Area B</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	684	Area A2	105/185; 105/190	TP8; 684; post- ex	59	Masonry	Brick/stone wall (E/W)	Brick, ragstone, sandstone and flint, pink white lime mortar	0.68	1.54	0.36	1.42	n/a	Medieval	4a	5a
BVK11	685	Area B	100/180	n/a	n/a	Fill	Fill of pit [686]	Firm, mid grey brown, clay silt	0.45	0.55	0.23	3.09	n/a	Medieval	5	5b
BVK11	686	Area B	100/180	686	n/a	Cut	Pit	Sub-round, concave sides,	0.41	0.55	0.23	3.09	2.86	Medieval	5	5b

								concave base								
BVK11	687	Area B	100/180; 105/180	687	53	Layer	Gardensoil	Friable, mid grey brown, sand silt	1.80	3.20	0.30	3.09	2.82	Post Roman	5	4a
BVK11	688	Area A2	105/190	n/a	13	Layer	Dump/levelling	Firm, yellow grey, silt clay	n/a	0.23	0.15	1.66	n/a	Roman	2b	3b
BVK11	689	Area A2	105/190	n/a	13	Cut	Pit	Shape unknown, gradual sides, flat base	1	2.36	0.45	1.7	1.23	Roman	2b	3b
BVK11	690	Area A2	105/185; 105/190	pre-ex	59	Fill	Fill of pit [692]	Loose, pink grey, mortar sand silt	0.59	1	0.3	2.03	n/a	Post-medieval	5	6b
BVK11	691	Area A2	105/185; 105/190	TP8; post-ex	59	Fill	Fill of pit [692]	Loose, mid grey brown, sand silt	0.5	1	0.8	1.91	n/a	Post-medieval	5	6b
BVK11	692	Area A2	105/185; 105/190	TP8; 692; pre-ex; post-ex	59; 66	Cut	Pit	Sub-square (?), steep sides, base not present	1.62	2	1	2.06	1.2	Post-medieval	5	6b
BVK11	693	Area A2	105/185	pre-ex	59	Fill	Fill of robber cut [695]	Soft, dark grey brown, sand silt	0.63	1	0.6	2.06	n/a	Post-medieval	4b	6b
BVK11	694	Area A2	105/185	n/a	59	Fill	Fill of robber cut [695]	Loose, tile brick mortar	0.65	1	0.05	1.44	n/a	Post-medieval	4b	6b
BVK11	695	Area A2	105/185	n/a	59	Cut	Robber cut	Linear, sides not present, flat base	0.65	1	0.68	2.06	1.38	Post-medieval	4b	6b
BVK11	696	Area A2	105/185	n/a	59	Fill	Fill of construction cut [697]	Soft, mid grey brown, sand silt	0.2	1.55	0.15	2.04	n/a	Post-medieval	6	6c
BVK11	697	Area A2	105/185	697	59	Cut	Construction cut for [662]	Linear, steep sides, flat base	0.22	1.55	0.15	2.04	1.88	Post-medieval	6	6c

BVK11	698	Area A1	105/195	post-ex (1)	n/a	Fill	Fill of robber cut [566]	Loose, light grey yellow, sand silt mortar	1.28	1.5	0.15	1.96	n/a	Medieval	5	5c
BVK11	699	Area B	105/180	n/a	n/a	Layer	Mortar surface/ bedding	Friable, light yellow brown, silt sand	0.39	0.40	0.01	2.83	n/a	Post Roman	5	4a
BVK11	700	Area B	100/180; 105/180	700	n/a	Layer	Gardensoil	Soft, dark brown, sand silt	2.14	1.70	0.15	2.84	2.75	Post Roman	5	4a
BVK11	701	Area A2	95/190; 100/190	n/a	n/a	Fill	Fill of cess pit [702]	Loose, light brown white, silt mortar	1	1.5	0.3	2.3	n/a	Post-medieval	6	6b
BVK11	702	Area A2	95/190; 100/190	702; post-ex	n/a	Masonry	Brick tank within construction cut [703]	Orange brick, mid grey yellow silt clay	1.4	1.9	0.3	2.39	2.03	Post-medieval	6	6b
BVK11	703	Area A2	95/190; 100/190	703; post-ex	n/a	Cut	Construction cut for [702]	Square, vertical sides, base not present	1.4	1.9	0.37	2.35	1.98	Post-medieval	6	6b
BVK11	704	Area A2	void	void	void	void	void	void	void	void	void	void	void	void		
BVK11	705	Area B	100/185	705	n/a	Masonry	Stone/brick foundation (E/W) within construction cut [715]	Brick, tile, chalk and sandstone, grey yellow brown mortar	0.48	0.92	0.50	2.46	2.16	Post-medieval	6b	6d
BVK11	706	Area A2	100/190	pre-ex	62	Masonry	Brick wall (E/W & N/S)	Red brick, loose grey brown sand silt mortar	0.81	0.54	0.22	3.01	2.86	Post-medieval	6	6b
BVK11	707	Area A2	100/190	pre-ex	n/a	Masonry	Brick floor	Red brick, loose, mid grey sand silt mortar	0.7	0.6	0.07	2.77	n/a	Post-medieval	6	6d
BVK11	708	Area A2	100/190	pre-	62	Masonry	Brick wall	Red brick,	1	0.41	0.28	3.1	n/a	Post-	6	6c

				ex; post- ex			(NE/SW)	light grey mortar						medieval		
BVK11	709	Area A2	100/190	pre- ex; post- ex	n/a	Masonry	Chalk/brick wall (N/S)	Red brick and chalk, hard light grey mortar	0.9	0.4	0.13	3.17	n/a	Post- medieval	6	6d
BVK11	710	Area A2	100/190	pre- ex; post- ex	62	Masonry	Brick wall (NW/SE) within construction cut [883]	Orange brick, light grey sand mortar	0.92	0.7	0.31	3.14	n/a	Post- medieval	6	6c
BVK11	711	Area A2	100/190	pre-ex	62	Masonry	Brick wall (E/W)	Red brick, loose, mid brown silt sand	0.34	0.9	0.2	2.84	n/a	Post- medieval	4c	6a
BVK11	712	Area A2	100/190	pre-ex	n/a	Layer	Levelling layer	Firm, mid grey brown, sand silt clay	1.28	0.7	0.25	2.67	n/a	Post- medieval	6	6d
BVK11	713	Area A2	100/190	pre-ex	n/a	Layer	Levelling layer (?)	Firm, mid brown grey, sand clay silt rubble	0.7	0.35	0.2	2.9	n/a	Post- medieval	6	6d
BVK11	714	Area A2	100/190	projec t level	n/a	Masonry	Brick wall (N/S)	Red brick, no mortar	1.64	0.28	0.065	2.25	n/a	Post- medieval	6	6b
BVK11	715	Area B	100/185	715	n/a	Cut	Construction cut for [705]	Linear, vertical sides, base not present	0.48	0.92	0.50	2.46	1.96	Post- medieval	6b	6d
BVK11	716	Area B	105/185	n/a	n/a	Fill	Fill of pit [717]	Loose, light yellow brown, sand silt	0.35	0.60	0.51	2.70	n/a	Post Roman	5	4a
BVK11	717	Area B	105/185	717	n/a	Cut	Pit	Sub-round, vertical sides, concave base	0.35	0.60	0.51	2.70	2.19	Post Roman	5	4a
BVK11	718	Area B	105/185	n/a	n/a	Fill	Fill of pit [719]	Soft, dark	1.70	1.30	0.44	2.72	2.48	Post	5	4a

								grey brown, clay silt						Roman		
BVK11	719	Area B	105/185	719	n/a	Cut	Pit	Round, steep sides, flat base	1.70	1.30	0.44	2.72	2.28	Post Roman	5	4a
BVK11	720	Area B	95/180; 100/180	720	16	Cut	Construction cut for [669]	Linear, vertical sides, flat base	0.98	2.72	0.32	2.64	2.32	Post-medieval	6b	6d
BVK11	721	Area B	95/180; 100/180	721	16	Cut	Construction cut for [670]	Linear, vertical sides, flat base	0.14	2.08	0.06	2.51	2.45	Post-medieval	6b	6d
BVK11	722	Area A1	105/200	UP 1B	60; 61; 64	Layer	Dump/levelling	Loose, mid brown grey, sand silt mortar	2	2.01	0.7	3	n/a	Post-medieval	6	6d
BVK11	723	Area A1	105/200	UP A1 (E) pre-ex	60; 61	Layer	Dump/levelling	Loose, mid pink grey, sand silt mortar	2	2.03	0.55	2.55	n/a	Post-medieval	6	6a
BVK11	724	Area B	95/180	n/a	16	Fill	Fill of construction cut [720] - trample?	Soft, light blue grey, mortar	0.98	2.08	0.05	2.45	n/a	Post-medieval	6b	6d
BVK11	725	Area B	95/180	n/a	16	Fill	Fill of construction cut [720] - trample?	Firm, dark grey blue, mortar sand silt	0.98	2.08	0.10	2.40	n/a	Post-medieval	6b	6d
BVK11	726	Area B	95/180	726	16	Layer	Levelling layer	Firm, light brown orange, sand clay	0.44	0.22	0.15	2.37	n/a	Roman	3.12	3g
BVK11	727	Area B	95/180	727	16; 35	Layer	Levelling layer	Soft, light yellow brown, silt sand	0.60	0.40	0.05	2.33	n/a	Roman	3.12	3g
BVK11	728	Area B	95/180	728	16; 35	Layer	Levelling layer	Soft, light green brown,	0.20	0.30	0.12	2.43	n/a	Roman	3.12	3g

								sand clay								
BVK11	729	Area B	95/180	729	16; 35	Layer	Mortar surface/ bedding	Firm, light brown yellow, sand mortar	0.66	0.44	0.10	2.24	n/a	Roman	3.07	3e
BVK11	730	Area B	95/180; 95/185; 100/180; 100/185	730	15; 16; 35	Layer	Clay layer	Firm, dark red brown, clay sand	1.44	1.24	0.10	2.21	2.14	Roman	3.07	3e
BVK11	731	Area B	95/180; 100/180; 100/185	n/a	15; 16	Fill	Fill of pit [1056]	Soft, light pink brown, sand clay silt	1.90	2.10	0.16	2.15	2.08	Roman	3.06	3d
BVK11	732	Area B	95/180	n/a	14; 15; 16; 35	Layer	Dump/levelling	Soft, dark green grey, sand silt	3.50	3.40	0.30	1.87	1.54	Roman	3.04	3d
BVK11	733	Area B	95/180	n/a	16; 35	Layer	Burnt horizon	Soft, dark grey blue, sand silt charcoal	0.31	0.30	0.03	1.66	n/a	Roman	3.04	3d
BVK11	734	Area B	95/180	n/a	15; 16; 35	Layer	Gravel surface (?)	Firm, light orange yellow, sand gravel	2.75	2.90	0.18	1.62	n/a	Roman	3.04	3d
BVK11	735	Area B	95/180	n/a	16; 35	Layer	Levelling layer (?)	Firm, dark orange red pink, sand clay	0.43	0.30	0.10	1.46	n/a	Roman	3.02	3b
BVK11	736	Area B	95/180	n/a	15; 16	Layer	Hearth collapse	Soft, mid pink grey, sand clay	1.22	1.02	0.23	1.60	n/a	Roman	3.02	3b
BVK11	737	Area B	95/180	n/a	14; 15	Fill	Fill of construction cut [855]	Firm, dark blue grey, sand silt	0.34	0.33	0.42	2.49	n/a	Medieval	5	5b
BVK11	738	Area B	95/180	n/a	14; 15	Fill	Fill of pit [623]	Soft, dark red brown, sand silt	0.13	0.16	0.10	2.22	n/a	Roman	5	3g
<i>BVK11</i>	<i>739</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	740	Area B	95/180	n/a	15	Fill	Fill of beamslot	Soft, black, charcoal	1.80	0.36	0.12	1.59	1.57	Roman	3.03	3c

							[1602]									
BVK11	741	Area B	95/180	n/a	14	Fill	Fill of pit [623]	Firm, light yellow grey, sand silt	0.15	n/a	0.48	1.30	n/a	Roman	5	3g
BVK11	742	Area B	95/180	742	14; 16; 35	Masonry	Chalk pier within construction cut [855]	Chalk, dark yellow brown sand mortar	0.61	0.41	1.29	2.49	2.29	Medieval	5	5b
BVK11	743	Area B	100/185	743	n/a	Cut	Pit	Sub-rectangular, vertical sides, base not present	1.25	0.86	0.58	2.27	1.69	Medieval	5	5a
BVK11	744	Area B	100/185	n/a	n/a	Fill	Fill of pit [743]	Firm, dark brown black, clay silt	1.25	0.86	0.58	2.27	n/a	Medieval	5	5a
BVK11	745	Area A1	105/200	UP A1 (E) pre-ex	61	Layer	Demolition layer	Loose, mid pink grey, sand mortar	0.74	0.5	n/a	1.8	n/a	Roman	2b	3g
BVK11	746	Area A1	105/200	UP A1 (E) pre-ex	61	Layer	Dump/levelling	Loose, dark brown black, sand silt	0.74	0.5	n/a	1.8	n/a	Roman	2b	3g
BVK11	747	Area A1	100/200	n/a	63	Layer	Fill of soakaway [749]	Loose, light brown grey, sand clay rubble	2	2.24	0.72	3	n/a	Post-medieval	5	6d
BVK11	748	Area A1	100/200	n/a	63	Layer	Fill of soakaway [749]	Loose, dark brown grey, silt clay rubble	2	2.28	0.57	2.36	n/a	Post-medieval	5	6d
BVK11	749	Area A1	100/200	n/a	63	Masonry	Brick soakaway	Unfrogged red brick, no mortar	n/a	1	0.56	2.26	n/a	Post-medieval	5	6a
BVK11	750	Area A2	100/190	750	n/a	Masonry	Brick drain within construction	Orange/red brick, mid brown yellow	0.7	0.3	0.25	2.42	n/a	Post-medieval	6	6c

							cut [751]	silt clay								
BVK11	751	Area A2	100/190	751	n/a	Cut	Construction cut for [750]	Linear, vertical sides, base not present	0.4	0.3	0.3	2.42	2.12	Post-medieval	6	6c
BVK11	752	Area A2	100/190	n/a	n/a	Fill	Fill of construction cut [753]	Friable, grey brown, sand silt	1.1	0.1	0.28	2.68	n/a	Post-medieval	6	6a
BVK11	753	Area A2	100/190	753	n/a	Cut	Construction cut for [665]	Linear, vertical sides, flat base	1.1	0.1	0.28	2.68	2.4	Post-medieval	4c	6a
BVK11	754	Area A2	95/190; 100/190	754	n/a	Layer	Bedding layer	Firm, dark yellow red brown, sand silt	0.9	1.76	0.1	2.71	n/a	Medieval	4b	5c
BVK11	755	Area A1	100/195	I.S	n/a	Fill	Fill of pit [756]	Firm, mid grey brown, silt clay	0.56	0.15	n/a	1.86	n/a	Post Roman	4b	4a
BVK11	756	Area A1	100/195	I.S	n/a	Cut	Pit (?)	Linear (?), steep sides, base not present	0.56	0.15	n/a	1.96	n/a	Post Roman	4b	4a
BVK11	757	Area A1	100/195	I.S	n/a	Layer	Opus Signinum surface/bedding	Op. Sig.	0.56	0.38	0.2	1.96	n/a	Roman	2b	3g
BVK11	758	Area A1	100/195	I.S	n/a	Cut	Robbing cut	Sub-round, steep sides, sloping base	0.6	0.36	0.2	1.86	1.79	Post Roman	4b	4a
BVK11	759	Area A1	100/195	n/a	n/a	Fill	Fill of robbing cut [758]	Loose, dark black, sand silt	0.6	0.36	0.2	1.86	n/a	Post Roman	4b	4a
BVK11	760	Area A1	100/195	n/a	n/a	Layer	Dump/levelling	Loose, mid pink grey brown, clay silt	0.56	0.62	0.09	2	n/a	Post Roman	4b	4a
BVK11	761	Area A1	100/195	I.S	n/a	Layer	Opus	Op. Sig.	0.6	0.26	n/a	1.79	n/a	Roman	2b	3g

							signinum surface/ bedding within construction cut [758]									
BVK11	762	Area A2	95/190; 100/190	762	n/a	Layer	Demolition layer	Firm, grey brown, sand silt	0.7	1.2	0.12	2.61	n/a	Medieval	4b	5c
BVK11	763	Area B	95/185	763	n/a	Masonry	Stone wall (E/W) within construction cut [764]	Sandstone & ragstone, mid grey yellow sand mortar	0.32	1.40	0.38	2.39	n/a	Post-medieval	6a	6a
BVK11	764	Area B	95/185	764	n/a	Cut	Construction cut for [763]	Linear, vertical sides, base not present	0.32	1.50	0.43	2.44	2.01	Post-medieval	6a	6a
BVK11	765	Area B	105/185	n/a	n/a	Fill	Fill of posthole [766]	Firm, mid grey brown, sand silt	0.32	0.25	0.25	2.72	n/a	Medieval	5	5a
BVK11	766	Area B	105/185	766	n/a	Cut	Posthole	Round, vertical sides, base not present	0.32	0.25	0.25	2.72	2.47	Medieval	5	5a
BVK11	767	Area B	105/185	n/a	n/a	Fill	Fill of posthole [768]	Loose, dark grey brown, clay silt	0.16	0.18	0.56	2.72	n/a	Post-medieval	5	6a
BVK11	768	Area B	105/185	768	n/a	Cut	Posthole	Sub-rectangular, vertical sides, pointed base	0.16	0.18	0.56	2.72	2.16	Post-medieval	5	6a
BVK11	769	Area B	105/185	n/a	n/a	Fill	Fill of posthole [770]	Loose, dark grey brown, clay silt	0.15	0.18	0.42	2.80	n/a	Post-medieval	5	6a
BVK11	770	Area B	105/185	770	n/a	Cut	Posthole	Sub-rectangular, steep sides,	0.15	0.18	0.42	2.80	2.38	Post-medieval	5	6a

								pointed base								
BVK11	771	Area A2	95/190; 100/190	771	n/a	Layer	Dump/levelling	Friable, grey brown green, sand silt	0.52	1.54	0.05	2.48	n/a	Medieval	4b	5c
BVK11	772	Area B	105/180; 105/185	722	28; 77	Cut	Pit	Sub-round, concave sides, base not present	1.55	0.59	1.19	2.81	1.68	Medieval	5	5a
BVK11	773	Area B	100/185	n/a	n/a	Fill	Fill of pit [774]	Soft, dark brown grey, clay silt	0.70	1.70	0.44	2.50	2.13	Post Roman	5	4a
BVK11	774	Area B	100/185	774	n/a	Cut	Pit	Shape unknown, steep sides, flat base	0.70	1.70	0.44	2.44	2.06	Post Roman	5	4a
BVK11	775	Area A2	105/190	n/a	n/a	Fill	Fill of pit [776]	Firm, dark grey brown, silt clay	0.68	0.7	0.26	2.01	n/a	Post Roman	2c/3	4a
BVK11	776	Area A2	105/190	776	n/a	Cut	Pit	Round, near vertical sides, flat base	0.68	0.7	0.68	2.01	1.33	Post Roman	2c/3	4a
BVK11	777	Area A2	95/190; 100/190	n/a	n/a	Fill	Fill of pit [786]	Firm, mid brown orange, silt clay	0.95	1.32	0.1	2.67	n/a	Medieval	4b	5c
BVK11	778	Area A2	95/190; 100/190	n/a	n/a	Fill	Fill of pit [786]	Soft, grey brown, clay silt	0.6	1.2	0.1	2.6	n/a	Medieval	4b	5c
BVK11	779	Area A2	95/190; 100/190	n/a	62	Fill	Fill of pit [786]	Firm, grey brown, clay silt	1	1.2	0.1	2.64	n/a	Medieval	4b	5c
BVK11	780	Area A2	95/190; 100/190	n/a	62	Fill	Fill of pit [786]	Loose, dark brown grey, clay silt	1.3	2	0.15	2.5	n/a	Medieval	4b	5c
BVK11	781	Area A2	95/190; 100/190	n/a	62	Fill	Fill of pit [786]	Soft, brown yellow grey, rubble mortar	1.4	2.1	0.25	2.35	n/a	Medieval	4b	5c

BVK11	782	Area A2	95/190; 100/190	n/a	62	Fill	Fill of pit [786]	Soft, dark brown grey, ash clay	1.4	2.95	0.1	2.07	n/a	Medieval	4b	5c
BVK11	783	Area A2	95/190	783	n/a	Cut	Pit	Irregular, Irregular sides, concave base	0.76	0.7	0.73	2.61	1.88	Medieval	4b	5b
BVK11	784	Area A2	95/190	n/a	n/a	Fill	Fill of pit [783]	Firm, dark grey black, clay silt	0.76	0.7	0.73	2.61	n/a	Medieval	4b	5b
BVK11	785	Area A2	95/190	785	n/a	Layer	Dump/levelling	Loose, dark brown black, sand silt clay	1	0.72	0.15	2.61	n/a	Medieval	4b	5b
BVK11	786	Area A2	95/190; 100/190	786	62	Cut	Pit	Irregular, steep sides, concave base	1.45	2.18	0.73	2.66	1.93	Medieval	4b	5c
BVK11	787	Area B	105/185	n/a	n/a	Fill	Fill of pit [788]	Friable, dark brown green, peat silt	1.44	1.62	0.52	2.52	n/a	Post Roman	5	4b
BVK11	788	Area B	105/185	788	n/a	Cut	Pit	Shape unknown, concave sides, flat base	1.44	1.62	0.80	2.52	1.72	Post Roman	5	4b
BVK11	789	Area B	105/180	n/a	n/a	Fill	Fill of posthole [790]	Soft, dark brown, sandy silt	0.30	0.19	0.26	2.56	n/a	Post Roman	5	4a
BVK11	790	Area B	105/180	790	n/a	Cut	Posthole	Round, concave sides, concave base	0.30	0.19	0.26	2.56	2.30	Post Roman	5	4a
BVK11	791	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [792]	Firm, dark brown grey, clay silt	1.60	2.50	0.84	2.66	2.06	Post Roman	5	4b
BVK11	792	Area B	100/185;	792	n/a	Cut	Pit	Round,	1.60	2.50	1.12	2.69	1.57	Post	3.12	4b

			105/185					vertical sides, base not present						Roman		
BVK11	793	Area B	100/180	n/a	35	Fill	Fill of pit [794]	Firm, dark grey blue, clay silt	0.82	0.68	0.26	2.38	2.34	Roman	4	3g
BVK11	794	Area B	100/180	794	35	Cut	Pit (?)	Sub-round (?), steep sides, flat base	0.82	0.68	0.26	2.38	2.12	Roman	4	3g
BVK11	795	Area B	100/180; 105/180	795	n/a	Fill	Fill of pit [796]	Friable, dark brown grey, sand clay silt	1.45	1.30	0.22	2.79	2.71	Post Roman	5	4a
BVK11	796	Area B	100/180; 105/180	796	n/a	Cut	Pit	Sub-rectangular, irregular sides, irregular base	1.45	1.30	0.22	2.78	2.56	Post Roman	5	4a
BVK11	797	Area B	105/185	797	n/a	Layer	Dump/levelling	Friable, mid brown grey, silt clay	1.53	1.76	0.30	2.63	2.50	Post Roman	5	4b
<i>BVK11</i>	<i>798</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	799	Area B	100/185	n/a	n/a	Fill	Fill of robber cut [868]	Firm, dark brown, clay silt	0.54	1.68	0.30	2.19	n/a	Post Roman	4	4a
BVK11	800	Area B	100/185	800	n/a	Cut	Pit	Shape unknown, gradual sides, concave base	0.80	0.80	0.28	2.20	1.92	Post Roman	3.10	4a
BVK11	801	Area B	100/185	n/a	n/a	Fill	Fill of pit [800]	Friable, dark brown, clay silt	0.80	0.80	0.28	2.20	n/a	Post Roman	3.10	4a
BVK11	802	Area B	105/180; 105/185	802	n/a	Layer	Gardensoil	Friable, dark black brown, silt sand	1.52	2.11	0.16	2.80	2.76	Post Roman	5	4a

BVK11	803	Area B	105/185	n/a	n/a	Fill	Fill of robber cut [804]	Friable, light brown, silt mortar	0.54	1.00	0.17	2.45	n/a	Post Roman	4	4a
BVK11	804	Area B	105/185	804	n/a	Cut	Robber cut	Linear, vertical sides, flat base	0.54	1.00	0.17	2.45	2.28	Post Roman	4	4a
BVK11	805	Area B	105/185	n/a	n/a	Fill	Fill of pit [788]	Friable, dark brown, silt peat	1.04	0.8	0.3	2.52	n/a	Post Roman	5	4b
BVK11	806	Area A2	105/190	806	65	Layer	Dump/levelling	Loose, mid yellow brown, sand silt oyster shell - midden	0.96	0.5	0.18	2.05	n/a	Post Roman	2c/3	4a
BVK11	807	Area B	105/185	n/a	n/a	Fill	Fill of posthole [808]	Loose, sand clay silt, dark grey brown	0.21	0.16	0.58	2.81	n/a	Post Roman	3.12	4a
BVK11	808	Area B	105/185	808	n/a	Cut	Posthole	Sub-square, steep sides, pointed base	0.21	0.16	0.58	2.81	2.23	Post Roman	3.12	4a
BVK11	809	Area B	105/180	n/a	41 ?	Fill	Fill of postpipe [810]	Firm, dark grey brown, clay silt	0.26	0.29	0.34	2.86	n/a	Post Roman	3.12	4a
BVK11	810	Area B	105/180	810	41	Cut	Postpipe in posthole [1101]	Sub-round, vertical sides, concave base	0.26	0.29	0.34	2.86	2.52	Post Roman	3.12	4a
BVK11	811	Area B	105/185	n/a	n/a	Fill	Fill of posthole [812]	Firm, dark grey brown, clay silt	0.24	0.12	0.36	2.77	n/a	Post Roman	3.12	4a
BVK11	812	Area B	105/185	812	n/a	Cut	Posthole	Sub-round, vertical sides, concave base	0.24	0.12	0.36	2.77	2.41	Post Roman	3.12	4a
BVK11	813	Area B	105/185	n/a	n/a	Fill	Fill of pit [814]	Soft, dark	0.34	0.58	0.35	2.65	n/a	Post	4	4a

								brown, sand silt						Roman		
BVK11	814	Area B	105/185	814	n/a	Cut	Pit	Linear, steep sides, concave base	0.34	0.58	0.35	2.65	2.30	Post Roman	4	4a
BVK11	815	Area B	95/185	815	n/a	Cut	Pit	Shape unknown, steep sides, base not present	0.64	1.30	0.80	2.40	1.60	Post Roman	5	4b
BVK11	816	Area B	95/185	n/a	n/a	Fill	Fill of pit [815]	Friable, dark grey brown, clay silt	0.64	1.30	0.40	2.40	n/a	Post Roman	5	4b
BVK11	817	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [792]	Friable, orange pink, brickearth silt	0.60	1.00	0.69	2.69	n/a	Post Roman	5	4b
BVK11	818	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [792]	Friable, dark grey brown, silt sand	1.60	2.50	0.56	2.56	n/a	Post Roman	5	4b
BVK11	819	Area B	105/185	n/a	n/a	Fill	Fill of pit [792]	Firm, green grey, sand silt	1.60	0.70	0.47	2.47	n/a	Post Roman	5	4b
BVK11	820	Area A2	105/190	n/a	n/a	Fill	Fill of pit [821]	Loose, mid grey, clay sand	0.58	0.46	0.46	2.02	n/a	Post Roman	2c/3	4a
BVK11	821	Area A2	105/190	821	n/a	Cut	Pit	Sub-rectangular, steep sides, flat base	0.58	0.46	0.46	2.02	1.56	Post Roman	2c/3	4a
BVK11	822	Area B	100/185	n/a	n/a	Fill	Fill of posthole [823]	Soft, light brown, sand silt	0.40	0.43	0.22	2.81	n/a	Medieval	5	5b
BVK11	823	Area B	100/185	823	n/a	Cut	Posthole	Round, steep sides, flat base	0.40	0.43	0.22	2.81	2.59	Medieval	5	5b
BVK11	824	Area B	105/180; 105/185	n/a	n/a	Fill	Fill of pit [772]	Soft, mid brown green,	1.49	0.45	0.02	2.02	n/a	Medieval	5	5a

								silt clay								
BVK11	825	Area B	105/180; 105/185	n/a	n/a	Fill	Fill of pit [601]	Soft, dark brown green, clay silt	1.76	0.85	0.80	2.80	n/a	Post Roman	5	4a
BVK11	826	Area A2	105/190	n/a	66	Fill	Fill of posthole [827]	Soft, grey black, sand silt	0.84	0.84	0.21	2.01	n/a	Post Roman	2c/3	4a
BVK11	827	Area A2	105/190	827	66	Cut	Posthole	Round, concave sides, flat base	0.84	0.84	0.21	2.01	1.8	Post Roman	2c/3	4a
BVK11	828	Area A2	105/190; 105/195	pre-ex; post-ex	66	Fill	Fill of pit [829]	Loose, mid grey brown, sand silt	1.76	1.04	0.31	2	n/a	Post-medieval	5	6b
BVK11	829	Area A2	105/190; 105/195	829	66	Cut	Pit	Sub-round, concave sides, flat base	1.76	1.04	0.31	2	1.69	Post-medieval	5	6b
BVK11	830	Area A2	105/190	830	n/a	Layer	Mortar surface/bedding	Hard, light yellow pink white, mortar	0.64	1.1	0.15	2.03	1.97	Roman	2b	3e
BVK11	831	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [792]	Friable, light grey, sand silt	1.60	0.70	0.51	2.51	n/a	Post Roman	5	4b
BVK11	832	Area B	100/180	832	23	Masonry	Bessalis surface	Bessalis brick, sandy lime mortar	1.60	0.60	0.20	2.79	2.59	Post Roman	5	4a
BVK11	833	Area B	100/185	833	n/a	Fill	Fill of robber cut [868]	Friable, mid brown, clay sand	0.45	0.26	0.11	2.66	n/a	Post Roman	4	4a
BVK11	834	Area A1	105/200	UP 3B	64	Masonry	Brick wall (N/S)	Unfrogged red brick, light pink grey mortar	0.5	1.15	0.42	2.52	n/a	Post-medieval	6	6d
<i>BVK11</i>	<i>835</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	836	Area B	105/180	836	n/a	Fill	Fill of construction	Friable, dark brown grey,	0.30	1.30	0.35	2.95	2.91	Medieval	5	5b

							cut [663]	sand clay silt								
BVK11	837	Area B	105/185	n/a	n/a	Fill	Fill of pit [838]	Friable, dark brown grey, peat silt	0.80	1.10	0.34	2.28	n/a	Post Roman	5	4b
BVK11	838	Area B	105/185	838	n/a	Cut	Pit	Sub-round (?), steep sides, irregular base	0.80	1.10	0.34	2.28	1.94	Post Roman	5	4b
<i>BVK11</i>	<i>839</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	840	Area B	95/185; 100/185	n/a	n/a	Fill	Fill of robber cut [868]	Soft, dark brown, sand silt	0.80	0.90	0.15	2.93	n/a	Post Roman	4	4a
<i>BVK11</i>	<i>841</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	842	Area B	105/180	n/a	n/a	Fill	Fill of construction cut [663]	Friable, dark grey brown, clay sand silt	0.30	1.30	0.10	2.64	2.46	Medieval	5	5b
<i>BVK11</i>	<i>843</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	844	Area B	95/185	n/a	n/a	Fill	Fill of robber cut [868]	Friable, dark brown black, clay silt	0.80	0.90	0.10	2.10	n/a	Post Roman	4	4a
BVK11	845	Area B	100/180; 100/185; 105/180; 105/185	845	n/a	Layer	Opus Signinum surface/bedding	Op. Sig.	3.06	1.80	0.15	2.79	2.57	Roman	3.12	3h
BVK11	846	Area B	95-185	846	n/a	Layer	Opus Signinum surface/bedding	Op. Sig. - possible hobnail marks	1.80	1.10	0.20	2.54	2.15	Roman	3.12	3g
BVK11	847	Area B	100/185	847	n/a	Masonry	Stone foundation (E/W) within construction cut [950]	Ragstone (?), no mortar	0.60	1.50	0.25	2.14	2.06	Roman	3.12	3g
BVK11	848	Area A2	105/190	848	65; 66	Layer	Dump/levelling	Soft, mid yellow brown, silt sand	3.1	2.45	0.1	1.92	1.82	Roman	2b	3e
BVK11	849	Area A2	105/190	849	65; 66	Layer	Occupation	Soft, mid	3.09	2.42	0.13	2	1.88	Roman	2b	3e

							layer	grey brown, sand silt								
BVK11	850	Area A2	105/190	850	n/a	Layer	Burnt horizon	Friable, dark green brown, sand silt	0.75	1.72	0.02	1.84	n/a	Roman	2b	3e
BVK11	851	Area A2	95/190	851	n/a	Layer	Dump/levelling	Soft, dark grey black, clay silt	1.74	0.38	0.1	2.38	n/a	Roman	4b	3g
BVK11	852	Area A1	100/200	n/a	63	Layer	Fill of soakaway [749]	Loose, light white grey, silt sand mortar	2	1	0.48	2.19	n/a	Post-medieval	5	6c
BVK11	853	Area A2	95/190	n/a	n/a	Fill	Fill of pit [854]	Soft, dark grey brown, clay silt	1.26	0.3	0.4	2.18	n/a	Roman	4b	3g
BVK11	854	Area A2	95/190	854	n/a	Cut	Pit	Shape unknown, irregular sides, concave base	1.26	0.3	0.4	2.18	1.78	Roman	4b	3g
BVK11	855	Area B	95/180	742		Cut	Construction cut for [742]	Square, sides not present, base not present	0.61	0.41	1.29	2.49	1.20	Medieval	5	5b
BVK11	856	Area A2	105/190	n/a	65	Fill	Fill of posthole [857]	Friable, mid grey, sand clay silt	0.45	0.42	0.26	1.77	n/a	Roman	2b	3e
BVK11	857	Area A2	105/190	857	65	Cut	Posthole	Round, vertical sides, base not present	0.45	0.42	0.26	1.77	1.46	Roman	2b	3e
BVK11	858	Area A2	105/190	858; post-ex	65; 66	Layer	Opus Signinum surface/bedding	Op. Sig.	3.1	2.5	0.15	1.82	1.64	Roman	2b	3c
BVK11	859	Area A2	105/190	859	66	Layer	Bedding layer	Soft, mid yellow brown,	0.94	0.96	0.1	1.77	1.71	Roman	2b	3e

								sand								
BVK11	860	Area A2	105/190; 105/195	860	65; 66	Layer	Occupation layer	Loose, mid green grey brown, silt clay sand	4.22	2.6	0.16	1.76	1.66	Roman	2b	3c
BVK11	861	Area B	95/185	n/a	n/a	Fill	Fill of pit [862]	Friable, dark brown, silt peat	0.22	0.80	0.08	2.00	n/a	Post Roman	5	4b
BVK11	862	Area B	95/185	862	n/a	Cut	Pit	Sub-round, gradual sides, irregular base	0.22	0.80	0.08	2.00	1.92	Post Roman	5	4b
BVK11	863	Area A2	105/190; 105/195	n/a	66	Fill	Fill of pit [864]	Soft, dark green grey, sand silt	0.65	0.9	0.13	1.71	n/a	Roman	2b	3c
BVK11	864	Area A2	105/190; 105/195	864	66	Cut	Pit (?)	Shape unknown, sides not present, sloping base	0.65	0.9	0.17	1.71	1.54	Roman	2b	3c
BVK11	865	Area A2	105/190	865	66	Layer	Dump/levelling	Soft, dark brown yellow grey, sand clay silt	0.5	0.9	0.03	1.67	n/a	Roman	2b	3c
BVK11	866	Area B	95/185	866	n/a	Cut	Pit	Sub-round, gradual sides, sloping base	0.70	0.80	0.17	2.23	2.06	Medieval	5	5a
BVK11	867	Area B	95/185	n/a	n/a	Fill	Fill of pit [866]	Friable, dark brown black, clay silt	0.70	0.80	0.17	2.23	n/a	Medieval	5	5a
BVK11	868	Area B	95/185; 100/185	868	n/a	Cut	Robber cut	Linear, near vertical sides, flat base	3.57	5.75	0.64	2.49	1.85	Post Roman	4	4a
<i>BVK11</i>	<i>869</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	870	Area A2	100/190	870	n/a	Layer	Dump/levelling	Loose, dark	2.98	1.15	0.3	2.59	2.42	Post-	4b	4a

								grey, clay sand silt						Roman		
BVK11	871	Area B	100/185	n/a	n/a	Fill	Fill of posthole [872]	Soft, dark blue grey, sand silt	0.44	0.45	0.18	2.25	n/a	Post-medieval	6b	6b
BVK11	872	Area B	100/185	872	n/a	Cut	Posthole	Square, vertical sides, flat base	0.44	0.45	0.18	2.25	2.07	Post-medieval	6b	6b
BVK11	873	Area B	105/185	n/a	n/a	Fill	Fill of robber cut [875]	Soft, mid red brown, silt	0.65	0.55	0.18	2.60	2.40	Post Roman	4	4a
BVK11	874	Area B	105/185	n/a	n/a	Fill	Fill of robber cut [875]	Firm, dark grey blue, sand silt	1.72	0.64	0.40	2.78	n/a	Post Roman	4	4a
BVK11	875	Area B	105/185	875	n/a	Cut	Robber cut (?)	Linear, vertical sides, flat base	1.72	0.64	0.40	2.78	2.38	Post Roman	4	4a
BVK11	876	Area B	100/180; 105/180	n/a	23	Fill	Fill of pit [878]	Friable, dark brown grey, clay sand silt	1.50	0.70	0.20	2.49	2.47	Post Roman	5	4a
BVK11	877	Area B	100/180; 105/180	n/a	n/a	Fill	Fill of pit [878]	Friable, dark red brown, sand clay silt	1.45	0.65	0.40	2.78	2.58	Post Roman	5	4a
BVK11	878	Area B	100/180; 105/180	878	23	Cut	Pit	Sub-rectangular, steep sides, flat base	1.45	1.35	0.52	2.78	2.26	Post Roman	5	4a
BVK11	879	Area A2	105/190	879; post-ex	65; 66	Layer	Dump/levelling	Loose, mid green grey brown, silt sand	2.08	2	0.13	1.7	1.54	Roman	2b	3c
BVK11	880	Area A2	105/190; 105/195	880; post-ex	65; 66	Layer	Brickearth layer	Soft, mid grey green yellow, silt clay	2.16	2.04	0.32	1.68	1.51	Roman	2b	3b
BVK11	881	Area A2	105/190	n/a	n/a	Fill	Fill of pit [776]?	Loose, yellow pink, sand	0.68	0.7	0.42	1.75	n/a	Post Roman	2c/3	4a

								gravel mortar								
BVK11	882	Area A2	100/190	n/a	n/a	Fill	Fill of construction cut [883]	Loose, light brown grey, sand mortar rubble	0.76	0.35	0.3	2.48	n/a	Post-medieval	6	6c
BVK11	883	Area A2	100/190	883	n/a	Cut	Construction cut (?) for [710]	Shape unknown, concave sides, concave base	0.76	0.35	0.3	2.48	2.2	Post-medieval	6	6c
<i>BVK11</i>	<i>884</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	885	Area B	95/185	n/a	n/a	Fill	Fill of robber cut [868]	Firm, dark blue brown, clay silt	0.80	1.20	0.1	1.90	n/a	Post Roman	4	4a
BVK11	886	Area A2	105/190; 105/195	n/a	65; 66	Fill	Fill of ditch [887]	Soft, dark grey green, sand silt	1.82	1.34	0.25	1.77	n/a	Roman	2b	3b
BVK11	887	Area A2	105/190	887	65; 66	Cut	Ditch (E/W)	Linear, steep sides, flat base	1.82	1.34	0.41	1.65	1.24	Roman	2b	3b
BVK11	888	Area A2	105/190	n/a	n/a	Fill	Fill of posthole [889]	Loose, grey, sand silt	0.14	0.1	0.16	1.36	n/a	Roman	2b	3b
BVK11	889	Area A2	105/190	889	n/a	Cut	Posthole	Round, vertical sides, concave base	0.14	0.1	0.16	1.36	1.2	Roman	2b	3b
BVK11	890	Area A2	105/190	n/a	65; 66	Fill	Fill of ditch [887]	Soft, black, sand silt charcoal	0.75	1.3	0.08	1.43	n/a	Roman	2b	3b
BVK11	891	Area A2	100/190	891; post-ex	n/a	Cut	Construction cut for [659]	Linear, vertical sides, base not present	4	0.04	0.59	2.59	2	Post-medieval	6	6c
BVK11	892	Area A2	100/190	n/a	n/a	Fill	Fill of pit [893]	Firm, dark grey, clay silt	1.15	0.2	0.55	2.51	n/a	Medieval	4b	5b
BVK11	893	Area A2	100/190	893;	n/a	Cut	Pit	Shape	1.15	0.2	0.55	2.47	1.95	Medieval	4b	5b

				post-ex				unknown, steep sides, flat base								
BVK11	894	Area B	100/180; 105/180	n/a	n/a	Fill	Fill of pit [878]	Loose, mid yellow brown, silt sand mortar	0.85	0.60	0.10	2.79	2.45	Post Roman	5	4a
BVK11	895	Area B	100/180; 105/180	n/a	n/a	Fill	Fill of pit [878]	Friable, mid grey brown, sand clay silt	0.70	0.60	0.10	2.57	2.42	Post Roman	5	4a
BVK11	896	Area B	95/185	896	n/a	Fill	Fill of robber cut [868]	Firm, mid grey brown, clay silt	0.60	0.70	0.20	2.25	n/a	Post Roman	4	4a
BVK11	897	Area A2	95/190	897	n/a	Layer	Demolition layer	Loose, dark grey black, sand silt mortar	0.56	0.68	0.12	2.35	n/a	Medieval	4b	5b
BVK11	898	Area A2	95/190	898	n/a	Layer	Dump/levelling	Soft, mid green brown, sand clay	1.67	0.8	0.2	2.18	n/a	Roman	1a	3d
BVK11	899	Area B	105/180	n/a	20	Layer	Levelling layer	Friable, green brown, silt sand	n/a	0.54	0.16	2.14	n/a	Post Roman	4	4a
BVK11	900	Area B	105/180	n/a	20	Layer	Occupation layer	Soft, black, sand silt	n/a	0.34	0.04	2.05	n/a	Roman	3.07	3e
BVK11	901	Area B	105/180	n/a	20	Layer	Brickearth layer	Firm, orange brown, sand clay	n/a	0.54	0.19	2.01	n/a	Roman	3.07	3e
BVK11	902	Area B	105/180	n/a	20	Layer	Levelling layer	Firm, yellow green brown, silt clay	n/a	0.34	0.04	1.87	n/a	Roman	3.07	3e
BVK11	903	Area B	105/180	n/a	20	Layer	Dump/levelling	Friable, brown green, silt sand	n/a	0.54	0.17	1.84	n/a	Roman	3.06	3d
BVK11	904	Area B	105/180	n/a	20	Layer	Dump/levelling	Soft, light green brown, silt clay	n/a	0.29	0.03	1.69	n/a	Roman	3.06	3d
BVK11	905	Area B	105/180	n/a	20	Layer	Occupation	Soft, black,	n/a	0.21	0.05	1.66	n/a	Roman	3.06	3d

							layer	charcoal silt								
BVK11	906	Area B	105/180	n/a	20	Layer	Brickearth layer	Soft, mid green brown, clay silt	n/a	0.38	0.11	1.68	n/a	Roman	3.05	3d
BVK11	907	Area B	105/180	n/a	20	Layer	Dump/levelling	Friable, mid brown, silt sand	n/a	0.36	0.16	1.57	n/a	Roman	3.04	3c
BVK11	908	Area B	105/180	n/a	20	Layer	Levelling layer	Friable, green brown, silt sand	n/a	0.42	0.11	1.44	n/a	Roman	3.04	3c
BVK11	909	Area B	105/180	n/a	20	Layer	Dump/levelling	Friable, light brown grey, silt sand	n/a	0.54	0.15	1.34	n/a	Roman	3.01	3a
BVK11	910	Area B	105/180	n/a	20	Fill	Fill of pit [911]	Friable, light brown green, silt sand	n/a	0.27	0.35	1.65	n/a	Post Roman	5	4a
BVK11	911	Area B	105/180	n/a	20	Cut	Pit	Shape unknown, concave sides, concave base	n/a	0.27	0.35	1.65	1.30	Post Roman	5	4a
BVK11	912	Area A2	105/190	n/a	65; 66	Fill	Fill of ditch [887]	Soft, green grey, silt sand clay	1.45	1.4	0.12	1.51	n/a	Roman	2b	3b
BVK11	913	Area A2	105/190	913	65; 66	Layer	Dump/levelling	Loose, mid green grey, clay sand	0.56	1.4	0.18	1.38	1.36	Roman	1b	3b
BVK11	914	Area A2	105/190	n/a	66	Fill	Fill of pit [915]	Soft, grey brown red, sand silt oyster	1.2	1.36	0.49	1.65	n/a	Roman	2b	3b
BVK11	915	Area A2	105/190	915	66	Cut	Pit	Sub-round, concave sides, flat base	1.2	1.36	0.49	1.65	1.16	Roman	2b	3b
BVK11	916	Area A2	95/190; 100/190	post-ex	n/a	Masonry	Stone/brick curvilinear wall	Ragstone & brick, yellow	3	0.76	0.05	2.45	1.94	Roman	2a	3e

							- Room 4	grey sand mortar								
BVK11	917	Area A2	100/190	post-ex	n/a	Fill	Fill of pit [918]	Soft, dark brown grey, silt	0.95	0.6	0.2	2.17	n/a	Post Roman	4b	4a
BVK11	918	Area A2	100/190	918; post-ex	n/a	Cut	Pit	Round, vertical sides, base not present	0.95	0.6	0.26	2.17	1.91	Post Roman	4b	4a
BVK11	919	Area B	100/180; 105/180	n/a	n/a	Fill	Fill of pit [878]	Friable, light grey white, sand lime mortar	1.10	0.70	0.10	2.34	2.32	Post Roman	5	4a
BVK11	920	Area A2	95/190	post-ex	n/a	Masonry	Stone wall (E/W) within construction cut [1020]	Ragstone, sand mortar	0.9	0.6	0.24	2.25	2.23	Medieval	4a	5a
BVK11	921	Area A2	100/190	921; post-ex	n/a	Cut	Pit	Sub-square, steep sides, base not present	0.48	0.72	0.5	2.5	2	Medieval	4b	5b
BVK11	922	Area A2	100/190	post-ex	n/a	Fill	Fill of pit [921]	Loose, mid yellow brown, sand silt	0.48	0.72	0.5	2.5	n/a	Medieval	4b	5b
BVK11	923	Area A2	100/190	923	n/a	Layer	Dump/levelling	Loose, mid brown yellow, sand clay	1.2	1.1	0.2	2.2	2.12	Roman	4b	3g
BVK11	924	Area A2	105/190	n/a	65	Fill	Fill of pit [925]	Soft, mid brown grey, silt sand	0.3	0.85	0.2	1.43	n/a	Roman	2b	3c
BVK11	925	Area A2	105/190	925	65	Cut	Pit	Shape unknown, near vertical sides, base not present	0.3	0.85	0.2	1.43	1.25	Roman	2b	3c
BVK11	926	Area A2	105/190	926	65; 66	Layer	Levelling layer	Friable, green grey, sand silt	0.54	1.38	0.12	1.51	1.49	Roman	2b	3c

BVK11	927	Area A2	105/190	927	65; 66	Layer	Demolition layer	Soft, light grey green, mortar silt sand	0.56	1.45	0.06	1.5	1.41	Roman	2b	3b
BVK11	928	Area A2	100/190	post-ex	n/a	Fill	Fill of pit [921]	Loose, dark black brown, sand clay silt	0.36	0.72	0.1	2	n/a	Medieval	4b	5b
BVK11	929	Area A2	100/190	929	n/a	Layer	Dump/levelling	Loose, mid brown yellow white, silt sand mortar	1	0.86	0.05	2.18	n/a	Post Roman	4b	4a
BVK11	930	Area A2	105/190	930	65; 66	Layer	Brickearth partition - internal	Firm, mid brown yellow, sand clay	0.13	1.35	0.13	1.55	1.52	Roman	2a	3b
BVK11	931	Area A2	95/190; 100/190	post-ex	n/a	Layer	Brickearth layer	Firm, mid brown yellow, silt clay	1.9	3.04	n/a	2.01	n/a	Roman	1a	3d
BVK11	932	Area A2	100/190	post-ex	n/a	Layer	Dump/levelling	Firm, mid brown orange, silt clay	0.8	0.85	0.1	2	n/a	Post Roman	4b	4a
BVK11	933	Area A2	100/190	933	n/a	Masonry	Stone/brick curvilinear wall - Room 4	Ragstone & brick, yellow grey sand mortar	2.38	0.62	0.1	2.04	n/a	Roman	2a	3e
BVK11	934	Area B	100/185	934	n/a	Masonry	Stone foundation (E/W) within construction cut [1419]	Ragstone, cream white mortar	0.56	3.30	0.30	2.11	1.88	Roman	3.12	3g
BVK11	935	Area A2	105/190	post-ex	n/a	Cut	Posthole	Round, sides not present, base not present	0.46	0.44	n/a	2	n/a	Post-medieval	6	6d
BVK11	936	Area A2	105/190	post-ex	n/a	Fill	Fill of posthole [935]	Loose, mid brown, sand gravel	0.46	0.44	n/a	2	n/a	Post-medieval	6	6d
BVK11	937	Area A2	100/190	post-	n/a	Fill	Fill of linear	Loose, mid	0.8	1	n/a	1.92	n/a	Post	4b	4a

				ex			cut [938]	grey brown, sand silt						Roman		
BVK11	938	Area A2	100/190	post-ex	n/a	Cut	Linear cut	Linear, sides not present, base not present	0.8	1	n/a	1.92	n/a	Post Roman	4b	4a
BVK11	939	Area A2	100/190; 105/190; 105/195	post-ex	n/a	Cut	Pit	Sub-round, sides not present, base not present	1.36	2.1	n/a	2.01	n/a	Post-medieval	5	6b
BVK11	940	Area A2	100/190; 105/190; 105/195	post-ex	n/a	Fill	Fill of pit [939]	Firm, dark black brown, silt clay	1.36	2.1	n/a	2.01	n/a	Post-medieval	5	6b
BVK11	941	Area A2	105/185; 100/190; 105/190	post-ex	n/a	Layer	Dump/levelling	Firm, light grey brown, sand clay mortar rubble	4	3.5	n/a	2.05	2	Post-medieval	5	6a
BVK11	942	Area A2	100/190	post-ex	n/a	Masonry	Brick wall (E/W)	Unfrogged red brick, light grey yellow mortar	0.32	0.11	n/a	2.06	n/a	Post-medieval	5	6a
BVK11	943	Area A2	100/190	post-ex	n/a	Layer	Dump/levelling	Soft, light pink grey, sand mortar rubble	0.45	0.62	n/a	2.04	n/a	Post Roman	2c/3	4a
BVK11	944	Area A2	100/190	post-ex	n/a	Layer	Levelling layer	Firm, grey brown, clay silt	4	1.9	n/a	2.06	n/a	Post Roman	2c/3	4a
BVK11	945	Area A2	100/190	post-ex	n/a	Layer	Dump/levelling	Soft, dark green grey, silt sand - cessy	0.16	1.72	n/a	2	n/a	Post-medieval	6	6a
BVK11	946	Area A2	100/190	post-ex	n/a	Layer	Levelling layer	Loose, mid orange brown, sand gravel clay silt	0.19	0.58	n/a	2.05	n/a	Post-medieval	6	6d
BVK11	947	Area A2	100/190	post-	n/a	Layer	Dump/levelling	Soft, dark	0.8	1.75	n/a	2	n/a	Post-	6	6a

				ex				grey brown, clay silt						medieval		
BVK11	948	Area A2	105/185; 105/190	684; post-ex	n/a	Masonry	Stone wall (E/W)	Ragstone, soft light grey white mortar	1.1	1.52	0.15	1.15	n/a	Medieval	4a	5a
BVK11	949	Area B	100/180	n/a	n/a	Fill	Fill of construction cut [950]	Friable, dark brown grey, sand clay silt	0.70	2.30	0.30	2.20	n/a	Roman	3.12	3g
BVK11	950	Area B	100/185	950	n/a	Cut	Construction cut for [847]	Linear, near vertical sides, flat base	0.70	2.30	0.30	2.20	1.91	Roman	3.12	3g
BVK11	951	Area A2	105/190	n/a	n/a	Fill	Fill of posthole [952]	Loose, grey, sand silt	0.12	0.08	0.16	1.36	n/a	Roman	1b	3b
BVK11	952	Area A2	105/190	954	n/a	Cut	Posthole	Sub-square, steep sides, concave base	0.12	0.08	0.16	1.36	1.2	Roman	1b	3b
BVK11	953	Area A2	105/190	n/a	n/a	Fill	Fill of posthole [954]	Loose, grey, sand silt	0.12	0.12	0.18	1.38	n/a	Roman	1b	3b
BVK11	954	Area A2	105/190	954	n/a	Cut	Posthole	Round, steep sides, concave base	0.12	0.12	0.18	1.38	1.2	Roman	1b	3b
BVK11	955	Area A2	105/190	955	n/a	Cut	Posthole	Round, near vertical sides, base not present	0.1	0.1	0.11	1.25	1.14	Roman	2b	3b
BVK11	956	Area A2	100/190	post-ex	n/a	Layer	Dump/levelling	Loose, mid green brown, silt sand	0.57	0.9	n/a	2	n/a	Roman	4b	3g
BVK11	957	Area A2	105/190	957	65	Layer	Brickearth layer	Soft, mid yellow brown, silt clay	0.7	0.24	0.1	2.14	n/a	Post Roman	2c/3	4a
BVK11	958	Area A2	105/190	n/a	65	Layer	Opus Signinum surface/ bedding	Op. Sig. - degraded	1	n/a	0.04	1.99	1.89	Roman	2b	3e

BVK11	959	Area A2	105/190	n/a	65	Layer	Opus Signinum surface/ bedding	Op. Sig. - degraded	0.9	n/a	0.03	1.85	1.72	Roman	2b	3e
BVK11	960	Area A2	105/190	n/a	65	Layer	Occupation layer	Soft, mid green brown, sand silt	0.3	n/a	0.16	1.65	n/a	Roman	2a/2b	3b
BVK11	961	Area A2	105/190	n/a	65	Layer	Brickearth layer	Firm, mid yellow brown, silt clay	0.45	n/a	0.1	1.55	1.5	Roman	2a/2b	3b
BVK11	962	Area A2	105/190	n/a	65	Layer	Burnt horizon	Loose, black, charcoal	0.54	n/a	0.07	1.45	n/a	Roman	1b	3b
BVK11	963	Area A2	105/190	n/a	65	Layer	Dump/levelling	Loose, mid yellow, silt sand	0.6	n/a	0.04	1.39	n/a	Roman	1b	3b
BVK11	964	Area A2	105/190	n/a	65	Layer	Occupation layer	Loose, mid green grey, silt sand	0.8	n/a	0.14	1.47	n/a	Roman	1b	3b
BVK11	965	Area B	100/185	n/a	n/a	Fill	Fill of pit [967]	Soft, mid brown grey, sand silt	0.80	1.20	0.15	2.28	2.22	Roman	3.10	3e
BVK11	966	Area B	100/185	n/a	n/a	Fill	Fill of pit [967]	Loose, mid yellow brown, silt gravel	0.70	1.20	0.30	2.25	2.10	Roman	3.10	3e
BVK11	967	Area B	100/185	967	n/a	Cut	Pit	Shape unknown, vertical sides, base not present	0.80	1.20	0.45	2.17	1.70	Roman	3.10	3e
BVK11	968	Area B	95/185; 100/185	968	n/a	Layer	Dump/levelling	Friable, light orange brown, silt sand	0.52	0.26	0.04	2.28	n/a	Post Roman	3.08	4b
BVK11	969	Area B	95/185; 100/185	969	n/a	Layer	Levelling layer	Friable, mid brown, silt sand	0.41	0.28	0.08	2.28	n/a	Post Roman	3.08	4b
BVK11	970	Area B	95/185; 100/185	970	n/a	Layer	Levelling layer	Friable, yellow	0.43	0.32	0.03	2.24	2.14	Post Roman	3.08	4b

								orange, sand								
BVK11	971	Area A2	105/190; 105/195	post- ex; WB post- ex	65; 66	Layer	Brickearth layer	Firm, mid yellow brown, sand clay	2	1.45	0.1	1.14	n/a	Roman	1b	3b
BVK11	972	Area A2	100/190	post- ex	n/a	Layer	Dump/levelling	Soft, dark black brown, silt clay	0.42	0.78	n/a	1.99	n/a	Medieval	4b	5b
BVK11	973	Area A2	100/190	post- ex	n/a	Fill	Fill of pit [893]	Soft, dark brown black, clay silt	0.54	0.32	n/a	1.95	n/a	Medieval	4b	5b
BVK11	974	Area B	100/185	n/a	n/a	Fill	Fill of pit [975]	Friable, mid brown, silt clay	0.82	0.30	0.20	2.02	n/a	Post Roman	3.10	4a
BVK11	975	Area B	100/185	975	n/a	Cut	Pit	Sub-round, concave sides, concave base	0.82	0.30	0.20	2.02	1.82	Post Roman	3.10	4a
BVK11	976	Area A2	100/190	post- ex	n/a	Layer	Demolition layer	Loose, light pink grey, sand mortar	0.7	1.16	n/a	1.98	n/a	Roman	1a	3d
BVK11	977	Area B	100/185	977	n/a	Layer	Dump/levelling	Friable, light brown grey, sand silt clay	0.40	0.70	0.10	2.25	n/a	Roman	3.10	3e
BVK11	978	Area B	100/185	n/a	n/a	Fill	Fill of pit [967]	Soft, dark black grey, clay silt	0.80	1.20	0.15	2.08	1.93	Roman	3.10	3e
BVK11	979	Area B	95/185; 100/185	979	n/a	Layer	Occupation layer	Friable, light brown grey	0.60	0.37	0.02	2.25	2.11	Roman	3.08	3g
BVK11	980	Area B	95/185; 100/185	980	n/a	Layer	Brickearth layer	Firm, orange brown, clay	0.40	0.31	0.06	2.18	2.09	Roman	3.08	3g
BVK11	981	Area B	95/185; 100/185	981	n/a	Layer	Mortar surface/ bedding	Friable, light white brown, silt sand mortar	0.44	0.34	0.04	2.12	n/a	Roman	3.08	3g
BVK11	982	Area A2	100/190	post-	n/a	Layer	Levelling layer	Loose, mid	0.46	0.82	n/a	1.98	n/a	Roman	1a	3d

				ex				green brown, silt sand								
BVK11	983	Area A2	105/190	post-ex; WB post-ex	66	Layer	Dump/levelling	Soft, light brown yellow, sand	1.66	1.5	0.07	1.23	n/a	Roman	1a	3a
BVK11	984	Area A2	105/190	post-ex; WB post-ex	66	Layer	Dump/levelling	Soft, green grey, sand silt	1.3	1.44	0.1	1.16	n/a	Roman	1a	3a
BVK11	985	Area A2	105/190	n/a	66	Layer	Brickearth layer	Soft, mid yellow brown, sand silt clay	0.7	n/a	0.13	1.38	n/a	Roman	1a	3a
BVK11	986	Area B	100/185	n/a	n/a	Fill	Fill of pit [987]	Friable, light brown orange grey, sand clay silt	0.50	0.70	0.25	2.15	n/a	Roman	3.10	3e
BVK11	987	Area B	100/185	987	n/a	Cut	Pit	Sub-round, vertical sides, flat base	0.50	0.70	0.25	2.15	1.91	Roman	3.10	3e
BVK11	988	Area B	95/185; 100/185	988	n/a	Layer	Dump/levelling	Soft, orange brown, clay silt	0.58	0.32	0.04	2.15	2.04	Roman	3.08	3g
BVK11	989	Area B	95/185; 100/185	989	n/a	Layer	Dump/levelling	Soft, orange brown, clay silt	0.58	0.32	0.08	2.12	2.00	Roman	3.08	3g
BVK11	990	Area B	100/185	990	n/a	Layer	Demolition layer	Friable, orange brown, silt clay rubble	0.20	0.80	0.15	1.97	n/a	Post Roman	3.10	4a
BVK11	991	Area B	100/180	991	n/a	Masonry	Chalk wall (E/W) within construction cut [992]	Chalk, white grey mortar	0.50	0.90	1.83	3.03	2.50	Post-medieval	6a	6b

BVK11	992	Area B	100/180	991; 992	n/a	Cut	Construction cut for [991]	Linear, near vertical sides, base not present	0.50	0.90	1.83	3.03	1.20	Post-medieval	6a	6b
BVK11	993	Area B	100/180	992	n/a	Fill	Fill of construction cut [992]	Firm, grey brown, silt clay	0.50	0.90	1.83	3.03	n/a	Post-medieval	6a	6b
BVK11	994	Area B	100/185	994	n/a	Layer	Dump/levelling	Friable, mid brown grey, sand silt	0.65	0.40	0.30	2.14	2.14	Roman	3.10	3e
BVK11	995	Area B	100/180	995	35	Layer	Levelling layer	Loose, mid brown, clay sand	1.04	0.80	0.11	2.32	2.28	Roman	3.12	3g
BVK11	996	Area B	100/180	996	35	Layer	Dump/levelling	Loose, mid yellow brown, clay sand	1.08	0.74	0.11	2.23	2.21	Roman	3.10	3e
BVK11	997	Area B	100/180	997	n/a	Layer	Dump/levelling	Friable, dark grey brown, charcoal	0.94	0.74	0.01	2.13	n/a	Roman	3.10	3e
BVK11	998	Area B	100/185	n/a	n/a	Fill	Fill of pit [652]	Friable, green brown, silt rubble	0.81	1.44	0.52	2.25	n/a	Post Roman	5	4a
<i>BVK11</i>	<i>999</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1000	Area B	100/185	n/a	n/a	Fill	Fill of pit [1033]	Loose, mid yellow, clay sand	0.50	0.25	0.12	2.25	n/a	Roman	3.10	3e
BVK11	1001	Area B	100/180; 100/185	n/a	n/a	Fill	Fill of pit [1033]	Loose, black, silt sand	1.20	0.50	0.02	2.11	n/a	Roman	3.10	3e
BVK11	1002	Area B	100/185	n/a	n/a	Fill	Fill of pit [987]	Loose, dark brown grey, sand silt	0.90	0.60	0.02	2.05	1.98	Roman	3.10	3e
BVK11	1003	Area B	95/185; 100/185	n/a	n/a	Fill	Fill of pit [987]	Loose, mid grey brown, clay sand	0.76	0.58	0.06	2.04	n/a	Roman	3.10	3e
BVK11	1004	Area B	100/185	1004	n/a	Layer	Dump/levelling	Soft, dark grey brown, clay silt sand gravel	0.22	1.10	0.20	2.15	n/a	Post Roman	4	4a

BVK11	1005	Area B	100/185	1005	n/a	Layer	Levelling layer	Firm, pink red, sand gravel	0.74	1.06	0.07	2.06	1.94	Roman	3.07	3e
BVK11	1006	Area B	100/185	1006	n/a	Layer	Demolition layer	Friable, mid brown orange, silt clay	0.40	0.58	0.10	1.97	n/a	Post Roman	3.10	4a
BVK11	1007	Area B	100/180	1007	35	Layer	Dump/levelling	Soft, mid yellow brown, sand clay	1.06	0.80	0.12	2.23	2.18	Roman	3.10	3e
BVK11	1008	Area A2	105/190	955	n/a	Fill	Fill of posthole [955]	Decayed wood	0.1	0.1	0.11	1.25	n/a	Roman	2b	3b
BVK11	1009	Area B	100/180	n/a	n/a	Fill	Fill of pit [1010]	Friable, dark brown grey, sand clay silt	1.85	0.40	0.30	2.67	2.45	Post Roman	5	4a
BVK11	1010	Area B	100/180	1010	n/a	Cut	Pit	Shape unknown, gradual sides, concave base	1.85	0.40	0.30	2.67	2.37	Post Roman	5	4a
BVK11	1011	Area B	100/185	1011	n/a	Cut	Posthole	Sub-round, concave sides, flat base	0.23	0.18	0.13	2.67	2.54	Post Roman	4	4a
BVK11	1012	Area B	100/185	n/a	n/a	Fill	Fill of posthole [1011]	Soft, mid grey brown, clay sand silt	0.23	0.18	0.13	2.67	n/a	Post Roman	4	4a
BVK11	1013	Area B	95/180; 95/185; 100/180; 100/185	n/a	n/a	Fill	Fill of pit [1033]	Loose, mid grey brown, clay sand	1.20	0.50	0.06	2.10	n/a	Roman	3.10	3e
BVK11	1014	Area A2	100/195	post-ex	58	Layer	Levelling layer	Soft, dark grey brown black, sand silt	1.2	3	n/a	2	n/a	Post-medieval	6	6a
BVK11	1015	Area B	100/180; 105/180;	1015	n/a	Layer	Brickearth layer	Firm, mid yellow brown,	2.82	3.27	0.12	2.74	2.35	Roman	3.12	3h

			105/185					brickearth								
BVK11	1016	Area B	100/185; 105/185	1016	n/a	Cut	Curvilinear feature	Curvilinear, vertical sides, flat base	0.66	1.10	0.22	2.77	2.55	Post Roman	4	4a
BVK11	1017	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of curvilinear feature [1016]	Soft, yellow orange brown, sand clay silt	0.66	1.10	0.22	2.77	n/a	Post Roman	4	4a
BVK11	1018	Area B	105/180; 105/185	n/a	n/a	Fill	Fill of beamslot [1019]	Soft, dark grey brown, clay silt	1.41	0.20	0.14	2.59	n/a	Roman	3.12	3h
BVK11	1019	Area B	105/180; 105/185	1019	n/a	Cut	Beamslot	Linear, vertical sides, flat base	1.40	0.20	0.14	2.59	2.45	Roman	3.12	3h
BVK11	1020	Area A2	95/190	1020; post- ex	n/a	Cut	Construction cut for [920]	Linear, vertical sides, base not present	0.67	0.94	0.2	2.18	2.01	Medieval	4a	5a
BVK11	1021	Area B	95/185	1021	n/a	Layer	Demolition layer	Soft, mid orange brown, clay sand	0.50	0.30	0.05	2.43	n/a	Post Roman	4	4a
BVK11	1022	Area B	95/185	1022	n/a	Layer	Demolition layer	Loose, light orange white, mortar rubble	0.35	0.65	0.08	2.43	2.38	Post Roman	4	4a
BVK11	1023	Area B	95/185	1023	n/a	Layer	Occupation layer	Soft, mid brown grey, sand silt	0.40	0.76	0.05	2.40	2.34	Post Roman	4	4a
BVK11	1024	Area B	95/185	n/a	n/a	Fill	Fill of beamslot [1073]	Soft, mid orange grey, clay silt	1.80	0.12	0.10	2.41	2.26	Roman	3.12	3h
BVK11	1025	Area B	100/185	1025	n/a	Cut	Curvilinear feature	Curvilinear, vertical sides, flat base	1.26	0.85	0.10	2.78	2.68	Post Roman	4	4a
BVK11	1026	Area B	100/185	n/a	n/a	Fill	Fill of	Soft, orange	1.26	0.85	0.10	2.78	n/a	Post	4	4a

							curvilinear feature [1025]	yellow brown, sand clay silt						Roman		
BVK11	1027	Area B	105/180; 105/185	1015	n/a	Layer	Brickearth layer	Firm, mid orange grey brown, sand silt clay	1.40	0.80	0.10	2.63	2.54	Roman	3.12	3h
BVK11	1028	Area B	105/180; 105/185	1028	n/a	Layer	Occupation layer	Friable, mid grey brown, sand silt charcoal	1.40	0.60	0.02	2.53	2.48	Roman	3.11	3g
BVK11	1029	Area B	105/180; 105/185	1029	n/a	Layer	Opus Signinum surface/ bedding	Op. Sig. - includes sloping sill	1.40	0.60	0.10	2.61	2.39	Roman	3.11	3g
BVK11	1030	Area B	105/185	n/a	n/a	Fill	Fill of pit [1229]	Firm, dark brown, sand silt	1.70	1.04	0.39	2.43	2.40	Roman	3.10	3f
BVK11	1031	Area B	105/185	n/a	n/a	Fill	Fill of pit [1229]	Firm, dark brown, sand silt	1.70	1.04	0.39	2.43	2.40	Roman	3.10	3f
BVK11	1032	Area B	105/185	n/a	n/a	Fill	Fill of pit [1229]	Firm, dark brown, sand silt	1.70	1.04	0.39	2.43	2.40	Roman	3.10	3f
BVK11	1033	Area B	100/180; 100/185	1033	n/a	Cut	Pit	Shape unknown, near vertical sides, flat base	1.48	0.64	0.39	2.22	1.83	Roman	3.10	3e
BVK11	1034	Area B	100/180	1034	n/a	Layer	Dump/levelling	Soft, mid yellow brown, sand clay	1.32	0.78	0.05	2.17	2.12	Roman	3.10	3e
<i>BVK11</i>	<i>1035</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
<i>BVK11</i>	<i>1036</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
<i>BVK11</i>	<i>1037</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
<i>BVK11</i>	<i>1038</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
<i>BVK11</i>	<i>1039</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
<i>BVK11</i>	<i>1040</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1041	Area B	100/180	1041	n/a	Layer	Gravel surface	Loose, mid	1.62	0.84	0.04	2.15	2.08	Roman	3.07	3e

								yellow brown, gravel sand								
BVK11	1042	Area B	95/180; 100/180	n/a	35	Layer	Dump/levelling (?)	Loose, light pink brown, sand clay	0.30	0.40	0.20	2.15	n/a	Roman	3.06	3d
BVK11	1043	Area B	100/185	1015	n/a	Layer	Brickearth layer	Firm, mid orange brown, brickearth	0.34	0.66	0.06	2.68	n/a	Roman	3.12	3h
BVK11	1044	Area B	100/185	1015	n/a	Layer	Brickearth layer	Firm, mid orange brown, brickearth	0.18	0.73	0.10	2.50	n/a	Roman	3.12	3h
BVK11	1045	Area B	105/185	1045	n/a	Layer	Dump/levelling	Soft, brown, silt clay	0.26	0.32	0.05	2.54	n/a	Roman	3.12	3h
BVK11	1046	Area B	105/185	1046	n/a	Layer	Brickearth layer	Soft, orange brown, silt clay	0.12	0.10	0.03	2.49	n/a	Roman	3.12	3h
BVK11	1047	Area B	105/185	1047	n/a	Layer	Dump/levelling	Friable, brown orange red, silt sand	0.26	0.19	0.08	2.49	n/a	Roman	3.12	3h
BVK11	1048	Area B	105/185	n/a	n/a	Fill	Fill of pit [1052]	Friable, mid brown, silt sand	0.25	0.20	0.02	2.44	n/a	Roman	3.10	3g
BVK11	1049	Area B	105/185	n/a	n/a	Fill	Fill of pit [1052]	Friable, white pink, silt sand mortar	0.25	0.20	0.04	2.42	n/a	Roman	3.10	3g
BVK11	1050	Area B	105/185	n/a	n/a	Fill	Fill of pit [1052]	Friable, mid brown, silt sand rubble	0.34	0.32	0.07	2.40	n/a	Roman	3.10	3g
BVK11	1051	Area B	105/185	n/a	n/a	Fill	Fill of pit [1052]	Friable, white pink, silt sand mortar	0.29	0.27	0.04	2.36	n/a	Roman	3.10	3g
BVK11	1052	Area B	105/185	1052	n/a	Cut	Pit	Sub-round, concave sides, flat base	0.36	0.32	0.12	2.44	2.32	Roman	3.10	3g

BVK11	1053	Area B	100/180; 105/180; 105/185	1053	n/a	Layer	Levelling layer	Soft, clay silt, grey orange	1.33	1.40	0.15	2.61	2.57	Roman	3.12	3h
BVK11	1054	Area B	100/185	1054	n/a	Layer	Dump/levelling	Loose, green grey, sand gravel	0.73	1.11	0.18	1.99	1.81	Roman	3.07	3e
BVK11	1055	Area B	100/185	1055	n/a	Layer	Brickearth layer	Soft, green pink orange, brickearth	0.60	0.55	0.10	2.09	1.91	Roman	3.05	3d
BVK11	1056	Area B	95/180; 95/185; 100/180; 100/185	1056	35	Cut	Pit	Round, gradual sides, flat base	1.90	2.10	0.31	2.15	1.84	Roman	3.06	3d
BVK11	1057	Area B	95/180; 95/185; 100/180; 100/185	1057	n/a	Layer	Brickearth layer	Firm, mid yellow brown, sand clay	0.98	1.24	0.20	2.16	2.12	Roman	3.05	3d
BVK11	1058	Area B	105/180	1058	n/a	Layer	Dump/levelling	Friable, yellow white, silt sand	0.24	0.22	0.02	2.62	n/a	Post Roman	4	4a
BVK11	1059	Area B	105/180	1059	n/a	Layer	Occupation layer	Soft, dark brown black, silt clay	0.27	0.25	0.01	2.59	n/a	Roman	3.12	3h
BVK11	1060	Area B	105/180	1060	n/a	Layer	Opus Signinum surface/ bedding	Op. Sig.	0.36	0.38	0.06	2.58	2.52	Roman	3.12	3h
BVK11	1061	Area B	105/180	1061	n/a	Layer	Brickearth layer	Firm, orange brown, sand clay	0.32	0.40	0.05	2.53	2.51	Roman	3.12	3h
BVK11	1062	Area B	105/180	1062	n/a	Layer	Levelling layer	Friable, mid brown orange, silt sand	0.33	0.47	0.13	2.50	n/a	Roman	3.11	3g
BVK11	1063	Area B	100/180; 100/185; 105/180; 105/185	1063	26	Layer	Dump/levelling	Soft, grey green, silt sand	1.30	1.90	0.22	2.60	2.44	Roman	3.11	3h

BVK11	1064	Area B	105/185	n/a	n/a	Fill	Fill of pit [1065]	Friable, dark brown grey, sand clay silt	1.40	0.60	0.10	2.59	2.45	Roman	3.11	3h
BVK11	1065	Area B	105/185	1065	n/a	Cut	Pit	Sub-round, steep sides, concave base	1.45	0.60	0.27	2.59	2.32	Roman	3.11	3h
BVK11	1066	Area B	105/180; 105/185	1066	n/a	Cut	Gully	Linear, gradual sides, irregular base	1.30	0.40	0.14	2.53	2.39	Roman	3.11	3h
BVK11	1067	Area B	105/180; 105/186	n/a	n/a	Fill	Fill of gully [1066]	Firm, grey green, sand gravel silt	1.30	0.40	0.14	2.53	n/a	Roman	3.11	3h
BVK11	1068	Area B	105/180	n/a	n/a	Fill	Fill of posthole [1069]	Friable, mid brown, silt sand	0.13	0.33	0.21	2.43	n/a	Roman	3.11	3g
BVK11	1069	Area B	105/180	1069	n/a	Cut	Posthole	Sub-round, vertical sides, flat base	0.13	0.33	0.21	2.43	2.22	Roman	3.11	3g
BVK11	1070	Area B	105/180	1070	n/a	Layer	Brickearth layer	Friable, light orange brown, clay sand	0.34	0.46	0.12	2.44	n/a	Roman	3.11	3g
BVK11	1071	Area B	105/180	1071	n/a	Layer	Dump/levelling	Friable, white brown, sand mortar	0.88	0.44	0.04	2.40	2.32	Post Roman	4	4a
BVK11	1072	Area B	105/185	n/a	n/a	Fill	fill of pit [1065]	Firm, mid brown grey, sand clay silt	1.25	0.60	0.10	2.54	2.46	Roman	3.11	3h
BVK11	1073	Area B	95/185	846	n/a	Cut	Beamslot	Linear, vertical sides, flat base	1.90	0.10	0.10	2.36	2.17	Roman	3.12	3h
BVK11	1074	Area B	100/180; 100/185;	1074	n/a	Layer	Dump/levelling	Firm, grey yellow,	0.66	0.30	0.05	2.56	2.49	Roman	3.11	3g

			105/180; 105/185					mortar								
BVK11	1075	Area B	100/180	1075	n/a	Cut	Pit	Sub-round, steep sides, flat base	0.47	0.42	0.05	2.44	2.39	Roman	3.11	3h
BVK11	1076	Area B	100/180	n/a	n/a	Fill	Fill of posthole [1075]	Soft, mid brown green, sand gravel silt	0.47	0.42	0.05	2.44	n/a	Roman	3.11	3h
BVK11	1077	Area B	105/185	1077	n/a	Layer	Mortar/gravel surface/ bedding	Hard, light brown grey, mortar gravel	0.15	0.35	0.10	2.57	2.48	Roman	3.11	3g
BVK11	1078	Area B	105/180; 105/185	1078	n/a	Layer	Occupation layer	Friable, mid green brown grey, sand silt	1.65	0.80	0.12	2.66	2.49	Roman	3.11	3g
BVK11	1079	Area B	100/180; 100/185; 105/180; 105/185	1079	n/a	Layer	Occupation layer	Soft, mid green brown, sand gravel silt	2.30	1.20	0.20	2.61	2.44	Roman	3.11	3g
BVK11	1080	Area B	105/180	n/a	n/a	Fill	Fill of construction cut [663]	Friable, dark brown, silt sand	0.24	0.86	0.35	2.53	n/a	Medieval	5	5b
BVK11	1081	Area B	105/180	n/a	n/a	Fill	Fill of construction cut [663]	Friable, green, silt sand	0.24	0.62	0.10	2.13	n/a	Medieval	5	5b
<i>BVK11</i>	<i>1082</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1083	Area B	100/185	1083	n/a	Layer	Opus Signinum surface/ bedding	Op. Sig.	0.84	1.12	0.10	2.17	2.15	Roman	3.11	3g
BVK11	1084	Area B	105/185	1084	n/a	Layer	Dump/levelling	Friable, dark brown red, silt Op. Sig. Mortar	0.60	0.90	0.15	2.29	2.17	Roman	3.10	3h
BVK11	1085	Area B	100/185	n/a	n/a	Fill	Fill of stakehole [1086]	Firm, dark brown, silt clay	0.10	0.10	0.11	2.15	n/a	Post Roman	4	4a

BVK11	1086	Area B	100/185	1086	n/a	Cut	Stakehole	Round, vertical sides, base not present	0.10	0.10	0.11	2.15	2.04	Post Roman	4	4a
BVK11	1087	Area B	100/185	n/a	n/a	Fill	Fill of pit [1088]	Friable, mid brown grey, silt clay	0.30	0.76	0.07	2.09	n/a	Post Roman	4	4a
BVK11	1088	Area B	100/185	1088	n/a	Cut	Pit	Round (?), concave sides, base not present	0.30	0.76	0.07	2.09	2.02	Post Roman	4	4a
BVK11	1089	Area B	100/185	1089	n/a	Layer	Dump/levelling	Loose, mid green grey brown, silt sand	0.28	1.00	0.15	2.37	2.25	Roman	3.11	3g
BVK11	1090	Area B	105/185	1090	n/a	Layer	Occupation layer	Soft, light grey brown, clay silt	0.35	0.70	0.08	2.46	n/a	Roman	3.11	3g
BVK11	1091	Area B	105/185	1091	n/a	Layer	Dump/levelling	Soft, dark brown, sand gravel silt	0.50	0.26	0.05	2.52	n/a	Roman	3.11	3g
BVK11	1092	Area B	105/180; 105/185	1092	n/a	Layer	Gravel surface	Hard, orange brown, sand gravel	1.80	1.00	0.05	2.57	2.52	Roman	3.11	3g
BVK11	1093	Area B	100/180;100/185; 105/180; 105/185	1093	n/a	Layer	Gravel surface	Hard, orange brown, sand gravel	1.74	1.30	0.10	2.55	2.41	Roman	3.11	3g
BVK11	1094	Area B	105/185	n/a	n/a	Fill	Fill of stakehole [1095]	Soft, dark brown, clay silt	0.06	0.06	0.14	2.46	n/a	Roman	3.11	3g
BVK11	1095	Area B	105/185	1095	n/a	Cut	Stakehole	Round, vertical sides, tapered base	0.06	0.06	0.14	2.46	2.32	Roman	3.11	3g
BVK11	1096	Area B	105/180	1096	n/a	Fill	Fill of construction cut [663]	Firm, white, chalk rubble	0.32	1.04	0.38	2.43	2.32	Medieval	5	5b

BVK11	1097	Area B	105/185	1097	n/a	Layer	Brickearth layer	Firm, light yellow brown, clay sand silt	1.10	0.45	0.08	2.43	2.30	Roman	3.11	3g
BVK11	1098	Area B	105/185	n/a	n/a	Fill	Fill of posthole [1099]	Friable, dark brown grey, sand clay silt	0.25	0.25	0.35	2.54	n/a	Post Roman	3.11	4a
BVK11	1099	Area B	105/185	1099	n/a	Cut	Posthole	Round, near vertical sides, concave base	0.25	0.25	0.35	2.54	2.20	Post Roman	3.11	4a
BVK11	1100	Area B	105/180	n/a	n/a	Fill	Fill of posthole [1101]	Friable, dark brown grey, sand clay silt	0.25	0.25	0.20	2.55	2.47	Post Roman	3.11	4a
BVK11	1101	Area B	105/180	1101	n/a	Cut	Posthole	Round, near vertical sides, concave base	0.25	0.25	0.20	2.55	2.37	Post Roman	3.11	4a
BVK11	1102	Area B	105/185	n/a	n/a	Fill	Fill of posthole [1103]	Friable, dark brown grey, sand clay silt	0.25	0.25	0.20	2.53	n/a	Post Roman	3.11	4a
BVK11	1103	Area B	105/185	1103	n/a	Cut	Posthole	Round, near vertical sides, concave base	0.25	0.25	0.20	2.53	2.33	Post Roman	3.11	4a
BVK11	1104	Area B	100/185	1104	n/a	Layer	Mortar/gravel surface/bedding	Hard, light brown grey, mortar gravel	0.46	0.81	0.10	2.60	2.56	Roman	3.11	3g
BVK11	1105	Area B	105/185	n/a	n/a	Fill	Fill of stakehole [1106]	Soft, dark brown grey, clay silt	0.08	0.08	0.10	2.41	n/a	Roman	3.11	3g
BVK11	1106	Area B	105/185	1106	n/a	Cut	Stakehole	Round, vertical sides, tapered base	0.08	0.08	0.10	2.41	2.31	Roman	3.11	3g
BVK11	1107	Area B	105/185	n/a	n/a	Fill	Fill of	Soft, dark	0.08	0.09	0.24	2.39	2.27	Roman	3.11	3g

							stakehole [1108]	brown, silt								
BVK11	1108	Area B	105/185	1106	n/a	Cut	Stakehole	Round, vertical sides, tapered base	0.08	0.09	0.24	2.39	2.15	Roman	3.11	3g
BVK11	1109	Area B	100/185; 105/185	1109	n/a	Cut	Beamslot	Linear, gradual sides, flat base	0.20	1.18	0.06	2.55	2.48	Roman	3.11	3g
BVK11	1110	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of beamslot [1109]	Soft, mid grey brown, sand gravel silt	0.20	1.18	0.06	2.55	n/a	Roman	3.11	3g
BVK11	1111	Area B	105/185	1111	n/a	Layer	Dump/levelling	Friable, dark grey brown, silt clay oyster	0.12	0.94	0.08	2.43	2.37	Roman	3.10	3h
BVK11	1112	Area B	105/180	1112	n/a	Cut	Pit	Sub-round, gradual sides, flat base	0.74	0.41	0.43	2.73	2.30	Post Roman	5	4a
BVK11	1113	Area B	105/180	n/a	n/a	Fill	Fill of pit [1112]	Soft, grey green, sand silt	0.74	0.41	0.40	2.73	n/a	Post Roman	5	4a
<i>BVK11</i>	<i>1114</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1115	Area B	105/180	1115	n/a	Masonry	Stone foundation (NE/SW)	Ragstone, no mortar - could be a dump	1.18	0.60	0.20	2.37	2.24	Roman	3.11	3g
BVK11	1116	Area B	105/180	1116	n/a	Layer	Brickearth layer	Soft, light grey brown, silt clay sand	0.62	0.40	0.12	2.73	2.63	Roman	3.11	3g
<i>BVK11</i>	<i>1117</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1118	Area B	105/1855	n/a	n/a	Fill	Fill of pit [1119]	Friable, mid grey brown, silt clay	0.66	0.38	0.15	2.31	n/a	Roman	3.10	3h
BVK11	1119	Area B	105/185	1119	n/a	Cut	Pit	Round (?),	0.66	0.38	0.15	2.31	2.16	Roman	3.10	3h

								concave sides, concave base									
BVK11	1120	Area B	95/185	n/a	n/a	Fill	Fill of posthole [1121]	Loose, mid pink grey, sand silt	0.35	0.16	0.37	2.49	2.44	Post Roman	4	4a	
BVK11	1121	Area B	95/185	1121	n/a	Cut	Posthole	Round (?), steep sides, concave base	0.35	0.16	0.37	2.49	2.12	Post Roman	4	4a	
BVK11	1122	Area B	100/185	1122	n/a	Layer	Brickearth layer	Firm, orange yellow, brickearth	0.47	0.61	0.11	2.28	2.17	Roman	3.11	3g	
<i>BVK11</i>	<i>1123</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
<i>BVK11</i>	<i>1124</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
BVK11	1125	Area B	100/185	1125	n/a	Layer	Dump/levelling	Firm, dark brown black, sand silt	0.24	0.62	0.01	2.17	2.16	Roman	3.10	3f	
BVK11	1126	Area B	95/185	n/a	n/a	Fill	Fill of posthole [1127]	Soft, mid brown grey, sand silt	0.10	0.13	0.13	2.41	n/a	Post Roman	4	4a	
BVK11	1127	Area B	95/185	1127	n/a	Cut	Posthole	Sub-round, steep sides, pointed base	0.10	0.13	0.13	2.41	2.29	Post Roman	4	4a	
<i>BVK11</i>	<i>1128</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
<i>BVK11</i>	<i>1129</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
<i>BVK11</i>	<i>1130</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
<i>BVK11</i>	<i>1131</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
<i>BVK11</i>	<i>1132</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
<i>BVK11</i>	<i>1133</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
<i>BVK11</i>	<i>1134</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
<i>BVK11</i>	<i>1135</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
<i>BVK11</i>	<i>1136</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
<i>BVK11</i>	<i>1137</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
<i>BVK11</i>	<i>1138</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
BVK11	1139	Area B	100/185	1139	n/a	Layer	Levelling layer	Firm, grey,	0.64	0.70	0.10	2.24	2.17	Roman	3.10	3f	

								sand silt gravel								
BVK11	1140	Area B	100/185	1140	n/a	Layer	Dump/levelling	Loose, yellow white pink, mortar sand	0.54	0.90	0.01	2.23	2.16	Roman	3.10	3f
BVK11	1141	Area B	100/185	n/a	n/a	Fill	Fill of pit [1147]	Firm, light orange brown, burnt clay silt	0.48	0.60	0.09	2.25	2.22	Roman	3.10	3f
BVK11	1142	Area B	95/185	n/a	n/a	Fill	Fill of posthole [1143]	Soft, mid brown grey, sand silt	0.08	0.08	0.16	2.38	n/a	Post Roman	4	4a
BVK11	1143	Area B	95/185	1127	n/a	Cut	Posthole	Round, steep sides, pointed base	0.08	0.08	0.16	2.41	2.25	Post Roman	4	4a
BVK11	1144	Area B	95/185	n/a	n/a	Fill	Fill of posthole [1145]	Firm, mid grey green, silt clay	0.18	0.10	0.23	2.28	2.27	Post Roman	4	4a
BVK11	1145	Area B	95/185	1127	n/a	Cut	Posthole	Rectangular, vertical sides, pointed base	0.18	0.10	0.23	2.28	2.05	Post Roman	4	4a
BVK11	1146	Area B	105/185	1146	n/a	Layer	Brickearth layer	Friable, grey, clay silt	0.60	0.90	0.05	2.36	2.30	Roman	3.11	3g
BVK11	1147	Area B	100/185	1147	n/a	Cut	Pit	Irregular, concave sides, concave base	0.48	0.65	0.17	2.14	1.97	Roman	3.10	3f
BVK11	1148	Area B	100/185; 105/185	1148	n/a	Layer	Occupation layer	Soft, dark grey brown, sand silt	1.20	1.40	0.13	2.52	2.41	Roman	3.11	3g
BVK11	1149	Area B	100/180; 100/185; 105/180; 105/185	1149	n/a	Layer	Levelling layer	Firm, yellow orange, gravel silt sand	1.42	0.60	0.04	2.48	2.38	Roman	3.11	3g
BVK11	1150	Area B	105/185	1150	n/a	Layer	Mortar/gravel surface/beddin	Friable, light orange	0.90	2.30	0.04	2.37	2.25	Roman	3.11	3f

							g	bronz, gravel mortar								
BVK11	1151	Area B	105/180	n/a	n/a	Fill	Fill of posthole[1152]	Friable, dark brown grey, sand clay silt	0.28	0.20	0.20	2.50	n/a	Roman	3.11	3h
BVK11	1152	Area B	105/180	1152	n/a	Cut	Posthole	Sub-square, vertical sides, flat base	0.28	0.20	0.20	2.50	2.31	Roman	3.11	3h
BVK11	1153	Area B	100/180; 100/185; 105/180; 105/185	1153	n/a	Layer	Burnt horizon	Friable, red brown, silt sand	0.76	0.48	0.02	2.43	2.38	Roman	3.11	3g
BVK11	1154	Area B	95/185	1154	n/a	Layer	Brickearth layer	Soft, mid grey yellow brown, sand silt clay	1.86	1.00	0.31	2.43	2.12	Roman	3.12	3g
BVK11	1155	Area B	105/180; 105/185	1155	n/a	Layer	Mortar surface/bedding	Firm, mid yellow brown, sand mortar	1.80	1.20	0.05	2.52	2.49	Roman	3.11	3g
BVK11	1156	Area B	100/185	1156	n/a	Layer	Burnt horizon	Friable, red brown, silt sand	0.79	0.69	0.02	2.48	n/a	Roman	3.11	3g
BVK11	1157	Area B	100/185	1157	n/a	Layer	Dump/levelling	Soft, mid orange brown, sand clay	1.49	0.40	0.02	2.36	2.19	Roman	3.10	3f
BVK11	1158	Area B	100/185	1158	n/a	Layer	Dump/levelling	Firm, pink yellow white, gravel mortar	0.33	0.48	0.02	2.17	2.07	Roman	3.10	3f
BVK11	1159	Area B	100/189	1159	n/a	Layer	Burnt horizon	Soft, dark brown black, charcoal sand silt	0.86	1.39	0.04	2.26	2.10	Roman	3.10	3e
BVK11	1160	Area B	95/185	1160	n/a	Layer	Brickearth layer	Soft, mid yellow brown, silt clay	1.86	1.00	0.10	2.29	2.09	Roman	3.12	3g
BVK11	1161	Area B	105/185	n/a	n/a	Fill	Fill of posthole	Loose, light	0.15	0.32	0.16	2.23	n/a	Roman	3.08	3f

							[1162]	brown grey, sand gravel								
BVK11	1162	Area B	105/185	1162	n/a	Cut	Posthole	Shape unknown, vertical sides, flat base	0.15	0.32	0.16	2.23	2.07	Roman	3.08	3f
BVK11	1163	Area B	105/185	1163	n/a	Layer	Dump/levelling	Friable, mid grey brown, silt clay	1.00	2.00	0.17	2.25	2.16	Roman	3.08	3f
BVK11	1164	Area B	105/180; 105/185	n/a	n/a	Fill	Fill of gully [1165]	Friable, light yellow brown, silt mortar	1.14	0.52	0.20	2.22	n/a	Roman	3.10	3f
BVK11	1165	Area B	105/180; 105/185	1165	n/a	Cut	Gully (N/S)	Linear, concave sides, flat base	1.14	0.52	0.20	2.26	1.99	Roman	3.10	3f
BVK11	1166	Area B	105/185	1029	n/a	Layer	Opus signinum sill	Op. Sig. & tile	0.56	0.21	0.1	2.58	2.56	Roman	3.11	3g
BVK11	1167	Area B	105/185	1029	n/a	Fill	Fill of pit [1168]	Friable, light brown grey, sand silt clay	0.60	0.60	0.15	2.48	n/a	Roman	3.10	3g
BVK11	1168	Area B	105/185	1168	n/a	Cut	Pit	Sub-round, concave sides, flat base	0.60	0.60	0.15	2.48	2.36	Roman	3.10	3g
BVK11	1169	Area B	105/180; 105/185	1169	n/a	Layer	Dump/levelling	Friable, mid brown, silt sand oyster	1.29	1.08	0.02	2.47	2.46	Roman	3.11	3g
BVK11	1170	Area B	100/185	1170	n/a	Layer	Demolition layer	Firm, white yellow pink, sand mortar	0.40	1.14	0.02	2.11	2.05	Roman	3.10	3e
BVK11	1171	Area B	100/185	1171	n/a	Layer	Dump/levelling	Soft, mid brown, clay sand silt	0.52	0.34	0.03	2.19	2.08	Roman	3.10	3e
BVK11	1172	Area B	100/185	1172	n/a	Layer	Levelling layer	Loose, yellow grey, sand gravel	0.56	1.28	0.04	2.16	2.04	Roman	3.10	3e

BVK11	1173	Area B	95/185	1173	n/a	Layer	Levelling layer	Soft, mid yellow green brown, sand clay silt	1.86	1.00	0.20	2.22	2.00	Roman	3.12	3g
BVK11	1174	Area B	105/185	n/a	n/a	Fill	Fill of pit [1175]	Soft, dark green grey, clay silt	0.30	1.05	0.14	2.27	2.15	Roman	3.10	3f
BVK11	1175	Area B	105/185	1175	n/a	Cut	Pit (?) - wood lined?	Shape unknown, steep sides, flat base	0.30	1.05	0.14	2.27	2.13	Roman	3.10	3f
BVK11	1176	Area B	105/180; 105/185	1176	n/a	Layer	Gravel surface	Firm, mid brown, gravel clay sand silt	0.80	0.48	0.03	2.48	n/a	Roman	3.11	3g
BVK11	1177	Area B	105/180; 105/185	1177	n/a	Layer	Burnt horizon	Soft, red brown, sand silt	0.75	0.46	0.04	2.42	2.36	Roman	3.11	3g
BVK11	1178	Area B	105/185	1178	n/a	Layer	Dump/levelling	Friable, mid grey brown, silt clay	1.10	0.76	0.17	2.29	n/a	Roman	3.08	3f
BVK11	1179	Area B	100/180; 100/185; 105/180; 105/185	1179	28; 72; 77	Layer	Dump/levelling	Soft, yellow brown grey green, sand clay silt	3.60	4.50	0.12	2.19	n/a	Roman	3.08	3e
BVK11	1180	Area B	100/180	1180	n/a	Layer	Gravel surface	Firm, orange brown, gravel silt sand	0.54	0.24	0.07	2.40	n/a	Roman	3.11	3g
BVK11	1181	Area B	100/180; 100/185; 105/180; 105/185	1181	n/a	Layer	Occupation layer	Friable, brown green, silt sand	1.44	0.81	0.10	2.46	2.36	Roman	3.11	3g
BVK11	1182	Area B	100/185	1182	n/a	Layer	Occupation layer	Soft, grey green, clay cess silt	0.17	0.28	0.06	2.12	n/a	Roman	3.10	3e
BVK11	1183	Area B	100/185	1183	n/a	Layer	Occupation layer	Soft, green grey black, clay silt	0.87	1.50	0.07	2.18	1.96	Roman	3.08	3e

BVK11	1184	Area B	100/180; 100/185; 105/180; 105/185	1184	28; 77	Layer	Dump/levelling	Loose, greenish white, oyster shell silt sand	3.36	3.94	0.08	2.18	1.73	Roman	3.08	3e
BVK11	1185	Area B	105/185	1185	n/a	Layer	Occupation layer	Soft, dark green grey, sand silt	1.10	2.50	0.05	2.12	n/a	Roman	3.08	3e
BVK11	1186	Area B	100/185;105/185	1186	n/a	Layer	Brickearth layer	Soft, orange brown, silt clay	1.98	0.91	0.06	2.49	2.32	Roman	3.11	3g
BVK11	1187	Area B	105/185	1187	n/a	Layer	Occupation layer	Soft, green yellow grey, silt sand	1.05	1.90	0.02	2.12	2.10	Roman	3.08	3e
BVK11	1188	Area B	100/185	1188	n/a	Layer	Brickearth layer	Soft, light orange brown, silt clay	0.86	1.02	0.08	2.08	1.92	Roman	3.07	3e
BVK11	1189	Area B	100/185	1189	n/a	Layer	Dump/levelling	Soft, green yellow grey, silt sand	1.00	1.10	0.10	2.05	1.89	Roman	3.08	3e
BVK11	1190	Area B	100/185	1190	n/a	Layer	Dump/levelling	Loose, black, charcoal	0.18	0.22	0.01	2.14	n/a	Roman	3.10	3e
BVK11	1191	Area B	100/185	1191	n/a	Layer	Occupation layer	Soft, light grey brown, clay silt	0.92	1.18	0.01	2.13	n/a	Roman	3.10	3e
BVK11	1192	Area B	100/185	1192	n/a	Layer	Dump/levelling	Soft, mid orange brown, sand clay	0.24	0.38	0.03	2.36	n/a	Roman	3.10	3f
BVK11	1193	Area B	105/185	1193	n/a	Layer	Dump/levelling	Firm, mid red brown, stone rubble silt sand	0.94	1.25	0.67	2.46	2.39	Roman	3.10	3g
BVK11	1194	Area B	100/180	1194	23	Layer	Dump/levelling	Friable, mid green grey, gravel sand silt	1.30	0.55	0.15	2.50	2.30	Roman	3.10	3g
BVK11	1195	Area B	100/180;	1195	n/a	Layer	Dump/levelling	Soft, grey	0.60	1.20	0.08	2.37	2.26	Roman	3.10	3g

			100/185; 105/185					orange brown, sand silt								
BVK11	1196	Area B	100/180	n/a	23	Fill	Fill of shaft [1198]	Soft, dark brown grey, sand clay silt	0.70	0.25	0.53	2.22	n/a	Roman	3.10	3g
BVK11	1197	Area B	105/185	1197	n/a	Layer	Mortar surface/beddin g	Firm, light brown, clay mortar	1.12	0.42	0.10	2.38	2.31	Roman	3.09	3f
BVK11	1198	Area B	100/180	1198	23	Cut	Shaft within construction cut [1200]	Sub-square, vertical sides, base not present	0.70	0.25	0.53	2.22	1.69	Roman	3.10	3g
BVK11	1199	Area B	100/180	n/a	23	Fill	Fill of construction cut [1200]	Friable, orange brown grey, sandy silt	0.95	0.40	0.53	2.22	1.69	Roman	3.10	3g
BVK11	1200	Area B	100/180	1200	23	Cut	Construction cut for [1198]	Sub-round, vertical sides, base not present	0.95	0.40	0.53	2.22	1.69	Roman	3.10	3g
BVK11	1201	Area B	105/185	1201	n/a	Layer	Dump/levelling	Friable, brown green, silt sand	0.57	0.34	0.05	2.41	n/a	Roman	3.10	3g
BVK11	1202	Area B	105/185	n/a	n/a	Fill	Fill of drain [1204]	Soft, orange brown, silt clay	1.41	0.41	0.19	2.39	2.32	Roman	3.10	3f
BVK11	1203	Area B	100/180; 100/185; 105/180; 105/185	n/a	n/a	Fill	Fill of drain [1204]	Friable, mid green brown, silt sand	3.66	0.42	0.26	2.36	2.19	Roman	3.10	3f
BVK11	1204	Area B	100/180; 100/185; 105/180; 105/186	n/a	n/a	Cut	Drain - wood lined?	Linear, vertical sides, NE- SW slope	3.66	0.42	0.26	2.41	1.96	Roman	3.10	3f
BVK11	1205	Area B	105/180; 105/185	1205	n/a	Layer	Dump/levelling	Soft, grey green, clay silt	0.61	0.54	0.07	2.35	2.29	Roman	3.10	3g

BVK11	1206	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	1207	Area B	100/180	n/a	23	Fill	Fill of construction cut [1200]	Friable, green grey brown, sand clay silt	0.35	0.30	0.05	2.03	n/a	Roman	3.10	3g
BVK11	1208	Area B	100/180	1208	23	Layer	Dump/levelling	Soft, green yellow, sand silt	0.86	0.36	0.05	2.43	2.30	Roman	3.09	3g
BVK11	1209	Area B	100/180; 100/185	n/a	23	Fill	Fill of pit [1215]	Loose, dark red brown, decayed wood	1.60	0.70	0.44	2.36	n/a	Roman	3.10	3g
BVK11	1210	Area B	100/180; 100/185; 105/180; 105/185	n/a	n/a	Fill	Fill of drain [1204]	Friable, mid brown, silt sand degraded wood	3.66	0.42	0.01	2.13	1.97	Roman	3.10	3f
BVK11	1211	Area B	100/180; 100/185	n/a	23	Fill	Fill of pit [1215]	Friable, mid green brown grey, sand silt	1.60	0.70	0.30	0.08	n/a	Roman	3.10	3g
BVK11	1212	Area B	105/180; 105/185	1212	n/a	Layer	Dump/levelling	Soft, green grey, sand silt	0.60	0.50	0.05	2.35	n/a	Roman	3.10	3f
BVK11	1213	Area B	100/185	1213	n/a	Layer	Dump/levelling	Soft, grey red, silt clay	0.18	0.27	0.05	2.45	2.37	Roman	3.10	3f
BVK11	1214	Area B	100/185; 105/185	1214	n/a	Layer	Gravel surface	Firm, light yellow brown, sand gravel	1.43	1.20	0.07	2.39	2.33	Roman	3.09	3f
BVK11	1215	Area B	100/180; 100/185	1215	23	Cut	Pit	Shape unknown, near vertical sides, base not present - possibly timber lined	1.60	0.70	0.40	2.36	1.92	Roman	3.10	3g
BVK11	1216	Area B	100/180; 100/185	1216	n/a	Layer	Dump/levelling	Friable, blue grey green	0.38	0.26	0.02	2.30	n/a	Roman	3.09	3f

								brown, sand clay silt								
BVK11	1217	Area B	100/180; 105/180; 105/185	1217	n/a	Cut	Pit	Irregular, concave sides, concave base	0.65	0.65	0.25	2.41	2.14	Roman	3.10	3f
BVK11	1218	Area B	100/180; 105/180; 105/185	n/a	n/a	Fill	Fill of pit [1217]	Soft, mid green grey, silt	0.65	0.65	0.25	2.41	2.27	Roman	3.10	3f
BVK11	1219	Area B	100/185; 105/185	1219	n/a	Layer	Occupation layer	Soft, dark black brown, sand charcoal silt	0.70	0.90	0.08	2.37	2.29	Roman	3.08	3f
BVK11	1220	Area B	105/185	n/a	n/a	Fill	Fill of pit [1221]	Friable, grey green, silt sand	0.49	0.22	0.12	2.42	n/a	Roman	3.10	3f
BVK11	1221	Area B	105/185	n/a	n/a	Cut	Pit	Rectangular (?), near vertical sides, flat base	0.49	0.22	0.12	2.42	2.30	Roman	3.10	3f
BVK11	1222	Area B	105/180; 105/185	1222	n/a	Layer	Burnt horizon	Friable, black brown, silt sand	1.02	0.57	0.06	2.44	n/a	Roman	3.10	3f
BVK11	1223	Area B	105/180; 105/186	1223	72	Layer	Gravel surface	Firm, orange brown, gravel silt sand	n/a	0.70	0.05	2.44	2.42	Roman	3.10	3f
BVK11	1224	Area B	100/185; 105/185	1224	n/a	Layer	Gravel surface	Firm, yellow pink, sand gravel	1.46	1.68	0.15	2.38	2.32	Roman	3.08	3f
BVK11	1225	Area B	100/180; 105/180	n/a	n/a	Fill	Fill of pit [1226]	Firm, dark brown green, sand silt	0.65	0.80	0.15	2.29	n/a	Roman	3.10	3f
BVK11	1226	Area B	100/180; 105/180	1226	n/a	Cut	Pit	Sub-round, gradual sides, flat base	0.65	0.80	0.15	2.29	2.15	Roman	3.10	3f

BVK11	1227	Area B	100/185; 105/185	1227	n/a	Layer	Occupation layer	Friable, mid grey, sand silt	1.50	2.46	0.04	2.28	2.15	Roman	3.08	3e
BVK11	1228	Area B	100/180	1228	23	Layer	Dump/levelling	Firm, green brown grey, sand silt	1.02	1.00	0.25	2.32	2.20	Roman	3.09	3f
BVK11	1229	Area B	105/180; 105/185	1229	25	Cut	Pit	Shape unknown, concave sides, concave base	1.70	1.04	0.39	2.43	2.04	Roman	3.10	3f
BVK11	1230	Area B	105/180; 105/185	1230	n/a	Layer	Gravel/mortar surface	Firm, white yellow, sand mortar gravel	0.56	1.04	0.04	2.24	n/a	Roman	3.08	3e
BVK11	1231	Area B	105/180; 105/185	1231	72	Layer	Occupation layer	Soft, mid brown green, sand gravel silt	3.14	1.58	0.14	2.35	2.28	Roman	3.10	3f
BVK11	1232	Area B	105/180	1232	n/a	Layer	Gravel/mortar surface (?)	Firm, light grey brown, mortar sand gravel	2.00	0.45	0.02	2.32	2.31	Roman	3.09	3f
BVK11	1233	Area B	105/185	1233	n/a	Layer	Dump/levelling	Firm, mid grey brown, clay silt	1.08	1.01	0.14	2.30	2.10	Roman	3.08	3f
BVK11	1234	Area B	105/180	1234	n/a	Layer	Gravel/mortar surface (?)	Firm, light grey brown, mortar sand gravel	0.60	0.60	0.02	2.26	n/a	Roman	3.09	3f
BVK11	1235	Area B	105/185	1235	n/a	Layer	Burnt horizon	Soft, dark grey brown black, sand silt	1.06	0.78	0.04	2.10	2.80	Roman	3.08	3e
BVK11	1236	Area B	105/180	1236	72	Layer	Levelling layer	Friable, light grey brown, sand silt	2.00	0.60	0.04	2.28	2.31	Roman	3.08	3f
BVK11	1237	Area B	105/180;	1237	72	Layer	Dump/levelling	Friable, dark	4.20	1.20	0.15	2.27	2.20	Roman	3.08	3e

			105/185					grey brown, sand silt								
BVK11	1238	Area B	105/185	1179	n/a	Layer	Dump/levelling	Soft, yellow brown grey green, sand clay silt	1.20	0.75	0.10	2.14	n/a	Roman	3.08	3e
BVK11	1239	Area B	105/180; 105/185	1239	n/a	Layer	Dump/levelling	Friable, light green yellow, sand mortar	1.72	1.40	0.20	2.17	2.03	Roman	3.08	3e
BVK11	1240	Area B	105/185	n/a	n/a	Fill	Fill of stakehole [1241]	Loose, dark brown, sand silt	0.10	0.18	0.15	2.12	n/a	Post Roman	3.08	4a
BVK11	1241	Area B	105/186	1241	n/a	Cut	Stakehole	Sub-square, vertical sides, base not present	0.10	0.18	0.15	2.12	1.97	Post Roman	3.08	4a
BVK11	1242	Area B	105/180; 105/185	1242	n/a	Layer	Dump/levelling	Friable, green, sand	1.24	1.00	0.10	2.12	2.09	Roman	3.08	3e
BVK11	1243	Area B	105/180	1243	26	Cut	Pit	Sub-round, gradual sides, irregular base	1.00	1.04	0.15	2.16	2.01	Roman	3.08	3f
BVK11	1244	Area B	105/180	n/a	26	Fill	Fill of pit [1243]	Firm, mid grey brown, sand gravel silt	1.00	1.04	0.15	2.16	n/a	Roman	3.08	3f
BVK11	1245	Area B	100/180	1245	n/a	Cut	Pit	Irregular, concave sides, flat base	0.58	0.40	0.12	2.07	1.95	Roman	3.08	3f
BVK11	1246	Area B	100/180	n/a	n/a	Fill	Fill of pit [1245]	No description	0.58	0.40	0.12	2.07	n/a	Roman	3.08	3f
BVK11	1247	Area B	100/185	1247	n/a	Layer	Brickearth layer	Firm, pink white brown, clay brickearth	2.00	1.24	0.08	2.16	2.14	Roman	3.07	3e
BVK11	1248	Area B	100/185	1248	72	Masonry	Tile surface	Red tile, soft	2.00	1.24	0.04	2.16	2.14	Roman	3.07	3e

							(?)	clay								
BVK11	1249	Area B	95/185; 100/180; 100/185; 105/180; 105/185	1249	25; 26; 28; 43; 77	Layer	Mortar surface/bedding	Firm, mid yellow grey, mortar clay	6.12	9.10	0.25	2.00	1.91	Roman	3.07	3e
BVK11	1250	Area B	100/180	n/a	26	Fill	Fill of pit [1252]	Soft, dark brown grey, sand silt	n/a	0.60	0.30	2.74	n/a	Post Roman	5	4a
BVK11	1251	Area B	100/180	n/a	26	Layer	Mortar/gravel surface/bedding	Friable, light yellow brown, gravel mortar	n/a	0.15	0.15	2.74	n/a	Post Roman	5	4a
BVK11	1252	Area B	100/180	n/a	26	Cut	Pit	Shape unknown, vertical sides, sloping base	n/a	0.60	0.30	2.74	2.35	Post Roman	5	4a
BVK11	1253	Area B	n/a	n/a	42	Fill	Fill of pit [1275]	Soft, dark brown grey, sand silt	n/a	0.55	0.30	3.03	n/a	Post Roman	5	4a
BVK11	1254	Area B	n/a	n/a	42	Fill	Fill of pit [1275]	Soft, light grey green, silt sand	n/a	0.55	0.18	2.73	2.58	Post Roman	5	4a
BVK11	1255	Area B	n/a	n/a	42	Fill	Fill of pit [1275]	Soft, dark brown green, silt sand	n/a	0.55	0.07	2.55	2.46	Post Roman	5	4a
BVK11	1256	Area B	n/a	n/a	42	Fill	Fill of pit [1257]	Soft, mid grey brown, sand silt	n/a	0.55	0.33	2.48	2.44	Post Roman	5	4a
BVK11	1257	Area B	n/a	n/a	42	Cut	Pit	Shape unknown, gradual sides, base not present	n/a	0.55	0.33	2.44	2.15	Post Roman	5	4a
BVK11	1258	Area B	n/a	n/a	42	Layer	Mortar surface/bedding	Firm, mid yellow brown, sand mortar	n/a	0.30	0.15	2.44	2.21	Roman	3.09	3f

BVK11	1259	Area B	n/a	n/a	42	Layer	Levelling layer	Soft, dark green grey, sand silt	n/a	0.44	0.08	2.29	2.21	Roman	3.09	3f
BVK11	1260	Area B	n/a	n/a	42	Layer	Occupation layer	Soft, light brown grey, sand silt	n/a	0.60	0.08	2.21	2.15	Roman	3.07	3e
BVK11	1261	Area B	n/a	n/a	42	Layer	Mortar surface/bedding	Soft, light brown yellow, sand mortar silt	n/a	0.61	0.08	2.13	n/a	Roman	3.07	3e
BVK11	1262	Area B	n/a	n/a	42	Layer	Occupation layer	Soft, light grey, clay silt	n/a	0.60	0.02	2.05	n/a	Roman	3.07	3e
BVK11	1263	Area B	n/a	n/a	28	Fill	Fill of pit [1265]	Firm, dark grey brown, clay silt	1.00	n/a	0.60	2.75	n/a	Medieval	6b	5b
BVK11	1264	Area B	n/a	n/a	28; 77	Fill	Fill of pit [1265]	Soft, dark grey brown, clay silt	1.80	n/a	0.75	2.75	2.15	Medieval	6b	5b
BVK11	1265	Area B	n/a	n/a	28; 77	Cut	Pit	Shape unknown, steep sides, base not present	1.80	n/a	0.75	2.75	2.00	Medieval	6b	5b
BVK11	1266	Area B	n/a	n/a	29	Layer	Demolition layer	Friable, light brown yellow, sand	n/a	0.75	0.10	3.39	3.29	Post-medieval	6c	6d
BVK11	1267	Area B	n/a	n/a	29	Layer	Demolition layer	Friable, light grey brown, sand	n/a	1.23	0.15	3.32	3.11	Post-medieval	6c	6d
BVK11	1268	Area B	n/a	n/a	29	Layer	Demolition layer	Friable, light green grey, sand	n/a	1.30	0.10	3.21	3.11	Post-medieval	6c	6d
BVK11	1269	Area B	n/a	n/a	29	Layer	Demolition layer	Soft, light green grey, clay silt	n/a	0.80	0.70	3.09	3.03	Post-medieval	6c	6d
BVK11	1270	Area B	n/a	n/a	29	Layer	Demolition layer	Friable, light green grey, gravel sand	n/a	1.40	0.20	3.13	2.94	Post-medieval	6c	6d

BVK11	1271	Area B	n/a	n/a	29	Layer	Demolition layer	Friable, light brown yellow, sand	n/a	1.45	0.20	3.00	2.92	Post-medieval	6c	6d
BVK11	1272	Area B	n/a	n/a	29	Layer	Demolition layer	Loose, light brown grey, limestone chippings, dust and boulders	n/a	1.55	0.47	2.87	2.76	Post-medieval	6c	6d
BVK11	1273	Area B	n/a	n/a	29	Layer	Demolition layer	Soft, mid grey brown, sand silt	n/a	0.55	0.35	2.72	2.35	Post-medieval	6c	6d
BVK11	1274	Area B	95/180; 100/180	1274	29; 42; 71	Masonry	Chalk wall (E/W) within construction cut [1275]	Chalk, light yellow brown sand mortar	0.44	1.52	1.40	2.59	2.53	Post-medieval	6a	6b
BVK11	1275	Area B	95/180; 100/180	n/a	42	Cut	Construction cut for [1274]	Linear, vertical sides, base not present	0.44	1.45	1.10	2.37	1.20	Post-medieval	6a	6b
BVK11	1276	Area A1	100/200	UP 8A	63	Layer	Dump/levelling	Soft, dark grey brown, clay silt	0.25	0.95	0.55	1.65	n/a	Post-medieval	5	6d
BVK11	1277	Area A1	100/200	UP 8A	63	Fill	Fill of tank [1278]	Soft, mid brown, silt	0.25	0.9	0.37	1.3	n/a	Post-medieval	5	6a
BVK11	1278	Area A1	100/200	UP 8A	63	Masonry	Brick tank within construction cut [1279]	Red brick and occasional flint, light grey sand mortar	0.5	0.95	0.75	1.65	0.9	Post-medieval	5	6a
BVK11	1279	Area A1	100/200	UP 8A	n/a	Cut	Construction cut for [1278]	Square (?), near vertical sides, base not present	0.5	1.05	0.75	1.65	0.9	Post-medieval	5	6a
BVK11	1280	Area A1	100/200	UP 8A	n/a	Layer	Alluvium	Firm, dark blue grey, clay silt	0.38	1.1	n/a	0.9	n/a	Natural	1	1 or 2

BVK11	1281	Area A1	105/200	UP 5B	30; 32	Fill	Fill of pit [1282]	Soft, dark grey brown, silt clay	0.3	0.38	0.22	1.93	n/a	Post Roman	3	4a
BVK11	1282	Area A1	105/200	UP 5B	30; 32	Cut	Pit (?)	Shape unknown, sides not present, base not present	0.3	0.38	0.22	1.93	1.5	Post Roman	3	4a
BVK11	1283	Area A1	105/200	UP 5B	30	Layer	Opus Signinum surface/bedding	Op. Sig.	1.3	1	0.07	2.02	1.93	Roman	2b	3g
BVK11	1284	Area A1	105/200	UP 5B	n/a	Masonry	Brick wall (N/S) - surface lain	Bessalis brick, mortar	0.52	0.24	0.11	2.14	2.03	Roman	2b	3g
BVK11	1285	Area A1	100/200	UP A1 (W) pre-ex	31; 63	Layer	Demolition layer	Loose, dark green brown grey, sand silt clay	n/a	1.3	0.13	1.92	n/a	Post-medieval	5	6b
BVK11	1286	Area A1	100/200	UP A1 (W) pre-ex	31	Layer	Dump/levelling	Firm, mid brown yellow, sand clay	n/a	1.45	0.05	1.96	n/a	Post-medieval	5	6b
BVK11	1287	Area A1	95/200	UP A1 (W) pre-ex	n/a	Layer	Dump/levelling	Loose, dark grey green, sand silt	1	3	0.36	1.96	n/a	Roman	2b	3c
BVK11	1288	Area A1	105/200	n/a	30	Layer	Levelling layer	Firm, dark black brown, sand silt	n/a	0.8	0.25	2.42	n/a	Post-medieval	6	6d
BVK11	1289	Area A1	105/200	n/a	30	Layer	Demolition layer	Soft, dark black brown, sand silt	n/a	0.9	0.12	2.17	n/a	Medieval	6	5a
BVK11	1290	Area A1	105/200	n/a	30; 32	Layer	Occupation layer (?)	Soft, dark black brown, sand silt	n/a	0.9	0.1	2.05	n/a	Post Roman	3	4a
BVK11	1291	Area A1	105/200	n/a	30	Layer	Levelling layer	Firm, mid brown, clay	n/a	0.9	0.21	1.93	n/a	Roman	2b	3g

								rubble silt								
BVK11	1292	Area A1	105/200	n/a	30	Layer	Levelling layer	Firm, light yellow brown, clay silt	n/a	0.9	0.25	1.72	n/a	Roman	2b	3g
BVK11	1293	Area A1	105/200	n/a	30	Layer	Burnt horizon	Firm, light red brown, clay sand - burnt stones	n/a	0.9	0.42	1.52	1.4	Roman	1	3b
BVK11	1294	Area A1	105/200	n/a	30	Layer	Burnt horizon	Soft, black, charcoal silt	n/a	0.9	0.03	1.14	1	Roman	1	3b
BVK11	1295	Area A1	105/200	n/a	30	Layer	Levelling layer	Soft, light white yellow, sand silt	n/a	0.9	0.05	1.12	n/a	Roman	1	3a
<i>BVK11</i>	<i>1296</i>	<i>Area A1</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1297	Area A1	95/200	n/a	31; 63	Layer	Dump/levelling	Loose, mid brown grey, sand clay silt	1	3	0.36	1.86	n/a	Roman	2b	3c
BVK11	1298	Area A1	95/200	n/a	31	Layer	Dump/levelling	Loose, mid grey brown, sand silt clay	1	0.62	0.11	1.22	n/a	Roman	1	3a
BVK11	1299	Area A1	95/200	n/a	31	Layer	Levelling layer	Loose, mid brown grey, sand mortar	0.3	2.5	0.14	1.96	n/a	Post-medieval	6	6c
BVK11	1300	Area A1	95/200	n/a	31	Layer	Levelling layer	Soft, light brown yellow, sand silt clay	0.9	0.65	0.04	1.6	n/a	Roman	1	3b
BVK11	1301	Area A1	95/200	n/a	31	Layer	Burnt horizon	Soft, black, sand ash charcoal	1	0.76	0.04	1.57	n/a	Roman	1	3b
BVK11	1302	Area A1	95/200	UP A1 (W) post-ex	31; 63	Layer	Levelling layer	Friable, light yellow brown, sand	1	2.58	0.38	1.55	1.44	Roman	1	3b
BVK11	1303	Area A1	95/200	n/a	31	Layer	Burnt horizon	Soft, black, silt ash	1	0.85	0.02	1.25	1.03	Roman	1	3b
BVK11	1304	Area A1	95/200	n/a	31; 63	Layer	Dump/levelling	Loose, mid	1	0.83	0.08	1.12	n/a	Roman	1	3a

								grey brown, silt gravel								
BVK11	1305	Area A1	95/200	n/a	31	Layer	Alluvium	Loose, mid brown grey, sand silt clay	1	0.85	0.12	1.04	n/a	Natural	1	1 or 2
BVK11	1306	Area A1	95/200	UP A1 (W) post-ex	31; 63	Layer	Alluvium	Loose, dark grey brown, clay silt	1	0.85	0.08	1.01	0.91	Natural	1	1 or 2
BVK11	1307	Area A1	105/200	n/a	32	Layer	Dump/levelling	Firm, dark black brown, sand silt	n/a	0.90	0.2	1.85	n/a	Medieval	6	5a
BVK11	1308	Area A1	105/200	UP 4B	n/a	Layer	Levelling layer	Firm, light yellow brown, clay silt	0.8	0.2	n/a	1	n/a	Roman	2c	3g
BVK11	1309	Area A1	105/200	UP 4B	n/a	Layer	Levelling layer - Room 2	Firm, yellow white, mortar sand stones	0.8	0.62	n/a	1	n/a	Roman	2c	3g
<i>BVK11</i>	<i>1310</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1311	Area A1	100/200	n/a	31	Fill	Fill of terracing cut [1312]	Loose, mid red brown grey, sand silt - organic	0.8	2.04	0.12	1.56	n/a	Roman	1	3b
BVK11	1312	Area A1	100/200	n/a	31	Cut	Terracing cut (?)	Shape unknown, steep sides, flat base	0.8	2.04	0.12	1.6	1.47	Roman	1	3b
BVK11	1313	Area A1	100/200	n/a	31	Layer	Levelling layer	Loose, mid grey brown, sand silt clay	0.9	1.28	0.07	1.36	n/a	Roman	1	3b
BVK11	1314	Area A1	100/200	n/a	31; 63	Layer	Burnt horizon	Soft, dark black brown red, sand ash	1	1.3	0.01	1.37	n/a	Roman	1	3b
BVK11	1315	Area A1	100/200	n/a	31; 63	Layer	Dump/levelling	Loose, mid grey brown, silt gravel	1	1.55	0.2	1.25	n/a	Roman	1	3a
BVK11	1316	Area A1	105/200	n/a	32	Layer	Levelling layer	Firm, mid	n/a	0.90	0.28	1.77	n/a	Roman	2b	3g

							(?)	brown, clay rubble silt								
BVK11	1317	Area A1	105/200	n/a	32	Layer	Levelling layer	Firm, light yellow brown, clay silt	n/a	0.90	0.25	1.46	n/a	Roman	2b	3g
BVK11	1318	Area A1	105/200	n/a	32	Layer	Burnt horizon	Firm, light red brown, clay sand - burnt stones	n/a	0.9	0.37	1.21	n/a	Roman	1	3b
BVK11	1319	Area A1	100/200	n/a	31	Fill	Fill of terracing cut [1312]	Loose, dark brown black, sand silt ash	0.8	2.09	0.17	1.7	n/a	Roman	1	3c
BVK11	1320	Area A1	100/200	n/a	31	Fill	Fill of pit [1321]	Loose, mid brown yellow, sand gravel	n/a	0.44	0.3	1.48	n/a	Roman	1	3b
BVK11	1321	Area A1	100/200	n/a	31	Cut	Pit (?)	Shape unknown, near vertical sides, flat base	n/a	0.44	0.3	1.48	1.17	Roman	1	3b
BVK11	1322	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [792]	Friable, dark brown yellow, silt sand	1.44	1.40	0.10	1.93	n/a	Post Roman	5	4b
BVK11	1323	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [792]	Firm, green grey, sand clay silt	1.44	1.40	0.08	1.88	n/a	Post Roman	5	4b
BVK11	1324	Area B	105/185	n/a	n/a	Fill	Fill of pit [788]	Friable, dark green brown, sand silt	1.44	1.62	0.28	2.00	n/a	Post Roman	5	4b
BVK11	1325	Area B	95/185	n/a	n/a	Fill	Fill of tank [1327]/[1363]/[1364]	Loose, light grey brown, silt sand	1.85	1.25	0.30	2.41	n/a	Post-medieval	6b	6c
BVK11	1326	Area B	95/185	n/a	n/a	Fill	Fill of tank [1327]/[1363]/[1364]	Loose, dark grey brown, silt sand	1.85	1.25	1.00	2.20	n/a	Post-medieval	6b	6b
BVK11	1327	Area B	95/180; 95/185	n/a	36	Masonry	Brick wall within construction	Unfrogged red (?) brick, mid grey lime	1.83	1.39	1.00	2.20	1.22	Post-medieval	6b	6b

							cut [1329]	mortar									
BVK11	1328	Area B	95/185	n/a	n/a	Fill	Fill of tank [1327]/[1363]/[1364]	Loose, mid grey, sand silt	1.85	1.29	1.00	2.20	n/a	Post-medieval	6b	6b	
BVK11	1329	Area B	95/180; 95/185	1329	n/a	Cut	Construction cut for [1327]/[1363]/[1364]	Square, vertical sides, flat base	1.83	1.39	1.34	2.54	1.20	Post-medieval	6b	6a	
BVK11	1330	Area B	100/180; 100/185	n/a	n/a	Fill	Fill of construction cut [602]	Loose, grey, rubble	1.90	1.75	0.80	1.96	1.21	Post-medieval	6b	6d	
BVK11	1331	Area B	100/180; 100/185	1331	37	Masonry	Brick floor within construction cut [602]	Unfrogged red brick, no mortar	2.00	1.71	0.10	1.25	1.21	Post-medieval	6b	6c	
BVK11	1332	Area B	100/185	n/a	34; 37	Masonry	Brick column within brick tank [596]	Unfrogged red brick, light grey mortar	0.34	0.34	0.76	2.39	n/a	Post-medieval	6b	6c	
BVK11	1333	Area B	105/180; 105/185	n/a	28; 77	Fill	Fill of pit [772]	Firm, dark green grey, sand silt	1.42	0.45	0.38	2.00	1.98	Medieval	5	5a	
BVK11	1334	Area A1	95/200; 100/200	n/a	n/a	Fill	Fill of construction cut [1335]	Soft, mid grey brown, sand silt	0.4	4.04	0.46	2.27	n/a	Post-medieval	6	6c	
BVK11	1335	Area A1	95/200; 100/200	1335	n/a	Cut	Construction cut for [518]	Linear, near vertical sides, irregular base	0.4	4.04	0.46	2.27	1.81	Post-medieval	6	6c	
BVK11	1336	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [792]	Firm, dark grey brown, clay silt	1.44	2.10	0.20	1.80	n/a	Post Roman	5	4b	
BVK11	1337	Area A1	105/195	n/a	n/a	Layer	Demolition layer	Friable, grey, mortar CBM	2.35	0.55	0.1	2.37	n/a	Post-medieval	5	6d	
BVK11	1338	Area A1	105/195; 105/200	1338	39; 48	Masonry	Chalk wall (N/S) within construction	Chalk, firm mid brown white mortar	2.6	0.52	0.35	2.31	2.26	Medieval	4c	5a	

							cut [1355]									
BVK11	1339	Area B	100/185	n/a	34; 37	Masonry	Tile facing of brick tank [596]	Red peg tile, mid grey lime mortar	0.27	1.37	0.68	1.88	n/a	Post-medieval	6b	6c
BVK11	1340	Area B	105/180; 105/185	n/a	28; 77	Fill	Fill of pit [601]	Soft, mid brown green, silt clay	1.06	1.00	0.79	1.99	n/a	Post Roman	5	4a
BVK11	1341	Area A1	105/195	1341	39; 46	Cut	Pit	Shape unknown, near vertical sides, base not present	1.45	0.95	0.65	2.34	1.69	Medieval	5	5b
BVK11	1342	Area A1	105/195	n/a	39; 46	Fill	Fill of pit [1341]	Firm, mid brown, silt clay	1.45	0.95	0.65	2.03	n/a	Medieval	5	5b
BVK11	1343	Area A1	105/195; 105/200	1343	39	Cut	Pit	Shape unknown, vertical sides, flat base	2.7	0.46	0.1	2.27	2.17	Post-medieval	5	6d
BVK11	1344	Area A1	105/195	n/a	39	Fill	Fill of pit [1343]	Loose, dark black brown, sand silt	2.7	0.46	0.1	2.27	n/a	Post-medieval	5	6d
<i>BVK11</i>	<i>1345</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1346	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of pit [609]	Soft, dark brown, silt clay	0.97	0.63	0.41	2.14	n/a	Medieval	5	5a
BVK11	1347	Area A1	95/200; 100/200	1347	n/a	Layer	Dump/levelling	Hard, mid yellow brown, silt sand	1.2	2.6	0.05	2.16	n/a	Roman	2b	3g
BVK11	1348	Area B	95/185	n/a	n/a	Fill	Fill of pit [815]	Soft, dark grey brown, clay silt	0.68	1.20	0.46	2.40	1.99	Post Roman	5	4b
BVK11	1349	Area A1	105/195	1349; post-ex	39; 47; 48	Layer	Dump/levelling	Soft, black, sand silt - generic number	5.5	4.6	0.2	1.51	n/a	Post Roman	4b	4b
<i>BVK11</i>	<i>1350</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		

BVK11	1351	Area A1	105/200	1351	n/a	Layer	Dump/levelling	Friable, dark brown, clay silt	0.72	1.24	0.25	2.34	n/a	Post Roman	2c	4a
<i>BVK11</i>	<i>1352</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1353	Area A1	95/200; 100/200	post-ex	n/a	Fill	Fill of pit [1354]	Soft, dark grey brown, clay silt	0.8	1.12	0.49	2.13	n/a	Post Roman	4b	4a
BVK11	1354	Area A1	95/200; 100/200	1354; post-ex	n/a	Cut	Pit	Sub-rectangular, near vertical sides, base not present	0.8	1.12	0.49	2.13	1.64	Post Roman	4b	4a
BVK11	1355	Area A1	105/195; 105/200	1355	39	Cut	Construction cut for [1338]	Linear, gradual sides, flat base	2.6	0.4	0.35	1.93	1.58	Medieval	4c	5a
BVK11	1356	Area A1	105/195; 105/200	1356	39	Fill	Fill of [1343]	Friable, dark grey orange, brick rubble sand	2.26	0.28	0.1	2.28	n/a	Post-medieval	5	6d
<i>BVK11</i>	<i>1357</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1358	Area B	105/185	n/a	n/a	Fill	Fill of pit [1359]	Loose, mid brown grey, clay silt	0.46	0.80	0.30	1.99	n/a	Roman	3.08	3e
BVK11	1359	Area B	105/185	1359	n/a	Cut	Pit	Rectangular, vertical sides, concave base	0.46	0.80	0.30	1.99	1.69	Roman	3.08	3e
BVK11	1360	Area B	95/185	n/a	n/a	Fill	Fill of pit [862]	Soft, dark grey brown, clay silt	0.30	0.74	0.06	1.97	1.91	Post Roman	5	4b
BVK11	1361	Area A1	100/200	UP A1 (W) post-ex	31; 63	Layer	Alluvium	Loose, dark grey brown, clay silt	1	1.6	0.1	1.06	n/a	Natural	1	1 or 2
BVK11	1362	Area B	100/185	n/a	n/a	Fill	Fill of pit [652]	Firm, dark	0.80	2.00	0.26	2.00	1.98	Post	5	4a

								grey brown, sand silt						Roman		
BVK11	1363	Area B	95/185	1363	36	Masonry	Stone wall within construction cut [1329]	Reused medieval/Roman worked stone, mid yellow grey lime mortar	0.98	0.46	0.25	1.76	1.40	Post-medieval	6b	6a
BVK11	1364	Area B	95/185	1364	36	Masonry	Stone wall within construction cut [1329]	Reused medieval/Roman worked stone, mid yellow grey lime mortar	0.60	0.50	0.20	1.76	1.24	Post-medieval	6b	6a
BVK11	1365	Area B	100/185	n/a	n/a	Fill	Fill of pit [743]	Soft, dark brown, silt clay	1.20	0.80	0.20	1.89	n/a	Medieval	5	5a
BVK11	1366	Area B	100/185	n/a	n/a	Fill	Fill of construction cut [602]	Soft, dark brown grey black, clay silt	3.02	2.66	1.19	2.39	1.20	Post-medieval	6b	6b
BVK11	1367	Area A1	105/200	1367	n/a	Layer	Fill of flue [1369]/[1370]	Soft, dark grey brown, sand silt ash	0.7	1.46	0.05	2.1	n/a	Roman	2b	3g
BVK11	1368	Area B	100/180	n/a	23	Fill	Fill of shaft [1198]	Soft, dark brown grey, silt clay	0.74	0.20	0.21	2.22	n/a	Roman	3.10	3g
BVK11	1369	Area A1	105/200	1369	n/a	Masonry	Stone flue wall - surface lain	Ragstone, Op. Sig.	0.88	0.46	0.11	2.25	n/a	Roman	2b	3g
BVK11	1370	Area A1	105/200	1370	n/a	Masonry	Stone flue wall - surface lain	Ragstone, Op. Sig.	1.1	0.8	0.13	2.23	n/a	Roman	2b	3g
BVK11	1371	Area B	100/180	1371	n/a	Layer	Levelling layer	Loose, green grey, sand silt	0.46	0.80	0.04	1.47	n/a	Roman	3.06	3d
BVK11	1372	Area A1	100/200	1372	38	Masonry (Structure)	Brick flue/drain	Consists of [1442], [1443] & [1440]	0.85	2.17	0.34	2.2	1.39	Roman	2b	3f

BVK11	1373	Area A1	100/200	1373	38	Layer	Bedding layer	Op. sig. & broken tile	1.38	1.48	0.4	2.35	2.04	Roman	2b	3g
BVK11	1374	Area A1	100/200	n/a	38	Fill	Fill of flue/drain [1372]	Loose, light black brown, clay silt CBM mortar	2.17	0.29	0.32	1.99	n/a	Roman	2b	3f
BVK11	1375	Area A1	100/200	1375	38; 40	Layer	Levelling layer - Room 1	Firm, dark green grey, silt sand gravel & stone	1.45	4.16	0.4	2.23	2.05	Roman	2b	3f
BVK11	1376	Area A1	100/200	1376	38; 40	Layer	Levelling layer - Room 1	Loose, dark grey brown, clay silt	1.12	2.18	0.15	1.98	1.57	Roman	2b	3f
BVK11	1377	Area A1	100/200	1377	38	Cut	Construction cut for [1372]	Irregular, gradual sides, flat base	1.7	2.72	0.55	1.99	1.44	Roman	2b	3f
BVK11	1378	Area B	100/180	n/a	23	Fill	Fill of construction cut [1200]	Soft, green grey brown, silt clay	0.90	0.60	0.20	2.03	n/a	Roman	3.10	3g
BVK11	1379	Area B	100/180	n/a	23	Fill	Fill of construction cut [1200]	Soft, dark grey, silt clay	0.90	0.60	0.40	1.69	n/a	Roman	3.10	3g
<i>BVK11</i>	<i>1380</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1381	Area A1	105/195	1381	39	Masonry	Chalk foundation (N/S) - part of [1338]?	Chalk, no mortar	1.94	0.5	0.4	2.35	n/a	Medieval	4c	5a
BVK11	1382	Area A1	105/195	n/a	39	Cut	Pit	Shape unknown, steep sides, flat base	1.75	n/a	0.35	2.23	1.83	Post-medieval	5	6b
BVK11	1383	Area A1	105/195	n/a	39	Fill	Fill of pit [1382]	Firm, dark black brown, silt clay chalk	1.75	n/a	0.35	2.23	n/a	Post-medieval	5	6b
BVK11	1384	Area A1	105/195	n/a	39	Fill	Fill of pit [1341]	Firm, mid grey brown,	0.85	n/a	0.2	2.19	n/a	Medieval	5	5b

								clay gravel silt								
<i>BVK11</i>	1385	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1386	Area B	95/185; 100/185	n/a	n/a	Fill	Fill of robber cut [868]	Friable, dark grey black, silt sand	2.80	0.84	0.60	1.95	1.83	Post Roman	3.10	4a
BVK11	1387	Area B	105/185	n/a	n/a	Fill	Fill of stakehole [1388]	Soft, dark brown grey, clay silt	0.08	0.08	0.10	1.97	n/a	Post Roman	3.07	4a
BVK11	1388	Area B	105/185	1388	n/a	Cut	Stakehole	Square, vertical sides, tapered base	0.08	0.08	0.10	1.97	1.87	Post Roman	3.07	4a
BVK11	1389	Area B	105/185	n/a	n/a	Fill	Fill of stakehole [1390]	Soft, dark brown grey, clay silt	0.08	0.09	0.15	1.97	n/a	Roman	3.07	3e
BVK11	1390	Area B	105/185	1388	n/a	Cut	Stakehole	Shape unknown, vertical sides, tapered base	0.08	0.09	0.15	1.97	1.82	Roman	3.07	3e
BVK11	1391	Area B	105/185	n/a	n/a	Fill	Fill of posthole [1392]	Loose, dark grey brown, sand silt	0.47	0.47	0.31	1.97	n/a	Roman	3.07	3e
BVK11	1392	Area B	105/185	1392	n/a	Cut	Posthole	Round, near vertical sides, concave base	0.47	0.47	0.31	1.97	1.66	Roman	3.07	3e
<i>BVK11</i>	1393	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1394	Area B	105/185	n/a	n/a	Fill	Fill of pit [1395]	Friable, mid pink brown, Op. Sig. mortar silt clay	0.82	1.28	0.85	2.04	n/a	Roman	3.08	3e
BVK11	1395	Area B	105/185	1395	n/a	Cut	Pit	Round, steep sides, flat base	0.82	1.28	0.85	2.04	1.20	Roman	3.08	3e

BVK11	1396	Area A1	100/200	1396	40	Layer	Levelling layer	Soft, mid brown, sand silt	1.2	2.72	0.15	2.21	2.05	Roman	2b	3g
BVK11	1397	Area A1	105/195	n/a	n/a	Fill	Fill of robber cut [1399]	Soft, dark grey black, silt sand	1.3	1.9	0.32	1.63	n/a	Post Roman	4b	4b
BVK11	1398	Area A1	105/195	post-ex	n/a	Fill	Fill of robber cut [1399]	Friable, light brown grey, silt sand clay	1.16	1.66	0.1	1.31	n/a	Post Roman	4b	4b
BVK11	1399	Area A1	105/195	1399; post-ex	n/a	Cut	Robber cut	Irregular, steep sides, concave base	1.3	1.9	0.48	1.63	1.15	Post Roman	4b	4b
BVK11	1400	Area B	95/180	n/a	n/a	Fill	Fill of pit [623]	Firm, dark grey brown, sand silt	1.00	0.60	1.00	1.80	n/a	Roman	5	3g
BVK11	1401	Area B	95/180; 100/180	n/a	n/a	Fill	Fill of pit [1056]	Firm, dark yellow brown, sand silt	0.40	0.99	0.07	2.02	1.91	Roman	3.06	3d
BVK11	1402	Area B	100/180	n/a	n/a	Fill	Fill of pit [1056]	Loose, light blue grey, silt mortar	0.51	0.52	0.11	1.84	n/a	Roman	3.06	3d
BVK11	1403	Area B	100/180	n/a	n/a	Fill	Fill of pit [1033]	Firm, mid blue grey, sand silt	1.27	0.69	0.16	1.86	1.83	Roman	3.10	3e
BVK11	1404	Area A1	105/200	1404	n/a	Layer	Opus Signinum surface/bedding - Room 2	Op. Sig.	0.62	0.64	0.06	2.1	n/a	Roman	2b	3g
BVK11	1405	Area B	100/180	n/a	23; 72	Fill	Fill of pit [1418]	Loose, mid brown grey brown, sand silt	1.10	0.70	0.54	1.98	n/a	Roman	3.08	3f
BVK11	1406	Area B	100/185	n/a	43	Layer	Occupation layer	Soft, dark brown grey, clay silt	0.75	n/a	0.08	1.94	1.82	Roman	3.06	3d
BVK11	1407	Area B	100/185	n/a	43	Layer	Dump/levelling	Loose, red yellow brown	1.53	n/a	0.25	1.94	1.80	Roman	3.06	3d

								grey, rubble clay silt								
BVK11	1408	Area B	100/185	n/a	43	Layer	Brickearth layer	Soft, grey green red, clay sand silt	1.47	n/a	0.10	1.80	1.59	Roman	3.05	3d
BVK11	1409	Area B	100/185	n/a	43	Fill	Fill of working hollow [1412]	Soft, dark blue grey, clay silt	1.08	n/a	0.25	1.77	1.54	Roman	3.03	3c
BVK11	1410	Area B	100/185	n/a	43	Fill	Fill of working hollow [1412]	Soft, mid green grey, gravel sand silt	0.38	n/a	0.04	1.43	n/a	Roman	3.03	3c
BVK11	1411	Area B	100/185	n/a	43	Fill	Fill of working hollow [1412]	Soft, dark brown grey, clay silt	0.40	n/a	0.21	1.52	1.38	Roman	3.03	3c
BVK11	1412	Area B	100/185	n/a	43	Cut	Working hollow	Shape unknown, gradual sides, base not present	1.08	n/a	0.54	1.77	1.25	Roman	3.03	3c
BVK11	1413	Area B	100/185	n/a	43	Layer	Occupation layer	Soft, dark grey brown, clay silt	0.86	n/a	0.20	1.77	1.58	Roman	3.04	3d
BVK11	1414	Area B	100/185	n/a	43	Layer	Gravel surface (?)	Soft, dark grey, silt gravel	1.05	n/a	0.14	1.59	n/a	Roman	3.04	3c
BVK11	1415	Area B	100/185	n/a	43	Layer	Gravel surface (?)	Firm, brown red grey, gravel silt sand	0.95	n/a	0.11	1.50	1.42	Roman	3.03	3c
BVK11	1416	Area B	100/185	n/a	43	Layer	Brickearth layer	Firm, grey brown red, clay sand silt	1.23	n/a	0.15	1.41	1.33	Roman	3.01	3a
BVK11	1417	Area B	100/180; 100/185	n/a	23; 72	Fill	Fill of pit [1418]	Firm, dark blue grey, silt clay	2.00	1.20	0.20	1.38	1.30	Roman	3.08	3f
BVK11	1418	Area B	100/180; 100/185	1418	43; 72	Cut	Pit	Sub- rectangular,	2.00	1.20	0.66	1.98	1.16	Roman	3.08	3f

								vertical sides, flat base								
BVK11	1419	Area B	100/185	1419	n/a	Cut	Construction cut for [934]	Linear, steep sides, concave base	3.50	1.01	0.39	1.88	1.49	Roman	3.12	3g
BVK11	1420	Area A1	105/195	1420	n/a	Cut	Robber cut	Irregular, gradual sides, base not present	2.3	2.3	0.8	1.94	1.19	Medieval	5	5b
BVK11	1421	Area A1	105/195	n/a	n/a	Fill	Fill of robber cut [1420]	Firm, mid black brown, silt clay	2.3	2.3	0.8	1.94	n/a	Medieval	5	5b
BVK11	1422	Area B	95/185	1422	n/a	Masonry	Stone foundation (?) within construction cut [1506]	Ragstone, yellow lime mortar	2.80	0.66	0.25	1.73	1.65	Roman	3.12	3e
BVK11	1423	Area B	100/185	1423	n/a	Layer	Dump/levelling	Friable, light brown, mortar	0.68	1.10	0.04	1.75	1.69	Post Roman	3.10	4a
BVK11	1424	Area B	105/185	n/a	n/a	Fill	Fill of posthole [1425]	Firm, mid blue grey, sand silt	0.30	0.33	0.18	2.01	n/a	Roman	3.07	3e
BVK11	1425	Area B	105/185	1425	n/a	Cut	Posthole	Round, steep sides, flat base	0.30	0.33	0.18	2.01	1.83	Roman	3.07	3e
BVK11	1426	Area A1	105/200	1426	n/a	Layer	Levelling layer - Room 2	Reigate stone, brown silt	1.14	3.2	0.2	2.29	1.89	Roman	2b	3g
<i>BVK11</i>	<i>1427</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1428	Area B	100/180; 105/180	n/a	n/a	Fill	Fill of pit [1429]	Firm, mid grey brown, sand silt	0.88	0.87	0.20	1.98	n/a	Roman	3.08	3f
BVK11	1429	Area B	100/180; 105/181	1429	n/a	Cut	Pit	Sub-round, steep sides, flat base	0.88	0.87	0.20	1.98	1.77	Roman	3.08	3f

BVK11	1430	Area B	100/185	1430	n/a	Layer	Levelling layer	Firm, grey black, silt sand	0.60	4.07	0.10	1.93	1.64	Roman	3.08	3e
BVK11	1431	Area B	105/180	n/a	n/a	Fill	Fill of pit [1432]	Firm, mid grey brown, sand silt	0.27	0.35	0.17	1.98	n/a	Roman	3.07	3e
BVK11	1432	Area B	105/180	1432	n/a	Cut	Pit	Shape unknown, steep sides, concave base	0.27	0.35	0.17	1.98	1.81	Roman	3.07	3e
BVK11	1433	Area A1	105/195	n/a	46	Fill	Fill of pit [1434]	Firm, mid grey brown, clay silt	1	0.3	0.26	1.55	n/a	Post Roman	3	4b
BVK11	1434	Area A1	105/195	1434; post-ex	46	Cut	Pit	Shape unknown, gradual sides, base not present	1	0.5	0.4	1.55	1.22	Post Roman	3	4b
BVK11	1435	Area A1	105/195	post-ex	46	Fill	Fill of pit [1434]	Firm, mid green brown, silt clay sand	1	0.5	0.14	1.55	n/a	Post Roman	3	4b
BVK11	1436	Area B	95/185	1436	n/a	Layer	Dump/levelling	Friable, dark grey, sand silt	2.00	0.96	0.07	1.95	1.94	Roman	3.10	3e
BVK11	1437	Area A1	105/195	1437	46	Cut	Pit	Shape unknown, gradual sides, flat base	0.8	0.3	0.4	1.35	1.16	Post Roman	3	4b
BVK11	1438	Area A1	105/195	n/a	46	Fill	Fill of pit [1437]	Firm, dark grey, sand silt clay	0.8	0.3	0.4	1.35	n/a	Post Roman	3	4b
BVK11	1439	Area A1	100/200	1439	40	Cut	Robber cut	Linear, gradual sides, concave base	0.18	4.01	0.13	1.98	1.85	Roman	2b	3g

BVK11	1440	Area A1	100/200	1372	38	Masonry	Brick floor of flue/drain [1372]	Brick & op. Sig.	2	0.5	0.14	1.88	1.55	Roman	2b	3f
BVK11	1441	Area B	100/185; 105/185	1441	28; 77	Layer	Occupation layer	Soft, mid grey green, clay silt	2.38	4.98	0.10	1.95	1.83	Roman	3.06	3d
BVK11	1442	Area A1	100/200	1372	38	Masonry	Brick wall of flue/drain [1372]	Brick & op. Sig.	1.73	0.32	0.13	2.11	1.68	Roman	2b	3f
BVK11	1443	Area A1	100/200	1372	38; 40	Masonry	Tile wall of drain/flue [1372]	Red tile, Op. Sig.	2.17	0.3	0.42	2.2	1.72	Roman	2b	3f
BVK11	1444	Area B	95/185; 100/185	1444	n/a	Layer	Burnt horizon	Soft, dark grey, silt clay charcoal	2.20	4.20	0.10	1.91	1.58	Roman	3.07	3e
BVK11	1445	Area B	100/185	n/a	n/a	Fill	Fill of pit [1446]	Friable, mid brown grey, sand silt	0.50	0.50	0.15	1.93	n/a	Roman	3.06	3d
BVK11	1446	Area B	100/185	1446	n/a	Cut	Pit	Round, vertical sides, flat base	0.50	0.50	0.15	1.93	1.77	Roman	3.06	3d
BVK11	1447	Area A1	100/200	1447	38; 40	Masonry	Tile cover of drain/flue [1372]	Red tile, brown white crushed chalk & CBM mortar	1.32	0.42	0.2	2.15	1.98	Roman	2b	3f
BVK11	1448	Area A1	105/195	1448	n/a	Cut	Pit	Shape unknown, gradual sides, base not present	1.1	0.5	0.13	1.59	1.46	Post Roman	3	4b
BVK11	1449	Area A1	105/195	n/a	n/a	Fill	Fill of pit [1448]	Loose, mid green brown, clay silt	1.1	0.5	0.13	1.59	n/a	Post Roman	3	4b
BVK11	1450	Area A1	100/200	n/a	n/a	Fill	Fill of robber cut [1439]	Firm, dark yellow brown, sand clay	0.18	4.01	0.13	1.98	n/a	Roman	2b	3g

								gravel								
BVK11	1451	Area B	95/185	1451	n/a	Layer	Levelling layer	Soft, green grey, clay silt	1.95	0.97	0.06	1.91	1.81	Roman	3.10	3e
BVK11	1452	Area A1	105/195	1452	46	Layer	Levelling layer - Room 3	Loose, mid yellow brown, gravel sand	2.4	1.2	0.25	1.67	n/a	Roman	3	3f
BVK11	1453	Area A1	105/200	1453	n/a	Layer	Mortar surface/bedding - Room 2	Friable, pink yellow white, mortar	1.7	3.24	0.11	1.83	1.76	Roman	2b	3g
BVK11	1454	Area A1	105/195	1454	46	Layer	Opus Signinum surface - Room 3	Op. Sig.	2.06	0.86	0.12	1.46	1.41	Roman	2b	3c
BVK11	1455	Area B	95/185	n/a	n/a	Fill	Fill of posthole [1456]	Friable, dark black brown, silt clay	0.30	0.30	0.08	1.83	n/a	Roman	3.08	3d
BVK11	1456	Area B	95/185	1456	n/a	Cut	Posthole	Sub-round, concave sides, concave base	0.30	0.30	0.08	1.83	1.75	Roman	3.08	3d
<i>BVK11</i>	<i>1457</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
<i>BVK11</i>	<i>1458</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1459	Area B	100/180; 100/185	n/a	72	Fill	Fill of pit [1460]	Loose, dark orange brown, clay silt	2.10	0.39	0.68	1.95	1.89	Roman	3.08	3f
BVK11	1460	Area B	100/180; 100/185	1460	72	Cut	Pit	Sub-rectangular, near vertical sides, flat base	2.10	0.39	0.68	1.95	1.20	Roman	3.08	3f
BVK11	1461	Area B	100/180; 105/180; 105/185	1461	72; 77	Layer	Levelling layer	Friable, black & light grey, charcoal & sand mortar	2.00	1.90	0.10	1.94	1.80	Roman	3.06	3d
BVK11	1462	Area B	100/185	n/a	n/a	Fill	Fill of stakehole	Soft, dark grey, silt	0.14	0.10	0.24	1.86	n/a	Roman	3.07	3e

							[1477]									
BVK11	1463	Area B	100/185	n/a	n/a	Fill	Fill of stakehole [1464]	Soft, dark grey brown, clay silt	0.09	0.09	0.20	1.86	n/a	Roman	3.07	3e
BVK11	1464	Area B	100/185	1464	n/a	Cut	Stakehole	Round, steep sides, pointed base	0.09	0.09	0.20	1.86	1.66	Roman	3.07	3e
BVK11	1465	Area B	100/185	n/a	n/a	Fill	Fill of pit [1466]	Friable, dark grey, sand silt	0.58	0.60	0.33	1.86	1.82	Roman	3.07	3e
BVK11	1466	Area B	100/185	1466	n/a	Cut	Pit	Round, gradual sides, base not present	0.58	0.60	0.33	1.86	1.53	Roman	3.07	3e
BVK11	1467	Area A1	105/200	1467; post-ex	47	Layer	Levelling layer	Soft, light grey brown, silt clay	1.7	3.24	0.1	1.77	1.72	Roman	2b	3g
BVK11	1468	Area B	95/185	1468	n/a	Layer	Dump/levelling	Soft, light grey, clay silt	1.84	0.93	0.1	1.85	1.68	Roman	3.08	3d
BVK11	1469	Area A1	105/200	post-ex	47	Fill	Fill of robber cut [1470]	Soft, mid grey brown, clay sand silt	1.64	1.6	0.61	1.85	n/a	Roman	2b	3g
BVK11	1470	Area A1	105/200	1470; post-ex	47	Cut	Robber cut	Linear & return, near vertical sides, irregular base	1.64	1.6	0.61	1.85	1.24	Roman	2b	3g
BVK11	1471	Area B	100/185; 105/185	1471	n/a	Layer	Levelling layer	Loose, light brown grey, ash silt	1.36	3.12	0.14	1.90	1.84	Roman	3.06	3d
BVK11	1472	Area A1	105/195	1472	n/a	Cut	Pit	Shape unknown, sides not present, base not present	0.8	1.1	0.15	1.37	1.22	Roman	3	3f
BVK11	1473	Area A1	105/195	n/a	n/a	Fill	Fill of pit [1472]	Firm, dark grey brown,	0.8	1.1	0.15	1.37	n/a	Roman	3	3f

								gravel silt clay								
BVK11	1474	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	1475	Area B	95/185	n/a	n/a	Fill	Fill of posthole [1476]	Soft, grey green, clay silt	0.31	0.40	0.34	1.87	n/a	Roman	3.07	3d
BVK11	1476	Area B	95/185	1476	n/a	Cut	Posthole	Sub-round, steep sides, concave base	0.31	0.40	0.34	1.87	1.53	Roman	3.07	3d
BVK11	1477	Area B	100/185	1464	n/a	Cut	Stakehole	Sub-round, steep sides, pointed base	0.14	0.10	0.24	1.86	1.62	Roman	3.07	3e
BVK11	1478	Area A1	105/195	1478	25; 46	Layer	Levelling layer	Soft, grey green, silt clay	1.46	0.9	0.05	1.34	n/a	Roman	2b	3c
BVK11	1479	Area B	105/180; 105/185	1479	77	Layer	Dump/levelling	Friable, dark green grey, sand silt	2.50	2.00	0.05	1.76	1.71	Roman	3.06	3d
BVK11	1480	Area A1	105/195	1480	46	Layer	Levelling layer - Room 3	Friable, brown yellow, clay sand	0.5	0.7	0.08	1.29	n/a	Roman	2b	3b
BVK11	1481	Area A1	105/195	1481	n/a	Cut	Pit	Shape unknown, steep sides, flat base	1	0.14	0.21	1.41	1.2	Roman	3	3f
BVK11	1482	Area A1	105/195	n/a	n/a	Fill	Fill of pit [1481]	Firm, mid grey brown, silt clay	1	0.14	0.21	1.41	n/a	Roman	3	3f
BVK11	1483	Area A1	105/195	1483	n/a	Layer	Levelling layer	Firm, green grey, silt clay	1.44	0.98	0.07	1.31	n/a	Roman	2b	3b
BVK11	1484	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void		
BVK11	1485	Area B	95/185	n/a	n/a	Fill	Fill of posthole [1486]	Friable, mid grey, silt clay	0.14	0.54	0.12	1.74	n/a	Roman	3.07	3d
BVK11	1486	Area B	95/185	1486	n/a	Cut	Posthole	Round (?), concave sides, flat base	0.14	0.54	0.12	1.74	1.62	Roman	3.07	3d

BVK11	1487	Area B	95/185	n/a	n/a	Fill	Fill of posthole [1488]	Friable, mid grey, silt clay	0.50	0.34	0.12	1.74	n/a	Roman	3.07	3d
BVK11	1488	Area B	95/185	1488	n/a	Cut	Posthole	Round (?), concave sides, concave base	0.50	0.34	0.12	1.74	1.62	Roman	3.07	3d
BVK11	1489	Area B	95/185	n/a	n/a	Fill	Fill of pit [1490]	Soft, grey, clay silt	1.10	0.45	0.13	1.82	n/a	Roman	3.07	3d
BVK11	1490	Area B	95/185	1490	n/a	Cut	Pit	Round (?), gradual sides, slopping base	1.10	0.45	0.13	1.82	1.69	Roman	3.07	3d
BVK11	1491	Area B	95/185	n/a	n/a	Fill	Fill of stakehole [1492]	Loose, mid brown yellow, silt sand	0.09	0.09	0.11	1.73	n/a	Roman	3.07	3d
BVK11	1492	Area B	95/185	1492	n/a	Cut	Stakehole	Round, vertical sides, concave base	0.09	0.09	0.11	1.73	1.62	Roman	3.07	3d
BVK11	1493	Area A1	105/200	1493	46; 47	Layer	Opus Signinum surface/bedding	Op. Sig.	1.6	3.4	0.04	1.65	1.39	Roman	2b	3f
BVK11	1494	Area B	95/185	n/a	n/a	Fill	Fill of posthole [1495]	Friable, mid grey, silt clay	0.39	0.34	0.25	1.85	n/a	Roman	3.07	3d
BVK11	1495	Area B	95/185	1495	n/a	Cut	Posthole	Round, concave sides, flat base	0.39	0.34	0.25	1.85	1.60	Roman	3.07	3d
BVK11	1496	Area B	100/185; 105/180; 105/185	1496	n/a	Layer	Dump/levelling	Loose, mid red brown grey, sand silt CBM	2.22	4.66	0.30	1.91	1.73	Roman	3.06	3d
BVK11	1497	Area B	100/185	1497	n/a	Layer	Mortar/gravel surface/bedding	Hard, mid grey green	1.24	3.80	0.01	1.77	1.60	Roman	3.06	3d

							g	yellow, mortar gravel									
BVK11	1498	Area B	95/185	1498	n/a	Layer	Brickearth layer	Firm, mid brown yellow, sand silt	1.64	1.03	0.13	1.88	1.73	Roman	3.07	3d	
BVK11	1499	Area B	100/185	1499	n/a	Layer	Opus Signinum surface/bedding	Op. Sig.	2.10	1.20	0.07	1.87	1.66	Roman	3.06	3c	
BVK11	1500	Area B	95/185; 100/185	1500	n/a	Layer	Levelling layer	Loose, light white orange brown, gravel	1.10	2.90	0.14	1.86	1.63	Roman	3.07	3e	
BVK11	1501	Area B	100/185	1501	n/a	Layer	Occupation layer	Soft, dark grey, sand silt	1.08	2.53	0.12	1.70	1.58	Roman	3.06	3c	
BVK11	1502	Area B	105/180; 105/185	1502	n/a	Layer	Brickearth layer	Firm, light orange brown grey, sand clay silt	1.20	1.50	0.10	1.81	1.68	Roman	3.06	3d	
BVK11	1503	Area B	100/185	1503	n/a	Layer	Levelling layer	Soft, dark grey, silt sand	0.30	1.30	NFE	1.56	n/a	Roman	3.06	3c	
BVK11	1504	Area B	95/185	1504	n/a	Layer	Occupation layer	Soft, mid grey, sand silt	1.48	0.89	0.04	1.84	1.65	Roman	3.04	3d	
BVK11	1505	Area B	95/185	1505	n/a	Layer	Dump/levelling	Firm, mid grey, clay silt	0.70	1.02	0.09	1.73	1.62	Roman	3.04	3d	
BVK11	1506	Area B	95/185	1506	n/a	Cut	Construction cut for [1422]	Linear, sides not present, base not present	2.80	0.66	NFE	1.76	n/a	Roman	3.12	3e	
<i>BVK11</i>	<i>1507</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
<i>BVK11</i>	<i>1508</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>			
BVK11	1509	Area A1	105/200	1509	46; 47	Layer	Levelling layer	Soft, mid yellow brown, clay sand silt	1.6	3.5	0.33	1.53	1.42	Roman	2b	3e	
BVK11	1510	Area B	100/180; 105/180;	n/a	n/a	Fill	Fill of linear cut [1511]	Loose, dark orange	2.60	0.60	0.25	1.81	n/a	Roman	3.06	3d	

			105/185					brown, sand silt								
BVK11	1511	Area B	100/180; 105/180; 105/186	1511	n/a	Cut	Linear cut	Linear, near vertical sides, flat base	2.60	0.60	0.25	1.81	1.45	Roman	3.06	3d
BVK11	1512	Area A1	100/200	1512	n/a	Masonry	Brick flue/drain foundation	Red tile, Op. Sig.	1.27	0.24	0.4	1.81	1.53	Roman	2b	3f
BVK11	1513	Area B	95/185; 100/185	1513	n/a	Layer	Dump/levelling	Loose, white grey, clay mortar	0.45	0.85	0.05	1.69	1.58	Roman	3.06	3d
BVK11	1514	Area B	95/185	1514	n/a	Layer	Gravel surface	Friable, mid yellow brown, clay sand gravel	1.25	1.05	0.1	1.81	1.61	Roman	3.04	3d
BVK11	1515	Area B	105/180	1515	20	Layer	Dump/levelling	Friable, black, sandy silt charcoal	0.40	0.70	0.04	2.06	2.05	Roman	3.07	3e
BVK11	1516	Area B	105/180	1516	20	Layer	Brickearth layer	Firm, mid orange brown, sand clay	1.10	0.60	0.19	2.02	2.01	Roman	3.07	3e
BVK11	1517	Area B	105/180	1517	20	Layer	Dump/levelling	Friable, mid brown green, silt sand	1.10	0.60	0.40	1.84	1.83	Roman	3.06	3d
BVK11	1518	Area B	105/180	1518	n/a	Layer	Demolition layer	Loose, light red orange brown, CBM mortar	0.60	0.60	0.12	1.96	1.83	Roman	3.06	3d
BVK11	1519	Area B	105/180	1519	20	Layer	Brickearth layer	Firm, light yellow green brown, silt clay	1.12	0.60	0.18	1.76	1.68	Roman	3.05	3d
BVK11	1520	Area B	105/180	1520	n/a	Layer	Dump/levelling	Soft, mid brown grey, sand silt clay	1.12	0.60	0.25	1.56	n/a	Roman	3.04	3c
BVK11	1521	Area B	105/180	1521	20	Layer	Levelling layer	Firm, light	1.12	0.60	0.05	1.34	1.32	Roman	3.04	3c

								brown grey, sand silt								
BVK11	1522	Area B	105/180	1522	n/a	Layer	Dump/levelling	Friable, dark black, sand silt	1.12	0.60	0.08	1.27	n/a	Roman	3.04	3c
BVK11	1523	Area B	105/180	1523	n/a	Layer	Levelling layer	Soft, light brown grey, silt sand	1.12	0.60	NFE	1.20	1.19	Roman	3.01	3a
BVK11	1524	Area B	105/180	1524	43	Layer	Brickearth layer	Firm, mid orange brown grey, sand clay silt	1.00	0.90	0.05	1.87	n/a	Roman	3.05	3d
BVK11	1525	Area B	95/185; 100/180; 100/185; 105/180; 105/185	1525	28; 72; 77	Layer	Brickearth layer	Firm, mid orange brown, sand clay silt	1.80	5.10	0.10	1.88	1.73	Roman	3.05	3d
BVK11	1526	Area A1	100/200	1526; post-ex	38	Layer	Levelling layer	Firm, dark green grey, clay silt	1.7	3.62	0.2	2.01	1.44	Roman	2b	3f
BVK11	1527	Area B	95/185; 100/180; 100/185	1527	n/a	Layer	Brickearth layer	Firm, light brown yellow, clay sand silt	4.80	2.10	0.19	2.03	1.65	Roman	3.05	3d
BVK11	1528	Area B	95/185	1528	n/a	Layer	Brickearth wall	Soft, yellow orange pink, clay silt	0.58	0.94	0.07	1.67	1.64	Roman	3.02	3b
BVK11	1529	Area A1	100/200	1529	n/a	Layer	Dump/levelling	Soft, dark green grey, sand silt brickearth	1.61	1.28	0.1	1.99	n/a	Roman	2b	3f
BVK11	1530	Area A1	95/200	1530	n/a	Layer	Dump/levelling	Soft, dark green grey, sand silt	0.16	0.6	0.05	1.95	n/a	Roman	2b	3g
BVK11	1531	Area B	105/185	1531	n/a	Layer	Dump/levelling	Loose, light white grey, sand mortar	0.70	0.90	0.03	1.73	n/a	Roman	3.05	3d
BVK11	1532	Area B	100/185; 105/180;	1532	72; 77	Layer	Levelling layer	Friable, dark green brown,	5.60	4.90	0.20	1.79	1.59	Roman	3.04	3d

			105/185					sand silt								
BVK11	1533	Area A1	105/195	n/a	46	Layer	Dump/levelling (?)	Firm, mid grey brown, silt clay	0.21	n/a	0.08	1.26	n/a	Roman	2b	3f
BVK11	1534	Area B	95/185	1534	n/a	Layer	Dump/levelling	Friable, dark grey black, sand silt - organic	1.49	0.98	0.11	1.71	1.62	Roman	3.03	3c
BVK11	1535	Area A1	95/200; 100/200	1535	n/a	Layer	Mortar surface/bedding - Room 1	Hard, pale green white pink, mortar crushed CBM	2.03	2.6	0.05	2.11	1.84	Roman	2b	3e
BVK11	1536	Area A1	100/200	1536	n/a	Layer	Mortar surface/bedding - Room 1	Hard, mid green white pink, mortar crushed CBM	1.2	2.36	0.02	1.75	1.37	Roman	2b	3e
BVK11	1537	Area B	95/180; 95/185; 100/185	1537	n/a	Layer	Dump/levelling	Firm, dark grey green, clay silt sand	3.50	3.40	0.10	1.87	1.54	Roman	3.04	3d
BVK11	1538	Area B	95/185; 100/180; 100/185; 105/180; 105/185	1538	25; 28; 77	Layer	Levelling layer	Loose, mid brown grey, silt sand clay	5.70	5.06	0.25	1.73	1.55	Roman	3.04	3c
BVK11	1539	Area A1	95/200; 100/200	1539; post-ex	n/a	Layer	Levelling layer	Soft, dark green grey, sand silt	1.78	5.1	0.15	2.09	1.36	Roman	2b	3e
BVK11	1540	Area B	100/185; 105/185	n/a	77	Fill	Fill of drain [1541]	Friable, mid brown grey, silt clay	4.14	1.60	0.30	1.65	n/a	Roman	3.04	3d
BVK11	1541	Area B	100/185; 105/185	1541	77	Cut	Drain	Linear, concave sides, flat base	4.14	1.60	0.30	1.65	1.35	Roman	3.04	3d
BVK11	1542	Area B	105/185	n/a	n/a	Fill	Fill of pit [1543]	Loose, mid yellow grey, sand gravel	0.60	0.60	0.17	1.58	n/a	Roman	3.04	3d
BVK11	1543	Area B	105/186	1543	n/a	Cut	Pit	Sub-round,	0.60	0.60	0.17	1.58	1.45	Roman	3.04	3d

								concave sides, base not present								
BVK11	1544	Area B	95/180; 95/185	1544	n/a	Layer	Dump/levelling	Loose, grey red brown, silt clay	4.50	1.00	0.04	1.91	1.63	Roman	3.04	3d
BVK11	1545	Area B	95/180; 95/185; 100/180; 100/185	1545	n/a	Layer	Dump/levelling	Soft, dark brown green, clay silt	4.10	2.16	0.13	1.86	1.71	Roman	3.04	3d
BVK11	1546	Area A1	95/200; 100/200	1545	n/a	Layer	Dump/levelling	Hard, mid green grey, clay silt sand gravel	2	1.1	0.1	2.05	1.73	Roman	1	3e
BVK11	1547	Area A1	100/200	n/a	n/a	Fill	Fill of linear cut [1548]	Soft, dark green grey, sand silt	1.8	0.59	0.12	1.78	n/a	Roman	1	3c
BVK11	1548	Area A1	100/200	1548	n/a	Cut	Linear cut	Linear, vertical sides, flat base	1.8	0.59	0.12	1.78	1.67	Roman	1	3c
BVK11	1549	Area A1	100/200	1549; post-ex	n/a	Layer	Levelling layer	Firm, mid yellow brown, clay gravel sand	1.79	2.7	0.1	1.8	1.27	Roman	1	3c
BVK11	1550	Area A1	95/200; 100/200	1550	n/a	Layer	Levelling layer	Firm, mid yellow brown, clay gravel sand	2.12	1.1	0.07	1.87	1.74	Roman	1	3c
BVK11	1551	Area A1	95/200; 100/200	1551; post-ex	n/a	Layer	Occupation layer	Firm, dark green grey, silt clay charcoal	2.12	4.19	0.1	1.74	1.25	Roman	1	3c
BVK11	1552	Area A1	95/200; 100/200	1552; post-ex	n/a	Layer	Levelling layer	Loose, mid orange yellow, gravel sand	2.09	4.19	0.1	1.7	1.32	Roman	1	3b
BVK11	1553	Area A1	95/200;	1553;	n/a	Layer	Levelling layer	Loose, mid	1.15	3.71	0.1	1.47	1.29	Roman	1	3b

			100/200	post-ex				yellow, sand								
BVK11	1554	Area A1	95/200; 100/200	n/a	n/a	Fill	Fill of pit [1555]	Loose, mid grey brown, sand silt	0.8	0.8	0.26	1.44	n/a	Roman	1	3b
BVK11	1555	Area A1	95/200; 100/200	1555	n/a	Cut	Pit	Shape unknown, gradual sides, concave base	0.8	0.8	0.26	1.44	1.18	Roman	1	3b
BVK11	1556	Area A1	95/200; 100/200	1556; post- ex	n/a	Layer	Occupation layer	Soft, dark brown grey, silt clay	1.16	2.78	0.12	1.36	1.28	Roman	1	3b
BVK11	1557	Area A1	100/200	n/a	n/a	Fill	Fill of pit [1558]	Soft, mid grey brown, clay silt	0.88	0.72	0.2	1.68	n/a	Roman	1	3b
BVK11	1558	Area A1	100/200	1558	n/a	Cut	Pit	Sub-round, concave sides, flat base	0.88	0.72	0.2	1.68	1.48	Roman	1	3b
BVK11	1559	Area B	95/180; 95/185; 100/180; 100/185	1559	n/a	Layer	Gravel surface	Loose, dark orange yellow, silt sand	2.75	2.90	0.18	1.73	1.66	Roman	3.04	3d
BVK11	1560	Area A1	95/200; 100/200	1560; post- ex	n/a	Layer	Burnt horizon	Firm, black orange red, ash sand silt clay	1.1	2.46	n/a	1.22	n/a	Roman	1	3b
BVK11	1561	Area A1	100/200	1561; post- ex	n/a	Cut	Pit	Round, gradual sides, concave base	0.45	1	0.24	1.44	1.2	Roman	1	3b
BVK11	1562	Area A1	100/200	n/a	n/a	Fill	Fill of pit [1561]	Soft, light yellow grey, silt sand	0.45	1	0.24	1.44	n/a	Roman	1	3b
BVK11	1563	Area A1	105/200	post-	n/a	Fill	Fill of pit	Soft, dark	0.72	1.94	n/a	1.17	n/a	Roman	1	3e

				ex			[1564]	yellow brown, sand clay								
BVK11	1564	Area A1	105/200	post-ex	n/a	Cut	Pit (?)	Shape unknown, sides not present, base not present	0.72	1.94	n/a	1.17	n/a	Roman	1	3e
BVK11	1565	Area A1	105/200	1566; post-ex	47	Fill	Fill of construction cut [1566]	Firm, grey brown, stone sand clay	0.9	0.53	n/a	1.21	n/a	Roman	2a	3e
BVK11	1566	Area A1	105/200	1566; post-ex	n/a	Cut	Construction cut for [525]	Linear, sides not present, base not present	0.9	0.53	n/a	1.21	n/a	Roman	2a	3e
BVK11	1567	Area A1	105/200	post-ex	n/a	Layer	Clay layer	Firm, mid yellow brown, sandy clay	0.38	0.34	n/a	1.21	n/a	Roman	1	3e
BVK11	1568	Area A1	105/200	post-ex	n/a	Layer	Burnt horizon	Soft, black red grey, ash brickearth	0.4	0.9	n/a	1.21	n/a	Roman	1	3b
BVK11	1569	Area A1	105/200	post-ex	n/a	Layer	Levelling layer (?)	Loose, yellow, sand	0.75	0.5	n/a	1.22	n/a	Roman	1	3e
BVK11	1570	Area A1	105/200	post-ex	n/a	Layer	Levelling layer (?)	Loose, yellow, sand	0.22	1.22	n/a	1.18	n/a	Roman	1	3e
<i>BVK11</i>	<i>1571</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1572	Area A1	105/200	post-ex	n/a	Layer	Dump/levelling	Soft, mid grey brown, clay silt	1.4	2.7	n/a	1.17	n/a	Roman	1	3e
BVK11	1573	Area A1	105/200	1574; post-ex	n/a	Fill	Fill of construction cut [1574]	Firm, light yellow, stones mortar	0.3	2.7	n/a	1.18	n/a	Roman	2a	3e
BVK11	1574	Area A1	105/200	1574; post-ex	n/a	Cut	Construction cut for [525]	Linear, sides not present, base not present	0.3	2.7	n/a	1.18	n/a	Roman	2a	3e
BVK11	1575	Area B	100/180	n/a	n/a	Fill	Fill of posthole [1576]	Loose, grey, sand silt	0.31	0.30	0.44	1.62	n/a	Roman	3.03	3c

BVK11	1576	Area B	100/180	1576	n/a	Cut	Posthole	Sub-square, steep sides, concave base	0.31	0.30	0.44	1.62	1.18	Roman	3.03	3c
BVK11	1577	Area B	100/180	n/a	n/a	Fill	Fill of posthole [1578]	Loose, grey, sand silt	0.28	0.32	0.14	1.57	n/a	Roman	3.03	3c
BVK11	1578	Area B	100/180	1576	n/a	Cut	Posthole	Sub-square, steep sides, flat base	0.28	0.32	0.14	1.57	1.43	Roman	3.03	3c
BVK11	1579	Area B	95/185	1579	n/a	Cut	Posthole	Shape unknown, steep sides, flat base	0.50	0.08	0.03	1.65	1.60	Roman	3.03	3c
BVK11	1580	Area B	95/185	n/a	n/a	Fill	Fill of posthole [1579]	Friable, dark black brown, silt sand	0.50	0.08	0.03	1.65	n/a	Roman	3.03	3c
BVK11	1581	Area A1	105/195	post-ex	n/a	Layer	Burnt horizon	Soft, black brown, silt clay charcoal	0.63	0.42	n/a	1.23	n/a	Roman	2c	3b
BVK11	1582	Area A1	105/195	post-ex	n/a	Layer	Demolition layer	Loose, light red white, mortar CBM	0.9	1.2	n/a	1.22	n/a	Roman	2c	3b
<i>BVK11</i>	<i>1583</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1584	Area B	95/185; 100/185	n/a	n/a	Fill	Fill of working hollow [1586]	Firm, grey brown green, silt sand brickearth	1.00	2.00	0.50	1.60	1.34	Roman	3.03	3c
BVK11	1585	Area B	95/185; 100/185	n/a	n/a	Fill	Fill of working hollow [1586]	Firm, dark grey black, silt clay	1.00	2.00	0.20	1.54	1.24	Roman	3.03	3c
BVK11	1586	Area B	95/185; 100/185	1586	n/a	Cut	Working hollow	Linear, gradual sides, base not present	0.90	4.12	0.40	1.59	1.19	Roman	3.03	3c
BVK11	1587	Area B	95/180; 95/185; 100/180; 100/185	1587	n/a	Layer	Dump/levelling	Soft, yellow grey, sand clay silt	2.95	2.50	0.06	1.66	1.56	Roman	3.03	3c

BVK11	1588	Area B	95/185	n/a	n/a	Fill	Fill of posthole [1589]	Friable, dark brown black, clay silt	0.10	0.24	0.13	1.61	n/a	Roman	3.03	3c
BVK11	1589	Area B	95/185	1589	n/a	Cut	Posthole	Round (?), concave sides, concave base	0.10	0.24	0.13	1.61	1.48	Roman	3.03	3c
<i>BVK11</i>	<i>1590</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>	<i>Void</i>		
BVK11	1591	Area B	100/185; 105/185	n/a	n/a	Fill	Fill of working hollow [1592]	Firm, dark black grey, silt clay	0.90	1.82	0.15	1.51	1.47	Roman	3.03	3c
BVK11	1592	Area B	100/185; 105/185	1592	n/a	Cut	Working hollow	Irregular, irregular sides, irregular base	0.90	1.82	0.43	1.57	1.14	Roman	3.03	3c
BVK11	1593	Area B	95/180; 95/185; 100/180; 100/185	1593	25; 72; 77	Layer	Dump/levelling	Soft, grey red brown, clay silt sand gravel	5.68	5.06	0.25	1.56	1.29	Roman	3.03	3c
BVK11	1594	Area A1	105/195	n/a	48	Masonry	Chalk wall (N/S)	Chalk (some ragstone & Roman tile), greyish yellow mortar	1.57	0.95	n/a	2.2	1.31	Medieval	4c	5a
BVK11	1595	Area A1	105/195	n/a	46	Cut	Construction cut for [525]	Shape unknown, steep sides, base not present	0.1	n/a	0.2	1.46	1.26	Roman	2b	3f
BVK11	1596	Area A1	105/195	n/a	46	Fill	Fill of construction cut [1595]	Firm, light brown grey, silt clay	0.1	n/a	0.2	1.46	n/a	Roman	2b	3f
BVK11	1597	Area A1	105/195	post-ex	n/a	Layer	Occupation layer (?)	Firm, dark black brown, silt clay	2	1.3	n/a	1.18	n/a	Roman	2c	3b
BVK11	1598	Area B	100/185;	n/a	n/a	Fill	Fill of working	Firm, mid	0.90	1.82	0.12	1.46	1.32	Roman	3.03	3c

			105/185				hollow [1592]	green grey, sand silt								
BVK11	1599	Area A1	105/195	post-ex	n/a	Layer	Dump/levelling	Firm, dark black brown, silt clay	1.86	2.1	n/a	1.25	n/a	Roman	2c	3b
BVK11	1600	Area B	95/180; 95/185; 100/180; 100/185	1600	n/a	Layer	Brickearth layer	Firm, light yellow brown, clay sand silt	2.85	3.10	0.23	1.61	1.54	Roman	3.03	3c
BVK11	1601	Area B	95/180; 95/185	n/a	n/a	Fill	Fill of gully [1602]	Firm, dark brown yellow, silt clay brickearth sand	1.80	0.36	0.17	1.59	1.57	Roman	3.03	3c
BVK11	1602	Area B	95/180; 95/185	1602	n/a	Cut	Gully?	Linear, irregular sides, flat base	1.80	0.36	0.17	1.59	1.42	Roman	3.03	3c
BVK11	1603	Area A1	95/200; 100/200	1603	n/a	Layer	Dump/levelling	Soft, dark grey, sand silt	2.02	1.05	0.01	1.87	n/a	Roman	1	3c
BVK11	1604	Area A1	95/200; 100/200	1604	n/a	Layer	Dump/levelling	Hard, mid green grey brown, clay silt sand gravel	2	1.1	0.01	1.87	1.73	Roman	1	3c
BVK11	1605	Area B	95/180; 95/185; 100/185	1605	n/a	Layer	Burnt horizon	Friable, dark grey, silt charcoal	1.66	2.28	0.06	1.45	1.39	Roman	3.02	3b
BVK11	1606	Area B	100/180; 100/185; 105/180; 105/185	1606	72	Layer	Dump/levelling	Soft, mid grey red, clay	5.20	4.50	NFE	1.30	1.18	Roman	3.01	3a
BVK11	1607	Area B	100/180; 100/185	1607	72	Layer	Dump/levelling	Firm, mid brown red, gravel clay	3.76	1.18	NFE	1.32	1.20	Roman	3.01	3a
BVK11	1608	Area B	105/180; 105/185	1608	69; 70	Fill	Fill of pit [1624]	Soft, black red brown,	0.90	0.88	0.05	1.37	1.29	Roman	3.02	3b

								sand silt charcoal - copper waste								
BVK11	1609	Area B	105/180; 105/185	1609	69; 70	Fill	Fill of pit [1624]	Friable, light brown grey red, clay brickearth - copper waste	0.96	0.64	0.02	1.34	1.30	Roman	3.02	3b
BVK11	1610	Area B	105/180; 105/185	1610	70	Fill	Fill of pit [1624]	Friable, light brown grey, sand clay - copper waste	1.92	1.10	0.05	1.33	1.25	Roman	3.02	3b
BVK11	1611	Area B	105/180; 105/185	1611	69	Fill	Fill of pit [1624]	Soft, mid grey orange, sand silt clay - copper waste	0.32	0.32	0.02	1.32	n/a	Roman	3.02	3b
BVK11	1612	Area B	105/180; 105/185	1612	69; 70	Fill	Fill of pit [1624]	Friable, light brown grey red yellow, sand silt clay - copper waste	1.04	0.70	0.03	1.34	1.27	Roman	3.02	3b
BVK11	1613	Area B	105/180; 105/185	1613	70	Fill	Fill of pit [1624]	Friable, mid red yellow, silt clay sand - copper waste	0.36	0.20	0.03	1.30	n/a	Roman	3.02	3b
BVK11	1614	Area B	95/180; 95/185; 100/180; 100/185	1614	67; 68	Layer	Hearth collapse	Firm, light yellow brown red, sand clay silt	1.02	1.22	0.12	1.49	1.37	Roman	3.02	3b
BVK11	1615	Area B	95/180; 95/185; 100/180; 100/185	1615	67; 68	Layer	Hearth wall	Friable, red, sand silt	0.35	0.37	0.10	1.48	1.42	Roman	3.02	3b
BVK11	1616	Area B	95/180; 95/185;	1616; 1628	67	Layer	Hearth wall	Friable, red, silt clay	0.56	0.58	0.10	1.47	1.38	Roman	3.02	3b

			100/180; 100/185													
BVK11	1617	Area B	105/185	n/a	n/a	Fill	Fill of pit [1622]	Firm (?), dark grey, ash sand clay charcoal	0.40	0.80	0.03	1.27	n/a	Roman	3.02	3b
BVK11	1618	Area B	105/185	1618	n/a	Cut	Pit	Sub-round, gradual sides, base not present	2.50	1.30	0.11	1.31	1.20	Roman	3.02	3b
BVK11	1619	Area B	105/185	n/a	28; 77	Fill	Fill of pit [1618]	Firm, mid grey brown, sand silt - copper waste	2.50	1.30	0.11	1.31	n/a	Roman	3.02	3b
BVK11	1620	Area B	95/180; 95/185; 100/180; 100/185	1628	68	Layer	Hearth wall	Soft, red purple, silt clay	0.20	0.29	0.17	1.49	1.37	Roman	3.02	3b
BVK11	1621	Area B	105/185	n/a	n/a	Fill	Fill of pit [1622]	Firm, green grey, sand silt - copper waste	0.40	0.80	0.05	1.24	n/a	Roman	3.02	3b
BVK11	1622	Area B	105/185	1622	n/a	Cut	Pit	Sub-rectangular, steep sides, base not present	0.40	0.80	0.07	1.27	1.20	Roman	3.02	3b
BVK11	1623	Area B	105/180; 105/185	1623	69; 70	Fill	Fill of pit [1624]	Soft, mid grey red, silt clay - copper waste	1.42	1.32	0.07	1.26	1.20	Roman	3.02	3b
BVK11	1624	Area B	105/180; 105/185	1624	69; 70	Cut	Pit	Round, concave sides, concave base	1.58	1.28	0.20	1.33	1.16	Roman	3.02	3b
BVK11	1625	Area B	95/180; 95/185	1614	68	Layer	Hearth collapse	Firm, light yellow brown,	0.30	0.08	0.08	1.42	1.39	Roman	3.02	3b

								silt clay								
BVK11	1626	Area B	95/180; 95/185	1614	68	Layer	Hearth collapse	Soft, light yellow brown, silt clay	0.60	0.30	0.14	?	?	Roman		3b
BVK11	1627	Area B	95/180; 95/185; 100/180; 100/185	1627	n/a	Layer	Levelling layer	Friable, mid green grey, sand silt	3.80	3.10	0.20	1.40	1.33	Roman	3.01	3a
BVK11	1628	Area B	100/180	1628	n/a	Layer	Hearth floor	Hard, red, sand silt clay	0.48	0.72	0.04	1.40	1.37	Roman	3.02	3b
BVK11	1629	Area B	95/185	Post Ex	n/a	Layer	Brickearth layer	Firm, orange brown, brickearth	1.48	1.12	NFE	1.57	1.56	Roman	3.03	3c
BVK11	1630	Area B	95/185	n/a	n/a	Layer	Dump/levelling	Firm, grey brown, sand silt	1.58	0.50	NFE	1.58	n/a	Roman	3.02	3b
BVK11	1631	Area B	105/180; 105/185	n/a	28; 77	Fill	Fill of pit [1632]	<i>Friable, light grey brown, clay silt</i>	0.50	n/a	1.00	2.75	n/a	Medieval	6b	5b
BVK11	1632	Area B	105/180; 105/185	n/a	28; 77	Cut	Pit	Shape unknown, vertical sides, flat base	1.50	n/a	1.00	2.75	1.75	Medieval	6b	5b
BVK11	1633	Area B	105/180	Post Ex	n/a	Fill	Fill of pit [1634]	Firm, dark brown, silt sand	0.54	0.60	NFE	1.15	n/a	Roman	3.02	3b
BVK11	1634	Area B	105/180	Post Ex	n/a	Cut	Pit	Sub- rectangular, sides not present, base not present	0.54	0.60	NFE	1.15	n/a	Roman	3.02	3b
BVK11	1635	Area B	105/185	Post Ex	n/a	Fill	Fill of pit [1636]	Firm, dark brown, clay silt	0.70	1.66	NFE	1.23	1.20	Roman	3.02	3b
BVK11	1636	Area B	105/185	Post Ex	n/a	Cut	Pit	Sub- rectangular, sides not	0.70	1.66	NFE	1.23	1.20	Roman	3.02	3b

								present, base not present								
BVK11	1637	Area A1	105/195	n/a	n/a	Fill	Fill of pit [1638]	Firm, mid brown, silt clay	0.92	0.55	0.21	1.41	n/a	Roman	3	3f
BVK11	1638	Area A1	105/195	1638	n/a	Cut	Pit	Shape unknown, concave sides, base not present	0.92	0.55	0.21	1.41	1.2	Roman	3	3f
<i>BVK11</i>	<i>225 - 499</i>	<i>Unused</i>														
<i>BVK11</i>	<i>84 - 199</i>	<i>Unused</i>														

APPENDIX 2: DOCUMENTARY RESEARCH

Julian Munby

Address: 11-15 Borough High Street TQ 3274 8023

Relevant Archaeological Features: Medieval pits/walls, Post-medieval buildings/pits

Location: East side of Borough High Street, south corner of London Bridge Street

Street names: London Bridge Street, previously Denman Street (19th century) – a new road.

Admin: St Thomas's Parish, Southwark, in the County of Surrey (e.g. Vestry).

Metropolitan Borough of Southwark from 1899.

Manor: Great Liberty Manor of the Archbishops of Canterbury (until 1899).

Topography: The primary topography is obscured by the sale of the St Thomas's Hospital site (after its comprehensive rebuilding) to the South Eastern Railway in 1862, and the subsequent creation of Denman/London Bridge Street, quite apart from the widening of Borough High Street (for the new London Bridge, 1831).

Medieval properties: The property is largely within the medieval precinct of St Thomas's Hospital (Carlin 1996, Gazetteer. no. 129), which had on the north side The Angel (Carlin 1996, Gaz. 130) and The Swan (Carlin 1996, Gaz. 131) – shown as The Black Swan yard on Rocque (1746). Whatever the nature of the hospital buildings there were certainly other properties along the street front, probably domestic and commercial and not related (except in ownership) to the hospital.

Post-medieval change: The site is shown on early mapping (e.g. Rocque 1746) with various buildings in front (west) of the Hospital, and the excavation site may include these; at the north of the site parts of the Swan Inn may be encountered, and at the south-east corner, the north range of the Hospital front court, which was still present on the 1830 skeleton map, may be present. The site was cleared by the time of the 1846 railway map to form a large forecourt for the new Hospital buildings, and as is shown on the very detailed coloured 10ft Map of Southwark in 1853. The new buildings must have been built after the 1862 sale of the entire Hospital site to the SE Railway in 1862, and are present on 1873 large-scale OS town plan. There is no property history reported in the detailed description of the ['Site 4'] building in the MOLA Building Survey Report (Nov 2010), and which dates the properties 'late 19th cent.'

Map evidence: The general development of the site is shown on the more informative maps (Rocque 1746, Horwood 1799-1819, the OS skeleton plan of 1830, detailed 10ft Map of

Southwark in 1853 (Southwark Library), and large-scale OS 1:1056 plan of 1873 (sheet VII.76).

Research potential: There is somewhat limited potential for the site history since it is internal to the Hospital and it may be very difficult to identify individual properties within the precinct without a map or survey, and these had all been removed by the railway era for the new hospital buildings. The earlier hospital records are in London Metropolitan Archives (LMA), and the later Medical School records are in King's College London. If the nature of the archaeology warrants, it would be worth checking for early property records and building plans of the Hospital in LMA, otherwise the map regression may provide most of the answer.

Bibliography

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APPENDIX 3: ROMAN POTTERY ASSESSMENT

Edward Biddulph

Introduction

Some 56 boxes contained a total of 5,736 sherds, weighing 193kg. The pottery was fully recorded to Museum of London Archaeology (MOLA) standards. Each context group was sorted into sherd groups of undiagnostic sherds of identical fabric or individual vessels identified by rim, base or diagnostic body sherds. Fabrics and forms were assigned standard MOLA codes, and a note was also made of decoration, evidence of use or reuse, and any other point of interest. The data were entered into an Access database, each sherd group occupying an individual row. In addition, decoration on samian bowls and stamps on amphorae, mortaria or samian vessels were rubbed using graphite and tissue paper to create images that form an accurate record of the material and can be used for research, archival and illustrative purposes.

The aims of the assessment were to identify and quantify the pottery to produce a comprehensive record of the material and a list of dates for each context group, allowing the assemblage to be characterised and permit recommendations for further study, illustration and publication to be made.

Assemblage composition

Fabric	Sherds	Weight (g)	Rim-EVE (total %)
Amphorae			
AMPH	51	4358	49
BAET	484	70491	409
C189	5	132	0
CADIZ	30	5290	25
CAMP1	15	1172	0
CAMP2	1	102	0
GAUL	137	10241	78
GAUL1	11	2735	62
GAUL2	12	1161	81
GAUL3	2	432	0
HOFA	2	177	0
ITFEL	22	2098	25

NAFR1	2	68	0
RHOD1	2	258	22
Samian wares			
MLEZ	3	67	38
SAM	5	93	15
SAMCG	56	809	181
SAMEG	17	381	27
SAMLG	381	4840	1236
SAMMT	3	40	11
SAMMV	16	192	53
Imported fine wares			
BLEG	1	1	0
BRAMD	2	4	0
CCIMP	4	77	0
CGBL	3	4	15
CGGW	1	17	0
CGWH	1	11	15
LYON	2	10	11
KOLN	16	79	83
PRW1	1	5	2
PRW3	13	302	0
Romano-British fine wares			
CCRB	4	60	10
COLCC	2	27	0
LOEG	1	4	0
LOMA	2	2	0
LOMI	54	1000	221
MHAD	8	142	7
MICA	2	14	0
NVCC	33	316	66
OXRC	37	916	66
RDBK	23	190	23
VRMI	3	57	20
Black-burnished-type wares			
BB1	85	1492	219

BB2	305	4449	716
BBS	50	838	190
Fine reduced wares			
FINE	176	1293	511
FMIC	119	1289	376
LONW	14	80	15
NKGW	28	389	59
TN	3	56	15
Reduced wares			
AHFA	62	1728	192
AHSU	297	4193	491
ERMS	87	1237	195
ERSA	31	811	31
ERSA/B	7	112	14
ERSB	125	2002	199
ERSS	1	11	0
HWC	135	1437	564
SAND	974	15205	2039
VRG	81	1658	157
Tempered wares			
CALC	6	121	29
COAR	16	1434	0
GROG	46	1232	87
GROGSH	37	724	30
HWB	61	1356	189
HWB/C	7	174	14
HWBR	5	140	36
NKSH	102	3165	29
SESH	2	70	13
SHEL	16	375	0
SUG	2	33	6
VEGE	4	124	0
Oxidised wares			
COLWW	1	29	0
ECCW	5	102	0

G238	6	2511	92
HOO	29	513	175
LOXI	18	553	71
MAYEN	3	80	7
MORT	4	570	30
NFSE	87	4537	312
NGWH	9	108	0
NKWS	11	104	0
OXID	97	1905	206
OXIDF	48	470	28
OXWS	1	31	0
OXWW	5	152	22
PORD	12	189	35
RHMO	8	1113	10
RVMO	3	209	18
RWS	164	2515	315
SLOW	1	88	0
VCWS	36	679	93
VRW	826	20806	2018
Miscellaneous wares			
IMPT	1	16	0
MISC	7	102	0
TOTAL	5736	192985	12699

Table 1: Quantification of fabrics from BVK11

Amphorae accounted for 13% of the entire assemblage by sherd count, or 6% by rim-EVE (Table 1). South Spanish amphorae (BAET) were best represented within the category. All rims assigned to the fabric were identified as Dressel 20 olive oil containers, and most body sherds are likely to belong to the type also. However, Haltern 70 vessels, which carried defrutum, fish sauce, or possibly wine, were potentially identified from a number of relatively thin body sherds and more diagnostic shoulder sherds. Amphorae from Gaul made the second largest contribution to the category. Most occurrences were body sherds, the majority of which being in a buff or cream fabric and probably belonging to Gauloise 4 or Pélichet 47 wine amphorae (GAUL1). The type was also identified from rims, handles and bases. London 555 (GAUL2) was represented by three rims and a number of generally orange or pink body sherds. At least two Gaulish Dressel 2-4 amphora (GAUL3) were also recorded. A range of other amphora types were present, but in relatively small quantities. Camulodunum 186 from

Cadiz (CADIZ), which carried fish products, were the best represented of these, followed by Italian felspathic Dressel 2-4 amphora (ITFEL), and then Campanian black-sand Dressel 1 wine amphora (CAMP1). Camulodunum 189 or 'carrot' amphorae (C189), Rhodian-style amphorae (RHOD1), North African amphorae (NAFR1), the 'hollow-foot' or Kapitän 2 amphora (HOFA), and a Dressel 2-4 amphora and Gauloise-style vessel in Verulamium region white ware were also represented.

Some 8% of the assemblage by sherd count, or 12% by rim-EVE (curiously a reverse of the proportions offered by amphorae), was samian. First-century South Gaulish samian from La Graufesenque (SAMLG) dominated the category. The fabric was available mainly as dishes. The Drag. 18(R) or 18/31(R) series was best represented, followed by Drag. 15/17. Other dishes included Drag. 16, 22/23, 36 and 42. Cups, mainly represented by Drag. 27, also made an important contribution. Other cups included Drag. 24/25, 33(a), and 35 and Ritterling 9. Bowls were largely confined to decorated forms Drag. 29 and 37. In addition, Drag. 30 and spouted bowl Ritt. 9 were recorded. A Drag. 18/31 dish and a bowl arrived from another South Gaulish workshop, Montans (SAMMT). Most vessels identified in samian from Les Martres-de-Veyre (SAMMV), which was typically imported during the early 2nd century, were Drag. 18/31 dishes, though a Drag. 15/17 dish, a Curle 11 bowl, and Drag. 27 and 33 cups were present. Apart from two Drag. 18 dishes in a micaceous fabric from Lezoux (MLEZ) and dating to the later 1st century, most Central Gaulish samian (SAMCG) arrived during the 2nd century. The fabric made a smaller contribution to the assemblage than did SAMLG, and consequently the range of forms identified by rim was more restricted. Dishes were confined to Drag. 18/31 and Drag. 31 (usually later 2nd century in date), Drag. 33 and 35 cups, and a Curle 11 bowl, although decorated Drag. 37 bowls were represented by body sherds. East Gaulish samian (SAMEG), which spanned the later 2nd century to mid 3rd century, made a relatively minor contribution. Dishes (Drag. 31), bowls (Drag. 37 and 38), cups (Drag. 33) and mortaria (Drag. 45) were recorded. Rheinzabern and Trier appear to have been responsible for most of the material, though Argonne and Chemery were also identified as potential sources for some pieces.

Other continental fine wares arrived in small quantities, accounting for 1% of the assemblage by sherd count and rim-EVE. Cologne colour-coated ware (KOLN), typically available as bag-shaped beakers (3J), was the best represented of these, followed by Pompeian red ware (PRW) dishes and lids. Glazed ware (CGGW) and colour-coated white ware (CGWH) arrived from Central Gaul, and a cup was recorded in Lyon ware. An eggshell ware (BLEG) and mica-dusted ware (BRAMD) were also present.

Romano-British fine wares took a 3% share of the assemblage by sherd count and rim-EVE. Local mica-dusted ware (LOMI) of late 1st or early/mid 2nd century date, made the most important contribution within the category. Forms recorded in the fabric included the Pompeian red ware-inspired plain rim dish (5J), reed-rimmed bowl (4A), and a flagon (1F)

copying metal forms. Ring-and-dot beaker fabric (RDBK) was well represented among early Romano-British fine wares, though forms were largely confined to globular beakers (3B). Other 1st or 2nd-century fine wares were present in small quantities, but included Colchester colour-coated ware (COLCC), eggshell ware (LOEG), marbled ware (LOMA) and Verulamium region mica-dusted ware (VRMI). Late Roman fine ware, indicating pottery use in the 3rd and 4th century, arrived as funnel-necked beakers (3M) and plain-rimmed dishes (5J) from the Nene Valley (NVCC), and a wide-mouthed jar or necked bowl (4N) and a pedestalled jar (2PD) from Much Hadham (MHAD), as well as forms in Oxford red colour-coated ware (OXRC). These included carinated bowls with rosette-stamped decoration (Young 1977, types C82-84), which date to the 4th century, a flanged bowl copying samian form Drag. 38 (Young 1977, type C51), flanged dishes copying samian form Drag. 36 (Young 1977, types C48-49), wall-sided mortaria copying Drag. 45 (Young 1977, type C100), and bead-and-flanged mortarium, type C100.

Black-burnished-type wares accounted for 8% of the assemblage by sherd count and 9% by rim-EVE. The category was dominated by wheel-thrown BB2, dating to the 2nd and 3rd centuries. Source was not routinely ascertained, but fabrics identical to fabrics BB2-1462, 2238 and 2759 described by Davies *et al.* (1994, 111-7) were noted, suggesting that north Kent was the principal source, with potentially a smaller amount arriving from Essex. The majority of identified vessels were bead-rimmed bowls (4H), though everted rimmed jars (2F) were important too. Plain-rimmed dishes (5J), including those with grooves below the rim, a flanged bowl (4M) and a bead-rimmed jar (2A17) were also recorded. Handmade BB1 from south-western Britain, principally Dorset, was available mainly during the late Roman period as everted-rimmed jars (2F), or flat-rimmed (4G), incipient flanged (4G226) and flanged (4M) bowls. Other forms included a plain-rimmed dish and a beaker with a short everted rim (3E). Black-burnished-style wares (BBS) comprised material that could not be assigned confidently to BB1 or BB2, and may represent local imitation of those wares. Inevitably, the forms identified in BB1 and BB2 were also represented in BBS fabrics.

Some 6% of the assemblage by sherd count (8% by rim-EVE) was identified as fine reduced ware. Two wares dominated – miscellaneous fine reduced ware (FINE) and fine micaceous reduced ware (FMIC). A wide range of vessel types were available in the former. These included a pulley-rim flagon (1K), globular (3B), poppyhead (3F) and carinated (3G) beakers, curving sided bowls (4F), necked jars (2P and 2T), and a lid (9A). Some of these forms were also supplied in FMIC fabric, notably types 3F and 3G, but other forms were recorded, including a flanged bowl copying samian form Drag. 36 or Ritterling 12 (4M34), globular beakers 3C and 3H, dish type 5A, and jars with a short neck (2B). A smaller quantity of fine reduced ware arrived from North Kent (NKGW). Forms were not easily identified to type, though beakers, dishes, jars and bowls, including a cordoned bowl (Monaghan 1987, type 4J1), were recorded. A globular beaker (3B) and a hemispherical bowl copying samian form

Drag. 37 (4E) were available in London reduced ware (LONW), and a shallow dish (Camulodunum 16) was recorded in terra nigra (TN).

Reduced coarse wares made the largest contribution to the assemblage, taking a share of 31% by sherd count and rim-EVE. The category was dominated by unsourced sandy fabrics (SAND) in which a wide variety of forms were identified. Among the principal forms were bead-rimmed jars (2A), jars with carinated shoulder and 'figure-7' rim (2C), other necked jars (2G), reed-rimmed bowls (4A), curving-sided bowls (4F) and lids (9A). Sandy fabrics (ERMS and ERS) consistent with the range of early Roman wares described by *Davies et al.* (2004, 89-97) were recorded in quantity. Forms included jar types 2A, 2B, 2C and 2G, bowl type 4F and lid 9A, and the forms were seen in another important fabric, Alice Holt/Surrey ware (AHSU). Beakers largely absent in sandy reduced wares were available in the fine sandy fabric, Highgate Wood ware fabric C (HWC, including HWC+). Poppyhead beakers (3F) and beakers with short everted rims (3E), usually decorated with barbotine dots, were well represented, and these were joined by round-bodied (2E), necked (2C), everted-rimmed (2F) jars, reed-rimmed (4A) and curving-sided (4F) bowls, and lids (9A). Bowl types 4A and 4F, jars 2A, 2B, dish type 5J and lid type 9A were recorded in Verulamium region grey ware (VRG). All these fabrics were available during the later 1st and early/mid 2nd century. The only fabric of certain late Roman date was Alice Holt/Farnham ware (AHFA), whose principal forms included the flanged bowl (4M), everted-rimmed jar (2F), plain-rimmed dish (5J) and storage jars.

Five per cent of the assemblage by sherd count, 3% by rim-EVE, comprised so-called tempered wares. Shelly wares were important within the category, particularly North Kent shelly ware (NKSH), in which storage jars (2M) and bead-rimmed jars (2A) were available. A small amount of early Roman shelly also arrived from South Essex (SESH). Shelly wares from the Midlands (CALC) dated to the 4th century. Forms were restricted to necked jars with hooked rims (2W). Grog-tempered wares also made an important contribution to the category and point to mid-1st century pottery use and deposition. Jar types 2A and 2B were recorded in unsourced fabrics (GROG and GROGSH); these were available in Highgate Wood grog-tempered ware (HWB), though were joined by necked jar 2N, storage jar 2M, bowl type 4F, and shallow dishes 5A and 5B. A copy of samian cup Drag. 27 (6A) was seen in the red-slipped fabric, HWBR. Late Roman grog-tempered ware, probably from west Kent (Pollard 1988, 149), was represented by an everted-rimmed jar (2F). Other fabrics included coarse-tempered fabrics (COAR), usually available as storage jars, and a vegetable/organic-tempered fabric (VEGE).

Oxidised wares, representing 23% of the assemblage by sherd count, or 27% by rim-EVE, were second to reduced wares in quantity. The category was overwhelmingly dominated by Verulamium region products, particularly white ware (VRW). The pottery was made in Brockley Hill and other kiln sites around Verulamium, but a proportion may have arrived from

a source closer to the site at Northgate House in the Walbrook valley, City of London (Seeley and Drummond-Murray 2005). Principal forms included ring-necked flagons (1B), reed-rimmed bowls (4A), and hooked rimmed mortaria (7HOF), although there were also notably occurrences of tazze (9A), a lamp (9LA), a cup copying Drag. 33 (6), and neckless jars (2J). Ring-necked flagons and a lamp were available in a variety of as yet unsourced white-slipped fabrics (RWS). More ring-necked flagons, as well as hooked flanged mortaria (7HOF, 7G238) were recorded in North French/South-east English white ware (NFSE). North Kent potters supplied flagons in white-slipped ware (HOO, NKWS), and Kentish potters were also responsible for the fine oxidised Eccles ware (ECCW), which arrived during the mid 1st century. Vessels in local oxidised ware (LOXI) were restricted to lids (9A), though a pinch-necked flagon, reed-rimmed bowls 4A, narrow-necked jar 2R, lids and a lamp in unsourced oxidised ware (OXID) may have been made reasonably locally. Hooked-flange mortaria (7HOF) were imported from the Rhineland (RHMO) and the Rhone Valley (RVMO), and a lid-seated jar in Mayen ware was imported during the 4th century. Other late Roman pottery included Portchester 'D' ware (PORD), in which necked jars (2W) and plain-rimmed dishes (5J) were recorded, and Oxfordshire white ware mortaria (Young 1977, type M22).

Chronology

Ceramic phase	Sherd count	%
AD 40/50-80	782	15
AD 70-120	1738	34
AD 120-160	1925	38
AD 160-250	128	3
AD 250-400	545	11
Total	5118	-

Table 2: Roman pottery by ceramic phase, based on spot-dates of individual context groups

The earliest context groups dated to the mid 1st century AD. Fabrics such as grog-tempered wares, terra nigra and early Roman sandy wares provide a good indication of pre-Flavian activity (Table 2). This appears to have been at a relatively low level, however, compared with the amount of pottery recovered from context groups dated to the period c.AD 70-120, which points to a significant increase in the volume of pottery supplied and deposited. Most of the groups assigned to this phase are confined to the 1st century, although a few groups, for example those containing samian ware from Les Martres-de-Veyre, are likely to belong to the early 2nd century. A further increase in the volume of pottery used and deposited is evident during the second and third quarters of the 2nd century (AD 120-160). Few context groups were dated to the late 2nd or first half of the 3rd century, but the presence of East Gaulish samian ware and Nene Valley colour-coated ware suggest continued, though low-

level, occupation. This hiatus was followed by an increase in activity after c.AD 250, with fabrics such as shelly ware, Portchester 'D' ware and Oxford products suggesting that pottery was supplied and deposited well into the 4th century, probably after c.AD 350. Overall, then, the assemblage spans the Roman period, though is largely of 1st and 2nd century date, with the period AD 70-160 representing a period of peak activity.

Condition

The mean sherd weight (weight/sherd count) of the entire assemblage is 33g. This is reduced to 19g when the relatively heavy amphorae sherds are removed, although even then sherds are relatively large and consistent with an assemblage that has experienced limited disturbance and redeposition. Average sherd weights for individual context groups ranged from 2g to 352g, and the average of context group averages was 32g. Obvious residuality appeared to be relatively low. Ten per cent of the assemblage was identified as residual solely from a ceramic basis. However, the assemblage must be considered in light of stratigraphic phasing and post-Roman spot dates to identify residual groups.

Recommendations

The Roman pottery will make a valuable contribution to the understanding of ceramic supply and use in Roman Southwark. Analysis of the data will be further enhanced with comparison with other assemblages from Southwark, both from the Thameslink project and other sites in the area. Site BVK contained a number of large groups that, supported by stratigraphic phasing, provide well-dated 'snapshots' of pottery supply, use and deposition. These included two groups ([1532] and [1544]) from a series of levelling or dumped assigned to Phase 3d (late 1st-early 2nd century). The groups, dated by the pottery to AD 120-140, each contained over 200 sherds and over 30 individual vessels. Earlier deposits in Phase 3d included dump [1545] and drain fill 1540, which contained over 100 sherds and some 20 vessels and were dated by pottery to AD 70-80/100. Presentation of such groups in the form of data tables and/or illustrations would support the main patterns of occupation and use. However, similar attention will also be given to pottery from significant features or deposits, notably mid/late 1st century (Phase 3b) burnt deposits and a large masonry building dated to Phase 3e-h.

In addition, a catalogue of stamped and decorated samian will be compiled. During recording, rubbings were made of some 70 decorated samian vessels. These will be invaluable during cataloguing, but a selection will be scanned and placed alongside their catalogue entries in the final publication. Rubbings were also taken of 20 samian stamps, but for publication reference will be made to the corpus of samian stamps by Hartley and Dickinson (2008-2012) and if necessary illustrated using a purpose-made samian font. Three amphora stamps and six mortarium stamps were also recorded.

A number of pieces are inscribed with graffiti, show aspects of use or are rare forms of intrinsic interest and are worthy of further analysis and, in some cases, illustration. Graffiti, or potential graffiti, were recorded on sherds from contexts [784], [1178], [1317] and [1545]. Unusual forms included a flanged bowl from context [1237] decorated with red painted stripes internally and externally and probably imported from the Rhineland (Gose 1976, tafel 18, no. 260), a grey ware pulley-rim flagon from context [1375], a fragment from a tripod bowl from context [848], two unusual local mica-dusted ware vessels from context [1179], and a Drag. 36 samian dish with unusual barbotine decoration around the rim (unstratified). Other pieces of note include a trimmed sherd from a Dressel 20 amphora from context [1619], a white-slipped oxidised ware lamp from context [1118], and a fragment of a pipeclay figurine from context [1430]. An unusual object, a ceramic cylinder, flat at one end, rounded at the other, was recovered from context [1249]. Though it resembles a broken amphora handle, the object seems to have been fashioned deliberately into its current form before firing, possibly as a phallus.

Further work

Analyse and report on pottery from BVK11, including compilation of samian catalogues, research, comparative work, selection and checking of pottery for illustration

Illustration of c.150 vessels

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APPENDIX 4: POST ROMAN POTTERY ASSESSMENT

John Cotter

Introduction and methodology

The BVK11 site produced a total of 430 sherds of post-Roman pottery weighing 18.209kg. The Estimated Number of Vessels (ENV) was 239. The real ENV total, however, must be lower than this due to the inevitability of double-counting indistinctive vessels dispersed through several contexts. In addition Estimated Vessel Equivalent (EVEs - a measure of surviving rim circumference) were recorded for all medieval fabrics up to c.1480. The total medieval EVEs is 6.08.

All the pottery was examined, spot-dated and fully catalogued during the present assessment stage (see Excel spreadsheet in archive). This was catalogued in accordance with the standards of the Museum of London Archaeology Service (MoLAS) and using the system of post-Roman pottery fabric codes developed in London over several decades (LAARC 2007), plus some recent updates. For reasons of economy and easier presentation some of the more ephemeral/interpretative data fields have been omitted from the catalogue here, although all those essential for the assessment and eventual publication of the assemblage have been retained. For each context and fabric the total pottery sherd count and weight were recorded. Vessel form, if identifiable, was also recorded together with ENV (minimum vessel count) and EVEs (rim circumference length) if present (medieval wares only). Vessel part, decorative details, condition and traces of use are recorded in the comments field and potential illustrations also indicated.

Date and nature of the assemblage

This is a medium sized assemblage with a range of pottery from the 10th to the mid 19th century. Overall the pottery assemblage is in a variable but mainly fragmentary condition. There are, however, three or four complete vessel profiles in the medieval assemblage and many others in the later post-medieval assemblage. The average sherd weight for the site is 42g, which is fairly high. The material comes from a large number of contexts excavated within three main trenches (defined by the footprints of projected basements), and one other trench (Area C) which was subjected to watching brief conditions. Most of the pottery comes from a series of medieval rubbish and robbing pits and from medieval garden soils and postholes. The post-medieval pottery is also from a large number of rubbish and cess pits as well as brick- and stone-lined latrines and soakaways. Stone and later brick foundations and walls have been interpreted as the medieval and post-medieval remains of St Thomas's Hospital.

Pottery Fabrics

By sherd count (and ENV) 59% of the pottery assemblage (254 sherds) is medieval and 40% post-medieval (171 sherds). A further 1% (5 sherds) occurs in fabrics spanning the medieval/post-medieval period. A detailed breakdown of these chronological fabric groupings is presented below in Tables 1-3.

Fabric	Common name	E Date	L Date	Sherds	Weight	ENV	EVEs
ANDE	Andenne-type ware	1050	1200	3	66	1	
BEAR	Beauvais red-painted ware	1050	1250	3	14	1	
CBW	Coarse Surrey-Hants border ware	1270	1500	25	786	13	0.27
CHEA	Cheam whiteware	1350	1500	4	194	3	0.54
EMCR	Early medieval crucible fabric	1000	1200	1	15	1	0.15
EMFL	Early medieval flint-tempered ware	970	1100	16	300	10	0.2
EMGR	Early medieval grog-tempered ware	1050	1150	5	96	3	
EMS	Early medieval sandy ware	970	1100	64	1593	36	0.85
EMSH	Early medieval shell-tempered ware	1050	1150	15	448	8	0.39
EMSS	Early medieval sand- and shell-tempered ware	1000	1150	13	440	8	0.48
ESUR	Early Surrey ware	1050	1150	3	96	2	
KING	Kingston-type ware	1240	1400	5	44	4	
KING HD	Kingston-type ware: highly decorated	1240	1300	1	14	1	
LCOAR	Coarse London-type ware	1080	1200	4	100	3	0.25
LOGR	London-area greyware	1050	1170	1	28	1	0.1
LOND	London-type ware	1080	1350	16	504	11	0.14
LSS	Late Saxon shelly ware	900	1050	49	2113	19	2.08
NEOT	St Neot's-type ware	970	1100	3	19	2	
NFGW	North French greyware	900	1050	3	21	1	
NFM	North French monochrome ware	1170	1300	1	6	1	
RHGR	Rhenish Tiel-type greyware	900	1100	3	113	2	
SHER	South Hertfordshire-type greyware	1170	1350	4	86	3	0.11
SSW	Shelly-sandy ware	1140	1220	3	31	2	0.09
TUDG	'Tudor green' ware	1350	1500	9	26	6	0.09
Total				254	7153	142	5.74

Table 1. Breakdown of medieval pottery fabrics (to c 1480)

Fabric	Common name	E Date	L Date	Sherds	Weight	ENV	EVEs
DUTR	Dutch red earthenware	1300	1650	3	52	2	0.34
MISC IMP	Miscellaneous unsourced imported pottery	900	1500	1	5	1	
SAIM	Saintonge ware with mottled green glaze	1250	1650	1	3	1	
Total				5	60	4	0.34

Table 2. Breakdown of medieval/post-medieval pottery fabrics

Fabric	Common name	E Date	L Date	Sherds	Weight	ENV
BBAS	Black basalt stoneware	1770	1900	2	120	2
BONE	Bone china	1794	1900	2	193	1
CHPO	Chinese porcelain	1580	1900	9	536	4
CREA DEV	Creamware with developed pale glaze	1760	1830	15	565	8
CREA GRN	Creamware: green glazed	1760	1830	1	52	1
DERBS	Derbyshire stoneware	1700	1900	4	447	1
ENPO	English porcelain	1745	1900	5	207	3
LONS	London stoneware	1670	1926	7	1194	6
PEAR	Pearlware	1770	1840	1	19	1
PEAR TR	Pearlware with underglaze transfer-printed decoration	1770	1840	29	611	10
PMR	London area post-medieval redware	1580	1900	30	4374	12
PMRE	London area early post-medieval redware	1480	1600	20	521	13
PMSRY	London area post-medieval slipped redware with clear (yellow) glaze	1480	1650	5	532	4
RAER	Raeren stoneware	1480	1610	1	4	1
RBOR	Surrey-Hants border redware	1550	1900	1	6	1
STMO	Staffordshire-type mottled brown-glazed ware	1650	1800	1	143	1
STSL	Staffordshire-type combed slipware	1660	1870	1	37	1
SUND	Sunderland-type coarseware	1800	1900	3	509	1
TGW	English tin-glazed ware	1570	1846	6	154	5
TPW	Transfer-printed refined whiteware	1830	1900	25	619	14
WEST	Westerwald stoneware	1590	1900	1	76	1
YELL SLIP	Yellow ware with industrial slip decoration	1820	1900	2	77	2
Total				171	10996	93

Table 3. Breakdown of post-medieval pottery fabrics (c. 1480+)

Summary by period

Of the five Thameslink site assemblages reported on by this author (JC) (Assessments 2, 3, 5, 7 and 8), the Assessment 2 site has highest quantity of Late Saxon pottery yet observed and also a reasonable quantity of Saxon-Norman or early medieval pottery. This is indicated by the relatively high sherd/vessel counts of these early wares compared to other wares. Unusually, the site assemblage is dominated by sherds of early medieval sandyware (EMS c.970-1100: 64 sherds, 36 vessels), followed fairly closely by Late Saxon shellyware (LSS c.900-1050: 49 sherds, 19 vessels). A range of other minor Late Saxon and Saxo-Norman wares add to the impression of activity here during this period. These include a few sherds of St Neot's-type ware (NEOT c.970-1100) and sherds from a vessel in North French greyware (NFGW c.900-1100). Occupation from as early as the 10th century appears very likely - possibly commencing in the second half of the century. A small number of pit fill contexts containing only LSS appear to be the earliest in the post-Roman pottery sequence (Contexts [816], [837], [874], [1276], [1336] and [1348]). These produced mainly jar sherds - most notably a complete LSS jar profile [816] with holes bored through the base - probably to adapt it as a strainer. Another groups of contexts ([620], [628], [636], [637], [791] and [819])

also produced LSS alongside EMS and distinctive sherds of early medieval flint-tempered ware (EMFL) jars, all suggesting a c.970-1050 spot-date. One of these contexts [628], joining [636] produced another jar profile in LSS while [819] produced a rare bowl profile in the same fabric.

Several Saxo-Norman or early medieval contexts (pit fills and levelling material) have spot-dates falling within the period c.1050-1200. These produced some large rim sherds of EMS cooking pots and a possible spouted pitcher rim ([558], [1349]) and other large rim sherds in early medieval shelly ware (EMSH, [1349]). Also notable is an early medieval crucible rim showing evidence of scorching (EMCR, [1307]). Context [1307] - a demolition layer probably of the later 12th century - also produced sherds of Beauvais red-painted ware (BEAR c.1050-1250). Other imports include fresh sherds from a yellow-glazed pitcher in Andenne ware (ANDE c.1050-1200, [744]), and (from [1349]) sherds of North French monochrome ware (NFM c.1170-1300) and Rhenish Tiel-type greyware (RHGR c.900-1100). Though not particularly abundant or well-preserved, this sprinkle of early medieval imports suggests that the site's occupants during this period were well connected to markets where imported goods were readily available.

The usual range of 13th- to 15th century wares found on London sites (mainly glazed jugs and a few bowls) also occur here - but generally as fairly small scrappy sherds and only in relatively small quantities. The assemblage of this period contains very little of note. Of some interest, however, is a body sherd from Context [779] in London-type ware (LOND) which is probably from a louver (roof ventilator). A Dutch red earthenware cauldron of c.1300-1550 with 'elbow' handles [777] is also noteworthy. Early post-medieval wares (c.1480-1550) are reasonably well represented here but in the main the assemblage is rather fragmentary and contains little out of the ordinary. Early post-medieval London redwares (PMRE, PMSRY) dominate - mainly in the form of wide bowls with pairs of handles, plus a few jars, jugs and a lid. The largest and best-preserved group of these is from Context [593] where they were associated with Tudor Green ware (TUDG c.1350-1500). These are similar to the contemporary assemblage from Guy's Hospital nearby (Dawson 1979) but unlike the latter there are very few Continental imports present and nothing that hints particularly of high status. A near-complete dish/saucer in Cheam whiteware (CHEA) from a context of c.1480-1550 is one of the few items of note [780].

Pottery positively datable to the 17th century is either rare or absent from the site. The usual 'classic' indicators of 17th-century occupation such as Frechen stoneware 'bellarmine' jugs (FREC) and Surrey/Hampshire border whiteware vessels (BORD) are completely absent and the few vessels in tin-glazed ware (TGW) and post-medieval red earthenwares (PMR) are mainly from 18th-19th century contexts. Furthermore, the earliest clay pipes bowls from the site are types of c.1680-1710 - which suggests a possible hiatus in site activity (or at least pottery disposal) until c.1700. One Area A1 pit context however [588] has been spot-dated to

c.1640-1700 on the basis of two tin-glazed ware vessels (the only ones in the context). Subsequent analysis of the clay pipes from this context, however, showed that it also contained a nearly-complete clay pipe of c.1680-1710 and a few stem fragments of probable 19th century date - although the earlier pottery spot-date still stands. This context should be investigated further at the analysis stage to determine whether it could be a late 17th century context perhaps with some 19th century contamination? Material of the 17th century is rare here nevertheless. The most interesting item of this period (from [588]) is a complete and unusually small drug or ointment jar in plain white tin-glazed earthenware (TGW). This has the characteristic carinated (angular) profile of drug jars of the early to mid 17th century and stands only 30mm tall, with a diameter of only 32mm. Inside, and all over the rim, are clear traces of a vermilion-red pigment - possibly red lead (?) which had a range of medicinal, cosmetic and artistic uses. It may have been connected with St Thomas's Hospital but - if so - little else in the pottery assemblage obviously is (only one other ointment jar from a later context was noted). Scientific analysis of the contents this jar will hopefully identify it and suggest its likely function.

The 18th and early 19th century assemblages (mostly from pits and latrines) contain only a few items of note. These include a complete London stoneware baluster-shaped bottle of c.1725-1800 [73]. Context [1276], spot-dated to c.1760-1830, produced a waster in London stoneware - a jug rim with clear evidence of glaze across the breaks. This may have come from a local stoneware manufactory. A few post-medieval red earthenware (PMR) vessels might provide useful additions to the typology of this locally-produced ware. These include a pipkin (saucepan) profile of c.1770-1850 with clear evidence of use as a cooking vessel [1325], and an unusually large cylindrical vessel of c.1790-1840 (diam. 310mm) which may be a flowerpot, or an unused chimney pot, or perhaps an industrial (sugar-refining?) vessel [701]. Some fine examples of early 19th century transfer-printed (PEAR TR) plates and other tablewares - including 22 vessels from [1330] - may contribute to the typology of these mass-produced Staffordshire-type products, and shed light on the status of the site's occupants at this time. Amongst the latest transfer-printed (TPW) and contemporary wares from the site nothing obviously later than the mid 19th century was noted.

Summary and recommendations

As the assemblage has been fully catalogued, little, if any, further cataloguing work will be required here. Though of modest size, the Late Saxon and early medieval assemblage here is one of the most significant from the Thameslink scheme and should be analysed in more detail. Evidence of cross-joins here should be further investigated as these may shed light on pottery disposal patterns and site taphonomy. The character of the Saxo-Norman/early medieval assemblage from BVK11, including the sprinkle of imports and crucibles, is similar to that observed on the Assessment 3 Site BVX09 - across the road - suggesting, perhaps, the two areas may have been connected somehow. They may perhaps have been part of the

same contemporary settlement and industrial zone, whose occupants had access to Continental pottery and probably other goods brought to the port of London. Amongst the later pottery some individual post-medieval vessels are of note and should be illustrated - including some of the high-quality early 19th century tablewares. Further documentary research might clarify the background to some of these later pottery groups. A more detailed summary report should be produced for all the Assessment 2 pottery with more detailed sections or appendices focusing on a small number of key contexts that add significantly to our understanding of the site or to the typology of individual wares. A few of the more significant vessels have already been selected for illustration, and it is recommended that around 25 vessels should be illustrated.

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APPENDIX 5: LITHIC ASSESSMENT

Michael Donnelly

The struck flint

Introduction

Various excavations along the length of the new Thameslink railway line in London have brought to light a number of small assemblages of flint. For the most part, these numbered very few flints and sometimes only unworked burnt flint or natural fragments were recovered. Assessment 2 consisted of a single site BVK 11 that yielded a moderate amount of flint, much of which consisted of mechanical and natural shatter from river gravel deposits. A small number of genuine flakes and blade forms were recovered including several from 1600s context numbers that suggests some form of low-level or heavily disturbed prehistoric activity. Other clusters of struck flint were associated with genuine examples of micro-debitage while burnt unworked flint was also recovered in low amounts.

Methodology

The artefacts were catalogued according to OA South's standard system of broad artefact/debitage type (Bradley 1999), general condition noted and dating was attempted where possible. Unworked burnt flint was quantified by weight and number. The assemblage was catalogued directly onto an Open Office spreadsheet.

During the initial analysis additional information on condition (rolled, abraded, fresh and degree of cortication), and state of the artefact (burnt, broken, or visibly utilised) was also recorded. Retouched pieces were classified according to standard morphological descriptions (e.g. Bamford 1985, 72-77; Healy 1988, 48-9; Bradley 1999).

Metrical and technological attribute analysis was undertaken and included the recording of butt type (Inizan *et al.* 1993), termination type, flake type (Harding 1990), hammer mode (Onhuma and Bergman 1982) and the presence of platform preparation and edge abrasion.

CATEGORY TYPE	BVE 11
Flake	21
Blade	2
Bladelet	3
Blade-like	1
Sieved Chips 10-4mm	26
Misc retouch	1
Total	54

Natural fragments	572
Burnt unworked flint No./g	107/721g
No. burnt (exc. sieved chips) (%)	
No. broken (exc. sieved chips) (%)	4/26 (15.38%)
No. retouched (exc. sieved chips) (%)	1/26 (3.85%)

Table 1: The flint assemblage from BVK 11

Site BVK11

This site contained 28 non-chips including one tool fragment, while another flake appeared to have been struck from a polished implement but may simply relate to surface scouring of an exposed piece. Twenty-six sieved chips were found alongside 572 natural fragments (mostly 10-4mm in size) and 107 pieces of burnt unworked flint weighing 721g. Many of the sieved chips are likely to be accidental shatter from Thames gravel deposits rich in flint pebbles/cobbles. Excavation of these in both current and archaeological times can generate numerous pieces of fine shatter.

Three groups of sieved chips corresponded to contexts containing genuine pieces. Context [627] contained a bladelet, a flake and three chips, however, the bladelet looked as if it was an accidental and mechanical fracture. Context [1199] contained two bladelets (one soft-hammer struck) and 12 chips. Context [1211] had the miscellaneous retouched piece, a large crude notch with a thick piercer-like projection on a thermally fractured chunk. It also contained one flake and eight chips. The tool resembled the sort of expedient form one would expect from later prehistoric knapping.

The bulk of the unequivocally genuine material originated in two contexts in the 1600s range. Context [1605] contained one narrow blade, a flake and a central segment from either a flake or blade. Context [1623] contained a blade-like flake and a possible ground implement flake. Parallel dorsal ridges were common throughout this small group indicating a careful reduction strategy of Mesolithic or earlier Neolithic date. These and the bladelets from context [1199] above indicate a limited early prehistoric presence in this area, possibly from some form of disturbed early prehistoric land surface.

The remainder of the assemblage had the appearance of mechanically struck flakes, quite probably knocked off of flint foundation/construction blocks. Even one of the blade forms ([627]) seemed to display a very hard-hammer bulb suggesting that it had been struck with a metal hammer. Another flake from context [592] looks like a piece of Portland Chert but this piece has no obvious dorsal flaking pattern and may have also been accidentally struck from building material.

Prehistoric activity is often found in urban contexts along the margins of the River Thames. Usually these flints are residual and this is the case here and at a number of other Thameslink sites in Assessments 3, 4, 5, 6 and 7.

Recommendations

There is little requirement for further work here, the natural fragments and the burnt unworked flint can be discarded. Some of the key elements may require illustration and/or photographing for any final report. Similarly, a short report highlighting the discoveries, particularly those of the blade forms and the tool, set alongside a discussion of our current understanding of prehistoric activity within greater London would be required.

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APPENDIX 6: CLAY TOBACCO PIPE ASSESSMENT

John Cotter

Introduction and methodology

Site BVK11 produced a total of 40 pieces of clay pipe weighing 279g. These have been spot-dated and fully catalogued (in Excel) in accordance with the standards of the Museum of London Archaeology Service (MoLAS). They were catalogued according to a series of codes based on Atkinson and Oswald's (1969) London pipes typology with bowl types assigned to an abbreviated code (e.g. AO22). The catalogue records, per context, the quantity of stem, bowl and mouth fragments, the overall fragment count and weight as well as the minimum number of bowls present. Other fields record details of decoration, milling, use, and any makers' marks. Additional information is provided in a comments field.

Summary of the assemblage

The condition of the material is generally good with slight wear visible on just a few pieces and several long fresh pieces of stem - up to a maximum of 274mm. long. A minimum of eight pipe bowls was recovered of which three are complete. Two mouth pieces and thirty stem fragments were also recovered from a total of nine contexts (including unstratified). Dates range from c.1680 to c.1900. The eight pipe bowls are all late 17th/early 18th century and 18th century types but in some cases these must be residual as they occur alongside slender narrow-bore stems fragments of 19th-century appearance. The following pipe bowl types were identified:

1680-1710

AO21: Two examples identified. These include a fresh complete bowl and joining stem fragment from Context [588] giving an impressive 274mm. length of stem. Despite this good state of preservation the pipe was associated with stem fragments of probable 19th century date. Unusually for London pipes of this period, this has a smallish circular maker's stamp on back of bowl with the relief initials 'WC' below stylised rays or a coronet and above a plant spray. Marks of this sort are more typical of Bristol pipes. A similar (but unclear) (?)WC mark on the back of a bowl of this period, found at Queenhithe, is illustrated by Oswald (1975, fig. 11.17) who attributes it to the maker William Chesterman c.1696-1710, although the 'W' in this example is unclear. Another WC maker listed in Atkinson and Oswald (1969, 211) is identified as William Collins of Southwark who died 1686. It is unclear at present to which maker the pipe here should be ascribed. As no exact parallel for this mark appears to exist the pipe should be researched and published.

1700-1780

AO25: Six examples of which five come from a single context [748]. One of the bowls is complete. None of these has makers' marks but three are decorated with small relief star stamps on either side of the heel and one is decorated with small stylised crowns in the same position. The latter has a 95mm length of stem still attached.

Recommendations for further work

A more detailed summary report of the assemblage should be produced with all marks and heel decoration researched in more detail. In particular, the unusual and well-preserved 'WC' marked pipe of c.1680-1710 from Context [588] should be further researched in order to clarify which of the two known London 'WC' pipemakers this product belongs to. This is probably the only piece in the assemblage that deserves illustration, as the others are all fairly generic types.

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APPENDIX 7: GLASS ASSESSMENT

Ian R Scott

Introduction (Tables 1-2)

The glass assemblage from BVK11 comprises 328 sherds of glass, including 271 sherds of vessel glass, 33 sherds of window glass and 14 sherds that cannot be identified as definitely vessel or window glass. There is a small amount of glass waste, some possibly from glass making, and 4 other sherds from the glass chimney from an oil lamp. Most of the glass comes from Roman contexts (n sherds = 218) with a smaller quantity of glass from post-medieval contexts (n sherds = 79) and just 8 sherds from post-Roman contexts and 8 sherds from medieval contexts. There are 13 sherds of vessel glass that are unstratified and 2 sherds of window glass from a void context. Most of the glass come from Area B (n sherds = 244), with 58 sherds from Area A1 and only 11 sherds from Area A2.

Period	Phase	Vessel	window	other	uncertain	waste	Totals
Roman	3b	2					2
	3c	38	3		1	1	43
	3d	112	1		9		122
	3e	17	5		1		23
	3f	4	4			1	9
	3g	10	1		1		12
	3h	7					7
Post-Roman	4a	2	3	1			6
	4b	2					2
Medieval	5a	1					1
	5b	2				1	3
	5c	1	3				4
Post-medieval	6a	3			2	2	7
	6b	1					1
	6c	1					1
	6d	55	11	4			70
unphased		13	2				15
	Totals	271	33	5	14	5	328

Table 1: BVK 11: Glass by Phase and Glass type (sherd count)

Methodology

The glass has been fully recorded onto a Microsoft Access database. For the purposes of quantification analysis the data has been copied onto a Microsoft Excel spreadsheet. The glass is classified as 'vessel', 'window', 'other' and 'uncertain', and quantified both by vessel/object and fragment numbers. In the case of vessel glass the sherd type(s) – rim, body, base, etc - are recorded and where possible the vessel forms are identified. Where appropriate a date is given for the glass or vessel.

Phase	Feature	Context	Glass Type					Totals
			vessel	window	other	uncertain	waste	
3b	fill, beam slot 1019	1018	2					2
		Total	2					2
3c	dump	732	1	2			1	4
	layer, opus signinum	858	1					1
	occupation layer	860	2					2
	levelling	1478	1					1
	levelling	1503				1		1
	levelling	1534	1					1
	levelling	1538	8	1				9
	occupation layer	1551	1					1
	fill, working hollow	1584	2					2
	1586	1585	19					19
	brickearth layer	1600	2					2
	Total	38	3		1	1	43	
3d	fill, pit 1056	731	1					1
	brickearth layer	931	2					2
	occupation layer	1441	1	1				2
	levelling	1461	2					2
	levelling	1468	4					4
	levelling	1479	4					4
	fill, linear	1511	5					5
	brickearth layer	1527	14			2		16
	levelling	1532	25			1		26
	levelling	1537	11			3		14
	fill, drain	1540	1					1
	1541	1544	24			1		25
	levelling	1545	17			2		19
	gravel surface	1559	1					1
	Total	112	1		9		122	
3e	levelling	848	1					1
	levelling	1179		1				1
	occupation layer	1183	1	1		1		3
	levelling	1237	1					1
	levelling	1239		1				1
	mortar surface	1249	1					1
	fill, pit 1359	1358	1					1
	levelling	1430	1	1				2
	levelling	1436	3					3
	levelling	1451	1					1
fill, pit 1466	1465	2					2	

Phase	Feature	Context	Glass Type					Totals
			vessel	window	other	uncertain	waste	
	levelling	1509	1					1
	levelling	1539		1				1
	levelling	1546	2					2
	fill, pit 1564	1563	2					2
		Total		17	5		1		23
3f	fill, posthole 1162	1161		1				1
	fill, pit 1175	1174	1					1
	fill, drain 1204	1203		1				1
	gravel/mortar surface	1232	1					1
	fill, drain 1372	1374		1				1
	levelling, Rm 1	1375	1					1
	fill, pit 1460	1459	1				1	2
	levelling	1529		1				1
	Total		4	4			1	9
3g	brickearth layer	1154	2					2
	fill, construction	1199		1				1
	cut 1200	1378	1			1		2
	levelling	1292	1					1
	levelling	1396	1					1
	fill, pit 623	1400	3					3
	levelling	1467	1					1
	fill, robber trench 1470	1469	1					1
	Total		10	1		1		12
3h	levelling	1063	7					7
		Total	7					7
4a	levelling	806				1		1
	fill, robber cut 868	840		2				2
	fill, robber cut 875	874		1				1
	fill, pit 878	876	1					1
	fill, posthole 1103	1102	1					1
	Total		2	3		1		6
4b	fill, pit 648	637	1					1
	fill, pit 815	816	1					1
		Total	2					2
5a	garden soil	635	1					1
		Total	1					1
5b	fill, pit 1341	1342	2				1	3
		Total	2				1	3
	bedding layer	754		3				3

Phase	Feature	Context	Glass Type					Totals
			vessel	window	other	uncertain	waste	
5c	fill, pit 786	779	1					1
		Total	1	3				4
6a	fill, pit 1278	617				2	2	4
	fill, tank 1278	1277	3					3
		Total	3			2	2	7
6b	bedding layer	514	1					1
		Total	1					1
6c	fill, tank (walls 1327, 1363, 1364)	1325	1					1
		Total	1					1
6d	fill, pit 587	588	5	2				7
	levelling	722	4					4
	fill, soakaway 749	747	1					1
		748	1					1
	levelling	1276	17	2	4			23
	fill, construction cut 602	1330	27	7				34
	Total	55	11	4			70	
unph	(void)	739		2				2
		U/s	13					13
		Total	13	2				15
Totals			271	33	4	15	5	328

Table 2: BVK 11: Summary of Glass by Phase, Context and Glass Type (sherd count)

Phase Assemblages

Roman

Phase: 3b

The only glass is two refitting body sherds from a vessel of uncertain form from context [2018].

Phase: 3c

There are 43 sherds of glass, including 38 sherds of vessel glass and 3 sherds of window glass. Much of the glass comes from dumping (eg. context [732]) or levelling layers and is therefore likely to be re-deposited and residual. Layer [1538] produced a number of diagnostic sherds of glass including fragments from convex jars with collared rims and pillar moulded bowls which date respectively to the late 1st to early 2nd century and to the mid to late 1st century. The working hollow [1586] produced 19 sherds, plus a number of small

chips, from a globular jar of 1st- to 2nd-century date. A selection of the diagnostic sherds could be catalogued and illustrated.

Phase: 3d

The glass from Phase 3d contexts comprises by far the largest single phase assemblage with 122 sherds, including 112 sherds of vessel glass and a single sherd of window glass. There are 9 sherds of uncertain type. Much of the glass comes from levelling layers, with most glass from layers [1532], [1537], [1544] and [1545]. These layers alone produced 84 sherds of glass, mostly vessel glass. Again the glass is likely to be re-deposited and residual. The glass from these layers includes glass from the ribbon handles of bottles of late 1st- to late 2nd-century date (contexts [1532] and [1537]) and a rim sherd from a pillar moulded bowl of mid to late 1st-century date (context [1545]). There are also sherds that could be late Roman glass from context [1545]. These include a thin-walled body sherd probably from a conical beaker in an almost colourless metal with fine bubbles, and a rim and body sherd from a conical beaker in a very pale blue green metal with a few small bubbles. Levelling layer [1537] produced the pushed up base of late Roman conical beaker in very pale blue green metal.

In addition to the levelling layers a quantity of glass comes from brickearth layers (contexts [931] and [1527]). There is a rim sherd from a probable 4th-century conical beaker from layer [931]. This layer also produced a moulded rim and body sherd from a medieval beaker with optic blown teardrop bosses (SF554) in a green metal.

Phase: 3e

This phase produced just 23 pieces of glass including 5 pieces of window glass and 17 sherds of vessel glass. Again the glass came mainly from levelling layers, although no context produced more than 3 sherds. Context [1563] pit [1564] produced a sherd from the base of a mid to late 1st-century pillar moulded bowl and context [1465] pit [1466] produced a rim sherd from an indented beaker with cracked off rim dating to the late 1st to early 2nd century. The window glass included a piece of possible cylinder, or muff, glass from levelling layer [1239].

Phase: 3f

In contrast to earlier phases Phase 3f produced very small quantities of glass ($n = 9$) and only 2 sherds were from levelling layers. The glass comprises 4 sherds of vessel glass, 4 sherds of window glass and 1 piece of possible glass working waste. The latter came from context [1459] pit [1460]. Fill [1203] of drain [1204] produced an edge sherd of Roman cast matt glossy window glass. Levelling layer [1537] produced a small body sherd from 1st-century pillar moulded bowl.

Phase: 3g

Phase 3g contexts produced 12 sherds of glass including 10 sherds of vessel glass, a single sherd of window glass and a flat sherd possibly from a square Roman bottle. Robber trench [1470] produced the pushed up domed base of cup of 1st-century form (context [1469]) in a colourless metal. This is clearly re-deposited. Construction cut [623] produced a sherd of window glass (context [1199]) and possible window glass and the folded horizontal rim of a bottle (context [1378]). The base of a cast glass vessel in colourless metal with a yellow green tint was found in levelling layer [1396]. The latter is of 1st or 2nd-century date and therefore probably residual.

Phase: 3h

There are 7 sherds all from a single wheel cut cup of late 1st- to early to mid 2nd-century date from levelling layer [1063].

Late Roman & Post-Roman

Phase: 4a

There are just 6 sherds of glass from Phase 4a contexts, including 2 sherds of vessel glass and 3 sherds of window glass. The vessel glass includes a body sherd from a bowl with facet cut decoration and wheel cut arcading and dating most probably to the 3rd to 4th centuries, but possibly as early as the late 2nd century. The other vessel sherd is from a Roman cup or beaker (context [876]). The window glass includes 2 sherds of Roman glass from context [840]. The remaining glass comprises a small undiagnostic vessel body sherd (context [806]) and small sherd of window glass (context [874]). The diagnostic glass is residual Roman material.

Phase: 4b

Just 2 sherds of glass come from this phase, a rod handle possibly from a globular jug of late Roman date in dark blue green metal (context [637]) and an undiagnostic colourless body sherd (context [816]).

Medieval

Phase: 5a

There is a single undiagnostic vessel sherd in pale blue green metal from context [635].

Phase: 5b

The glass all came from context [1342] in pit [1341] and comprises 2 sherds probably from wine bottles in olive green metal, and a part melted body sherd in pale blue green metal.

Phase: 5c

The glass from Phase 5c comprises 3 sherds of medieval or early post-medieval window glass from layer [754] and a kick or pushup from the base of a small vessel from context [779] pit [786]. Both the window glass and vessel glass are weathered and at least in part devitrified.

Post Medieval

Phase: 6a

The glass from Phase 6a comes from two contexts, the fill [617] of pit [1278], and the fill [1277] of tank [1278]. The glass from context [617] comprises 2 almost flat sherds, which may be waste or scrap, and thin pulls or rods in very pale blue green metal. The latter may be glass working waste. The glass waste is not intrinsically dateable. The glass from tank [1278] comprises 2 refitting sherd from a free blown wine bottle in green metal and a complete small cylindrical phial in colourless metal. The latter dates probably to the 18th century.

Phase: 6b

The only glass is a single sherd from the neck of a free blown wine bottle (context [514]). The glass dates broadly to the 18th-century.

Phase: 6c

The only glass is short tapered neck of a free blown wine bottle (context [1325]) of very late 17th- or more probably early to mid 18th-century date.

Phase: 6d

Phase 6d contexts produced 70 sherds of glass including 55 sherds of vessel glass. Most of the glass comes from levelling layer [1276] (n sherds = 23) and from fill [1330] of construction cut 602 n sherds = 34). Context [588] pit [587] produced 5 sherds of vessel glass including 3 sherds from cylindrical phials or pharmaceutical bottles of 18th-century date and 2 refitting sherds from a moulded square or rectangular section bottle. Levelling layer [722] produced 3 refitting sherds from an 18th-century case bottle, and part of the base and kick of a mid 18th-century free blown wine bottle.

Levelling layer [1276] produced 4 refitting sherds in colourless glass from a lamp chimney of late 18th or 19th century date. There are also 4 sherds from a moulded bottle of flattened

octagonal section with a long narrow neck and cracked-off out-turned and fire polished finish. The latter probably of mid 18th-century date. There are 5 sherds from a cylindrical bottle of late 18th-century date. There are 7 sherds from various wine bottles. There is a body sherd from a globular vessel with optic blown ribs. The date of the latter is uncertain. Finally there are 2 sherds off post-medieval window glass.

Context [1330], the fill of construction cut [602], produced 27 sherds of vessel glass and 7 sherds of window glass. The vessel glass is dominated by 23 sherds from wine bottles, mainly free blown wine bottles dating from the 18th century but including the base of one bottle moulded in a Rickett type mould and dating to the mid 19th century. The window glass is post-medieval.

Distribution of Glass (Table 3)

The distribution of glass from BVK 11 by location and phase shows that the glass comes mainly from Area B. Finds from Roman contexts are even more concentrated in Area B, with only small quantities in Areas A1 and A2. At least 90% of the glass from Roman contexts comes from Area B. The glass from Area A1 is quite limited but most comes from Phase 6d contexts (n sherds = 36). This includes 7 sherds from context [588], pit [587], 4 sherds from levelling deposit [722], 2 sherds from soakaway [749], fills [747] and [748], and 23 sherds from levelling layer 1276. Area A2 produced only 11 sherds of glass and this includes just 6 sherds from Roman contexts. Area B produced 244 sherds including 197 sherds from Roman contexts. There are very small numbers of sherds from later phases in Area B. The only context to produce substantial numbers of sherds is the fill [1330] of construction cut [602] which produced all 34 sherds from Phase 6d in Area B.

Area	Phase																Totals	
	3b	3c	3d	3e	3f	3g	3h	4a	4b	5a	5b	5c	6a	6b	6c	6d		unph
A1		2		6	3	4					3		3	1		36		58
A2		3	2	1				1				4						11
B	2	38	120	16	6	8	7	5	2	1			4		1	34		244
Unstratified																	13	13
void																	2	2
Totals	2	43	122	23	9	12	7	6	2	1	3	4	7	1	1	70	15	328

Table 3: BVK 11: Glass by Area and Phase (sherd count)

Recommendations

The glass from BVK11 comprises a substantial assemblage composed largely, but not exclusively of Roman glass. All but 15 sherds are stratified. However, much of the Roman glass derives from levelling deposits and dumps. For this reason much of the glass is re-deposited and probably residual. This may be the reason why much of the assemblage comprises quite small sherds that are undiagnostic to vessel type. Amongst the identifiable glass are some 1st-century types, including pillar moulded bowls, and some 1st- to 2nd-

century vessels including bottles, convex jars with collared rims and globular jars. There are also some sherds of late Roman glass including conical beakers. There is a surprisingly small quantity of window glass from Roman contexts. The Roman glass assemblage should be published with a brief text describing its composition and character and a summary catalogue, with selected vessels illustrated. Those vessels to be illustrated are indicated in the catalogue below.

In addition to the Roman glass there is a small quantity of glass of later date. The small number of sherds from post-Roman contexts is residual Roman material and the glass from medieval contexts is unremarkable. It should be noted that there is a sherd of moulded glass of medieval date with optic blown teardrop bosses from context [931] (Phase 3d). Of more interest is the small post-medieval assemblage of glass, mostly dating from the 18th century and early to mid 19th century from Phase 6d. The glass comes mainly from context [1330] cut [602] and levelling layer [1276]. The glass from context [1330] comprises 34 sherds including 27 sherds of vessel glass, and that from context [1276] comprises 23 sherds including 17 sherds of vessel glass. There are also 5 sherds of vessel glass from context [588] pit [587]. Much of this glass comprises bottles and in particular wine bottles and might be worthy of brief report with some selected illustrations if relevant to overall project research design.

Catalogue

Roman

Phase: 3b

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
B	1018			vessel	2 x joining body sherds, v thin walled. Undiagnostic. Almost colourless metal with blue tint	

Phase: 3c

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
A1	1478			vessel	small thick sherd possibly from the base of a square bottle. Blue green metal. Roman	
A1	1551			vessel	sherd with tubular rim from beaker or small cup. Very pale blue green metal. Roman?	catalogue and illustrate?
A2	858			vessel	small very thin walled body sherd (Th: 0.5mm). Undiagnostic. Very pale blue tint. Possibly Roman	
A2	860			vessel	curved body sherd, uncertain vessel form. Pale blue green metal. Possibly Roman	
A2	860			vessel	curved small body sherd, uncertain vessel. Blue green metal.	
B	732			vessel	curved body sherd, undiagnostic. Blue green metal.	
B	732			window	sherd of thick window glass in blue green metal. Smooth surfaces, very slightly irregular. Post medieval?	
B	732			window	sherd of window glass in blue green metal with	

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
B	732			working waste	slightly wavy surfaces. Post medieval curved waste fragment forming a flat C-shape. One face is roughened with embedded soil or sand grains, the other face is fractured. Blue green metal.	
B	1503			uncertain	flat fragment with thickened and slightly curved edge. Possibly from a flat circular object with diameter of c 380mm. Pale green metal.	
B	1534			vessel	rim sherd from pillar moulded bowl. Bowl of very similar colour and size from context 1538. Dark blue green metal. Mid to late 1st century	catalogue and illustrate
B	1538			vessel	1 x rim sherd from convex jar with collared rim. 1 x body sherd with optic blown rib, from body of convex bodied collared jar. Sherds probably from the same vessel. Pale blue green metal. Late 1st to early to mid 2nd century	catalogue and illustrate
B	1538			vessel	rim sherd from convex jar with collared rim. Dark blue green metal. Late 1st to early to mid 2nd century	catalogue and illustrate
B	1538			vessel	3 x sherds from a pillar moulded bowl. Small rim sherd from similar bowl from context 1534. Dark blue green metal. Mid to late 1st century	catalogue and illustrate
B	1538			vessel	2 x small thick walled body sherds, one more markedly curved. From different vessels? Undiagnostic to form. Blue green metal. Roman	
B	1538			window	sherd of possible matt/glossy window glass. Blue green. Roman	
B	1584			vessel	body sherd from cylindrical vessel. Some imperfections in metal. Pale green metal.	
B	1584			vessel	sherd possibly from the base of a square bottle? Blue green metal.	
B	1585			vessel	Globular jar with inturned folded rim and round body. 10 x rim sherds, 9 x body sherds, and 9 small chips. Dark blue green metal. 1st to 2nd century, perhaps 3rd century	catalogue and illustrate
B	1600			vessel	strongly curved body sherd from a flask. Pale blue green metal. Roman	
B	1600			vessel	base with applied base ring, possibly from a small jug or flask. Dark amber metal. Roman	catalogue and illustrate

Phase : 3d

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
A2	931			vessel	rim sherd from a ?conical beaker with cracked off and ground rim, with ground band/groove below lip. Little of rim survives, but could be c 90mm diameter. Metal colourless, yellow tint. Late RB? 4th century	catalogue and illustrate
A2	931			vessel	moulded rim and body sherd with optic blown teardrop bosses from a beaker. Green metal. Medieval	catalogue and illustrate
B	731			vessel	Body sherd from thin walled vessel with horizontal ?optic blown rib. Almost colourless metal with blue tint. Date uncertain, possibly Roman.	
B	1441			vessel	small body sherd, undiagnostic to form. Blue green metal. Roman	
B	1441			window	small sherd of possible matt/glossy cast window glass. Slightly wavy or curved, could body from square bottle. Th: 2mm - 2.9mm. Blue green metal. Roman	
B	1461			vessel	2 x small body sherds, do not join. Undiagnostic to form. Pale blue green metal.	
B	1468			vessel	body sherd from optic blown ribbed bowl. Yellow green metal. Late 1st to early to mid 2nd century.	catalogue and illustrate
B	1468			vessel	2 x rim sherds from convex jar with collar rim. Yellow green metal. Late 1st to early to mid	catalogue and illustrate

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
					2nd century.	
B	1468			vessel	body sherd possibly from near base / heel of vessel. Undiagnostic to form. Blue green metal.	
B	1479			vessel	fragment possibly from neck of bottle or flask, Possibly a moi? Pale blue green metal.	
B	1479			vessel	2 x body sherds possibly from vessel shoulder/neck? Form uncertain. 1 x thick possible body sherd. Pale blue green metal.	
B	1510			vessel	rim from a jar with out-turned rim? The rim has been fire rounded. Blue green metal. Roman.	catalogue and illustrate
B	1510			vessel	rim from a jar with out-turned rim? The rim has been folded out and down to thicken it. Blue green metal. Roman.	catalogue and illustrate
B	1510			vessel	small body sherd possibly from a jar. Blue green metal.	
B	1510			vessel	base of a thin-walled conical beaker with horizontal tubular base ring and slightly domed base. Some small bubbles in metal. 2 x sherds. Colourless metal. Late Roman. 4th century	catalogue and illustrate
B	1527			vessel	3 x joining body sherds from cylindrical vessel; 1 x non-joining sherd probably same vessel. Vertically striated outer surface. Possible bottle. Pale blue green metal.	
B	1527			vessel	sherd from cracked-off rim probably from funnel mouthed flask. A few small bubbles in metal. Pale blue green metal. Probably late Roman (4th century?)	catalogue and illustrate
B	1527			vessel	6 x body sherds from more than one vessel. Undiagnostic. Pale blue green metal.	
B	1527			vessel	small body sherd with optic blown rib. Uncertain vessel form. Very pale blue green metal. Roman	
B	1527			vessel	thin walled sherd (Th: c 0.5mm) from base or body of vessel, Undiagnostic to form. Very pale blue green metal.	
B	1527			vessel	small sherd from folded rim. Undiagnostic to vessel form. Pale blue green metal.	
B	1527			uncertain	small sherd possibly window glass, but not certain. Th: 2.4mm to 3mm. Pale blue green metal.	
B	1527			uncertain	1 x small moulded sherd slightly crazed. Undiagnostic. Pale blue green metal.	
B	1532			vessel	2 x body sherds (50mm x 28mm; 52mm x 28mm) probably from cylindrical bottles/vessels otherwise undiagnostic to form. Pale blue metal. Possibly recent	
B	1532			vessel	Body sherd (52mm x 22mm) probably from a cylindrical bottle or vessel, otherwise undiagnostic to form. Very pale blue green metal. Very pale blue green metal. Possibly recent	
B	1532			vessel	2 x body sherds probably from a cylindrical bottle or vessel, otherwise undiagnostic to form. Pale blue green metal. Possibly recent	
B	1532			vessel	flat sherd in blue green metal, probably base or body sherd from square bottle. Blue green metal. Roman	
B	1532			vessel	small body sherd from thin walled vessel. Undiagnostic to form. Very pale blue green, almost colourless, metal.	
B	1532			vessel	body sherd, undiagnostic to form. Very pale blue green metal.	
B	1532			vessel	4 x small body from different vessels, undiagnostic to form. Blue green metal.	
B	1532			vessel	body sherd, thick walled and tightly curved. Undiagnostic to form. Pale blue green metal.	
B	1532			vessel	small body or base sherd, vessel form unclear. Pale yellow metal.	
B	1532			vessel	small body sherd, undiagnostic to vessel form.	

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
B	1532			vessel	Pale blue green metal. Body or shoulder sherd, possibly from conical vessel. Form not certain. Very pale blue green metal.	
B	1532			vessel	2 x neck sherds, from 2 different vessels. Undiagnostic to form. Blue green metal.	
B	1532			vessel	fragment of thick ribbon handle from bottle. Dark blue green metal. Late 1st to end 2nd century.	catalogue and illustrate ?
B	1532			vessel	fragment of thick ribbon handle from bottle. Dark blue green metal. Late 1st to end 2nd century	catalogue and illustrate ?
B	1532			vessel	tapered small diameter neck possibly from an unguent bottle. Yellow green metal. Roman.	catalogue and illustrate ?
B	1532			vessel	sherd from the pushed up base of thin walled vessel (Th: 0.5mm). Very pale blue green metal. Roman	
B	1532			vessel	small bowl? with horizontal fire polished rim. Pale blue green metal with matt finish. Roman	catalogue and illustrate ?
B	1532			vessel	small sherd with curved cracked off rim, possibly from a beaker or cup. Pale blue green metal. Could be late RB	
B	1532			vessel	small sherd with in turned horizontal rim. Flask or bottle rim? Blue green metal. Roman.	
B	1537			vessel	flat body sherd from square bottle. Blue green metal. Roman	
B	1537			vessel	fragment from ribbed ribbon handle of a bottle. Blue green metal. Late 1st to end 2nd century.	catalogue and illustrate ?
B	1537			vessel	sherd from near horizontal shoulder of square bottle, with curve to neck just visible. Blue green metal. Late 1st to end 2nd century	
B	1537			vessel	body sherd from indented and very thin-walled vessel, uncertain form. Some small bubbles in metal. Very pale blue green metal. Roman	
B	1537			vessel	5 x body sherds, from more than one vessel. Undiagnostic to form. Pale blue green metal. Roman	
B	1537			vessel	sherd from shoulder of a flask or jug. Upper part of sherd is more tightly curved bottom of neck. Pale blue green metal. Roman	
B	1537			vessel	base of conical beaker with tubular pushed in base ring and almost flat base. Very pale blue green metal. Roman	catalogue and illustrate
B	1532		554	uncertain	flat fragment, forming half a disc-like object, with one slightly irregular/rough face. On the other face it has folded and is broken. There is a tiny hole in the centre. Function uncertain. Pale blue green metal.	
B	1537			uncertain	flat sherd, matt on one face, varying from 4.5mm to 6mm in thickness. Possibly bottle rather than window glass? Pale blue green metal. Roman.	
B	1537			uncertain	flat sherd, varying in thickness from c 2mm to 3.5mm. Window or vessel? Pale blue green metal.	
B	1537			uncertain	thick triangular fragment, slight curve as if vessel, but very thick walled. Dark green with hint of blue.	
B	1540			vessel	body sherd undiagnostic to form. Pale blue green metal.	
B	1544			vessel	body sherd from cylindrical vessel (bottle?), Striated outer surface. Blue green metal.	
B	1544			vessel	body sherd possibly from hexagonal section bottle. Pale blue green metal. Roman.	
B	1544			vessel	body sherd with applied ?handle fragment. Possibly bottle sherd. Blue green metal.	
B	1544			vessel	sherd from neck shoulder junction. Not diagnostic to form, possibly bottle or flask. Blue green metal.	
B	1544			vessel	7 x body sherds from more than one vessel. Undiagnostic to form. Pale blue green metal.	

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
B	1544			vessel	body sherd from cylindrical vessel (bottle?). Blue green metal.	
B	1544			vessel	small thin-walled curved body sherd more strongly curved in one direction. Small bubbles in metal. Undiagnostic to form. Very pale blue green metal. Roman	
B	1544			vessel	small very thin-walled body, possibly from indented vessel?. Very pale blue green metal, almost colourless. Roman	
B	1544			vessel	2 x small fragments from handles or rims. Undiagnostic. Blue green metal.	
B	1544			vessel	sherd from heel or base of possible discoid flask. D: c 120mm. Pale blue green metal. Roman	
B	1544			vessel	rim sherd. Curved cracked off rim, not ground to finish, but left slightly uneven. From a flask with funnel mouth. Pale blue green metal. Roman	catalogue and illustrate ?
B	1544			vessel	rim sherd. Curved cracked off rim. Similar to above, but profile indicates different vessel. From a flask with funnel mouth. Pale blue green metal. Roman	catalogue and illustrate ?
B	1544			vessel	strongly curved body sherd with optic blown rib, possibly from globular jar or flask. Very pale blue green metal. Late 1st to early to mid 2nd century	catalogue and illustrate
B	1544			vessel	4 x sherds, forming neck and finish of a bottle with folded diagonal rim, and remains of handle junction. Dark blue green metal. Roman	catalogue and illustrate
B	1544			uncertain	swirled blob of glass with small trail. Could be part of a vessel or could be waste. Blue green metal.	
B	1545			vessel	5 x body sherds, more than one vessel, varied thickness. Undiagnostic to form. Blue green metal.	
B	1545			vessel	3 x body sherds, more than one vessel, thin walled. Undiagnostic to form. Pale blue green metal	
B	1545			vessel	2 x small body sherds, more than one vessel, undiagnostic to form. Pale blue green metal.	
B	1545			vessel	small body sherd, undiagnostic to form. Blue green metal.	
B	1545			vessel	small thin walled sherd possibly from conical beaker. Fine bubbles in metal. Very pale blue green metal, almost colourless. Late RB (4th century)	
B	1545			vessel	rim and body sherd from a conical beaker with curved and ground cracked-off rim. Some wheel cutting/grinding below rim. A few bubble in metal. Very pale blue green metal. 4th century.	catalogue and illustrate
B	1545			vessel	rim and body sherd from a conical beaker with curved and ground cracked off rim. 3 horizontal wheel cut lines further down profile. Some grinding below rim on exterior. Very pale blue green metal. Roman	catalogue and illustrate
B	1545			vessel	sherd from neck of flask with constriction at junction with body. Very pale blue metal. Roman	catalogue and illustrate ?
B	1545			vessel	possible cracked off curved rim for a wide out turned funnel mouthed vessel. The apparent craked off rim may just be a fortuitous break rather than a rim. Pale blue green metal	
B	1545			vessel	small rim sherd from pillar moulded bowl. Rim ground both inside and out down to top of mouldings. Dark blue green metal. Mid to late 1st century	catalogue and illustrate ?
B	1545			uncertain	2 x small flat sherds, slightly different shades. Possibly window glass, but could be from square bottles. Blue green metal.	
B	1559			vessel	sherd from pushed up base. Undiagnostic to	

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
					form. Blue green metal.	

Phase: 3e

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
A1	1509			vessel	curved body sherd possibly from a bottle. Blue green metal. Roman	
A1	1539			window	small sherd (Th: 2.5mm) of window glass with one slightly irregular face. Pale blue green metal.	
A1	1546			vessel	folded fragment from an applied ribbon handle from a flask or bottle. Dark blue green metal. Roman	
A1	1546			vessel	small body sherd with cracks or possibly wheel cut decoration. Difficult to be certain. Uncertain vessel form. Pale blue green metal.	
A1	1563			vessel	sherd from base of pillar moulded bowl. Pale blue green metal. Mid to late 1st century.	catalogue and illustrate ?
A1	1563			vessel	small body sherd, undiagnostic. Pale blue green metal.	
A2	848			vessel	strongly curved thin walled body sherd with painted decoration - single silver/grey oval- or petal-shape. Uncertain vessel form. Very pale blue green metal. Roman	
B	1179			window	probable window glass. Pale blue green metal. Could late post medieval?	
B	1183			uncertain	thick triangular sherd. Th: 6.5mm. Vessel glass rather than window? Pale green metal.	
B	1183			vessel	small sherd from horizontal rim of bottle or flask. Rim D: c 40mm. Pale green metal. Post-medieval rather than Roman? Sherd too small for certainty.	
B	1183			window	window glass with wavy surfaces. Th: 1.5mm-2.7mm. Pale blue green metal. Possibly Roman.	
B	1237			vessel	thick walled almost hemispherical fragment, could be push up from large cylindrical bottle, or round base of thick walled bottle or flask. Probably a push up. Blue green metal.	
B	1239			window	triangular piece of 'broad' or 'muff' glass. One face has a slight 'bobbly' surface, and there are distinctive elongated bubbles within metal. Brown mottling on the 2 shorter sides may indicate where leaded. Pale green metal. Roman?	
B	1249			vessel	sherd from sloping shoulder and junction with neck of a small cylindrical or conical vessel. Could be Roman or could be more modern. Pale green metal.	
B	1358			vessel	body sherd possibly from cylindrical bottle. Pale blue metal. Possibly Roman	
B	1430			vessel	small curved sherd from small globular bodied vessel. Very pale blue green metal.	
B	1430			window	sherd of thin window glass (Th: 1.4mm), with one short straight edge. Very pale blue green metal. Not closely datable, but possibly post medieval.	
B	1436			vessel	rim and neck sherd from flask with funnel mouth. Fire rounded rim, slightly over thickened at one point on circumference. Pale blue green metal. 1st-2nd century	
B	1436			vessel	2 x body sherds in similar metal, but not joining. Pale blue green metal. Roman	
B	1451			vessel	body sherd from optic blown ribbed bowl. Yellow green metal. Late 1st to early to mid 2nd century.	
B	1465			vessel	small curved body sherd, undiagnostic to vessel form. Pale blue green metal.	
B	1465			vessel	rim sherd possibly from an indented beaker	catalogue and illustrate

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
					with slightly curved cracked-off and ground rim. Very pale blue green metal. Late 1st to early to mid 2nd century.	?

Phase: 3f

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
A1	1375			vessel	body sherd with single rib from a cast pillar moulded bowl. Dark blue green metal. Mid to late 1st century.	
A1	1374			window	small sherd of thin window glass. Flat regular surfaces. Colourless. Undiagnostic	
A1	1529			window	small sherd of window glass. Blue green metal. Undiagnostic	
B	1174			vessel	body sherd, undiagnostic to vessel form. Colourless metal with hint of blue.	
B	1232			vessel	possible vessel sherd very thin walled (0.7mm). Strongly curved, could be base or rim sherd, Vessel form uncertain. Colourless metal with milky white surface.	
B	1459			vessel	almost flat sherd varying from 4.5mm to 2mm in thickness. Possible body sherd from square bottle. Blue green metal. Roman	
B	1459			waste	small oval blob, possibly glass working waste. Green metal.	
B	1161			window	small sherd of possible matt-glossy cast window glass. Th: 3.7mm – 4.2mm. ID not certain. Pale blue green metal. Roman	
B	1203			window	piece of edge of sheet of cast glass with rounded and slightly thickened edge profile. Matt-glossy. Pale blue green metal. Roman	catalogue and illustrate ?

Phase: 3g

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
A1	1292			vessel	body sherd of vessel glass. Undiagnostic to form. Yellow green metal.	
A1	1396			vessel	base from cast vessel with low base ring (D: 43mm) and indented base. Iridescent weathering. Colourless metal with yellow green tint.	catalogue and illustrate ?
A1	1467			vessel	small body sherd, colourless metal, undiagnostic to form.	
A1	1469			vessel	pushed-in domed base of cup. Colourless metal. Late 1st century.	catalogue and illustrate
B	1154			vessel	body sherd from square bottle. Blue metal. Roman	
B	1154			vessel	shed from indented base of thin walled free blown beaker. Very pale blue metal. Roman	
B	1199			window	possible cast window glass, even surfaces although with some imperfections. Th. c 2.5mm. Blue green metal.	
B	1378			vessel	sherd from a folded horizontal rim of c 100mm diameter, probably from a square bottle. Pale blue green metal. Roman.	catalogue and illustrate ?
B	1378			uncertain	flat sherd, possibly window glass, but could be body sherd from square bottle. Pale blue green metal.	
B	1400			vessel	small body sherd with cast rib (vertical or possibly diagonal rather than horizontal). Could be from jug or bowl. Amber metal. Roman	
B	1400			vessel	body sherd, undiagnostic. Pale blue green metal. Possibly not Roman, but not possible to be certain.	
B	1400			vessel	very small thin slightly curved body sherd (17mm x 10mm; Th: 1.5mm. Undiagnostic. Pale blue green metal.	

Phase: 3h

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
B	1063			vessel	6 x base sherds and 1 x rim sherd from a thin-walled wheel cut cup with tubular base ring and domed base. Ht probably originally c 100mm. D: 48mm. Colourless metal with hint of green. Late 1st to early to mid 2nd century	catalogue and illustrate

Post Roman

Phase: 4a

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
A2	806			uncertain	tiny fragment possibly glass. 4mm x 3.5mm x 1.2mm. Undiagnostic. Green metal.	
B	840			window	2 x joining sherds of thick window glass. Wavy surfaces, thickness varies from 5mm to 7mm. Pale blue green metal. Probably Roman.	
B	874			window	small sherd of window glass. Th: 2.2mm. Blue green metal.	
B	876			vessel	rim and body sherd from a cup or beaker with fire polished rim, Traces of possible wheel cutting or grinding at lower edge of sherd. Colourless metal with hint of yellow. Roman	catalogue and illustrate
B	1102			vessel	body sherd from deep bowl with facet cut decoration and wheel cut arcading. Colourless metal with hint of green. Roman, 3rd-4th century, possibly late 2nd century.	catalogue and illustrate

Phase: 4b

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
B	637			vessel	rod handle in dark blue green metal, almost complete. Possibly from a globular jug. Dark blue green metal. Roman, late 4th century.	catalogue and illustrate ?
B	816			vessel	body sherd from round-bodied vessel? Iridescent weathering. Almost colourless metal with blue tint. Undiagnostic	

Medieval

Phase: 5a

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
B	635			vessel	small sherd with slight but clear curvature, suggesting vessel glass. Undiagnostic to form. Very pale blue green metal. Some iridescent weathering on surfaces.	

Phase: 5b

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
A1	1342	0	0	vessel	body sherd from wine bottle. Not measured. Olive green metal.	
A1	1342	0	0	vessel	body sherd from wine bottle, weathered (possibly burnt). Not measured. Olive green metal.	

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
A1	1342	0	0	waste	melted sherd, possibly part melted body sherd, undiagnostic. Not measured. Very pale blue green metal	

Phase: 5c

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
A2	754	0	0	window	3 x joining sherds of probable window glass, partly de-vitrified. Wavy surfaces. Medieval or early post medieval?	
A2	779	0	0	vessel	possibly kick or push up from small vessel, rather than rounded bottom. Weathered, devitrified and opaque. Original colour unknown.	

Post-Medieval

Phase: 6a

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
A1	1277			vessel	2 x joining body sherds from a bottle free blown wine bottle. Green metal.	
A1	1277			vessel	complete free blown cylindrical phial with small kick, short neck and horizontal fire polished rim. Ht: 81mm. Colourless metal.	
B	617	9		uncertain	2 x small almost flat sherds. Possibly waste? Very pale blue green metal.	
B	617	9		working waste	2 x thin pulls or rods. The longest is 57mm long with a D of 3.1 x 3.2mm; the shorter is 31mm long with D of 4.2 x 4mm. Very pale blue green metal.	catalogue and illustrate

Phase: 6b

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
A1	514			vessel	sherd from the neck of free blown wine bottle. Date uncertain, no distinguishing features. Broadly 18th century.	

Phase: 6c

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
B	1325			vessel	short tapered neck from a squat wine bottle. It has a cracked off rim and hand applied horizontal string rim. Part of shoulder survives. Green metal. Very late 17th to early 18th century.	

Phase: 6d

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
A1	588			vessel	2 x joining body sherds, flat with one turned up edge on long side. Part of a square or rectangular section thin walled bottle or other vessel. Th: 1mm to 1.2mm. Pale blue green metal.	
A1	588			vessel	sherd from almost flat only very slightly indented base of a thin walled cylindrical bottle	

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
					or phial. Body D: c 70mm. Pale blue green metal. Similar to next 2 vessels. 18th century.	
A1	588			vessel	conical kick or pushup from free blown cylindrical pharmaceutical vessel. Similar to next vessel, but perhaps from a smaller vessel. Pale blue green metal. 18th century.	
A1	588			vessel	Neck and horizontal shoulder of a thin walled free blown cylindrical pharmaceutical bottle. Short neck narrowing to the mouth with an out turned almost horizontal rim with marvered or tooled edge. Similar vessel to previous 2 vessels, but maybe has larger diameter. Pale blue green metal. 18th century.	
A1	588			window	2 x joining sherds of window glass with regular smooth faces. Th: 1.5mm. Colourless.	
A1	722			vessel	3 x joining sherds possibly from shoulder and body of bottle of square or hexagonal section. Very pale blue green metal. 18th century.	
A1	722			vessel	sherd from base and kick of a free blown cylindrical wine bottle. Deep domed kick D: 110mm. Green metal. Mid 18th century.	
A1	747			vessel	almost complete base of squat free blown wine bottle, with domed kick. D: 130mm. Olive green metal. Early 18th century.	
A1	748			vessel	curved body sherd, undiagnostic. Weathered and possibly partly devitrified. Light green.	
A1	1276			other	Lamp chimney. 4 x joining sherds forming part of upper rim and body of a lamp chimney. Colourless. Late 18th- or 19th-century	
A1	1276			vessel	bottle with flattened octagonal section, mould blown (4 x sherds), almost complete. Long narrow neck with cracked-off out-turned mouth with fire polished finish. Single hand applied and tooled V-profile string rim. Ht: 220mm. Olive green metal. Mid 18th century.	TRUE
A1	1276			vessel	free blown cylindrical bottle. Neck and upper body survive (5 x sherds). Wider at shoulder than base. Has out turned fire polished finish with uptooled flattened string rim. Green metal. Late 18th century.	
A1	1276			vessel	sherd from heel of free blown cylindrical wine bottle. Dark green metal. 18th century	
A1	1276			vessel	sherd from heel of free blown wine bottle. Undiagnostic to form. Green metal.	
A1	1276			vessel	5 x sherds from different wine bottles. Varying shades of olive green	
A1	1276			vessel	body sherd from a small possibly globular vessel with optic blown ribs. Undiagnostic to form and date.	
A1	1276			window	2 x sherds of thin window glass, Larger: 70mm x 41mm; smaller: 63mm x 38mm. The small sherd has one long straight edge. Very pale blue green metal. Post-medieval	
B	1330			vessel	base of free blown cylindrical bottle with deep domed kick. Green metal. Late 18th century	
B	1330			vessel	base and much of body of a free blown cylindrical wine bottle, deep domed kick, thin walls in upper body. Olive green metal. Late 18th century	
B	1330			vessel	wine bottle neck with applied and down tooled string rim below a down tooled (and possibly thickened) rim. Complete neck with part of shoulder from cylindrical bottle. Green metal. Late 18th- or early 19th century	
B	1330			vessel	wine bottle neck with applied and down tooled string rim below a thickened and down tooled rim. Complete neck with part of shoulder from cylindrical bottle. Green metal. Late 18th- or early 19th century	
B	1330			vessel	possible condiment bottle neck, Narrow neck with thickened and tooled rim over a down	

Area	Context	SF No	Sample No	Glass Type	Comments	Recommendations
					tooled string rim. The shoulders of the bottle are asymmetrical, which makes it difficult to determine the body form. Green metal. Late 18th century.	
B	1330			vessel	Body sherd from a cylindrical vessel. Colourless metal. Undiagnostic	
B	1330			vessel	7 x body sherds from wine bottles, undiagnostic. Green metal.	
B	1330			vessel	moulded faceted tumbler base. Colourless metal. Date uncertain.	
B	1330			vessel	base and part of body of a small bottle of rectangular section with bevelled corners. Mould blown. Dark green metal.	
B	1330			vessel	neck and finish of wine bottle with slightly bulged neck. Thickened and down-tooled rim, and applied down tooled string rim. Dark green metal. Late 18th- to early 19th-century	
B	1330			vessel	neck and finish of wine bottle with slightly bulged neck. Thickened and down-tooled rim, and applied flattened string rim. Dark green metal. Late 18th- to early 19th-century	
B	1330			vessel	neck and finish of wine bottle with slightly bulged neck. Tooled V-shaped rim, and applied down-tooled string rim. Weathered. Green metal. Late 18th- to early 19th-century	
B	1330			vessel	neck and finish of wine bottle with slightly bulged neck. Down-tooled (and possibly thickened) rim, and applied flattened string rim. Part of the rim is cracked away. Dark green metal. Late 18th- to early 19th-century	
B	1330			vessel	part of neck and complete finish of a wine bottle. Thickened and V-shaped tooled rim and applied down-tooled string rim. Dark green metal. Late 18th- to early 19th-century	
B	1330			vessel	base of free blown cylindrical wine bottle, deep domed kick, and triangular pontil mark. D: 91mm x 92mm. Dark green metal. Late 18th- to early 19th-century	
B	1330			vessel	base of free blown cylindrical wine bottle, domed kick, small circular pontil mark. Dark green metal. Late 18th- to early 19th-century	
B	1330			vessel	base of free blown cylindrical wine bottle, domed kick, and circular pontil mark. D: 88mm x 90mm. Dark green metal. Late 18th- to early 19th-century	
B	1330			vessel	base of free blown cylindrical wine bottle, domed kick, and no clear pontil mark. D: 85mm x 86mm. Dark green metal. Late 18th- to early 19th-century	
B	1330			vessel	base of free blown cylindrical wine bottle, deep domed kick, and circular pontil mark. D: 88mm x 89mm. Very dark green metal. Late 18th- to early 19th-century	
B	1330			vessel	base of free blown cylindrical wine bottle, conical kick, and circular pontil mark. D: 85mm x 86mm. Dark green metal. Late 18th- to early 19th-century	
B	1330			vessel	base of moulded large cylindrical wine bottle, low conical kick formed on base plate, and pontil mark comprising square formed from 4 sub-triangular marks. D: 98mm x 99mm. Probably formed in a dip mould but possibly in a Rickett's type mould. Dark green metal. Early to mid 19th-century.	
B	1330			window	7 x sherds of window glass with regular smooth surfaces, now weathered. Th: 1.5mm. Colourless metal. Post medieval rather than modern?	

APPENDIX 8: SMALL FINDS ASSESSMENT

Ian R Scott

Introduction (Table 1)

The metal and small finds assemblage considered here comes from the archaeological work at 11-15 Borough High Street, Southwark (BVK 11) and comprises 577 objects (1,115 frags). The large number of fragments is accounted for mainly by undiagnostic fragments and nail stem fragments. The finds from Roman contexts (Phases 3a-3h) number 414 (n frags = 888) and the majority of these finds come from Phases 3b-3g. Some finds from Post Roman contexts (Phases 4a-4b) (n = 95; n frags = 127) and a small number of finds from medieval contexts (Phases 5a-5c) (n = 42; n frags = 60) are also considered here. There is also a small number of finds from post-medieval contexts (n = 19; n frags = 29) and 7 unstratified objects (11 fragments).

Methodology

The metal and other small finds have been fully recorded. They are quantified both by object and fragment numbers. Complete nails and nail heads have been counted to give a minimum number of nails, and all fragments of nails including stem fragments were counted to give a maximum number. Undiagnostic metal fragments (Table 1: 'Undiag') are only counted as fragments and are not included in the Catalogue below.

Phase Assemblages

Roman

Phase: 3a

The only find from this phase is a block of copper alloy from levelling layer [1606].

Phase: 3b

There are 42 finds from Phase 3b contexts, and over half of these finds (n = 26) come from pits. Finds from pit [1624] include a probable barb spring padlock bolt from context [1608] and there is the stem of a copper alloy needle from pit [689] context [678]. Four finds came from the fills of ditch [887] including an annular glass bead from context [886], 3 hobnails, an offcut of lead and some nails. A small bone handle in the form of a bird (S570) came from a burnt horizon [1605]. However, most of the finds from Phase 3b comprise nails, miscellaneous fragments, unidentified fragments and waste material and are of limited interest.

Table 1: BVK 11: Small finds and metals: Summary by Phase and object function (object and fragment counts)

Phase		Function																	Totals
		Coin	Tools	Transport	Measure	Personal	Leisure	Medicine	Household	Door	Security	Structural	Nails	Binding	Misc	Query	Waste	Undiag	
3a	Count														1				1
	Fragt														1				1
3b	Count		1			4					1	1	8		7	4	16	0	42
	Fragt		1			6					1	1	29		8	6	18	31	101
3c	Count				1	44						1	26	1	9	2	24	0	108
	Fragt				1	53						1	54	1	9	2	24	35	180
3d	Count		1			2			2				20		7	6	9	0	47
	Fragt		1			2			2				39		7	7	12	32	102
3e	Count		5	1		10							32		4	4	4	0	60
	Fragt		5	1		10							51		4	5	4	49	129
3f	Count		2			12	1	1					7		3	3	12	0	41
	Fragt		2			15	1	3					37		3	3	13	9	86
3g	Count		1			23							51			7	10	0	92
	Fragt		1			23							96			8	10	60	198
3h	Count					1							9		2		10	0	22
	Fragt					1							33		3		10	44	91
4a	Count					23			2			1	14		13	2	15	0	70
	Fragt					25			2			1	18		16	2	15	7	86
4b	Count					5			1				6	1	6	2	1	0	22
	Fragt					5			1				11	1	9	2	2	10	41
5a	Count					1							2		1		1	0	5
	Fragt					1							5		1		1	2	10
5b	Count												2				1		3
	Fragt												3				1		4
5c	Count		1	2						1		2	14	2	3	3	2	0	30
	Fragt		1	3						1		2	22	5	3	4	2	3	46
6a	Count												4	1	1	2			8
	Fragt												9	1	1	2			13
6b	Count											1	1		1	1			4
	Fragt											1	2		1	1			5
6d	Count					3			1			1	1			1			7
	Fragt					3			1			1	3			3			11
unph	Count	1	2			1			1								2	0	7
	Fragt	1	2			1			1								2	4	11
Total	Count	1	13	3	1	129	1	1	7	1	1	7	197	5	58	37	107	8	569
Total	Fragt	1	13	4	1	145	1	3	7	1	1	7	412	8	66	45	114	286	1115

Phase: 3c

There are 108 finds from Phase 3c contexts. Some of the finds come from levelling layers [732], [926], [1538], [1587] and [1593]. Layer [732] produced pieces of waste, while [926] produced just 3 hobnails. A pair of tweezers in 3 pieces came from levelling layer [1538]. Layers [1587] and [1593] produced little of interest.

Occupation layer [860] produced 27 finds including 17 hobnails and occupation layer [1551] produced an incomplete copper alloy balance arm (SF182).

Working hollow [1586] contained 22 hobnails (contexts [1584] and [1585]) as well as wood nails (contexts [1584], [1585] and [1591]). As with Phase 3b, the finds from Phase 3c are quite numerous but of limited intrinsic interest.

Phase: 3d

There are 47 finds from Phase 3d contexts and all are from Area B. The commonest finds from this phase are nails (n = 20; n frags = 39), followed by waste (n = 9; n frags = 12), miscellaneous pieces (n = 7; n frags = 7) and objects of uncertain identification (n = 6; n frags = 7). The remaining finds comprise a copper alloy needle stem (SF177) from levelling layer [1537], a fragment of a cosmetic or medical probe with olive-shaped head (SF171) from a gravel surface [1514] and a Trumpet brooch (SF178) from levelling layer [1544].

Most of the finds are from levelling layers (n = 27) but comprise mainly nails and other largely undiagnostic material, but there is a copper alloy needle stem (SF177) from layer [1537], a fragment of possible knife blade as well as a Trumpet brooch (SF178) from levelling layer [1544] and a large copper alloy tack (SF176), perhaps a furniture tack, from layer [1532]. The finds from pits are limited to nails and a single miscellaneous metal fragment. One of the more interesting finds is the fragment of cosmetic or medical probe (SF171) with olive shaped head from gravel surface [1514].

Overall the finds from this phase are of limited interest or potential.

Phase: 3e

There are 60 finds (129 fragments) from Phase 3e contexts. The most numerous objects are nails (n = 32) and personal items (n = 10), which include 7 hobnails. Other personal items comprise a rectangular copper alloy buckle frame (SF166) from levelling [1509], a bone hairpin with decorative head (SF141) from pit [1395] context [1394] and bone pin stem from occupation layer [1227]. Levelling [1237] produced a bone needle with eye (SF121) and bone pin stem fragment (SF120). Another bone needle (SF145) came from burnt horizon [1445]. Levelling [1509] produced a fragment of copper alloy needle with eye (SF167) and

levelling [1539] produced a copper alloy needle fragment with part of its eye extant (SF181). The most interesting find is small teardrop shaped seal box from levelling layer [1451].

Again most finds (n = 37) are from levelling deposits. The fills of pits produced 10 finds, but only 1 object of note, bone hairpin (SF141) from pit [1395] context [1394]. The main feature of the finds from this phase is number of bone and copper alloy pins and/or needles recovered when compared to overall paucity of distinctive or intrinsically interesting finds.

Phase: 3f

There are 41 finds (8 fragments) from Phase 3f. The finds include just 7 nails, but 37 nail fragments, most of which come from burnt layer [1222]. This horizon also produced 10 hobnails (13 fragments). There is a bone needle from levelling layer [1163] and a bone needle stem from context [1405] pit [1418]. Mortar/gravel layer [1150] produced a copper alloy ring (SF108) with a deep groove round its circumference. There is a bone hairpin from context [1374] in flue or drain [1372]. There is a copper alloy spatula probe (SF129) from levelling [1375]. A bone counter or gaming piece (SF114) was recovered from context [1203] drain [1204]. The range of finds is again limited with little evidence for domestic occupation or craft activity.

Phase: 3g

There are 92 finds (198 fragments) from Phase 3g contexts. There are 51 nails (96 nail fragments) and 60 undiagnostic fragments. There are also 10 pieces of either lead or copper alloy waste. There is a bone pin or hairpin from occupation layer [979] and bone hairpin (SF105) from gravel surface [1093]. Other personal items are limited to hobnails. The range of objects from Phase 3g appears to be even more limited than previous phases.

Phase: 3h

There are just 22 finds from this phase. There are no intrinsically interesting finds. There are nails, miscellaneous metal and metal waste, and numerous undiagnostic fragments. There is a single hobnail from brickearth layer [1015].

Post Roman

Finds from Post Roman and later contexts (Phases 4a-4b, 5a-5, 6a-6b and 6d) are significantly fewer in number than the Roman finds. For that reason the discussion of Post Roman finds focuses on individual finds of intrinsic interest rather than assemblages. The recorded objects have been included in the catalogue at the end of this report and are summarised in Tables 1-2.

Phase: 4a

The finds recorded from Phase 4a number 70 items (86 fragments). Amongst the finds from are part of a Roman bracelet decorated with crenelations (SF6) from levelling [591]. Other finds from this layer include a single Manning Type 1 nail and 19 hobnails (S500). Garden soil [700] produced part of a cast copper alloy circular collar or bracelet with piecrust decoration (SF26). Fill [877] of pit [878] produced the fig-shaped bowl of a Roman spoon (S512). Occupation layer [1023].

Phase: 4b

The finds recorded for Phase 4b number 22 (41 fragments). Amongst the finds are a decorated ivory or bone knife handle (SF407) of late 16th- or 17th-century date from levelling layer [1349]. From the same layer is an incomplete amphora-shaped late Roman strap end (SF137).

Medieval

Phase: 5a

Just 5 objects (10 fragments) have been recorded from this phase. Amongst the objects is an early Roman Aucissa brooch (SF184) from a chalk wall [1594].

Phase: 5b

There are 3 objects (4 fragments) which have been recorded from Phase 5b contexts.

Phase: 5c

A total of 30 objects (46 fragments) have been recorded from Phase 5c. The fragments include 3 undiagnostic fragments from robber cut [566] context [698]. All the remaining finds (n = 30; n frags = 43) were recovered from pit [781]. Amongst the finds is a complete copper alloy needle (SF59).

Post-medieval

Phase: 6a

There are 8 recorded finds (13 fragments) from Phase 6a contexts. They comprise nails, miscellaneous pieces and the like.

Phase: 6b

There are just 4 recorded finds (5 fragments) from Phase 6b contexts. One copper alloy object (SF35) may possibly be an unfinished bow brooch (cf. example illustrate by Feugère 1985, 253-58, pl. 85, no. 1148). Further investigation will be required.

Phase: 6d

There 7 finds (11 frags) recorded. They include a drape ring, a drawn wire pin fragment and 2 shank buttons.

Unstratified finds

The small number of unstratified finds includes a small rim fragment from a copper alloy vessel (SF22) and a lead token (SF50).

Table 2: BVK 11: Small Finds: Summary by Phase Context and Object Function (object and fragment counts)

Ph	Ctxt	Feature		Function																	Totals
				Coin	Tools	Transport	Measure	Personal	Leisure	Medicine	Household	Door	Security	Structural	Nails	Binding	Misc	Query	Waste	Undiag	
3a	1606	levelling	Count														1				1
			Fragt															1			
3b	678	fill, pit 689	Count		1														1		2
			Fragt		1															1		2
	886	fill, ditch 887	Count				4						4						1	0	9
			Fragt				6						11						1	9	27
	890	fill, ditch 887	Count													1	1				2
			Fragt													2	1				3
	912	fill, ditch 887	Count										1						1		2
			Fragt										1						1		2
	913	levelling	Count													3					3
			Fragt													3					3
	1314	burnt horizon	Count													1					1
			Fragt													1					1
	1483	levelling	Count										1								1
			Fragt										1								1
	1552	levelling	Count															1			1
			Fragt															3			3
	1560	burnt horizon	Count																1		1
			Fragt															3			3
	1605	burnt horizon	Count										3					1		0	4
			Fragt										5					1		1	7
1608	fill, pit 1624	Count										1						3		4	
		Fragt										1						3		4	
1609	fill, pit 1624	Count														1				1	
		Fragt														1				1	
1610	fill, pit 1624	Count										0						3		3	
		Fragt										7						3		10	
1614	hearth collapse	Count										0			1				0	1	
		Fragt										3			1				20	24	
1619	fill, pit 1618	Count										0								0	
		Fragt										2								2	
1621	fill, pit 1622	Count															1	4	0	5	
		Fragt															1	4	1	6	
1623	fill, pit 1624	Count																2		2	
		Fragt																2		2	
732	levelling	Count																6		6	
		Fragt																6		6	
858	op sig surface /	Count														1				1	

Ph	Ctxt	Feature		Function																Totals	
				Coin	Tools	Transport	Measure	Personal	Leisure	Medicine	Household	Door	Security	Structural	Nails	Binding	Misc	Query	Waste		Undiag
3d			Fragt					1									2			3	
	1522	levelling	Count														1	1		2	
			Fragt														1	1		2	
	1527	brickearth layer	Count										2				1	2		5	
			Fragt										2				1	2		5	
	1532	levelling	Count							1			5				3		2	0	11
			Fragt							1			8				3		4	10	26
	1537	levelling	Count		1																1
			Fragt		1																1
	1544	levelling	Count				1				1										4
		Fragt				1				1										4	
1545	levelling	Count										1						1		2	
		Fragt										1						1		2	
1559	gravel surface	Count										2			1	1	3	0		7	
		Fragt										7			1	1	3	2		14	
3e	850	burnt horizon	Count																0	0	
			Fragt																	4	6
	978	fill, pit 967	Count																		5
			Fragt																		7
	1005	levelling	Count																		1
			Fragt																		1
	1179	levelling	Count				5											1		0	12
			Fragt				5													29	48
	1183	occupation layer	Count																		2
			Fragt																		2
	1184	levelling	Count				2														2
			Fragt				2														2
	1227	occupation layer	Count				1												1		2
			Fragt				1												1		2
	1237	levelling	Count		2																5
			Fragt		2																6
1242	levelling	Count																		1	
		Fragt																		1	
1249	mortar surface	Count														2		3	0	7	
		Fragt														4		2	3	11	20
1262	occupation layer	Count															1			1	
		Fragt															1			1	
1394	fill, pit 1395	Count				1												1		2	
		Fragt				1												1		3	
1430	levelling	Count															1			3	
		Fragt															1			4	
1444	burnt horizon	Count		1																1	

Ph	Ctxt	Feature		Function																Totals		
				Coin	Tools	Transport	Measure	Personal	Leisure	Medicine	Household	Door	Security	Structural	Nails	Binding	Misc	Query	Waste		Undiag	
			Fragt					12								15			1	14	42	
	1292	levelling	Count												1						1	
			Fragt												1						1	
	1367	fill, flue 1369/1370	Count															1		0	1	
			Fragt														1			3	4	
	1404	op sig surface / bedding	Count												1						1	
		Fragt												2						2		
1467	levelling	Count												2			2			4		
		Fragt												2			3			5		
3h	1015	brickearth layer	Count					1							6		1		6	0	14	
			Fragt					1							17		1		6	2	27	
	1024	fill, beam slot 1073	Count												0					0	0	
			Fragt												13					4	17	
	1053	levelling	Count																3		3	
			Fragt																3		3	
1063	levelling	Count												1		1		1		3		
		Fragt												1		2		1		4		
1064	fill, pit 1065	Count																		0	0	
		Fragt																		38	38	
1067	fill, gully 1066	Count												2							2	
		Fragt												2							2	
4a	591	levelling	Count					20							1						21	
			Fragt					21							1						22	
	640	demolition layer	Count												1						1	
			Fragt												1						1	
	643	fill, pit 644	Count														1				1	
			Fragt														1				1	
	651	fill, pit 652	Count														1				1	
			Fragt														3				3	
	700	garden soil	Count					1													0	1
			Fragt					1													2	3
718	fill, pit 719	Count																		0	0	
		Fragt																		1	1	
789	fill, posthole 790	Count															2		1		3	
		Fragt															2		1		3	
795	fill, pit 796	Count									1									0	1	
		Fragt								1										4	5	
806	levelling	Count												0							0	
		Fragt												1							1	
807	fill, posthole 808	Count												2							2	
		Fragt												2							2	
813	fill, pit 814	Count															1				1	

Ph	Ctxt	Feature		Function																	Totals	
				Coin	Tools	Transport	Measure	Personal	Leisure	Medicine	Household	Door	Security	Structural	Nails	Binding	Misc	Query	Waste	Undiag		
		cut 702	Fragt												2						2	
6d	748	fill, soakaway 749	Count										1								1	
			Fragt										1									1
	1330	fill, construction cut 602	Count				3			1								1			5	
			Fragt				3			1								3			7	
1344	fill, pit 1343	Count											1								1	
		Fragt											3								3	
unph			Count	1	2			1			1									2	0	7
			Fragt	1	2			1				1									2	4	11
Total			Count	1	13	3	1	129	1	1	7	1	1	7	197	5	58	37	107	0	569	
Total			Fragt	1	13	4	1	145	1	3	7	1	1	7	412	8	66	45	114	286	1115	

Distribution of Small Finds (Table 3)

The distribution of finds from BVK 11 by location and phase shows that the small finds come mainly from Area B. Finds from Roman contexts are concentrated in Area B, with only comparatively small quantities in Areas A1 and A2. The finds from Roman contexts in Area A1 are limited and are concentrated in Phases 3b-3c and 3e-3g. Roman finds from Area A2 concentrated almost exclusively in Phases 3b and 3c. The concentration of finds in Area B continues in Phases 4a and 4b.

Table 3: BVK 11: Small finds and metals by Area and Phase (object and fragment counts) (including unstratified material)

Area		Phase																Total	
		3a	3b	3c	3d	3e	3f	3g	3h	4a	4b	5a	5b	5c	6a	6b	6d		unph
A1	Count		4	4		10	8	7		22	5	2	0	0		2	2		66
	Fragt		8	4		17	23	12		23	6	4	1	3		2	4		107
A2	Count		18	31		0		1		6			1	30		2			89
	Fragt		37	45		6		1		7			1	43		3			143
B	Count	1	20	73	47	50	33	84	22	42	17	3	2		8		5		407
	Fragt	1	56	131	102	106	63	185	91	56	35	6	2		13		7		854
unstrat	Count																	7	7
	Fragt																	11	11
Total	Count	1	42	108	47	60	41	92	22	70	22	5	3	30	8	4	7	7	569
Total	Fragt	1	101	180	102	129	86	198	91	86	41	10	4	46	13	5	11	11	1115

Recommendations

The Roman small finds from BVK 11 comprises a numerically large assemblage but one that has a limited range of objects. The assemblage lacks domestic objects, tools and craft objects. There are a few personal items, including small groups of hobnails. Almost all the finds are stratified, but much of the assemblage comes either from dumped levelling or infill deposits and clearly includes a substantial residual element. This may be reason why there is such a high proportion of nail stem fragments and also numerous undiagnostic fragments. A small number of objects of Roman date have been identified and could be published. The Roman finds assemblage should be published with a brief text characterising its composition and a summary catalogue, with selected vessels illustrated. Those vessels to be catalogued and/or illustrated are indicated in the catalogue below.

Catalogue

Roman

Phase: 3a

Area	Context	SF No	Sample No	Comments	Pot Date	recommendations
B	1606	202		block, slight wavy/irregular long sides, but straight (cut?) ends. Cu alloy.		

Phase: 3b

Area	Context	SF No	Sample No	Comments	Pot Date	recommendations
A1	1314		539	rod fragment, heavily encrusted. Fe.		
A1	1483			U-staple, very heavily encrusted. ID from x-ray. L: 35mm. Fe.		
A1	1552			3 x fragments of strip, largest piece L: 21mm; W: 12mm. Cu alloy		
A2	678			stem of needle, with broken eye and missing point. L extant: 88mm. Cu alloy		
A2	678			melted cu alloy waste (1 x fragt).		
A2	886		513	annular bead fragment in amber glass. D; c 10mm.		catalogue and illustrate
A2	886		513	4 x Type 1 nails, encrusted, various sizes; 7 x nail stems (11 x frags). Fe.		
A2	886		513	3 x hobnails, 2 x hobnail stems (5 frags). Fe		
A2	886		513	9 x undiagnostic fragments. Fe.		
A2	886			offcut of strip or strip. 63mm x 42mm. Waste. Pb.		
A2	890	81		2 x fragments of wire (L: 26mm & 17mm). Cu alloy		
A2	890	82		possible seal box hinge fragment Poorly preserved and possibly part melted. 25mm x 15mm. Cu alloy		
A2	912	83		tack with solid domed head. L: 18mm. Cu alloy		
A2	912	84		melted, or heavily corroded, waste. Cu alloy		
A2	913	85		3 x small plate or strip fragments (not measured) do not join. Cu alloy		
A2	1560	188		3 x fragments of folded and melted cu alloy sheet. Waste. Largest piece 39mm x 32mm.		
B	1605	0	570	1 x Type 1 nail complete with mineral preserved wood; 1 x Type 1 head fragment, encrusted; 1 x complete nail stem; 2 x small stem fragments (5 x frags). Fe		
B	1605	0	570	small handle in the shape of a bird (possibly an eagle) attached to cu alloy blade and secured by single cu alloy rivet. Knife handle carved from bone (or ivory). Appears to be an eagle?		catalogue and illustrate
B	1605	0	570	small triangular fragment of cu alloy		
B	1608	0	573	3 x fragments melted lead waste.		
B	1608	203		probable barb sprig padlock bolt, comprising tapering bar with rolled over loop at the wider end and an attached spring leaf at the narrow end. L: 70mm x 8mm. Cu alloy		catalogue and illustrate
B	1609		576	heavily encrusted fragment, reveals rectangular section in break. Fe		
B	1610		579	7 x stem fragments from small nails. Fe		
B	1610		579	3 x fragments melted lead waste.		
B	1614		591	3 x nail stem fragments. Fe.		
B	1614		591	4 x amorphous lumps; 16 tiny undiagnostic fragments. Fe.		
B	1614	200		rectangular sheet fragment. 118mm x 55mm. Pb		
B	1619		599	2 x nail stem fragments. F.		
B	1621		600	curved strip possibly very slightly curved in cross section. No visible nail holes. Encrusted. L: 42mm; W: 7mm. Cu alloy		
B	1621		600	undiagnostic fragment, possibly natural iron pan. e		
B	1621		600	4 x irregular fragments of melted waste. Pb.		
B	1623		590	2 x small pieces of melted waste. Pb.		

Phase: 3c

Area	Context	SF No	Sample No	Comments	Pot Date	recommendations
A1	1551			fragment of thin sheet, no original edges, with single cu alloy pin or nail. 28mm x 26mm. Cu alloy.		
A1	1551			2 x possible Type 1 nails, incomplete and heavily encrusted. Fe.		
A1	1551	182		incomplete balance arm, comprising central part of arm with suspension point. L extant: 62mm. Cu alloy.		catalogue and illustrate
A2	858	56		small irregular plate fragment. Cu alloy.		
A2	860		511	8 x Type 1 nails incomplete, poorly preserved and encrusted. e.		
A2	860		511	17 x hobnails. Fe		
A2	860		511	4 x small flat undiagnostic fragments. Fe		
A2	860	57		folded sheet, cu alloy. 35mm x 30mm		
A2	860			T-staple, rectangular section tapering stem incomplete. L: 69mm; W: 62mm. Fe.		
A2	926		517	3 x hobnails. Fe.		
B	732	100		melted lead waste. Pb.		
B	732	99		5 x fragments of waste, some melted? Cu alloy.		
B	1538			folded cu alloy sheet. 38mm x 15mm.		
B	1538			2 x probable Type 1 nails, encrusted and incomplete; 1 x stem fragment. Fe.		
B	1538			encrusted ?melted cu alloy waste.		
B	1538			8 x fragments of encrusted ?melted waste. Cu alloy.		
B	1538	185		tweezers. 3 x fragments forming the 2 arms of the tweezers. The spring between the blades is missing. L: 45mm; 44m & W: 6mm. Cu alloy.		catalogue and illustrate
B	1579			Possible Type 1 nail, heavily encrusted (2 x frags). Fe		
B	1584		560	small length of wire or thin rod. Cu alloy.		
B	1584			1 x Type 1, incomplete, very heavily encrusted; 1 x possible nail or nail stem very heavily encrusted; 1 x stem fragment. Fe.		
B	1584		560	3 x Type 1 or possible Type head fragments; 3 x stem fragments. Fe		
B	1584		560	6 x hobnails; 3 x stem fragments. (9 x frags). Fe.		
B	1584		560	10 x tiny undiagnostic fragments. Fe.		
B	1584		560	small flat undiagnostic fragment. Cu alloy.		
B	1584			2 x small thin melted cu alloy fragments. Waste.		
B	1585			2 x nail stem fragments. Fe.		
B	1585		561	2 x possible Type nails, incomplete; 4 x stem fragments (6 x frags). Fe.		
B	1585		561	16 x hobnails encrusted; 4 x stem fragments. (20 x frags). Fe.		
B	1585			possible T-staple, but has at least one hole, and possibly two. Could be handle?. L: 79mm; W: 48mm. Fe.		Further investigation?
B	1585		561	5 x amorphous lumps; 11 x small fragments and lumps. Undiagnostic. Fe.		
B	1585	199		thick curved strip, plain. Perhaps part of hoop or collar? Cu alloy.		
B	1587	0	564	nail stem or rod, fragment. Fe.		
B	1591	0	563	3 x Type 1 nails incomplete and heavily encrusted; 2 x small stem fragments. (5 frags). Fe.		
B	1593	0	0	3 x heavily mineralised and encrusted elongated fragments perhaps rod or strip fragments. Fe..		
	1593	0	0	2 x Type 1 nails both complete or near complete: L: 65mm and 50mm. The		

Area	Context	SF No	Sample No	Comments	Pot Date	recommendations
B				smaller nail has mineral preserved wood on its stem. Fe		
B	1593	0	567	2 x Type 1 nails , 1 x clenched, incomplete; 4 x stem fragments. (6 x frags). Fe.		
B	1593	0	0	pointed cast (or melted) fragment of lead, possibly waste. 64mm x 14mm.		
B	1593	0	567	4 x undiagnostic lumps. Fe.		
B	1593	0	567	2 x fragments melted lead waste.		
B	1600	0	0	length of bar, heavily encrusted. L: 127mm. Fe		
B	1600	0	569	hobnail. Fe.		
B	1600	189	0	large dense irregular block of melted cu alloy. Waste? 120mm x 73mm x 36mm.		
B	1600	190	0	small lump of melted cu alloy.		
B	1600	191	0	small lump of melted cu alloy.		
B	1600	193	0	small lump of melted cu alloy		
B	1600	194	0	small lump of melted cu alloy		

Phase: 3d

Area	Context	SF No	Sample No	Comments	pot date	recommendations
B	731			Type 1 nail, complete (2 x frags). L: 105mm. Fe.		
B	731	101		sheet folded to form a slightly irregular triangle. 32mm x 27mm. Cu alloy		
B	1371			Type 1 complete, encrusted. L: 49mm. Fe		
B	1401			2 x Type nails, encrusted but complete - L: 57mm and 46mm. Fe.		
B	1402			2 x Type 1 nails, incomplete, but small (originally c 40mm to 50mm long?). Fe.		
B	1455		544	2 x nail stem fragments. Fe.		
B	1455		544	3 x small undiagnostic lumps. Fe.		
B	1461		545	2 x nail stem fragments. FE.		
B	1461		545	thin strip fragment. Pb		
B	1461		545	9 x undiagnostic lumps. Fe.		
B	1468		547	bar or rod fragment, encrusted. Could be nail. Fe.		
B	1468		547	1 x possible Type 1 nail, encrusted and mineralise; 3 x possible stem fragments. Fe.		
B	1468	204		shale plaque, fragment which has split. The full thickness of plaque only survives at one edge where section of incised/carved decoration remains, comprising an incised ring and dot with panel of hatching following curved edge. 52mm x 37mm. Shale.		catalogue and illustrate
B	1471		552	1 x Type 1 with small head; 4 x stem fragments. Fe.		
B	1471		552	8 x undiagnostic amorphous lumps. None are magnetic.		
B	1496			slag or cinder. Fe?		
B	1496	154		cu alloy pellet, melted waste. 8mm x 6mm.		
B	1514	171		cosmetic or medical probe fragment with olivary head. L: 65mm. Cu alloy.		catalogue and illustrate
B	1514	172		tubular object, poorly preserved 2 x fragments, do not join, but clearly parts of same object (same section in break). Cu alloy		
B	1522	158		strip, probably folded , very poorly preserved. 24mm x 15mm. Cu alloy.		
B	1522	159		tapering and slightly curved object. Possibly hollow and mineralised. Uncertain identification. L: 25mm. Cu alloy.		
B	1527			2 x Type 1 nails heavily encrusted, 1 x incomplete, but one could be complete (L: c 80mm). Fe		

Area	Context	SF No	Sample No	Comments	pot date	recommendations
B	1527			wire or pin stem fragment. L: 39mm. Cu alloy		
B	1527			2 x melted waste. Cu alloy.		
B	1532			2 x possible washers encrusted in corrosion products. Fe		
B	1532			bar fragment, corroded and fused to stone. Not measured. Fe.		
B	1532			2 x Type 1 nails, incomplete; 1 x stem fragment; all encrusted. Fe		
B	1532			nail stem fragment. Fe.		
B	1532		554	1 x Type 1 nail, incomplete; 2 x Type I heads only; 1 x stem fragment, (4 x frags). Fe.		
B	1532		554	10 x undiagnostic amorphous lumps; plus numerous tiny fragments (30 +). Fe.		
B	1532			slag. Fe?		
B	1532			cinder or slag. Fe?		
B	1532			folded sheet offcut. Pb.		
B	1532			folded and rolled offcut of thick sheet. Pb.		
B	1532	176		large tack with large head or nail/tack with sheet). Head bent. L: 41mm; D: 26mm. Cu alloy		
B	1537	177		needle, lacking both point and eye. : 92mm. Cu alloy.		
B	1544			fragment of possible knife blade, encrusted. L extant: 91mm. Fe.		
B	1544			2 x Type 1 nails encrusted, 1 x possibly complete, L: 62mm. Fe		
B	1544	178		Trumpet brooch. L: 53mm; W: 18mm. Cu alloy.		catalogue and illustrate
B	1545			Type 1 nail very heavily encrusted and incomplete. Fe.		
B	1545	180		dense irregular block. 4mm x 32mm x 28mm. Waste. Cu alloy.		
B	1559			Type 1 nail possibly complete, encrusted. L:80mm. Fe.		
B	1559		558	1 x possible Type nail incomplete; 5 x stem fragments. Fe.		
B	1559			heavily encrusted rectangular fragment, broken at one end to reveal object of oval section. Function and ID uncertain. Fe		further investigation?
B	1559		558	2 x small undiagnostic lumps. Fe.		
B	1559		558	melted cu alloy, possibly lead bronze. Waste.		
B	1559	196		fragment of thick strip (or small block). 19mm x 9mm x 3mm. Cu alloy.		
B	1559	197		small lump of melted cu alloy waste.		
B	1559	198		small piece of melted cu alloy, possibly with remains of decorative terminal.		further investigation?

Phase: 3e

	Context	SF No	Sample No	Comments	pot date	recommendations
A1	1509			1 x Type 1 complete but encrusted. L: 57mm; 2 x Type 1 heads; 1 x Type 1 incomplete. Fe.		
A1	1509	169		melted waste. Pb.		
A1	1509	166		rectangular buckle frame. 43mm x 34mm. Cu alloy.		
A1	1509	167		needle fragment with fattened top pierced with rectangular eye. L: 50mm. Cu alloy.		
A1	1509	168		narrow strip, bent (2 x frags). 40mm x 22mm. Cu alloy		
A1	1535		556	5 x small undiagnostic fragments. Fe.		
A1	1539	181		needle with incomplete eye. Eye is not countersunk. L: 108mm. Cu alloy.		catalogue and illustrate
A1	1546			nail stem fragment. Fe.		
A2	850		510	2 x nail stem, or bar, fragments. Fe.		

	Context	SF No	Sample No	Comments	pot date	recommendations
A2	850		510	4 x undiagnostic fragments. Fe		
B	978		515	5 x Type 1 nails incomplete, various sizes; 2 x stem fragments. Fe.		
B	1005			Type 1 incomplete. L extant: 84mm. Fe.		
B	1179			2 x Type 1 nails incomplete and encrusted. Fe.		
B	1179		535	1 x possible Type 1 nail, incomplete; 3 x Type 1 heads; 7 x stem fragments. (11 x frags.). Fe.		
B	1179		535	5 x hobnails. Fe.		
B	1179		535	29 x undiagnostic fragments, c 20 very small. Fe.		
B	1179	119		curved flat strip with deep V-notches at each end. L: 45.5mm. Function unclear. Cu alloy.		
B	1183			2 x Type 1 nails, encrusted but complete. L: c 70mm & c 75mm. Fe.		
B	1184		536	2 x hobnails. Fe.		
B	1227			knife cut and polished pin stem. Tapered stem lacking point and head. L: 65mm. Bone.		
B	1227	117		possible stud or rivet, oval rather than circular in plan, encrusted. D: 17mm. Cu alloy.		
B	1237			1 x Type 1 nail complete but bent (L: 52mm); 1 x bolt or nail with flat circular head, incomplete; 1 x nail stem fragment (2 x frags). Fe.		
B	1237	120		bone pin, missing head, tapering to a point. L extant: 84.5mm; D: 3.5mm.		
B	1237	121		complete tapering bone needle, beautifully polished. Flattened at the upper end a pierced with an almost figure of eight shaped eye. L: 116mm.		catalogue and illustrate
B	1242			Type 1 nail incomplete. Fe.		
B	1249			curved tapered bar fused to pebble. 83mm x 39mm. Fe.		
B	1249			irregular slight tapered strip. 70mm x 13mm. Pb.		
B	1249		550	2 x probable Type 1 nails; 2 x stem fragments, all encrusted one has a white tessera attached. Fe.		
B	1249		550	11 x small undiagnostic fragments. Fe		
B	1249			3 x tiny fragments of melted waste. Pb.		
B	1262	125		dense irregular block, possibly Waste? 40mm x 36mm x 17mm. Cu alloy.		
B	1394			nail stem, or bar, fragment, encrusted. Fe.		
B	1394	141		hairpin with elongate knobbed head with cut disc below. The stem has been recut to a blunt point. L: 45mm. Bone		catalogue and illustrate
B	1394	174		clay fill of a ceramic vessel containing fragments of metallic cu alloy. Part profile of vessel preserved by clay.		
B	1430			poorly preserved plate or strip fragment with no original edges. 25mm x 16mm. Cu alloy.		
B	1430			2 x large Type 1 nails, incomplete. Fe.		
B	1430			nail stem fragment. Fe.		
B	1444	145		needle with tapering stem, The tip is missing as is part of the eye and the top of the needle. L: 76mm; D: 4mm x 3.5mm. Bone.		catalogue and illustrate ?
B	1451			1 x Type 1 nail possibly complete (L: c 53mm), encrusted; 1 x Type 1 incomplete; 1 x stem fragment. Fe.		
B	1451			Type 1 complete but encrusted (2 x frags). L: 70mm. Fe.		
	1451			small heavily encrusted seal box. Tear drop shape. L: 36mm; W: 15mm. Cu alloy.		catalogue and illustrate

	Context	SF No	Sample No	Comments	pot date	recommendations
B				2 x Type 1 nails complete or almost complete L: c 60mm & c 42mm; 1 x Type 1 incomplete. Fe.		
B	1465					

Phase: 3f

Area	Context	SF No	Sample No	Comments	pot date	recommendations
A1	1526	170		object with circular section body, worn at one end, with flange or flat top at the other end. On one side is evidence of lugs or possible hinge. Appears solid on x-ray. Uncertain ID. 18mm x 14mm x 23mm. Cu alloy		further investigation
A1	1526			slag. Fe?		
A1	1374		549	2 x possible nail heads; 3 x stem fragments, encrusted. (5 frags). Fe.		
A1	1374	152		hairpin with ?recut quite blunt point, and slight notch marking head. Does not taper through length. L: 61mm. Bone		catalogue and illustrate
A1	1374		549	9 x small undiagnostic fragments. Fe		
A1	1374	150		length of wire. L: 48mm. Cu alloy		
A1	1374	151		length of wire with small knob at one end perhaps the head of a small pin. L: 26mm. Cu alloy.		
A1	1374	153		tapering object/rod fused at an angle to strip or rod. Undiagnostic. Heavily encrusted. L: 35mm. Cu alloy		further investigation?
A1	1375	129		spatula probe with slightly dished leaf-shaped blade at one end, and olive-shaped knob or pestle at the other end. (3 frags). L: 185mm. Cu alloy. Roman		catalogue and illustrate
B	1150	108		ring, fragment, with deep groove around circumference of band. D: 23mm. Cu alloy		catalogue and illustrate
B	1163			bone needle, circular section stem with broad flat head. 3 piercings, 2 small flanking elongated hole. Tip missing. L extant: 79mm.		catalogue and illustrate
B	1164			curved bar, encrusted and mineralised, hardly magnetic. L: 79mm. Fe.		
B	1178			Type 1 nail complete but bent or clenched. L: 68mm. Fe		
B	1203	114		circular counter or playing piece. Slightly angled or chamfered edges. The upper face has a slight but regular depression, clearly original. D: 26mm x 26mm. Bone.		catalogue and illustrate
B	1203			1 x Type 1 nail almost complete. L: 68mm; 1 x Type 1 incomplete; 1 x stem fragment. (3 frags). Fe.		
B	1203			3 x irregular pieces of melted lead waste.		
B	1203			2 x lead offcuts		
B	1203	116		thick cast plate fragment. 50mm x 18mm x 4mm. Cu alloy		
B	1212			Type 1 nail encrusted, probably complete. L: 70mm. Fe.		
B	1222		533	26 x small nail or tack stems, possibly hobnail stems, but not bent/clenched. Fe.		
B	1222		533	10 x large hobnails L: 21mm; 3 x smaller hobnails. Fe.		
B	1222			off cut or melted waste. Pb		
B	1228	118		3 x small pieces of ?melted waste. Cu alloy		
B	1405			needle stem fragment, flattened towards the head which is incomplete, part of eye survives. No tip/point. L extant: 45mm. Bone.		
B	1417		543	nail with small head or no head,		

Area	Context	SF No	Sample No	Comments	pot date	recommendations
B				incomplete. Fe.		
B	1459	147		slag or cinder . Cu alloy?		
B	1459	148		melted waste. Cu alloy		
B	1459	149		melted waste. Cu alloy		

Phase: 3g

Area	Context	SF No	Sample No	Comments	Pot date	recommendations
A1	1292			possible Type 1 with encrusted head, incomplete. Fe.		
A1	1367		542	pin or needle, tiny stem fragment of circular section. Bone.		
A1	1367		542	3 x tiny undiagnostic fragments. Fe. 1 x Type 1 nail incomplete, mortar encrusted; 1 x stem fragment, mortar encrusted. Fe.		
A1	1404			2 x Type 1 nails incomplete and encrusted. Fe.		
A1	1467			tapering tube or tubular object, possibly blocked at the wider end. L: 52mm. Cu alloy.		
A1	1467	155		tapering solid point. L: 24mm, max D: 6.5mm. Straight taper. Function uncertain. Cu alloy.		
A1	1467	156		Type 1 complete, mineral preserved wood. L: 102mm. Fe.		
A2	853			Type 1 nails, 1 x complete; 1 x incomplete. L: 55mm. Fe.		
B	979			pin with straight taper, tip missing. Has shallow cone shaped head, D: 6.4mm x 6.7mm. L: 100mm. Bone.		catalogue and illustrate ?
B	979	90		7 x undiagnostic fragments. Fe.		
B	979		516	Type 1 nails, 2 x complete (L: c 100mm and c 50mm) encrusted; 4 x incomplete, encrusted; 4 x stem fragments. Fe.		
B	989			narrow thick strip fragment with thin strip riveted to the top? Cu alloy.		
B	1050	97		Type 1 nail, encrusted but complete. L: 68mm. Fe.		
B	1078			Type 1 encrusted but complete (2 x frags). L: 65mm. Fe.		
B	1089			pin fragment with cone shaped head. The top end of the pin is oval in section. The extant lower end is circular in section. D near top: 3mm x 3.6mm.; D near break: 3mm. L: 70mm. Bone.		catalogue and illustrate
B	1093	105		4 x Type 1 nails, incomplete, all bent or clenched. Fe.		
B	1097			nail stem fragment. Fe.		
B	1116			Type 1 incomplete. Bent or clenched. Fe.		
B	1148			Type 1 almost complete and clenched. L 60mm. Fe.		
B	1149			small piece of melted waste. Cu alloy		
B	1149	107		2 x Type 1 incomplete. Fe		
B	1154	109		melted waste. Cu alloy		
B	1154		527	5 x possible nail stem fragments. Fe		
B	1154		527	hobnail. Fe.		
B	1156			elongated rod-like piece of melted lead.		
B	1167			1 x Type 1 incomplete; 1 x stem fragment. Fe.		
B	1167	110		dished circular mount fragment. D: 50mm. Cu alloy		
B	1169		528	4 x Type 1 heads; 7 x stem fragments. All fused to pebbles and stones. Fe.		
B	1169		528	2 x hobnails. Fe.		
B	1169		528	small curved strip pointed at one end and fused to stones. Poorly preserved. Fe.		

Area	Context	SF No	Sample No	Comments	Pot date	recommendations
B						
B	1169		528	moulded object perhaps part melted. ID uncertain. Ht: 15mm. Cu alloy.		
B	1169		528	8 x small undiagnostic fragments. Fe.		
B	1173	112		amorphous lumps of waste. Cu alloy, encrusted.		
B	1173	113		2 x fragments melted waste. Cu alloy		
B	1186			Type 1 nail incomplete, fused to nail stem fragment. Fe.		
B	1196		530	irregular melted waste. Pb.		
B	1199			2 x nails almost complete but lacking heads. Both encrusted, 1 has a tessera attached. Fe.		
B	1199		531	12 x Type 1 nails; 14 x stem fragments all encrusted and mineralised. No longer magnetic. Fe.		
B	1199		531	7 x hobnails. Fe.		
B	1199		531	28 x undiagnostic fragments, mostly small. Fe.		
B	1205			Type 1 nail almost complete. Encrusted. L: 83mm. Fe.		
B	1208			2 x Type 1 nail incomplete. Fe.		
B	1211		532	5 x Type 1 head fragments, encrusted; 10 x stem fragments. Fe.		
B	1211		532	12 x hobnails. Fe.		
B	1211		532	14 x undiagnostic fragments. Fe.		
B	1211	115		1 x fragment of melted cu alloy or possibly slag.		

Phase: 3h

Area	Context	SF No	Sample No	Comments	pot date	recommendations
B	1015	103		fragment of cast cu alloy plate, poorly preserved. 32mm x 13mm.		
B	1015		522	6 x Type 1 nails/nail heads, incomplete; 11 stem fragments. (17 x frags). Fe.		
B	1015		522	hobnail. Fe.		
B	1015		522	2 x tiny flat fragments, undiagnostic. Fe.		
B	1015		522	6 x small irregular pieces of melted lead waste		
B	1024		521	nail stem fragments, 3 x with mineral preserved wood. Fe.		
B	1024		521	4 x small undiagnostic flat fragments. Fe.		
B	1053			3 x large pieces of melted lead waste.		
B	1063			Type 1 nail incomplete. Fe.		
B	1063	102		2 x lengths of wire (: 38mm & 32mm), the longer piece pointed and possibly part of a pin. Cu alloy.		
B	1063	102		melted waste. Cu alloy.		
B	1064		525	10 x undiagnostic lumps, not magnetic. Fe?		
B	1064		525	25 x small undiagnostic fragments. Fe.		
B	1067			2 x Type 1 nails, incomplete and encrusted. Fe.		

Post-Roman

Phase: 4a

Area	Context	SF No	Sample No	Comments	Pot date	recommendations
A1	591			Type 1 nail. Incomplete. Fe.		
A1	591		500	19 x hobnails. Fe.		
A1	591	6		thin crenellated bracelet incomplete. L: 40mm. Cu alloy. Roman		catalogue and illustrate

Area	Context	SF No	Sample No	Comments	Pot date	recommendations
A1	640			Type 1 nail incomplete. Fe.		
A2	806		505	nail stem fragment. Fe.		
A2	820			nail incomplete, heavily encrusted. Fe.		
A2	820	42		irregular curved strip. 32mm x 15mm. Cu alloy.		
A2	870			probable nail, very heavily encrusted. Extant L: c. 90mm. Fe.		
A2	870	88		hairpin, fragment of stem of. Polished fatter middle section of pin (D: 3.5mm). L: 67mm. Bone		
A2	881	69		melted, or eroded, cu alloy		
A2	917			Type 1 nail encrusted and bent or clenched. Fe.		
B	643	28		irregular slightly curved plate fragment. 19mm x 12mm. Cu alloy.		
B	651	19		3 x joining fragments of thin plate, forming irregular fragment with no original edges. 30mm x 20mm. Cu alloy.		
B	700	25		2 x small undiagnostic fragments. Cu alloy.		
B	700	26		fragment of bracelet or collar, circular or near circular section and with 'pie crust' decoration. L: 32mm. Cu alloy. Roman		catalogue and illustrate ?
B	718	33		undiagnostic fragment. Cu alloy.		
B	789	64		length of rod, oval in section, encrusted. L: 23mm. Cu alloy.		
B	789	65		small piece of melted waste. Cu alloy		
B	789	66		small curved plate fragment, possibly from a collar. L: 10mm; W: 8mm. Cu alloy.		
B	795	507		small tack with flat circular head. L: 14mm. Cu alloy.		
B	795	507		4 x small undiagnostic fragments. Fe.		
B	807			2 x Type 1 nails, incomplete, heavily encrusted. Fe.		
B	813	43		rivet . Cu alloy.		
B	844			melted waste. Cu alloy		
B	874			tapered block heavily encrusted. L: 115mm. Fe.		
B	874			melted irregular lump. Pb		
B	874			thick trapezoid offcut. Pb		
B	874			thin trapezoid offcut. Pb		
B	874			curved sheet of melted waste. Pb		
B	874			sheet of melted waste. Pb		
B	874	68		pin with added large cast head. L: 47mm. Cu alloy. Post medieval.		
B	874	70		strip or plate fragment. 12mm x 17mm. Cu alloy.		
B	877	512		fragment of a spoon with fig-shaped bowl and cranked handle. L: 37mm; W: 18mm. Cu alloy. Roman.		catalogue and illustrate
B	877			strip with leaf-shaped terminal or expansion. No nail holes. L: 135mm; W: 40mm. Fe.		
B	877	512		nail stem, or bar, fragment. Fe.		
B	895			Type 1 nail complete, clenched or bent. L: c 60mm. Fe.		
B	919			tapering block or thick strip, incomplete and encrusted. No nail holes. 88mm x 48mm x 17mm. Fe.		
B	919			head of T-staple, with stump of stem. : 110mm. Fe.		
B	998			dense small block, heavily encrusted. 53mm x 37mm x 18mm. Fe.		
B	998			2 x nail stem, or bar, fragments, encrusted. Fe.		
B	1023			possible Type 1 nail, or bolt, incomplete (extant L: 96mm). Fe.		
B	1023			nail stem or spike. L: 100mm. Fe.		
B	1023	520		Type 1 nail mineralised and encrusted. Fe.		
B	1023	520		5 x pieces of irregular melted lead waste.		

Area	Context	SF No	Sample No	Comments	Pot date	recommendations
				Pb.		
B	1023	92		small domed object with circular hole at apex. Possibly bell, but more probably a moulded dome collar or binding? Ht: 13mm; D: 22mm. Cu alloy.		catalogue and illustrate
B	1023	94		thick triangular plate fragment, encrusted with part of a Type 1 nail fused to one face, and corrosion product at one end. Cu alloy.		
B	1023			bar bent into a curve, possibly part of a hook, now heavily encrusted. 49mm x 40mm. Fe.		
B	1102			2 x Type nails, 1 x complete (L: 130mm); 1 x almost complete (extant L: 50mm). Fe.		
B	1340			encrusted melted waste. Cu alloy		
B	1340	136		curved flattish strip. Laminated at one end. Undiagnostic to function. L: 61mm. Cu alloy.		
B	1362			Type 1 nail incomplete, encrusted. Fe.		

Phase: 4b

Area	Context	SF No	Sample No	Comments	pot date	recommendations
A1	558			Type 1 nail, incomplete. Fe		
A1				ivory or bone knife handle of hexagonal section, for whittle tang knife. Each face of the handle is decorated with parallel and interleaved wavy lines. The top of the handle has small carved knob. Late 16th- to 17th-century. Ivory (or bone)	L 16 - 17C	catalogue and illustrate
A1	1349	407		folded thin lead sheet. 35mm x 30mm.		
A1	1349			Possibly fastener formed from wire, or possibly a nail, bent into a loop. L: 50mm; W: 23mm. Fe.		
A1	1349	137		amphora-shaped strap end, incomplete. L extant: 31mm; W: 19mm. Cu alloy. Late Roman	Roman	catalogue and illustrate
A1	1397			slag. Fe?		
B	620			3 x fragments of strip, 2 possibly join at right angles. 52mm x 16mm. Fe.		
B	647		504	3 x Type 1 head fragments; 5 x stem fragments. Fe.		
B	647		504	2 x possible hobnails, encrusted. Fe.		
B	647		504	undiagnostic fragments. Fe.		
B	647	5		small undiagnostic amorphous lump. Cu alloy.		
B	647	13		tapering spike or strip bent up at the pointed end. L: 24mm. Cu alloy.		
B	647	24		2 x refitting fragments of plate with 3 extant edges. 17mm x 14mm. Cu alloy.		
B	791		506	strip fragment, encrusted. Fe.		
B	791		506	small square strip or sheet fragment. Fe.		
B	791		506	small encrusted fragment of possible sheet or plate. Only slightly magnetic. Fe.		
B	791		506	2 x Type 1 nails incomplete. Fe.		
B	791		506	2 x hobnails. Fe.		
B	791		506	small undiagnostic fragment. Fe.		
B	791			tiny triangular offcut. Pb.		
B	791	37		undiagnostic amorphous lump. Cu alloy.		
B	1336	130		corroded lump, undiagnostic. Cu alloy.		
B	1336	131		corroded elongated lump, undiagnostic. Cu alloy.		
B	1336	132		possible strip fragment with single nail/rivet. Poorly preserved and encrusted. ID far from certain. 23mm x 19mm. Cu alloy.		

Medieval

Phase: 5a

Area	Context	SF No	Sample No	Comments	pot date	recommendations
A1	541			nail stem fragment. Fe.		
B	608			block, encrusted. 68mm x 26mm x 17mm. Fe.		
B	608			1 x Type 1 incomplete; 1 x stem fragment. Fe.		
B	608			triangular offcut of lead sheet.		
B	608	8		undiagnostic amorphous lump. Cu alloy.		
B	632	31		undiagnostic amorphous lump. Cu alloy.		
A1	1307			2 x Type 1 incomplete and encrusted. Fe.		
A1	1594	184		Aucissa brooch. L: 55mm; W: 19mm. Cu alloy. Late 1st- to early 2nd-century.		catalogue and illustrate

Phase: 5b

Area	Context	SF No	Sample No	Comments	Pot date	recommendations
A2	784			Type 1 nail, complete. L: 55mm. Fe.		
A2	1342			nail stem, or bar, fragment, encrusted. Fe.		
B	600			Nail with small head or missing head, encrusted. Fe.		
B	600			melted waste. Cu alloy		

Phase: 5c

Area	Context	SF No	Sample No	Comments	Pot date	recommendations
A1	698	135		3 x small undiagnostic fragments. Cu alloy		
A2	777			half horseshoe, with worn toe. Broad thick branch with square heel and 2 x rectangular nail holes. L extant: 105mm. Fe.		
A2	778			Type 1 incomplete. Fe.		
A2	779			3 x Type 1 incomplete; 4 x stem fragments. Fe.		
A2	779			half horseshoe with worn toe. Broad thick branch with square heel and 3 rectangular nail holes. L extant : 125mm. Fe.		
A2	780			3 x fragments of a small cu alloy collar. D: 14mm; W: 6mm. Cu alloy.		
A2	780			2 x fragments of bar, both laminating. The longer fragment ends on a rolled over loop; the smaller fragment) which has a similar diameter (D: c 20mm) and appears flattened and widen at one end. The two pieces do not join. L: 111mm & 61mm. Fe.		
A2	780			curved object formed from rectangular section bar, looks like a heel iron, but lacks nail holes. Function unclear. 81mm x 70mm. Fe.		
A2	780			small fragment of narrow tubular object, heavily encrusted, possibly part of a lace tag. L: 10mm. Cu alloy		
A2	780	62		lead strip cast in a C-shaped. 84mm x 60mm; W of strip: c 18mm. Pb.		
A2	780			dished melted fragment. Cu alloy.		
A2	781			poorly preserved and encrusted strip with single nail hole. 28mm x 20mm. Cu alloy		
A2	781			L-shaped hinge staple. L; 68mm. Fe.		
A2	781			roughly triangular ?plate fragment. Encrusted. 46mm x 45mm. Fe.		
A2	781			3 x Type 1 complete or near complete: L: 100mm; 72mm; 64mm; 6 x Type 1		

				incomplete; 4 x stem fragments. (13 x frags) Fe.		
A2	781			nail with T head, or T-staple, incomplete		
A2				spike or nail with mineral wood preserved on stem. Bent to form an L-shaped head?		
	781			L: 81mm. Fe.		
A2	781	59		complete needle with elongated eye. L: 76mm. Cu alloy		catalogue and illustrate ?
A2				holdfast with mineral preserved wood on stem, grain in 2 directions. L extant:		
	782			74mm; W: 40mm. Fe.		
A2	782	63		melted waste. Cu alloy		

Post-Medieval

Phase: 6a

Area	Context	SF No	Sample No	Comments	Pot date	recommendations
B				strip with 1 nail hole, and traces of mineral preserved wood on one face. L: 94mm; W: 34mm. Fe.		
	593					
B	593			short strip. L: 29mm; W: 10mm. Pb.		
B	593			nail stem fragment		
B				possible fragment of binding with single nail. L: 46mm; W: 30mm. Fe.		
	593					
B				Y-shaped object heavily encrusted, could be spur fragment or rowlock fragment. L: 105; W: 63mm. Fe.		
	593					
B				4 x Type 1 nails incomplete and heavily encrusted; 4 x nail stem fragments. Fe.		
	627		502			

Phase: 6b

Area	Context	SF No	Sample No	Comments	Pot date	recommendations
A1	508			bolt, heavily encrusted. L: 100mm. Fe.		
A1	514			wire, L: 70mm; D: c 1.2mm. Fe.		
A2				object comprising broad central section with parallel grooves towards edges,. At each end are tapering spikes. Purpose uncertain. L: 92mm; W: 12mm. Cu alloy		catalogue and illustrate
	690	35				
A2				Type 1 nail, almost complete. L: 118mm. Fe.		
	701					

Phase: 6d

Area	Context	SF No	Sample No	Comments	Pot date	recommendations
A1	748			pipe or tube. L: 45mm; D: 18mm. Fe.		
A1				1 x Type 1 nail complete but encrusted, L: 42mm; 2 x large stem fragments. Fe.		
	1344					
B				drape ring. Plain ring fragment. D: 24mm. Cu alloy. Post medieval		
	1330					
B				stem of drawn pin, late medieval or post-medieval. L extant: 28mm. Cu alloy. Post medieval		
	1330					
B				flat circular button with shank, encrusted. D: 20mm. Cu alloy. Post medieval		
	1330					
B				small solid cast button with shank. D: 14mm. Cu alloy with fe shank. Post medieval		
	1330					
B				object with mineral preserved wood and corrosion product with drum or barrel shaped wooden wheel with copper alloy tube through centre. L: 105mm; W: 85mm. Wood and cu alloy		
	1330					

Unstratified / unphased

Area	Context	SF No	Sample No	Comments	Pot date	recommendations
				large flat circular button with cast shank. Decorated with flower with 8 petals. D: 31mm. Cu alloy. Post medieval		
				pin or needle incomplete, top end (head) broken. L extant 93mm; D: 5mm x 4.5mm. Straight taper to point. Bone		
				probable needle, uniform taper to point. No clear evidence of eye on x-ray. Could be needle or pin. L: 102mm. Cu alloy		
		124		offcut of sheet. Pb		
		17		4 x small undiagnostic fragments. Cu alloy.		
		22		vessel fragment. Small out turned rim, slight bevel on inner edge of rim, engraved horizontal line on outer face below rim. 18mm x 18mm. Cu alloy.		catalogue and illustrate ?
		50		token. Obverse: Female bust facing R; Reverse: illegible or blank? D: 18 x 17mm. Pb		catalogue and illustrate ?
		80		melted waste. Cu alloy		

APPENDIX 9: COINS ASSESSMENT

Paul Booth

Sixty-eight coins certainly or probably of Roman date were seen from this site; the collection also included three post-medieval coins (SF 10, SF 61 and SF 122) and two copper alloy pieces which were probably not coins (SF 106 and SF 138). The coins were scanned quite rapidly alongside the X-rays. The coins are generally in poor condition, almost all being encrusted and/or eroded to a greater or lesser degree, some very heavily, the only exceptions being a few of the later Roman coins. Identifications were recorded as far as was possible without further cleaning; none of the coins was identifiable to the level of specific catalogue numbers (e.g. RIC or LRBC). In view of the condition of the coins some of the provisional identifications, based on factors such as size, must be regarded as tentative.

Twenty-five of the coins are of early Roman date. The earliest is a 'Claudian copy' as of Minerva type (unstratified with no SF number). A dupondius/as of Nero is dated AD 66-69 (SF 161), with one further coin (SF 91) possibly of similar character. There were five coins certainly or probably of Vespasian, one of Domitian, another two probably Flavian and one of Nerva. A further 13 coins are of 1st-2nd (or possibly early 3rd) century date on the basis of size, but most of these had no further distinctive characteristics at this stage, identifiable 2nd century coins being lacking, except for one with a bust of an empress.

There were nine antoniniani of later 3rd century date, including two of Tetricus I and one of Allectus. Fourteen 4th century coins were assigned to the House of Constantine. All were dated after AD 330. They included two irregular Fel Temp Reparatio issues of the middle of the 4th century, and a further four coins were also assigned to this issue principally on the basis of size; a later date for these is possible, but on balance unlikely. Five coins appeared to be of 4th century character but were not more closely dateable, while another 11 were assigned a generic later 3rd-4th century date range on the basis of size. Three coins (SF 11, SF 44, of which perhaps less than half survived, and SF 187) were considered undateable on present evidence.

This is much the largest Roman coin assemblage from any of the Thameslink sites, which collectively make a significant contribution to the body of Roman coin data for Southwark (cf. Hammerson 2002, 232). Overall, the assemblage may span most of the Roman period, but there is a strong early Roman emphasis, as would be expected. The apparent absence of coins dating after the mid 4th century may be significant (coinage of the House of Valentinian and even the House of Theodosius occurs in some of the other, smaller Thameslink groups), although this situation could change in the light of further cleaning. Further work will be dependent on cleaning. All the coins except SF 134 and context [591] need to be cleaned if their identifications are to be refined at all, although in the case of some of the more eroded pieces this might not add much new information. Subsequent to cleaning and revision of identifications, a summary report would be undertaken.

Bibliography

Hammerson, M., 2002. 'The Roman coins', in J. Drummond-Murray and P. Thompson with C. Cowan, *Settlement in Roman Southwark Archaeological excavations (1991-8) for the London Underground Limited Jubilee Line Extension Project*, MoLAS Monograph 12, 232-240.

SF No	Ctxt	x-ray	Est Date	Denomination	Rev	Obv	Condition	Comment
173	1534	?	1-2C?	24mm			encrusted	
163	1509	?Domitian	86	28mm	?	IMP CAES DOMIT AUG GERM COS XII C[ENS ... IMP NERO CAESAR AUG	encrusted	COS XII is clear, reading from X-ray
161	1509	Nero	66-69	28mm ?denarius	figure l	[	encrusted	reading from X-ray
144	1430	?Vespasian	69-79?	17mm	figure	bust r	encrusted	
160	1509	?4C	4C?	18mm			encrusted	
162	1509	1-2C	1-2C	28mm			encrusted	only half
164	1509	1-2C	1-2C	28mm			encrusted	
165	1509	1-2C	1-2C	27mm			encrusted	& corroded onto pebble
175	1532	empress	2C?	27mm			encrusted	
186	1538	1-2C	69-79?	29mm		..]SAR VE[Vespasian?	encrusted	
179	1544	1-2C	1-2C	26mm			encrusted	
	1551	?1-2C	1-2C?	25mm			encrusted	
183	1559	?	1-2C?	24mm			encrusted	
187	1585	?	?	22mm			encrusted	
	1616	none	1-2C	29mm			encrusted	SS 594
2	US	1-2C	1-2C	27mm			encrusted, corroded	incomplete
11	US	?	?	20mm			encrusted	
21	US	3-4C	330+	14mm			encrusted	
122	US		post-med	21mm				
123	US	?	3-4C	14mm			encrusted, incomplete	
	US	Claudian copy XRK12/138	43-64?	25mm	Minerva advancing r		encrusted	ID from X-ray
	US	? XRK12/139	4C?	15mm			encrusted	Metal' on label
3	557	3C	270??	18-22mm	??SEC[URITAS PERP]ETUA		encrusted	
	591	none	350-364	11mm	FTR fallen horseman	head r	SW/SW	irregular, SS 500
12	608	?	3-4C	16mm			encrusted	
4	628	??	3-4C	13-15mm halfpenny			encrusted	?4C
10	634	1-2 flat?	18-19C	28mm	Britannia		EW/EW	
13	635	radiate	271-274	18-21mm		C PIO ESU TETRICUS[	encrusted	ID from X-ray
14	635	4C	4C?	17mm			encrusted	
15	635	minim?	350+?	10mm			encrusted	

7	641	?	3-4C	18mm		]AUG ?	encrusted	from X-ray
18	651	minim?	350+?	8mm		head r	encrusted	from X-ray
23	655	frag	3-4C	fragment			encrusted	just over a quarter survives
	678	?	1-2C	28mm?			encrusted	
29	700	?4C	350+?	10mm		head r	VW/VW	
32	718	?	3-4C	13mm			encrusted	incomplete
34	773	?	3-4C	19mm?			encrusted	incomplete
61	782	post-Roman	post-med?	25mm			encrusted	
39	787	Allectus	293-296	20mm	galley??	IMP C ALLECTUS PF AUG	encrusted	from X-ray
38	791	?	341-348	fragment	?Victoriae dd augg q nn	head r	W/W	incomplete - all edges missing
51	791	Urbs Roma	330-335	17mm	Wolf and twins	URBS ROMA	encrusted	from X-ray
52	791	minim?	3-4C	9mm+			encrusted	possibly 350+
	791		3-4C	18mm			encrusted	SS 506
36	793	4C	335-341	13mm	Soldiers and 1 standard	uncertain legend frag, head r	SW/W	irregular, SS 500
41	795	4C?	350-364?	14-16mm	?FTR fallen horseman	head r	slightly encrusted	irregular?
47	797	Urbs Roma	330-335	18mm	Wolf and twins	URBS ROMA	encrusted	from X-ray
48	805	?4C	330+?	12mm			encrusted	
44	828	??	?	19mm?			encrusted	less than half?, quite thick
49	844	radiate	250-296	17mm			encrusted	
53	844	radiate	271-274?	17mm		]IO ESU TE[TRICUS	encrusted	from X-ray, legend uncertain. Irregular?
54	844	radiate	270-296	11mm		radiate head	encrusted	irregular, from X-ray
55	844	radiate	250-296?	18mm		radiate head r half facing]PF AUG	encrusted	from X-ray
46	849	1C	96-98	27mm	CONCORDIA] EXERCIT[UUM	head r IMP NE]RVA CAES {AUG} [	encrusted	most from X-ray
60	870	radiate	250-296	fragments			encrusted	3 fragments, incomplete
67	873	?4C	4C?	20mm			encrusted	
86	895	?1-2C	70-100?	28mm	standing figure l	head r	EW/VW slightly encrusted	
87	895	1C	1C	32mm		head r	VW/SW slightly encrusted	
40	934	1C	69-79?	19mm		]CAES T?[head r	encrusted	mainly from X-ray, looks like Vespasian. Size suggests quadrans, but V's do not usually have obverse head?
91	978	1C	1C	28mm	?	head r	partly encrusted	?pre-Flavian??
98	1053	Gloria exercitus	330-335	16mm	soldiers and 2 standards	]STANTINUS IUN NOB C	partly encrusted	
104	1116	?4C	4C?	19mm		head r	encrusted	Date not certain

106	1149	not a coin?	-	-	-	-	-	fragments with straight edge - not a coin
111	1173	?radiate	3-4C	19mm			encrusted	possibly radiate??
27	1178	radiate	250-296	21mm		radiate head r	encrusted	
142	1184	1-2C	1-2C	28mm		head r	encrusted	
126	1297	1-2C	69-79	28mm	?	..]VE[SP]AS[IAN] AUG COS [	mostly encrusted	
128	1330	1-2C?	1-2C	28mm			encrusted	
134	1353	??	341-348?	14mm+	?Victoriae dd augg q nn	head r	W/W	incomplete
143	1375	Vespasian	69-79	27mm		IMP CAE]S VESPASIAN AUG CO]S	encrusted	from X-ray
138	1386	not a coin?	?	fragments			encrusted	4 fragments - not certainly a coin
139	1386	?	3-4C	14mm+			encrusted	?4C
140	1394	3-4C	330+?	16mm+	standing figure	head r?	encrusted	mostly from X-ray
195	1398	?	3-4C	14mm			encrusted	

APPENDIX 10: HIGH TEMPERATURE DEBRIS ASSESSMENT

Lynne Keys

Introduction and Methodology

A medium assemblage (53kg), much of it material - including grit and stones - from soil samples, was examined for this report. The material was examined by eye and categorised on the basis of morphology; a magnet was used to test for iron-rich material and to detect smithing microslags in soil adhering to slags. Each slag or other material type in each context was weighed except for smithing hearth bottoms, which were individually weighed and measured for statistical purposes. Quantification data and details are given in the table below in which weight (wt.) is shown in grams, and length (len.), breadth (br.) and depth (dp.) in millimetres.

Quantification table

cxt	^s^	identification	wt	len	br	dp	comment	pcs
558		smithing hearth bottom	856	110	100	80	incomplete	
591	500	copper alloy	0.5				waste	
591	500	microslags	0.5					
591	500	sample residue	123					
591	500	smithing hearth bottom	191	75	60	35		
591	500	undiagnostic	24					
591		undiagnostic	422					1
593		undiagnostic	27					
627	502	hammerscale	0.5				flake	
627	502	iron-rich undiagnostic	0.5					
627	502	undiagnostic	90					
627	502	vitrified hearth lining	20					
637	503	sample residue	36				undiagnostic, cinder etc	
647	504	copper alloy	11					
647	504	sample residue	46					
647		copper alloy	34					
647	504	sub-sample	434				sand, stone, grit, bone, charcoal, fired clay, cinder from copper alloy working, very tiny frags broken hammerscale flake	
718		undiagnostic	94					
791	506	copper alloy	29					
791	506	hammerscale	43				most is broken flake; also spheres and microslogs	
791	506	iron-rich undiagnostic	42					
791	506	sample residue	95					
791	506	undiagnostic	13					
795	507	cinder	26					
795	507	fired clay	10					
795	507	fuel ash slag	2					
795	507	sample residue	3				one hammerscale sphere, one large flake, slag dribbles	
795	507	undiagnostic	149					

795	507	vitrified hearth lining	5				
795		ferruginous concretion	10				
795		undiagnostic	175				
800	510	microslags	2				
800	510	sample residue	5				
806	505	copper alloy	1				
806	505	microslags	0.5				
806	505	sample residue	8			microslags & cinder	
806	505	sample residue	40			cinder, fired clay, undiagnostic	
806	505	undiagnostic	20				
809	508	hammerscale	1			spheres & occasional flake	
809	508	iron	0.5				
809	508	microslags	4				
809	508	sample residue	4				
822	509	undiagnostic	23				
860	511	cinder	12				
877	512	cinder	7				
877	512	copper alloy	1				
877	512	iron-rich undiagnostic	7				
877	512	sample residue	31			mostly hammerscale flake & some tiny spheres	
877	512	undiagnostic	52				
886	513	undiagnostic	2				
886	513	vitrified hearth lining	14				
890	514	cess	30				
890	514	cinder	6				
890	514	copper alloy	0.5			tiny flecks	
890	514	iron	4				
890	514	sample residue	27				
890	514	undiagnostic	10				
978	515	sample residue	25				
1003		vitrified hearth lining	434			with portion of tuyere hole remaining; 25mm dia	
1064	525	fired clay	27				
1064	525	fuel ash slag	10				
1159	529	sample residue	18			nothing	
1169	528	sample residue	7			nothing	
1173		cinder	42			copper alloy working	
1173		undiagnostic	22				
1179	535	sample residue	20			nothing	
1184	536	magnetic residue	3			two large spheres, one small; rest is fired clay	
1184	536	sample residue	17				
1199	531	cinder	13				
1199	531	vitrified hearth lining	224				
1211	532	cinder	6				
1211	532	fuel ash slag	5				
1211	532	sample residue	17			undiagnostic, fired clay, cinder	
1211	532	undiagnostic	4			all tiny	
1211	537	copper alloy	0			tiny flecks	
1222	533	undiagnostic	2			all tiny	
1249	550	fuel ash slag	9				
1249	550	undiagnostic	4				
1314	539	fired clay	9				

1336	133	undiagnostic	24				
1349		cinder	31				
1367	542	cinder	1				
1367	542	fuel ash slag	15				
1367	542	iron	3				
1367	542	microslags	2				
1374	549	magnetic residue	0			iron bits	
1374	549	undiagnostic	11				
1417	543	undiagnostic	7				
1430		iron-rich undiagnostic	8				
1441		undiagnostic	27				
1441		vitrified hearth lining	127				
1455	544	cinder	2				
1461	545	fuel ash slag	3				
1461	545	hammerscale	0			flake	
1468	547	copper alloy	0			tiny flecks	
1468	547	undiagnostic	6				
1471	552	fuel ash slag	91				
1505	553	sub-sample	264			grit, stones, bone, charcoal, very occ hammerscale flake	
1509		copper alloy	7				
1509		undiagnostic	389				3
1514		undiagnostic	15				
1527		fired ceramic	23			kiln material?	
1532	554	cinder	23				
1532	554	hammerscale	2			flake & one sphere	
1532	554	sample residue	15			undiagnostic, fired clay, cinder	
1534		cinder	15			from copper alloy working hearth **	
1534		copper alloy	110				
1535	557	undiagnostic	3				
1540		copper alloy	28				
1540		undiagnostic	112				1
1559	558	cinder	5				
1559	558	copper alloy	50				
1559	558	sub-sample	484			stones, ferruginous concretion, sand, some broken flake	
1579	559	undiagnostic	5				
1584	560	cinder	8				
1584	560	copper alloy	0.5				
1584	560	ferruginous concretion	6				
1585	561	cinder	10				
1585	561	undiagnostic	8			all tiny	
1587	564	copper alloy	52				
1587	564	sample residue	29			undiagnostic, cinder, iron	
1587	564	sub-sample	440			stones, shell, sand	
1587		copper alloy	123			object	
1588	562	copper alloy	9				
1588	562	sample residue	40			undiagnostic, cinder, iron	
1591	563	fuel ash slag	94				
1591	563	undiagnostic	2				
1593	567	copper alloy	16				
1593		copper alloy	846			objects & waste	
1595	567	sub-sample	349			sand, stones, fired clay, very occ broken flake	

1598		copper alloy	39				
1600	569	cinder	5				
1600	569	copper alloy	6				
1600	569	iron-rich undiagnostic	10				
1600		fuel ash slag	22				
1601	566	cinder	237			from copper alloy working	
1601	566	copper alloy	288				
1601	566	copper alloy	759			waste & cinder from casting	
1601	566	iron-rich undiagnostic	19				
1601	566	sample residue	40			cinder, fuel ash slag, undiagnostic	
1601	566	sample residue	1406			copper alloy included	
1601	566	sample residue	2512			grit, stones and copper alloy - all tiny	
1601	566	sub-sample	333			sand, copper alloy bits, charcoal, stones, occ broken hammerscale flake	
1605	570	copper alloy	24				
1605	570	iron	12			nails & iron lumps	
1608	572	sub-sample	761			sand, stones, charcoal, shell, copper alloy flecks, some very broken hammerscale flake	
1608	573	copper alloy	86				
1608	573	sample residue	268			includes lots tiny copper alloy pieces	
1608	573	sample residue	254			copper alloy & stones, fired clay & lead	
1608	573	sub-sample	470			sand, charcoal, occ copper alloy bits, very occ really tiny broken hammerscale flake	
1608	573	undiagnostic	44				
1609	575	copper alloy	62				
1609	575	sub-sample	555			sand, stones, furruginous concretion, very tiny flecks copper alloy, very occ tiny broken flake	
1609	576	sub-sample	1301			sand, stones, fired clay, copper alloy flecks, charcoal, iron	
1610	579	copper alloy	137			waste	
1610	579	copper alloy	319			objects & waste	
1610	579	sample residue	2232			includes lots tiny copper alloy pieces	
1610	579	sample residue	454			small copper alloy 'blobs' and one flat strip, etc. grit, fired clay	
1610	579	sub-sample	378			sand, stones, copper alloy flecks, charcoal	
1610	580	copper alloy	36			waste	
1610	580	fuel ash slag	10			and cinder	
1610	580	iron-rich undiagnostic	15				
1610	580	sample residue	230			includes lots tiny copper alloy pieces	
1610	580	sample residue	183			grit, stones and copper alloy	
1610	580	sub-sample	436			sand, fired clay, copper alloy bits, charcoal	
1610	580	undiagnostic	66				

1611	583	sample residue	1448			grit, sand, cess, copper alloy flecks, some very tiny microslag pieces
1612	586	sub-sample	904			sand, charcoal, fired clay, copper alloy
1612	587	copper alloy	64			waste
1612	587	sample residue	422			sand, occ very tiny copper alloy flecks, grit, charcoal
1612	589	sample residue	389			stones, fired clay, copper alloy waste
1613	589	copper alloy	42			waste
1613	589	sample residue	550			grit, sand, charcoal, copper alloy
1614	591	microslags	0.5			
1614	592	sample residue	423			burnt pebbles, finely crushed fired clay
1615	593	sample residue	597			fired clay, very occ slag spheres
1615	593	sample residue	50			small stones & occ fired clay
1615	595	sample residue	611			crushed fired clay, grit
1615	595	sample residue	125			tiny flecks fired clay in grit
1615	602	sample residue	332			grit, fired clay
1615	602	sample residue	95			tiny burnt flint, grit, charcoal fired clay
1615	602	sample residue	138			fired clay, stones
1616	594	sample residue	562			grit, stone, occ broken microslags
1616	594	sample residue	403			sand, stones, burnt grit & flint, occ very tiny spheres
1616	594	undiagnostic	3			all tiny
1617	597	cinder	1			
1617	597	sample residue	316			grit, tiny charcoal, copper alloy - all tiny
1617	597	sample residue	61			grit, stones, copper alloy specks
1617	597	sample residue	52			copper ally, stones, ceramic building material
1619	598	sample residue	1146			nothing but grit and tiny charcoal
1619	598	sample residue	166			grit, fired clay flecks, occ copper alloy flecks
1619	598	sample residue	165			pebbles, shell, fired clay, some Cu waste
1619	599	cinder	15			
1619	599	copper alloy	78			waste
1619	599	sample residue	3906			very occ broken flake hammerscale but mainly sand, tiny charcoal, grit
1619	599	sample residue	704			grit, stones, copper alloy specks
1619	599	sample residue	1096			stones, fired clay, very occ copper alloy flecks
1619	599	sample residue	3518			grit, tiny stones, fired clay, very occ copper alloy flecks
1619	599	sample residue	393			sand, stones, charcoal, occ tiny Cu pieces, occasional very tiny frags hammerscale flake
1619	599	undiagnostic	22			
1621	600	copper alloy	2983			waste, possibly from floor
1621	600	sample residue	639			copper alloy bits, fired clay, stones, occ. lead bits etc.

1621	600	sample residue	3345			2-0.5mm. Tiny fired clay, copper alloy	
1621	600	sample residue	494			4-2mm. Copper alloy bits, fired clay etc.	
1623	588	copper alloy	131				
1623	588	sample residue	505			copper alloy & grit	
1623	588	sample residue	373			three pieces copper alloy, sand, grit, tiny charcoal, occasional fired clay **	
1623	590	cinder	3				
1623	590	sample residue	377			sand, fired clay, grit	
1623	590	undiagnostic	57				
1628	603	sample residue	741			fired clay, stone	
1628	603	sample residue	526			fired clay, stones	
1628	603	sample residue	1450			sand, fired clay	
1628	603	sub-sample	338			large pieces fired clay, stones, grit	
		Total wt. = 53kgs					

Key Groups

There are no key groups for the iron slag.

Discussion

There was very little evidence for ironworking in the assemblage and the copper-alloy material in the samples consisted of flecks and very small waste fragments. Ironworking was probably small-scale and related to the copper-alloy working. The metalworking is focused in the Roman period, especially Phases 3b and 3c, although some ironworking slag was found in later Roman deposits.

Small ironworking microslags were present in small quantities in samples but bulk (larger) slags from the process were noticeably absent; only two smithing hearth bottoms (the slag lump that forms below the tuyere in a smithing hearth) were recovered from the site. This absence is either because the slag lumps were taken away for recycling (which appears common in Southwark in the Roman period) or because they were dumped elsewhere off site for collection.

Other debris present was fired clay, cinder (the lighter portion of a hearth lining, closest to the fire), and fuel ash slag (produced in any hearth or by the burning down of buildings with clay walls and/or thatched roofs).

Phase 3b

The metalworking evidence begins in this phase, with Area B of most interest. Much of the material consists of copper-alloy waste or flecks but ironworking microslags were occasionally present. The hearth wall [1615] contained iron microslags which must have been brought in with the clay or

material used for its construction. The fills of pit [1618] contained flecks of copper-alloy and occasional microslags from smithing.

Pit [1622] contained copper alloy waste but, additionally, some small fragments of lead; its presence may indicate it was being worked here or was being used in composite objects, or was being used to produce a leaded copper alloy. The latter is the most probable explanation. In pit [1624] very occasional, broken, iron microslag hammerscale flakes were present; the latter is indicative of ordinary hot working of iron rather than high-temperature welding to join two pieces of iron. Also in [1624], occasional pieces of lead and fired clay were found: the latter may be from a hearth or from moulds. There was no ironworking evidence from the floor of hearth [1628].

Phase 3c

Copper alloy waste and flecks continue to occur in Area B in this phase but the quantity is much reduced.

Phase 3d

In Area B, very tiny quantities of ironworking microslags were found in dump or levelling layers. Given the prevalence of ironworking in this area of Southwark during the Roman period, this is not unusual and certainly cannot be presented as evidence for ironworking on the site.

Phase 3e

In Area A1, 389g of undiagnostic iron slag were found in levelling layer or dump (1509). Although not large – and probably re-deposited material from elsewhere – it serves to highlight the absence of large fragments of iron slag from the site.

Phase 4a

Dump or levelling layer [591] in Area A1 contained a small smithing hearth bottom, one of only two recovered from the site. In Area B, pit [878] - fill [877] - produced 31g of microslags: hammerscale flakes from ordinary smithing and some spheres from high-temperature welding.

Phase 4b

Area A1 dump [558] contained an incomplete smithing hearth bottom. Pit [792] (sample 506) contained 43g of broken hammerscale flake and some spheres and other microslags.

In the later periods the evidence for metalworking falls off very significantly and nothing of relevance was recovered.

Recommendations for further work

The emphasis on this site should be on the copper-alloy working and the possible use of lead to produce a leaded bronze. As the quantity of slag iron slag is so small, the possibility of some ironworking having taken place should be mentioned and the presence of ironworking microslags flagged up.

After publication, the assemblage could be discarded.

APPENDIX 11: CERAMIC BUILDING MATERIAL ASSESSMENT

Cynthia Poole

Introduction and Aims

A large assemblage of thirty-five crates of ceramic building material (CBM) amounting to 2,224 fragments (825kg) were retained from excavation from the site at Borough High Street, Southwark (BVK11). A quantity of CBM had been assessed on site by Kevin Hayward of which about 50 pieces could be equated with retained material; although other pieces were recorded as retained these were either not found or the record showed too much discrepancy with retained material to be sure which item from a context was seen on site. These records are incorporated in the database of the assemblage but can be differentiated by the field noting the specialist responsible for recording. The assemblage has been fully recorded on an Excel spread sheet together with a visual record in the form of working drawings and digital photos of diagnostic features. The majority of the tile has been discarded in accordance with Museum of London (MoL) guidelines, except for a small quantity of more complete tiles, Roman tiles with keying and signature marks and post-Roman decorated floor and wall tile. A final decision of pieces for permanent retention as part of the archive will be made following full analysis.

The assemblage is moderately well preserved, has a fairly high mean fragment weight of 331g, and is largely unabraded, but generally fragmented with few complete or near complete items. Excluding samples (mostly bricks) from in situ structures and the Roman tesserae, there are only six items categorised as complete or near complete, all flooring. This appears to reflect the re-use, especially of Roman CBM, as hardcore in foundations, make-up and levelling deposits of Roman and post-Roman date.

Re-use is largely indicated by the presence of mortar or opus signinum on broken surfaces, representative of mortared foundations or masonry structures. Approximately a third of fragments are recorded with mortar adhering, but only half of these are recorded as re-used. Roughly a quarter of fragments had evidence of burning or sooting indicating use in ovens, hearths or flues, but this does not necessarily represent re-use as this may have been an effect caused during primary use in some structures such as a hypocaust. A number of heavily vitrified and distorted pieces were encountered, but it is unclear whether this was a result of overfiring during production or subsequent use in furnace or kiln structure.

The assemblage was assessed in order to:

Identify the fabric and forms of the Roman, medieval and post-medieval ceramic building material to produce a list of spot dates which could be used to verify, refine or revise the phasing of the site.

Make recommendations for further study, illustration and publication.

Methodology

Masonry structures were sampled on site with one or more complete bricks or tiles retained where possible, though it is noted that twelve structures recorded as including brick in their construction were not sampled. For the remaining contexts of Roman, medieval and post-medieval date, CBM was retained during hand excavation.

The assemblage has been fully recorded on an Excel spread sheet according to London system of classification established by Museum of London (MoL). Fabrics have been assigned with a fabric number following the MoL fabric type series based on examples provided by Kevin Hayward and Berni Sudds of PCA. The fabric was examined on a fresh break at x20 magnification using a binocular microscope or hand lens (x20).

Roman Ceramic Building Material

1,931 examples 649kg (762, 205.5kg in post Roman contexts)

The quantities of the Roman tile forms and fabrics are summarised in Tables 1 and 2. The proportion of fabrics in Table 3 is not dissimilar to those recorded at other sites in Southwark (Pringle 2009, 191). London fabrics have been fully described in several publications (e.g. Pringle 2002; 2009). The more complete and better preserved material was found in the structures and associated deposits in Areas A1, A2 and B.

Table 1: Quantification of Roman tile forms

Tile Form	Nos	% Nos	Weight (g)	% Wt
Box flue	108	5.59	10723	1.65
Half box	2	0.1	253	0.04
Op.spic.	2	0.1	673	0.1
Tessera	57	2.95	1365	0.21
Brick	497	25.74	354612	54.65
Circular brick	1	0.05	734	0.11
Tegula mammata	26	1.35	48296	7.44
Tile	608	31.49	76271	11.76
Tegula	359	18.59	114615	17.67
Imbrex	271	14.03	41282	6.36
	1931		648824	

Approximately 15% of the Roman tile was found in masonry structures of Roman date and a tiny proportion re-used in post-Roman structures. The majority of the Roman ceramic building material was recovered from demolition, dump, levelling and make-up layers and pit fills both in the Roman and post Roman phases.

Fabrics

Early London Sandy Fabric Group 2815 (AD50-160) 1507 examples 522kg

2452; 2459a; 3004; 3006

This group dominated the assemblage accounting for 80% by weight of the Roman tile, a feature typical of sites in both Roman London and Southwark. The early (AD50-160) 2815 red group used local brickearth with medium and coarse moulding sand. Fabric 2452, very fine hard and well fired, sometimes vitrified, is especially common. The fabrics were used for the full range of forms including most of the less common types found such as half box-flues, double box flues, roller stamped flue and an opus spicatum brick. Tiles in these fabrics were used in masonry structures in Areas 2a, 2b and 2c but most was recovered from dump and levelling layers, construction cuts, pits, and a variety of other features. Nearly a third was found residually in post-Roman deposits. This was the fabric most commonly identified in tile fragments extracted from opus signinum surfaces.

Later London Sandy Fabric Group 2459b (AD120-250) 63 examples 24.75kg

By contrast examples of the later group with a much finer moulding sand associated are poorly represented (4% by weight). They are only represented by the more standard forms of roofing, brick and box flue. Approximately 40% was found residually in post-Roman deposits

Eccles Sandy Fabric 2454; 3022 (AD50-80) 94 examples 19.3kg

This distinctive early fabric manufactured around the area of the Eccles villa site during the mid-late first century forms a small proportion (3%) of the assemblage and includes predominantly brick, tegula and imbrex with only a couple of pieces of box flue.

Radlett Iron oxide Group early 3023; 3060 (AD50-120) 233 examples 73.15kg
later 3023b; 3060b (AD170-230) 3 examples 0.35kg

The Roman ceramic building material made in the Hertfordshire fabric group 3023 (AD50-120), which has frequent black iron oxide and small lumps of silt, forms the second most common group accounting for 11% of the assemblage. Although predominantly used for tegulae, imbrices and brick it also included some box flue, a half-box flue and a circular brick. Only a tiny proportion came from the later varieties of this group.

Other fabrics found in small quantities and used for the most common forms (tegula, imbrex, brick including tegula mammata and combed box flue) included:

Silty Wealden fabric 3238 (AD71-100) 10 examples 4,632g

Hampshire fabric 3009 (AD100-AD120) A single example of this fabric was noted on site, but was not subsequently identified during recording.

3054 (AD70-AD140); 2 examples 634g early chaff grog tempered
3024 (AD55-350); 8 examples 1219g

Calcareous Fabrics 2453; 3026 (AD140-300) 2 examples 2,050g These late fabrics rarely form more than a small proportion of assemblages but has a wide distribution around the south coast of England (Betts and Foot 1994)

2456 (AD270-350) 1 example, 66g; a shelly fabric probably from the Harrold kilns, Bedfordshire

Table 2: Quantification of Roman tile fabrics

Fabric Group	Fabrics	Fabric Date	Nos	% nos	Wt (g)	% wt
Local Sandy Gp 2815	2815	AD50-250	91	4.71	28262	4.36
	2452	AD55-160	1051	54.43	398935	61.49
	2459A	AD50-160	167	8.65	44149	6.8
	2459A & B	AD50-250	7	0.36	1011	0.16
	2459B	AD140-250	56	2.9	23654	3.65
	2459C	AD140-250	7	0.36	1090	0.17
	3006	AD50-160	168	8.7	44497	6.86
	3004	AD50-160	19	0.98	4935	0.76
	3006 nr 3004	AD50-160	4	0.21	536	0.08
Sub-total			1570	81.31	547069	84.32
Eccles Group	3022	AD50-80	82	4.25	17948	2.77
	2454	AD50-80	8	0.41	1078	0.17
	2455	AD50-80	4	0.21	279	0.04
Sub-total			94	4.87	19305	2.98
Radlett / Hertfordshire Group	3023	AD50-120	65	3.37	11094	1.71
	3060	AD50-120	33	1.71	8358	1.29
	3023/3060	AD50-120	135	6.99	53699	8.28
	3023b	AD170-230	1	0.05	190	0.03
	3023b/3060b	AD170-230	2	0.1	163	0.03
Sub-total			236	12.22	73504	11.33
Silty group	3238	AD71-100	10	0.52	4632	0.71
	3009	AD100-120	1	0.05	0	0.0
Sub-total			11	0.57	4632	0.71
Calcareous	3026	AD140-300	1	0.05	112	0.02
	2453	AD140-300	1	0.05	1938	0.3
Sub-total			2	0.1	2050	0.32
	3054	AD70-140	2	0.1	634	0.1
	3024	AD55-350	8	0.41	1219	0.19
Harrold	2456	AD270-350	1	0.05	66	0.01
Unclassified	U	AD50-400	7	0.36	345	0.05
Total			1931		648824	

Roman Tile Forms

Box Flue

Box flue formed less than 6% (count) / 2% (wt) of the tile and included some thin walled box flue, double box flue and half box flue fragments. No certain voussoir was identified though a piece with keying on adjacent surfaces may be such a tile. Almost half the fragments were found in post-Roman contexts. Those in Roman levels were concentrated in Areas A1 and A2 in phase 3b and 3c levels in demolition, dump and levelling layers and opus signinum surfaces. Keying included scored, combed,

and roller stamped. Roller stamped dies identified were die 4, 44 and 65, together with a chevron design not positively identified to die type. Dies 4 and 65 have both been found at Winchester Palace, Southwark (Betts *et al.* 1997). Major characteristics are summarised in Table 3. A similarly varied assemblage was found at BVL10 site (Hayward, Thameslink Assessment 1).

Table 3: Summary of major characteristics of flue tiles

Tile Type	Keying	Vent	Nos	Fabric Group	Date	Phase/context
Box flue	Combed	Double vent?rectangular	3	Eccles	AD50-80	Roman. Levelling and drain 1541 fill
Box flue	Combed (44): fine medium and coarse; varied patterns including straight vertical and horizontal bands, wavy, and diagonal (cross/saltire) Scored (21) (diamond lattice) includes very thin tiles 9-11mm th. Roller stamped (5): dies 4, 44, 65	Circular	85	Local 2815 (2452, 3006, 2459A)	AD50-160	Roman, medieval and Post-medieval: Areas A1, A2, B; demolition, levelling layers and pits
Voussoir?	Combed coarse and medium combing; vertical, horizontal and diagonal bands.		2	Local 2815 (2452)	AD50-160	Roman construction cut 1200; Post-med robber trench 1420
Double Box flue	Roller stamped (chevron type) Scored (diamond lattice) Scored (diamond lattice) and combed (vertical bands 43mm w, 9 teeth) on adjacent surfaces.		3	Local 2815 (2452)	AD50-160	Medieval levelling 591, 1349 in area A1; RB Area B Construction cut 1200
Half Box	Stabbed?		1	Local 2815	AD55-160	Roman pit 1033
Box flue	Scored (diamond lattice) thin and thick score lines, 30-44mm apart. Combed: coarse; saltire pattern	Circular	6	LOCL 2815 - NE LONDON/ ESSEX (2459B)	AD140-250	Roman levelling and pit 1472; Medieval levelling and pit 648
Box flue	Combed: coarse and medium; vertical and diagonal bands, including cross and saltire patterns and parts	Circular	12	Radlett, Herts (3023, 3060)	AD50-120	Roman construction surfaces and cuts, Medieval pits and levelling; and Post-medieval

	of more complex designs					levelling
Half box	Scored (diamond lattice)		1	Radlett, Herts (3023, 3060)	AD50-120	Roman mortar surface 1249
Box flue	Combed: coarse band		1	3024	AD55-350	Roman gravel surface 1041

Brick

Brick formed over half of the assemblage by weight (a quarter of fragments). The majority of the material was broken up, frequently occurring in demolition, levelling and make-up layers. The sizes of more complete examples are summarised in Table 4. The numbers of bricks of identifiable to form was limited to bessales and lydions. There were several with complete widths, but incomplete lengths which could be either pedales or lydions. Thickness ranged from 28-78mm, the thickest fragments possibly indicating the presence of bipedalis in the assemblage. In addition to plain bricks there were several tegulae mammatae, all of Brodrigg's type A (1987, 60-1), of lydion and sesquipedalis size. The number of mammae was between one and three. Single examples were positioned centrally, pairs were either diagonally opposite or placed symmetrically in a line on the central long axis as were a possible example of three. A single example of a circular brick of bessalis size was also found.

Bricks had a range of uses as floor paving, as bonding courses in walls and in the construction of hypocausts (Brodrigg 1987). The bessales (both square and circular) were used for the pilae, which could be set on brick paving (pedales or sesquipedales) or directly on an opus signinum foundation and were usually capped with a pedalis or a lydion and the gaps spanned by larger bricks such as sesquipedales or bipedales. The tegula mammata may also have been used in flooring and wall bonding courses, the mammae possibly intended to help bonding or keying onto position (Brodrigg 1987, 62).

Table 4: Measurements of Roman bricks with complete width and/or length measurements.

Brick type	Thickness	Width	Length	Fabric	Context	Comments
Bessalis	35	200	210	3023/3060	5	~
Bessalis	40	203	210	3023/3060	5	~
Bessalis	35-40	202	202	3023/3060	5	~
Bessalis	35-40	205	210	3023/3060	5	~
Pedalis/lydion	35	295	>260	2452	516	~
Pedalis/lydion	36	285-292	>190	2459B	1113	~
Pedalis/lydion	40	300	>250	2452	1443	~
Pedalis/lydion	40	302	>200	2452	1443	Signature: OA type 16R.1
Pedalis/lydion	37-42	295	>220	2452	1500	Signature: MoL Type 1 (No. 1)
Pedalis/lydion	33-42	290	>230	2452	622	~
Pedalis/lydion	37-55	292	>240	2452	1512	~

Pedalis/lydion	38-45	292	>165	2452	1055	~
Lydion	38-40	295	>330	2452	731	~
Lydion	42	>210	420	2452	832	~
Lydion	33-41	293	>245	2452	1055	~
Lydion	33-36	285	>215	2459B	1284	~
Lydion	35-37	280	>230	2459B	1284	Signature: Similar to MoL Type 4 (No.31) (Fabric 2454)
Lydion	40	310	>340	2452	1443	~
Lydion: Tegula mammata	38-49	>220 [est. c.300]	>245 [est. c.380]	2452	731	Probably single central mamma. Signature: MoL Type 1 (No. 1). Imprints: possibly rings of spacer bobbin.
Lydion: Tegula mammata	30-44	290	423	2452?	1440	Central mamma (removed). Signature: MoL: No. 13 (Fab2454 No. 1)
Lydion: Tegula mammata	35-42	295	>390 [est. c.470mm]	2452	1440	Central mamma. Signature: MoL: No. 13 (Fab2454 No. 1)
Lydion: Tegula mammata	35-40	300	440	2452	1527	Two or three mammae in central longitudinal line. Signature: MoL Type 1 (No. 1)
Sesquipedalis: Tegula mammata	48	420	420	2452	1447	Two mammae in diagonally opposite quadrants. Signature: MoL Type 1 (No. 1)
Segmental: circular	55	220	220	3023/3060	1527	~

Flooring

Two opus spicatum bricks were found, both in post-Roman pit fills. One was complete measuring 38mm thick, 50-51mm wide and 130-133mm long. Approximately half survived of the second, which measured 40mm thick by 54mm wide.

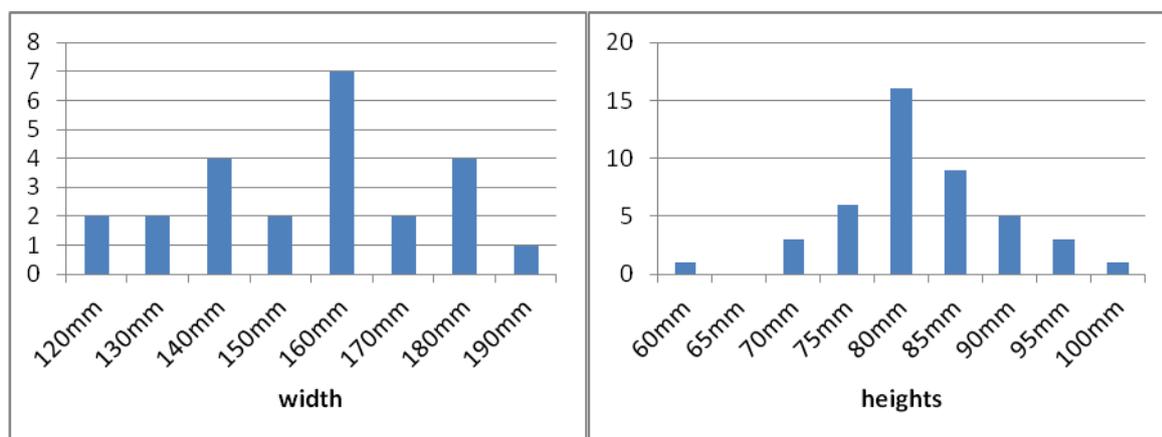
Seventy-five coarse border tesserae also provide evidence of flooring. These were all made by reusing and splitting other tile: the thickness of the original tile suggests tegulae were mainly used, though some were identified as re-using imbrex and box flue. Most were in the red orange colour range, though a couple had used the grey/black area as the tessera surface. Most were rectangular or square and trapezoidal, and one triangular. They range in size between 21 and 40mm long, 17-33mm wide and 10-29mm deep. It is notable that no fine tesserae were present that would indicate the presence of mosaics rather than just a tessellated pavement. The white stone tesserae associated were somewhat finer, but only indicate a two tone colour scheme in design. The majority of the tile tesserae were found in Area B. Tile in fabric 2452 had been most commonly used to make tesserae.

Roofing Material

Imbrex

The imbrex was heavily fragmented with no complete tiles surviving and no complete lengths present (the maximum surviving being 240mm). Two complete widths of 130 and 160mm survived with heights of 70 and 80mm. Sufficient profile was present on a number of tiles to estimate overall widths ranging from 120 to 190 mm and heights of 60-100mm, though 75-85mm was most common (Figs. 1 and 2). Thickness ranged from 11 to 25mm, with there often being considerable variation between the tile edge and central body. Both angular and rounded profiles were present and it was common for the tiles to thicken considerably to corners and edges.

Figures 1 and 2: Imbrex widths and heights



Tegula

All the tegulae were broken and no complete lengths or widths were found, the maximum surviving respectively being 345mm and 245mm. Most had a smooth upper surface, rough sanded base and sides, commonly knife or wire trimmed across the base and along edges. Flange types and sizes are summarised in Table 5, which shows that type 1 dominates the assemblage with types 2, 7, 12 and 13 forming smaller significant groups. Flanges mostly measured between 20 and 40mm wide though it was clear from longer examples that the flange often tapered being narrowest at the tile top, though one unusually narrowed to the base. Occasionally the flange profile could be seen to change lengthwise. A finger groove along the base of the flange was observed on 67 examples, a further 69 had a curved base angle without a groove and 93 had an angular base angle.

Half of the tegulae made in Eccles fabric have an undercut flange profile (no. 7, 9, 11), though the others are more rectangular (no. 1, 2, 13) and one is rounded (no. 26). Only three lower cutaways were present of types A, B and D.

Fabric 3024 produced two type 1 and a type 40 flange and two cutaways of type C5.

Table 5: Tegula flange types and sizes

Flanges	Nos	Width	Height	Associated Warry c/a groups		Fabrics
1	115	17-45	35-62	A, B, C, D	includes tapered flanges	2815, 2452, 2459A, 2459B, 3006, 3004, 3023/3060, 3022, 3024
2	15	18-32	46-60	A, C	includes tapered flanges	2452, 2459A, 2459B, 3006, 3023/3060, 2455
3	5	22-31	43-56	none	one tapered	2452, 2459A
4	1	32	43	D		2452
7	21	16-40	43-59	A, B, C/D	includes tapered flanges	2452, 2459A, 3004, 3006, 3023/3060, 3022
8	9	20-38	40-55	C, D		2452, 3006, 3023, 3060,
9	6	22-40	45-65	A, C		2452, 3006, 3022, 2454
10	2	29-32	37	D		2452
11	5	10-40	48-65	C, D	includes tapered flanges	2452, 2815, 3022, 3023/3060
12	11	22-40	37-53	A, B, C, D	includes tapered flanges	2452, 2459A, 2459B, 3006
13	12	25-40	40-54	A, C, D	includes tapered flanges	2452, 3006, 3023, 3060, 3022
15	1	25	43	none		2459B
20	1	34	35	none		3006
21	1	35	40	none		3006
26	6	21-33	40-61	none	includes tapered flanges	2452, 2459A, 3004, 3006, 3023, 3022
39	4	24-33	44-52	C	one slightly tapered	2452, 2459A, 2459B, 3006
40	3	18-30	42-51	C	one tapered	3023, 3024, 3026

Table 6: Tegula cutaway types; dates are those proposed by Warry (2006) for his cutaway groups

Warry C/A group	Warry sub-types	London c/a type	Date	Nos	Length	Fabrics
A	A2, A26, A27, A28	D	AD43-120	21	50-75	2452, 2459A, 3006, 3060
B	All B6	E	AD100-180	6	43-67	2452, 2459A, 3006, 3060, 3238, 3022
C	Most C5, few C4	B, C	AD140-260	42	53-75	2815, 2452, 2459A, 2459B, 3006, 3023/3060, 3022
D	D1, D15, D16	A	AD240-380	14	42-70	2815, 2452, 2459A, 2459B, 3006, 3023/3060, 3024, 3026, 2456

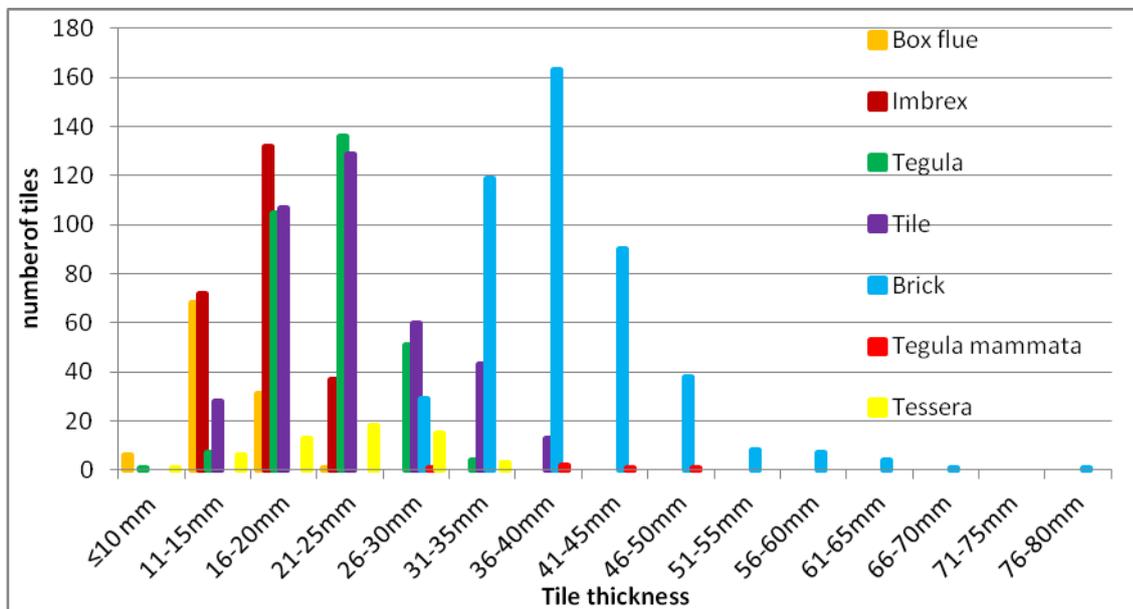
Tegulae have cutaways at the corners to enable the tiles to interlock securely on the roof. Upper cutaways (at the top end of the tile) were of standard rectangular form removing a block of the flange to the level of the main tile body. In three variants, all from context [1527], the cutaway only removed the upper half of the flange. The upper cutaways range in length from 45 to 82mm. Lower cutaways (positioned at the lower end of the tile) are more variable and a range of types may be present. In London six types have been recognized of which five were found. A recent analysis of tegulae by Warry (2006) has suggested a sequence of development for lower cutaways, which he divided into four major groups, each containing variety of sub-types. Table 6 summarises the cutaway types

present, showing the equivalent Warry groups and London types and the dates proposed by Warry for his cutaway groups. There is clearly some discrepancy between these dates and the standard dates assigned to some fabrics from London, suggesting this area may benefit from further analysis in relation to the stratigraphic sequence and phasing.

Plain Tile

A large proportion of the assemblage has been classified as plain tile, where no diagnostic characteristics survived. A comparison of thickness with other tile forms (Fig. 3) suggests much of it is likely to be derived from tegula though at the lower end of the thickness range it is likely to include some imbrex and box flue, whilst at the higher end of the range (26-40mm) there is likely to be a much higher proportion of brick. All fragments of 40mm thickness and above were designated as brick.

Figure 3: Comparison of tile thickness in relation to form



Markings

These were dominated by signature marks occurring on the tegulae (18), bricks (26), tegulae mammatae (4) and indeterminate flat tile (29). Many were fragmentary and not identifiable to type. Of the better preserved the majority were of the most common forms of semicircles, hoops or horseshoe shaped arcs and loops of one, two and three finger grooves. A small number of less common types were also present such as a single straight diagonal finger groove (No.31), double diagonal finger grooves (similar to No. 154) and a few which appeared to be new to the body of signatures found in London such as a quarter circle, two diagonal grooves cutting off a corner (similar to no. 199) and a small C next to a tegula flange, which should be illustrated.

Other markings were predominantly imprints including animal paw and hoof prints, finger marks from handling and possibly the end of a spacer bobbin.

A small number of tally marks were observed, but no stamps. Possible graffiti were observed on two tiles, though insufficient survived to define their character.

Fired clay

A very small quantity of fired clay was recovered amounting to 12 fragments (776g). In most cases the fabric was sandy, probably utilising local brickearth deposits, though in two examples a smoother clay, possibly alluvial, was used tempered with a high density of vegetal inclusions, predominantly broken straw. The majority of fragments appear to derive from oven structures including oven wall, floor and possible oven plate. The majority was found in Roman contexts, though a small quantity was recovered from medieval deposits. Fired clay was used from the prehistoric to medieval period and is not intrinsically dateable except in the case of a small number of diagnostic artefacts. No Roman roller stamped buildings daub was found, though present at other sites in the project.

The Medieval and Post-medieval tile

The post-Roman brick and tile form a little less than a quarter of the whole assemblage. Brick and roof tile dominated the assemblage and forms are quantified by date in Table 7.

Table 7: Quantification of Medieval- and Post-medieval tile forms

Forms		Med	EPM	PMed	Mod	Total
Brick	Nos.	6	41	55	0	102
	Wt g	2985	75525	66759	0	145269
Chimney	Nos.	0	0	2	0	2
	Wt g	0	0	159	0	159
Peg tile	Nos.	105	16	8	0	129
	Wt g	21920	2663	392	0	24975
Ridge tile	Nos.	7	0	1	0	8
	Wt g	1114	0	278	0	1392
Roof tile	Nos.	40	5	5	0	50
	Wt g	3008	365	429	0	3802
Floor	Nos.	5	12	6	0	23
	Wt g	1696	16364	5936	0	23996
Wall Tile	Nos.	0	0	4	0	4
	Wt g	0	0	162	0	162
Drain pipe	Nos.	0	0	0	1	1
	Wt g	0	0	0	42	42
Total	Nos.	163	74	81	1	319

	Wt g	30723	94917	74115	42	199797
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Medieval Brick and Tile

Medieval brick and tile amounting to 163 fragments (30.7kg) was found in both medieval and post-medieval deposits, together with a small number intrusively in Roman deposits. A small proportion was found in masonry structures, mostly re-used peg tile, and the remainder in variety of cut features predominantly pits, construction cuts, robber trenches and postholes.

Brick

Medieval brick was rare and all examples were incomplete. Three Flemish type yellow bricks (fabric 3031) measured 35-50mm thick and 85-104mm wide. This type commonly occurs in Kent, where it is known locally as 'Sandwich brick' (pers. comm. John Cotter) and may have been produced in Kent rather than the Low Countries.

Red bricks in fabric 3032 measured 51mm thick and 68-70mm thick by 109mm wide. One had organic impressions over the base and another was overfired and covered in thick green glaze.

Roof Tile

Most of the roof tile of identifiable form was peg tiles, though a small number of ridge tiles were also identified. The peg tile was made in fabrics 2271, 2272, 2273, 2274, 2276, 2286 and 2287. Details are summarised in Table 8.

Table 8: Medieval roof tile fabrics

Fabric	Nos	Wt (g)	Date	Comments
2271	120	19667	AD1180-1800	Includes peg and ridge tile; some glazed.
2272	4	270	AD1135-1220	Includes glazed ridge
2273	2	54	AD1135-1220	Peg tile, ridge tile
2274	1	136	AD1080-1350	Peg tile
2276	6	1197	AD1480-1900	Peg tile
2586	18	4535	AD1180-1800	Peg tile
2587	1	83	AD1240-1450	
Total	152	25942		

Four complete or near complete tiles were found built into the brick tank [596]. Three measured 13-15mm thick, 154-156mm wide and 261mm long and had circular tapered pegholes 9-11mm diameter. The fourth measured 12mm thick, 162mm wide and 270mm long and had sub-square/oval pegholes measuring 13-15 x 8-9mm. In general the peg tile ranged in thickness from 10-15mm though occasionally up to 20mm at the edges. Thirteen tiles had complete widths, which ranged from 145-162mm. Pegholes were generally circular or oval, either cylindrical or conical, measuring 12-21mm in size. In some cases the peg hole was blind and unused. A small number had diamond peg holes 11-15mm wide. Six small fragments had splatters of amber glaze.

In addition there were plain flat fragments ranging from 10-17mm thick, some with splatters or patches of amber or more rarely green glaze. These are most likely to be fragments of peg tile.

Three plain curved ridge tiles were identified, two with splatters of amber glaze and one with green glaze. The better preserved measured 14-15mm thick and is estimated to have been c.200mm wide and c.90-100mm high. The others measured 8mm thick. A fourth with amber glaze had a more angular profile and measured 12mm thick. They were made in fabric 2271, except for one in fabric 2272.

Floor Tile

Five medieval floor tiles were found. Three were plain glazed (two dark brown, one amber) made in Penn fabric 3076 dated to AD1330-1390. One was complete and measured 115mm square and 22mm thick. Another was slightly thicker at 24-28mm. A decorated encaustic tile also made in this fabric measured 24mm thick and was decorated with design 2791 or 2988. A complete Westminster type tile in fabric 3081 dated to 1225-1300 measured 105mm by 109mm and 21mm thick. The decoration formed a quadrant of a four tile pattern comprising a circle enclosing a quatrefoil, with possibly four further quatrefoils set within each lobe and a fifth in the centre. This and two of the Penn tiles were found in a medieval pit [786] and the other Penn tiles in post-medieval features [566], [692].

Post-Medieval Brick and Tile

The post-medieval ceramic building material is summarised in Table 7, divided into early post-medieval, representing broadly the Tudor-Stuart period and later post-medieval.

Bricks

All the bricks found were unfrosted and many exhibited some considerable variation in thickness and width within the individual brick. Three had skintling marks on their sides. Much of the Tudor-Stuart brick appears to have been re-used in later structures.

Tudor – Stuart bricks Tudor reds

Fabric 3030 AD1400-1660 – 15 bricks (8 complete) 50-64mm thick x 104-113mm wide x 218-234mm long (2,169-2,772g each); associated with mortars M1-M3, M5, M11, M12

Fabric 3033 AD1450-1700 – 2 bricks (complete) 51-55mm thick x 108mm wide x 222-225mm long (2,603g, 2,686g); associated with mortar M2, M3 (AD1664-1800)

Fabric 3046 AD1450-1700 – 33 bricks (22 complete) 45-65mm thick x 99-112mm wide x 216-235mm long (2,050g-3,103g); associated with mortar M1, M2, M3 (AD1664-1800)

Local post Great Fire

Fabric 3032 AD1666-1900 – 17 bricks (4 complete) 51-70mm thick x 96-110mm wide x 182-222mm long (2,366-2,923g); associated with mortar M2 , M3 (AD1664-1800)

Fabric 3032 nr 3033 AD1664-1725 – 3 bricks (1 complete) 58-66mm thick x 101-106mm wide x 224mm long (1,893-2,684g); associated with M3 mortar

Fabric 3034 AD1664-1900 – 6 bricks (5 complete) 62-70mm thick x 95-108mm wide x 215-230mm long (1,938-2,058g); associated with mortar M1, M2 , M3 (AD1664-1800)

London Stock

Fabric 3035 AD1780-1940 – 2 bricks (1 complete) 60-65mm thick x 103-105mm wide x 230mm long (2,800g)

Paviments

Fabric 3047 AD1680-1900 – 3 bricks (all 50-60%) 54-60mm thick x 108-111mm wide; associated with mortar M2, M3 (AD1664-1800)

Roofing Tile

The quantity of flat roof tile was very small amounting to only thirteen fragments (821g). Only one piece was positively identified as peg tile having a conical peg hole 12mm diameter. One fragment with a slight curve may be pantile. The tile was made in fabrics 2271 and 2276, apart from one in 3090. One fragment of an angular unglazed ridge tile in fabric 2271 was recovered.

Two fragments of chimney pot were recovered from a dump/levelling layer [1276]. One made in a fine red sandy fabric was probably hand made from the lumpy finish crude horizontal grooves on the inside. It had a diameter of 260mm and walls 10mm thick. The other was wheel thrown with a smooth finish and possibly remnants of a white slip towards one end. It measured 300mm in diameter and had a wall thickness of 13mm.

Table 9: Post-medieval floor tiles

Context	No. of tiles	Fabric	Thickness	Width /Length	Type	Date	Notes
781	1	2323	26	136	Flemish type	AD1450-1500	Very dark greenish brown glaze
744	1	2318	25-32	>205	Flemish type	LC15-EC16	Surface obscured by grey mortar/cement
596	1	2318	37	>170	Flemish type	LC15-EC16	Surface obscured by grey mortar/cement
526	1	2191	37-40	185	Flemish	LC15-EC16	Dark green-black glaze; nail holes in corners
526	1	1977	38	187	Flemish	LC15-	Green glaze

					type	EC16	
1584	1	2318	38	>125	Flemish	LC14-EC16	Unglazed, worn (no evidence of any glaze). Nail hole in corner
526	1	2850	39	188	Flemish type	LC15-EC16	Yellowish cream glaze (amber over white).
526	1	2191	40	187	Flemish type	LC15-EC16	Cream glazed. Two lines scored at right angle pre-firing set 30 and 55mm from nearest edges.
526	1	2323	41-47	244x250	Flemish	C16-C17	Dark green – black glaze. Nail holes in corners.
669	2	2318	25-26mm	200mm	Quarry tile	C17-C18	Unglazed
669	3	2850	42-45	>150mm	Quarry tile	C17-C18	Unglazed

Floor Tile

Nine floor tiles of Flemish or Flemish type dating to early post-medieval period were found in a robber trench [566], one re-used in the construction of a brick tank [602] and the remainder discarded in pit fills. These were plain glazed in cream / yellow and dark green / black and were normally used to create a checkerboard pattern. Three tiles had small nail holes 2.5-4mm size in each of the four corners, a feature sometimes thought to indicate genuine Flemish tiles imported from the Low Countries, rather than locally made. Another tile had two lines at right angles scored prior to glazing across the surface 30 and 55mm from the nearest edge. A group of five unglazed quarry tiles in two different sizes had been re-used in the construction of a chalk and brick wall [669]. The floor tile sizes and characteristics are summarised in Table 9.

Wall Tile

A small quantity of post-medieval tin-glazed wall tiles probably all of 18th century date. One plain white glazed may be slightly later. The other tiles had a design in blue on a white ground, two framed by a blue circle. Two were rural scenes, one with two male figures and one with a windmill and other buildings. Three of the tiles measured 7-8mm wide and the fourth 10mm wide. The complete width could be estimated for two to be c.130-140mm and c.150mm.

Significance and Recommendations

The Roman Tile

The Roman tile forms the most significant part of the assemblage accounting for over three-quarters of the ceramic building material. The quantity of material that relates to in situ structures is limited with roughly a fifth from masonry structures, construction cuts or robber trenches. Over half comes from spread layers especially levelling dumps, make-up and demolition deposits.

The Roman tile fabrics are typical of Roman London and sites in Southwark with the overriding emphasis on locally produced tiles manufactured during the first and second centuries, based on the standard dating applied to the tile fabrics. However, if the dating of tegula cutaways as argued by Warry (2006) is compared to fabric dates it suggests some of the local fabrics may have continued in production longer than hitherto recognised. It is suggested this data is analysed in relation to site phasing, stratigraphy and other dating evidence to establish how realistic such a hypothesis may be.

The range of forms includes all of the most common types of roofing, flue tile and brick. In addition there are a few more unusual items such as opus spicatum flooring and round bricks. There is also a wide range of flue tiles including early types such as thin walled scored box flue, half box, roller stamped, double box flue together with a range of combed keying patterns including many coarse combed varieties. A wide range of flue tile types has also been noted at BVL10 (Hayward, Thameslink Assessment 1)

Though the variety of markings is limited and in general not very well preserved, a number of signature types not previously recorded in London were found.

The Medieval Ceramic Building Material

The medieval assemblage is modest in size and limited in form containing little that is significant or outstanding in character. Roof tile is of standard peg tile, with no evidence for the use of unusual roof furniture such as crested ridge tiles, louvres or chimneys. The decorated encaustic floor tiles are the only items to indicate the presence of buildings of some status in the area, possibly a religious establishment. The quantity of material suggests medieval occupation was either not particularly dense or has been heavily truncated by later building.

The Post-medieval Ceramic Building Material

The post-medieval assemblage is dominated by early post-medieval material of Tudor or Stuart date. Bricks are dominant, the majority having been sampled from in situ buildings. Many of these appear to have been re-used in later buildings judging by the presence of more than one mortar type on some. Much of the floor and roof tile also appears to originate in this earlier period possibly indicating this to be a major phase of development. However, the presence of some later items such as the 18th century wall tile and 18th-19th century quarry tiles suggests some alteration, refurbishment or rebuilding occurred at this date and involved the re-use of earlier materials in this construction phase.

Further Research, publication and illustration

A report incorporating the results from the assessment should be produced on the ceramic building material of all phases. This should additionally include an analysis of the assemblage in relation to the stratigraphy and structures to inform the character, possible function and status of the buildings,

together with a comparison with assemblages from other sites within the project and elsewhere in Southwark.

A selection of the Roman tile with keying and signature marks should be illustrated, including the complete tegulae mammatae with signature marks.

The decorated medieval floor tiles should be illustrated.

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APPENDIX 12: STONE ASSESSMENT

Ruth Shaffrey

Description

Excavations at BVK11 produced the largest assemblage of worked stone of any of the Thameslink sites. It includes 45 tesserae, of which one is of a fine grained limestone and the remainder are of a hard chalk. The majority of the tesserae (27) are from a single context [1249] which was a mortar / bedding surface, possibly the one in which they had originally been laid. The other tesserae were from a mixture of contexts in Areas A2 and B and either of Roman date or unstratified.

Roman contexts also produced other pieces of structural stone indicating the presence of a high status building, including wall veneer and floor tiles of Purbeck marble ([849], [730], [1249]) and a white marble string course ([989]). Two further pieces of decorative stone were recovered from post-Roman contexts but are almost certainly residual from Roman activity comprising further possible wall veneer of Purbeck marble and a thick veneer or slab of green marble, probably Cipollino verde.

A single lava rotary quern is the only evidence of domestic activity within the worked stone.

Ctx	Descrip	Notes	Lithology	Size	Area	Cont. Type	Phase
1538	Rotary quern, lower stone	Edge fragment, no centre survives. Stone is more solid than lava can be but all the surfaces are worn and rounded	Lava	Measures 28mm thick	Area B	Levelling layer	3c: Roman
730	Floor tile	Two worn smooth faces and one vertical smooth edge. The two fragments do not adjoin and one is thicker than the other	Purbeck marble	Measures 20 and 30mm thick	Area B	Clay layer	3e: Roman
849	Inlay veneer	Thin slab with one surviving edge. One face is rough while the other is smooth (but not polished)	Purbeck marble	Measures 10mm thick	Area A2	Occupation layer	3e: Roman
1249	Paving slab?	Slab with one original edge that is vertical. Base is grooved but rough, probably to help it adhere. The other face is smooth but not	Purbeck marble	Measures 28mm thick x >130 x >130mm	Area B	Mortar surface/bedding	3e: Roman
989	String course / moulded stone	Full profile survives - needs sketching. Both ends are damaged so it is not possible to say how long it was. Gently	White marble, probably Carrara	Measures 78mm high	Area B	Dump/levelling	3g: Roman
1022	Slab/veneer	Thick slab with no original edges and mortar over both faces and a broken edge. Several bits damaged	Cipollino verde or possibly cipollino	Measures 20mm thick x > 170mm thick x	Area B	Demolition layer	4a: Post Roman
896	Moulded	Wall veneer? Flat back and moulded front. Lower edge is straight and vertical. Other three edges are damaged. Profile	Purbeck marble	Measures	Area B	Fill of robber cut [868]	4a: post-Roman

Medieval

There were fewer worked stones from medieval contexts and those that were found were less exotic than from earlier phases. They comprise two ashlar blocks of chalk and Reigate stone ([201], [592]) and a single piece of limestone inlay or veneer ([635]).

Ctx	Descrip	Notes	Lithology	Size	Area	Cont. Type	Phase
201	Ashlar	Not recorded in detail	Chalk		Area B	Chalk retaining arch (E/W) within construction cut [202]	5: medieval
635	Inlay veneer	Very thin slab, smooth on one side, rough on other. No edges survive	Limestone	Measures 5mm thick	Area B	Gardensoil	5a: medieval
592	Ashlar	Not recorded in detail	Reigate stone		Area B	Fill of pit [594]	5b: medieval

Post-medieval or unphased

Post-medieval and unphased contexts produced worked stone that is likely to be residual from medieval or Roman phases. Given the generally more exotic nature of the stratified Roman stone, it seems likely that the Purbeck marble veneer ([828]) and white marble floor tile (unstratified) were originally Roman in date. Stones of probable medieval origin are represented by an ashlar block and seven moulded pieces of Reigate and by three unstratified chalk blocks.

Ctx	Descrip	Notes	Lithology	Size	Area	Cont. Type	Phase
665	Ashlar	Not recorded in detail	Reigate stone		Area A2	Brick/stone wall (N/S) within construction	6a: post-medieval
828	Slab/veneer	Slab, very smooth on two faces and one edge, but not polished. The edge is vertical	Purbeck marble	Measures 14mm thick x >100 x >72mm	Area A2	Fill of pit [829]	6b: post-medieval
596	Moulded stone (7)	Not recorded in detail	Reigate stone		Area B	Brick tank within construction cut [602]	6b: post-medieval
0	Floor tile	Fragment with two surviving (opposing) edges and the ends broken. One edge is smooth and one face and the other edge and	White marble with some pale grey	Measures 22mm thick x 80mm wide x			
	Blocks (3)	Not recorded in detail. Not labelled with a context	Chalk	Measures			

Recommendations for further work

It is recommended that a report be prepared which discusses the assemblage in the light of finalised phasing and in relation to other material classes. The assemblage should also be compared to adjacent sites. It may also be desirable to submit the white marble string course ([989]) and the possible Cipollino verde to a marble specialist for identification.

APPENDIX 13: WALL PLASTER, OPUS SIGNINUM AND MORTAR ASSESSMENT

Cynthia Poole

The plaster, opus signinum, mortar and daub assemblages have been recorded together on an Excel spread sheet. For the painted plaster digital photos of the more complex designs also form part of the archive record. The opus signinum included substantial structural elements from floors, walls including some painted and other structures. Individual mortar fragments were also recovered in addition to the material attached to ceramic building material and noted in the CBM data record. In addition mortar samples were also taken from many of the masonry structures.

The Wall Plaster

Painted wall plaster amounted in total to 143 fragments (6.7kg) representing a surface area of c.0.3m². The majority (134 fragments, 6.15kg) was found in Roman contexts and the remainder (9 fragments, 0.54kg) in post-Roman deposits of medieval and post-medieval date. The wall plaster all appears to be Roman and there is no evidence to suggest any of the material from post-Roman deposits is of later date. The plaster from Roman contexts was mostly derived from demolition layers, foundation and construction surfaces and occupation layers, with very little from feature fills.

Painted wall surfaces were made with a backing of either mortar or opus signinum. This base (arricio) was made up of one or two layers of varying thickness from 7-47mm thick. The composition of the arricio layers was variable in character. Those with a mortar base were composed of most commonly of lime, sand and gravel with white rounded calcareous inclusions (chalk or lime balls) in a few cases and only rarely coarse organic inclusions probably broken cereal straw stems or tile fragments. The size grade of aggregate is in the majority quite fine up to 5mm with considerably less at coarser grades up to 10mm, and very rarely above this. The same applies to those made with an opus signinum base, in which the main aggregate of tile grit was generally less than 5mm in size. Where coarser grades were present this was usually in the primary base layer, not the finishing render. The majority of fragments had a thin finishing layer, usually 1mm thick, of fine white lime intonaco on which the fresco had been painted. Three pieces had no intonaco veneer and had been painted directly on the surface of the final arricio render.

The back face survived in about two thirds of the assemblage, usually as a flat surface, though sometimes slightly rough or undulating and possibly representing the interface with a further render surface. There were also a number of pieces with tile stone or gravel impressions, representing the core of a masonry structure.

Extensive evidence of renovation occurred on the surfaces of plaster from a dump or levelling layer [591]: these had peck marks together with remnants of mortar across the painted surface. A few

fragments from [828] and [1467] had scratches or suggestion of mortar on the surface, but it is unclear whether this could be damage from demolition and re-use as hard core.

The range of colours include white, red, black, yellow ochre, green, blue, pale blue, pink, purple and grey. A limited variety of pattern types have been identified:

Type 1: Single block of colour

Type 4: two blocks of colour separated by a stripe

Type 6: marbling

Type 7: floral/foliate

Pieces with a single colour scheme (Type 1) were painted Red, pink, white, purple, yellow ochre, greyish green, greyish blue and bluish green. Polychrome pieces used a more limited range of white, red, blue, green and yellow ochre. Three examples of Type 4 were found: one of these consisted of adjacent blocks of white and black separated by a narrow red stripe, a design also noted at BVQ09 (Thameslink Assessment 7) and BVW09 (Thameslink Assessment 3). Other combinations included red and green blocks and red and yellow ochre blocks both divided by a white stripe. One piece has a red ground divided from an area of green by a white stripe and painted on the red is a motif in yellow ochre possibly a small section of a floral or candelabrum motif. One piece with red and black stippling or splashes of paint on a white ground is probably from a section of dado designed to resemble marble.

Opus signinum

Opus signinum is mentioned in the site recorded in relation to about forty contexts most of which are structural in some form. Opus signinum was also noted attached to nine tiles. A large quantity of opus signinum was recovered amounting to some 109 pieces (142.5kg), the greater part (128kg) sampled from a small number of in situ surface structures [5], [507], [845], [846], [848]. Most of these are floor surfaces or foundations for floors. The upper surface of floor [507] was covered with impressions of tiles pressed into the surface of the opus signinum leaving ridges of mortar c.20mm high and c.30-50mm wide between the tiles. Two tile impressions were over 280 and 320mm long and the mortar had pressed into a gap at the corner suggesting the tiles were tegulae and the mortar had filled the cutaway. Some tile impressions were lying at different levels so the mortar is stepped and suggests the opus signinum foundation may have formed a base for a tile and mortar structure.

Floor [846] had a flat even top surface with a flat vertical side edge where the concrete has been laid up against a flat surface, presumably the wall or wall foundation. In some pieces the surface has been smoothed up at the edge forming a curving lip in the angle with the adjoining surface. Hobnail boot imprints representing several foot prints were visible on the surface. These include several

outlining one of both edges of the footprint with 2 sinuous lines of close spaced hobnail impressions (one 200mm long with 18+ nail imprints), along with others of no discernible pattern suggesting quite a significant amount of walking on the surface whilst still soft. The quality of the finish suggests the surface was not visible in the finished structure: there is no evidence to suggest it was surfaced with tiles and though it may have formed part of a hypocaust, no pilae bases had left any imprint.

Smaller fragments found loose in demolition, dump and levelling layers mostly had a single flat surface or were broken and amorphous and sometimes with impressions of stone rubble, stone slabs or tile in the back. A small number of pieces had a moulded curving surface, which included the rounded edge or kerb of a structure, or a concave surface, where the block joined at a corner with the adjacent wall, floor or ceiling.

The composition of the opus signinum consisted of normally a pink mortar base coloured by crushed tile, containing sparse quartz sand, moderate-frequent tile grit up to 5mm and variable densities of coarser components, which commonly include river gravel and pebbles, broken tile fragments, and chalk. The grade of aggregate varied depending on the construction. In floor foundations it incorporated coarse stone rubble and tile up to 140mm with in some cases such as surface [846] broken timbers becoming incorporated. In other cases such as floor surface [845] an ash component appears to have been mixed with the mortar. Where opus signinum was used to render walls the inclusions were much finer usually less than 10mm or 5mm in size. Some of these had been painted and have been included with the wall plaster (above).

Opus signinum cannot normally be dated more closely than the Roman period (AD43-400). However tile removed from some of the blocks from layer [846] were all of fabric 2452, which is dated to AD55-160.

Mortar

A relatively small quantity of plaster was collected during excavation. This comprised loose broken fragments within deposits (34 fragments, 4kg), mortar attached to ceramic building material (528 examples of which 49 had two types of mortar present) and mortar samples from masonry structures (77 examples, 4,981g). Thirteen mortar types were identified and incorporated identifications initially made during site visits by Kevin Hayward. The mortar samples from the masonry structures have not been characterised, but have been listed and quantified. Many of the samples are not coherent lumps of hard mortar but are loose friable sediments. Some of these appear to be soil replacement products where the lime has been leached out by water percolating through the soil. As a result no detailed analysis has been made at this stage.

The mortar types are summarised in Table 1.

The Roman mortar (types M6, M7 and M8) were used as wall render, mortar bedding in masonry and tile structures and to form concrete foundations incorporating coarse rubble. There was a number of

subtypes identified based on variations in type or size of aggregate. Type M9 was most commonly found attached to the sides of tesserae and appears to have formed 'pointing' around the tesserae. Mortar M8 which incorporated crushed tile is the type most commonly associated with structures in bath houses.

Table 1: Mortar types

Mortar type	Date of mortar	Description	Examples
M1	C16-17	white lime mortar	29
M2	C16-17	brown sandy lime mortar	38
M3	C18	clinker rich brown mortar	44
M3.2	C18	grey clinker mortar	8
M4	E Pmed/ C19	grey sandy mortar, hard, containing high density of flint gravel and pebbles up to 20mm. Medium & coarse quartz sand, rounded, mostly clear, white and occasionally brown. Rare black sand size grains ?cinders.	2
M5	medieval	brown mortar	2
M6	RB	White, off-white or buff hard sandy mortar containing frequent well sorted, clear, white and translucent brown quartz sand (rounded-sub-rounded) 0.3-0.5mm.	222
M6.1	RB	Buff, cream, off-white mortar containing high density of clear or white, rare brown quartz sand (rounded), well sorted c.0.3mm rarely 0.5mm; scattered rounded lumps of chalk or lime balls 2-5mm. Some examples have a rather chalky matrix.	14
M6.2	RB	White mortar, sparse clear/white rounded quartz sand R medium c0.3-0.5mm, rare scattered red tile grit generally 1-2mm but in some examples included a proportion of larger size up to 7mm	36
M6.3	RB	White mortar, frequent clear/white and brown, rounded-sub-rounded medium quartz sand c0.3-0.5mm, plus frequent coarse angular-sub--angular clear/white and brown quartz grit 1-2mm and rare coarser gravel grits 4-20mm	7
M6.4	RB	White, off-white, buff hard sandy mortar containing frequent well sorted, clear, white and translucent brown quartz sand (rounded-sub-rounded) 0.3-0.5mm and dark/black sand of same size and character.	7
M6.5	RB	Cream mortar containing mod density of sub-angular med and coarse quartz sand common tile grit c1mm and common coarse inclusion of tile 5-10mm and grey/brown gravel (hard fine grained rocks – probably flint, chert or quartzite).	2
M7	RB	Brown sandy hard mortar: high density of medium rounded quartz sand, brown, plus low density of angular black medium sand and scattered flint gravel up to 10mm and small white calcareous/chalk grit or 'lime balls' (rounded) c.2mm. Aggregate rarely up to 21mm and mudstone lump 32mm in one example.	5
M8	RB	Pink mortar with tile grit	21
M8.1	RB	Pink with red tile grit 1-4mm, most c2mm, clear quartz, sometimes white rounded chalk1-5mm	33
M8.2	RB	Pink with coarse red tile grit 1-10mm [R-SA], white rounded calcareous /chalk grit 1-5mm and rare (accidental) organic inclusions (monocot stem/leaf).	16
M8.3	RB	Pink matrix containing fine tile dust, clear quartz sand and occasional black sand, rare coarser tile grit.	2
M9	RB	White (rarely cream) lime mortar; no visible inclusions. Almost exclusively associated with tesserae.	76
M10	RB	Orange clayey matrix with high density of medium brown quartz	1

		sand and brown grit (?crushed tile?)	
M11	Pmed	Grey	2
M12	Pmed	Clinker rich white or brown mortar with high density of coarse shell fragments up to 15mm. white or buff with clear/white quartz sand, SR, medium and coarse and scattered complete shell, up to 15mm and frequent black clinker mostly 1-5mm, but up to 15mm.	1

Potential and Recommendations

The wall plaster assemblage is of modest size with a variety of colours, but a limited range of designs and motifs. These suggest the schemes fall into the most straightforward types of simple panel schemes with little or no illusion or depth consisting of framed panels of a single colour, possibly with a single decorative motif within the frame and with the lower dado sometimes painted to imitate marble. This is the commonest form of wall decoration in Roman Britain and occurred at all periods (Davey and Ling 1982). The variety of colour combinations suggests fragments derive from a number of walls. The wall plaster provides evidence for the interior decoration, status and character of the buildings on the site. The largest group from a dump or levelling layer [591] is limited to plain single colour blocks. A smaller but more varied group from a levelling layer [1467] produced a greater range of colour combinations and designs.

Apart from information on the composition of the opus signinum and mortar there is little further information to be gained unless a more detailed chemical analysis of the mortars from in situ structures is considered significant in understanding those structures.

It is recommended that the assessment report forms the basis for the final report, with more detailed analysis of the painted plaster in relation to in situ buildings, to enhance the understanding of their construction, function and status.

APPENDIX 14: ANIMAL BONE ASSESSMENT

Lena Strid

Introduction

The animal bone assemblage from 11-15 Borough High Street (BVK11) consists of a total of 8,342 fragments, dated to the Roman, medieval and post-medieval periods (Table 1).

Almost half of the assemblage, 4,361 bones, or 52.3%, came from sieved soil samples. Although most of the sieved bones are small fragments unidentifiable to species, the sieved assemblage is still a good source for bones from commensal fauna and small to medium-sized birds. Several of the unidentified bird remains could possibly be identified to species/family with help of an extensive reference collection. The fish remains have been assessed separately.

A full record of the assemblage, documented in a Microsoft Access database, can be found with the site archive.

Period	Phase	Total number of fragments	Hand-collected fragments	Sieved fragments
Roman	3	1	1	
	3a	4	4	
	3b	598	102	496
	3c	1568	524	1044
	3d	2471	1008	1463
	3e	618	426	192
	3f	165	105	60
	3g	321	175	146
	3h	206	34	172
Total Roman		5952	2374	3578
Post-Roman	4a	829	438	391
	4b	947	633	314
Total post-Roman		1776	1071	705
Medieval	5a	124	124	
	5b	119	103	16
	5c	192	192	
Total medieval		435	419	16
Post-medieval	6	2	2	
	6a	128	83	45
	6b	9	9	
	6c	10	9	1
	6d	30	30	
Total post-medieval		179	117	62
TOTAL		8342	3981	4361

Table 1. Number of hand-collected and sieved fragments from the 11-15 Borough High Street assemblage.

Methodology

The bones were identified at Oxford Archaeology using a comparative skeletal reference collection in addition to standard osteological identification manuals. Sheep and goat bones have been identified to species where possible, using Boessneck *et al.* 1964 and Prummel and Frisch (1986); they were otherwise classified as 'sheep/goat'. Long bone fragments, ribs and vertebrae, with the exception for atlas and axis, were classified by size: 'cattle sized mammal' (csz) representing cattle, horse and deer, 'sheep sized mammal' (ssz) representing sheep/goat, pig and large dog, and 'small mammal' representing small dog, cat and rabbit.

The general condition of the bones was graded as good, moderate and poor.

For ageing, Habermehl's (1975) data on epiphyseal fusion was used. Tooth wear was recorded using Grant's tooth wear stages (Grant 1982), and correlated with tooth eruption (Habermehl 1975). Sex estimation was carried out on cattle pelvises and pig canine teeth, using data from Schmid (1972) and Vretemark (1997). Measurements were taken according to von den Driesch (1976), using digital callipers with an accuracy of 0.01 mm. Large bones were measured using an osteometric board, with an accuracy of 1mm.

Overview of the Assemblage

Bone condition is very good, regardless of phase. Only a small number of moderately or poorly preserved bones were retrieved.

Gnaw marks from carnivores, probably dogs, were noted on a total of 140 bones (Table 2). The frequency of gnawed bones per period is relatively low, suggesting that bones were generally not readily accessible for scavengers. Traces of rodent gnawing only occurred in the medieval and in the post-medieval assemblages.

Charred and calcined bones are present in all periods, most frequently occurring in Phase 3d of the Roman assemblage (Table 2). Most of the burnt bones from Phase 3d come from the fill of posthole [1456]. Whether this represents a deliberate deposit of burnt remains or opportunistic kitchen waste removal is yet to be determined.

Period	Phase	Burnt bones		Gnawed bones	
		Calcined	Charred	By dog	By rodent
Roman	3				
	3a				
	3b	9	5	2	
	3c	33	9	11	
	3d	140	102	9	
	3e	2		15	
	3f	4		6	

	3g	16	2	7	
	3h		1	1	
Post-Roman	4a	6	12	17	
	4b	24	6	53	
Medieval	5a			6	
	5b			3	
	5c			3	2
Post-medieval	6				
	6a	14	21	5	
	6b			1	
	6c	1			
	6d			1	9

Table 2. Burnt and gnawed bones from the 11-15 Borough High Street assemblage.

The Assemblage

Roman

The Roman assemblage is divided into eight chronological phases: Phase 3a (mid 1st century), Phase 3b (mid - late 1st century), Phase 3c (late 1st century), Phase 3d (late 1st - early 2nd century), Phase 3e (early 2nd century), Phase 3f (mid - late 2nd century), Phase 3g (late 2nd century) and Phase 3h (late 2nd - early 3rd century). The assemblage also contains one bone from an unphased Roman layer: Phase 3. The majority of the assemblage derives from Phase 3c and Phase 3d.

The species present in the total Roman assemblage include cattle, sheep, goat, pig, equid, dog, red/fallow deer, roe deer, badger, hare, domestic fowl, goose, duck, golden plover, field vole, mouse sp., mole, frog and toad (Table 3). The assemblage also included several as yet unidentified birds, mostly waders. Cattle are the most numerous animal, followed by pig and sheep/goat. Such livestock frequencies are common for Roman Southwark (Ainsley 2002, 261; Liddle *et al.* 2009, 245).

Red/fallow deer, roe deer and hare are sparsely represented, suggesting that hunting would not have been necessary for subsistence but instead would have mainly been a social event. Again, this pattern follows other Roman sites in Southwark (Ainsley 2002, 261; Liddle *et al.* 2009, 245). The presence of badger (see below) is very unusual. Contemporary badger remains in Roman London include an astragalus from Bermondsey Abbey (Rielly in prep a).

The skeletal element distribution for livestock suggests a combination of kitchen waste and butchery waste. The presence of a badger tibia from Phase 3e could be a sign of industrial waste from fat rendering industries or from a furrier's workshop. A small number of bones from cervid (deer) heads and feet could derive from leather processing waste, but could also be butchery waste from hunting.

In order to carry out a secure inter-species analysis of livestock, the combined number of fragments from cattle, sheep/goat and pig must be 300 fragments or more (Hambleton 1999, 39-40). Of the eight Roman phases, only Phase 3c and Phase 3d are of a suitable size for such analysis. All assemblages contain a small sample size of ageable mandible and sexable bones. While ageing

based on epiphyseal fusion is less precise than one based on dental eruption and wear, the number of ageable bones in Phase 3c, Phase 3d and Phase 3e form large sample sizes, suitable for chronological comparisons. Butchery marks are also frequent whereas bones with pathologies are less common (Table 4). While the assemblages from Phase 3c, Phase 3d and Phase 3e are of a suitable size for intra- and inter-phase analysis, the remaining assemblages could be combined with contemporary assemblages from the Thameslink excavations and thus form a substantial dataset for analysis of animal utilization in this part of Southwark.

	Phase 3	Phase 3a	Phase 3b	Phase 3c	Phase 3d	Phase 3e	Phase 3f	Phase 3g	Phase 3h
Cattle	1		36	234	315	94	26	36	7
Sheep/goat			13	31	46	19	6	15	7
Sheep					2	2			
Goat							1		
Pig			13	37	50	67	20	19	13
Equid					1	1			
Dog			5		2		1	2	
Red/fallow deer								1	
Roe deer				1	1	2		1	
Badger						1			
Hare			1	2					
Hare/rabbit					1				
Domestic fowl			4		2	18	1	10	10
Goose						1	1		
Duck				2		1	1		
Golden plover						1			
Wader				1		1	4		
Fowl sized bird			4	9	3	8	2	2	2
Goose sized bird			1			2		1	
Large passerine					1	2			
Small passerine									1
Indeterminate bird			4	11	5	15	18		14
Field vole				1					1
Mouse sp.			1						
Mouse/vole			5	1	2		2	2	2
Mole								3	
Frog				1				5	
Toad				1					
Frog/toad			2	2				9	
Microfauna			1		1	1		1	15
Small mammal			3	4				3	2
Sheep sized mammal		1	23	76	126	52	9	18	14
Cattle sized mammal		3	59	191	323	129	37	62	16
Indeterminate			423	963	1590	201	36	125	102
Total	1	4	598	1568	2471	618	165	321	206
Weight (g)	74	39	4399	16341	27917	9765	3265	3978	680

Table 3. Number of identified fragments by species and phase for the Roman assemblage from 11-15 Borough High Street.

	Roman									Post-Roman	
	3	3a	3b	3c	3d	3e	3f	3g	3h	4a	4b
Ageable mandibles			5	5	10	2		2		3	17
Ageable bones			29	104	142	102	26	46	14	99	135
Sexable bones			2	3	3	7	2	3	1	10	18
Measureable bones			8	26	32	10	7	6		14	25
Butchery marks	1		28	91	74	62	14	28	7	79	182
Pathologies				4	10	3	2	1		1	1

Table 4. Number of mandibles and bones in the Roman and post-Roman assemblages from 11-15 Borough High Street providing data on ageing, sexing, biometrics, butchery and pathologies

Post-Roman

The post-Roman assemblage comprises two phases: Phase 4a (late 4th century) and Phase 4b (9-10th century). The species present include cattle, sheep, goat, pig, equid, dog, cat, hare, rabbit, domestic fowl, goose, duck, pigeon, house mouse, water vole and frog/toad (Table 5). Goose, duck and house mouse are only found in Phase 4a, whereas cat is only present in Phase 4b. In both assemblages cattle are the most numerous species. Sheep/goat are more common in the later assemblage, possibly reflecting an increase in wool production in the hinterland.

Large game is absent; the only wild mammals present are hare and rabbit. This suggests that hunting was a rare event and/or that meat from game rarely were sold by the local butchers. The skeletal element distribution for livestock suggests a combination of kitchen waste and butchery waste.

Ageable bones are common in both assemblages, whereas only the latter phase contain a relatively large number of mandibles suitable for an ageing analysis. The number of bones that could be sexed or measured is relatively low, but they could form a substantial sample if included with a contemporary assemblage from other Thameslink sites. Bones with butchery marks are common, suggesting a possibility for an analysis of changes and tradition in butchery methods over time (Table 4). The two assemblages could be combined with contemporary assemblages from Thameslink or from other parts of Southwark and thus form a substantial dataset for analysis and comparisons.

	Phase 4a	Phase 4b
Cattle	75	109
Sheep/goat	29	77
Sheep	1	4
Goat	1	3
Pig	34	56
Equid	4	6
Dog	9	7
Cat		3
Hare	1	2
Rabbit	1	1
Domestic fowl	14	19
Goose	3	
Duck	2	

Pigeon		1
Fowl sized bird	10	3
Goose sized bird	7	4
Large passerine	2	
Small passerine		2
Indeterminate bird	20	18
House mouse	1	
Mouse sp.		1
Mouse/vole	8	5
Water vole		1
Frog/toad	1	5
Microfauna	22	3
Small mammal	3	2
Sheep sized mammal	102	116
Cattle sized mammal	107	224
Indeterminate	372	275
Total	829	947
Weight (g)	9154	18193

Table 5. Number of identified fragments by species and phase for the post-Roman assemblage from 11-15 Borough High Street.

Medieval

The medieval assemblage is dominated by bones from cattle and sheep/goat, followed by pig and domestic fowl (Table 6). A small number of bones could be identified to sheep, but none to goat. Other animals that are likely to have formed part of the diet include rabbit, goose and duck. Equid, dog and cat were also present. Microfauna were only represented by mole.

While the total number of livestock bones from the medieval assemblage is too low for a secure inter-species analysis (cf. Hambleton 1999, 39-40), previous analyses of medieval assemblages in Southwark suggest that cattle are the most frequent taxa for this period followed by sheep/goat and pig (Rielly 2006, 133; Rielly in prep b). The distribution of skeletal elements from livestock indicates a mix of household and butchery waste.

	Medieval			Post-medieval				
	Phase 5a	Phase 5b	Phase 5c	Phase 6	Phase 6a	Phase 6b	Phase 6c	Phase 6d
Cattle	16	16	38		17	2	3	2
Sheep/goat	16	12	27	1	9	2		9
Sheep		2	1					1
Pig	7	3	12		6	3	1	3
Equid	1	1						
Dog		1						
Cat		11			1			
Roe deer					1			
Rabbit			2		2			
Domestic fowl	2	4	4					
Galliform			1		2			

Goose			3					1
Duck			1				1	
Gull					1			
Fowl sized bird	1	1	5		3			
Goose sized bird			1					1
Indeterminate bird		2						
Mouse/vole					1			
Mole		1						
Microfauna		1						
Small mammal		1						
Sheep sized mammal	27	28	41		4	1		4
Cattle sized mammal	40	1	40	1	21	1	1	7
Indeterminate	14	19	16		60		4	2
Total	124	119	192	2	128	9	10	30
Weight (g)	2467	2250	5756	43	2100	290	244	815

Table 6. Number of identified fragments by species and phase for the medieval and post-medieval assemblages from 11-15 Borough High Street.

	Medieval			Post-medieval				
	Phase 5a	Phase 5b	Phase 5c	Phase 6	Phase 6a	Phase 6b	Phase 6c	Phase 6d
Ageable mandibles	2	1	5		1		1	
Ageable bones	24	32	48	1	20	4	1	11
Sexable bones	2	3	2	1	3			1
Measureable bones	5	7	10		5	1		1
Butchery marks	31	12	1	1	14	2	1	7
Pathologies	1	1	1					

Table 7. Number of mandibles and bones in the medieval and post-medieval assemblages from 11-15 Borough High Street providing data on ageing, sexing, biometrics, butchery and pathologies

Post-medieval

The small post-medieval assemblage is dominated by bones from cattle, sheep/goat and pig (Table 6). The number of speciable bones is very low, but previous analyses of post-medieval assemblages in Southwark suggest that these are the most frequent taxa for this period (Rielly 2006, 133: Rielly in prep b). Other taxa present include equid, dog, cat, rabbit (possibly domestic), roe deer, goose, duck and gull. Goat could not be identified in the post-medieval assemblage.

Wild mammals are represented by a single fragment of a roe deer metatarsal. This may derive from leather working waste, as these bones were sometimes included in skins sold for tanning (Yeomans 2006, 196-197). The leather industry formed a large part of the industrial activity in Southwark in the post-medieval period, although contemporary records indicate that it was mostly located east of London Bridge (Yeomans 2006, 121).

Data on ageing, sexing, size and butchery are very limited (Table 7), but if the assemblages from 11-15 Borough High Street would be combined with contemporary assemblages from other parts of the Thameslink excavations, they could potentially provide useful data on animal utilisation.

Potential and Recommendations

The Roman and post-Roman assemblages have good potential to inform us of diet and animal utilisation in this area of Southwark. While several of the assemblages from the individual phases may be too small on their own for a valid analysis, these could be combined with contemporary assemblages from the Borough Market area of Southwark to provide useful information on animal use in this area. The medieval and post-medieval assemblages contain relatively few bones identified to species level and they would need to be combined with contemporary assemblages from Southwark in order to be able to yield useful information on animal utilisation from these periods.

A visit to a large bird bone reference collection, for example the National History Museum, Tring, is warranted in order to attempt an increase of the number of identified avian species.

Due to the small number of published data on faunal remains from Southwark, particularly for the medieval and post-medieval periods, a brief analysis and publication of the dataset for the two assemblages is warranted.

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APPENDIX 15: FISH REMAINS ASSESSMENT

Rebecca Nicholson

Introduction and Aims

Fish remains from this site were entirely recovered from the residues of the bulk sieved soil samples, which were sieved to 0.5mm and sorted to 4mm or in some cases to 2mm. Over 200 bones have been identified for this assessment, comprising the majority of the recovered assemblage. Retained residues (4-2mm and 2-0.5mm) have been scanned for the presence of small and tiny fish bones. This small assemblage has been assessed in order to identify the range and types of fish represented and significance in terms of its usefulness to inform on diet, economy and the use of marine, estuarine and freshwater resources. Recommendations for further work, including residue sorting if appropriate, are given at the end of this report.

Assemblage Summary

Generally the fish remains are well preserved or in some cases very well preserved. The largest assemblage of fish remains comes from sample 503, fill [637] in medieval pit [648]. Only around 80 bones have been identified from Roman deposits, and in many cases these came from deposits not as yet more precisely phased. Several deposits included a small number of fish scales.

Phase 1/2/3: Prehistoric and Roman

Although only 80 bones have been identified, a range of taxa have been recorded, from sea fish including: clupeids (herring/sprat: Clupeidae), smaller flatfishes, small gadids including whiting (*Melanogrammus aeglefinus*), sea breams (Sparidae), sea bass (*Dicentrarchus labrax*), possibly a small tuna (Thunnidae) and spanish mackerel (*Scomber japonicus*). Freshwater fish included barbel (*Barbus barbus*), bream (*Abramis brama*) and gudgeon (*Gobio gobio*) as well as salmonid(s) (Salmonidae) which were probably caught in local rivers or streams. Eel (*Anguilla anguilla*) would have been common in the Thames but as a migratory fish can be found in rivers and in coastal waters.

Phase 5: Medieval

Almost 150 fish bones have been identified, largely from from pit fills and postholes. A more restricted range of taxa was recorded than from the Roman samples: rays (Rajidae), gadids including cod (*Gadus morhua*) and whiting, smelt (*Osmerus eperlanus*), clupeids (herring/sprat), gurnard (Triglidae) and smaller flatfishes including flounder (*Platichthys flesus*) were present. A single spanish mackerel vertebra from context [877] (a fill in pit [878]) is very likely to be residual from a Roman deposit. Bones from freshwater fish were confined to a single small roach (*Rutilus rutilus*)

proatlas and bones from eel, the latter probably caught in the Thames estuary or in freshwater streams or pools.

Phase 6: post-medieval

A single small flatfish vertebra has been identified from this phase.

Discussion and Recommendations

The fish assemblage from 11-15 Borough High Street is small, but for the Roman period this is typical (Locker 2007). As is the case from other Roman sites in this project, for its size, the assemblage contains a diverse and interesting range of taxa, some of which are likely to be imported fish. The fish assemblage will form one of only a small number of Roman assemblages reported from Southwark and consequently results from this study should be published both together with other material from this site and as part of an overall discussion of Roman fish remains associated with sites from the Thameslink project. The assemblage can be compared with published and unpublished reports from sites in London such as Winchester Palace, Southwark (Yule 1989; 2005), Parnell Road (Locker 1998) and the Babe Ruth Site (Armitage 2005).

A small number of the finer soil sample residues remain to be fully sorted, and it is recommended that where these are from Roman deposits full sorting should be undertaken.

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Species	?Roman	Roman	Post-	Medieval	Post	Total
Ray (Rajidae)				8		8
Eel (<i>Anguilla anguilla</i>)	7	4	1	15		27
Salmonid (<i>Salmo</i> sp.)	1	1				2
Smelt (<i>Osmerus eperlanus</i>)				1		1
Clupeid (Clupeidae)	5	2		15		22
Herring (<i>Clupea harengus</i>)		2		4		6
Cyprinid (Cyprinidae)	12	4	1	2		19
Barbel (<i>Barbus barbus</i>)		1				1
Bream (<i>Abramis brama</i>)		1				1
Roach (<i>Rutilus rutilus</i>)				1		1
Gudgeon (<i>Gobio gobio</i>)	1					1
Gadid (Gadidae)				9		9
Cod (<i>Gadus morhua</i>)				5		5
Whiting (<i>Melanogrammus aeglefinus</i>)				6		6
Gurnard (Triglidae)				2		2
Sea bream (Sparidae)	1	3				4
Gilthead sea bream (<i>Sparus aurata</i>)	1					1
Red sea bream (<i>Pagellus boragaveo</i>)	1					1
Sea bass (<i>Dicentrarchus labrax</i>)	1	1				2
Scombrid (Scombridae)	3					3
Spanish mackerel (<i>Scomber</i>)		3		1		6
Cf Tuna (Thunnidae)	1					1
flatfish nfi	4	3		7		14
Right eyed flatfish (Pleuronictidae)	2	4	1	58	1	66
Flounder (<i>Platichthys flesus</i>)				2		2
cf. Lemon sole (<i>Microstomus kitt</i>)	1					1
Unidentified	5	3		8		16
Grand Total	48	32	3	144	1	228

Table 1: Number of Identified fish remains in the assessed assemblage

APPENDIX 16: WOOD CHARCOAL ASSESSMENT

Sheila Boardman

Introduction

Eighty bulk soil samples from the excavations were submitted for assessment, of which sixty-four samples were assessed in detail for wood charcoal. Assessed samples included primary deposits (floors, hearths, burnt horizons, etc.), and discrete refuse deposits (fills of pits, ditches, postholes, etc.), but not the large scale dumping/levelling deposits seen in parts of the site. The latter are likely to include material of very mixed origins and ages. A summary of the samples, the periods/phases investigated and recommendations for further work can be found Table 1.

Table 1. Summary of samples assessed, site phases and recommendations for further work.

Period	Phase	Date range - centuries AD	Site area	No. of samples assessed?	Samples for further work?
Roman	3b	Mid/late 1st	A1	1	1
			A2	2	2
			B	24	8
Roman	3c	Late 1st	A2	1	1
			B	6	4
Roman	3d	Late 1st/early 2nd	B	2	2
	3e	Early 2nd	A1	2	0
			A2	1	1
		B	4	2	
Roman	3f	Mid/late 2nd	A1	1	0
			B	2	2
Roman	3g	Late 2nd	A1	2	1
			B	5	4
Roman	3h	Late 2nd/early 3rd	B	3	2
Saxon	4a	Late 4th	B	3	2
Late Saxon	4b	9th/10th	B	3	3
Medieval	5b	12th/14th	B	1	1
Post Medieval	6a	Late 15th - early 17th	B	1	1
Totals				64	37

The two overarching aims were to provide a detailed assessment of the potential for further work on the wood charcoal samples and associated deposits, and to provide rapid base-level data across all

the samples and contexts which can later be used in the interpretation at the site, including where the material or associated contexts and features are not deemed suitable for full analysis.

Methods

The samples were processed at Oxford Archaeology South. Sample fractions examined during the assessment were the (dry-sieved) greater than 4 and 2-4mm flots, and hand-picked charcoal from greater than 10, 4-10 and 2-4mm residues. Where available, between 20 and 40 flot charcoal fragments, and 10 to 30 residue charcoal fragments were examined per sample. The majority of fragments were examined at low magnifications (x10 - x40) only. All tentative identifications will therefore require verification before publication of any of the results here. Identifications took place using standard reference books and keys (including Schweingruber 1990; Hather 2000; Gale & Cutler 2000).

Results

The assessment results are summarised in Table 2 which is organised by area, broad period (Roman, medieval, etc.) and tentative phase (Roman, 2. 3. 4. etc., where known). The latter may change prior to full analysis of the wood charcoal.

The numbers of fragments per taxa group in each sample are roughly quantified using asterisks as outlined below. The right hand column in Table 2 incorporates codes for the potential for further work on each sample. This has been adapted from Carruthers (2011; see Hunter 2012) and it is also described below.

The following taxa were identified:

Acer campestre – field maple

Ilex aquifolium – holly

Betula - birch

Alnus – alder

Corylus avellana – hazel

Fagus sylvatica - beech

Quercus - oak

Fraxinus excelsior – European ash

Pomoideae – sub-group of Rosaceae family which includes *Malus* (crab-apple), *Pyrus* (pear),

Crataegus (hawthorn) and *Sorbus* (rowan/whitebeam/service)

Prunus spp. – blackthorn/cherries, etc. - another Rosaceae sub-group. *P. spinosa* (blackthorn/sloe) definitely present in one sample.

Rhamnus cathartica – purging buckthorn

Ulmus - elm

In addition there was one poorly preserved softwood fragment in medieval sample S504, and fragments of possible ivy (*Hedera*) in one or two samples. With a few exceptions, the dominant tree present across the BVK11 samples was oak (*Quercus*), suggesting this was of great importance at the site. There were considerable variations in the numbers of oak heartwood, sapwood and roundwood fragments per sample, and particularly in the quantities of range of other taxa present. The latter will be the focus of proposed further work, below.

Quantity codes

* 1-5 fragments

** 6-10 fragments

*** 11-50

**** 50-100

***** 100+

Charcoal potential codes

The potential of the samples/deposits for further charred and mineralised plant investigations (and fuller wood charcoal analysis) is coded as follows.

A - High potential on archaeobotanical grounds, i.e. rare or interesting taxa and range of material, or exceptional preservation; or high potential on archaeological grounds due to scarcity of information from this type of material and/or deposit or period.

B - Good potential due to the quantity and range of material present and its reasonable preservation; i.e. the assemblage can provide a useful amount of information.

C - Some identifiable plant material but in low concentrations or poorly preserved.

D - No identifiable material or so little that this has already fully identified/recorded (e.g. all wood charcoal present is from a single taxa such as oak [*Quercus*]).

Discussion and Recommendations

Using wood charcoal data it may be possible to address questions relating to the following research areas:

Preferred fuel woods in use at the site in different periods

Preferred fuel wood for particular industrial or domestic activities

Character and exploitation of local environment

Importation of fuel woods from further afield

Changes in local vegetation and fuel wood preferences during occupation of site

Local and regional tree and shrub vegetation and its exploitation, through comparisons with other wood/charcoal assemblages, and local and regional pollen data.

Comparison with other sites

Comparative data will include plant material from a range of Thameslink sites (e.g. BVG10, BVX09, BVW10, BVQ09, BVB10), some additional sites excavated by MoLAS/MOLA, and from other published sources in the form of wood charcoal, waterlogged wood, pollen and other environmental reports, from sites in and around London. Historically, there have been few comprehensive wood charcoal investigations on urban sites in the area.

WOOD CHARCOAL: Recommended Analyses & Tasks

1. It is recommended that the assessment data is consolidated, with a small number of critical identifications added/checked, so this evidence can be included in the later wood charcoal analysis report.
2. It is recommended that up to thirty-seven samples are rapidly analysed (highlighted in Table 2), with particular emphasis placed on identifying of the full range of non oak taxa present.
3. Final report to include the data from 64 samples.

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Site	Sample No	Context	Area	Period	Phase	Feature Type	Charcoal size range	sample vol/L	Softwood	Acer	Betula	Alnus	Corylus	Alnus/Corylus	Fagus	Fraxinus	Hedera	Ilex	Populus/Salix	Pomoideae	cf. Pomoideae	Prunus spp.	Rhamnus	Quercus	Ulmus	Other RP wood	Other DP wood	Indet.	Comments	Identifiable charcoal frags. remaining	Charcoal Potential
PHASE 3b - Mid/late 1st century																															
Areas A1 & A2																															
BVK11	539	1314	A1	Roman	3b	Burnt horizon						***r			*								***hs			**	*	Variety of DP taxa present	130	B	
BVK11	514	890	A2	Roman	3b	Charcoal-rich fill of ditch [887]																	*****hsr			*	Astoundingly rich. Flot = 1.65 kilos. Almost all oak. Oak bark & vitrified mat.	10's of 1000s!	AB		
BVK11	513	886	A2	Roman	3b	Fill of Ditch 887					?	*	*							*r			****h(s)		*	*	Only residue charcoal for this sample. No flot?	450	AB		
Area B - Industrial hearths																															
BVK11	603	1628	B	Roman	3b	Hearth floor									*								**hs				Tiny flot. No further work	0	D		
BVK11	588	1628	B	Roman	3b	Hearth floor				?	**r											?	***hs		*			300+	B		
BVK11	594	1616	B	Roman	3b	Hearth wall																	***h(s)			inc .r	V variable oak Fs	80+	BC		
BVK11	593	1615	B	Roman	3b	Hearth wall																	*				Two tiny oak Fs.	0	D		
BVK11	595	1615	B	Roman	3b	Hearth wall									**								**h				Ash most common mat.	40+	BC		
BVK11	602	1615	B	Roman	3b	Hearth wall																	***hsr				Oak = hw with dense g. rings or sw w wide growth rings. Charred insect rems	300	BC		
BVK11	591	1614	B	Roman	3b	Hearth collapse									*								***hsr				Mostly slow grown oak heartwood (hw)	150+	B		
BVK11	592	1614	B	Roman	3b	Hearth collapse																	***h(s)				Mix of slow grown & fast grown oak timber.	100	BC		
BVK11	570	1605	B	Roman	3b	Burnt horizon																	****hsr				Total charcoal 720g. Mostly/all oak.	1000+	B		
Area B - Domestic & industrial rake out deposits - Pit 1624																															
BVK11	590	1623	B	Roman	3b	Fill of Pit [1624]						***			(+)								**hs			*	(+) Min wood inc. ash. Oak hw	100+	B		

																							mostly				
BVK11	589	1613	B	Roman	3b	Fill of Pit [1624]																	***h(s)	*	Small sample. All identified	0	D
BVK11	586	1612	B	Roman	3b	Fill of Pit [1624]																	***hs	*	Oak mostly hw with very dense rings	25	BC
BVK11	587	1612	B	Roman	3b	Fill of Pit [1624]					**												***hsr	*		250+	BC
BVK11	583	1611	B	Roman	3b	Fill of Pit [1624]					*												***hs	*	Mostly hw with wide growth rings. Cu deposits	200+	B
BVK11	579	1610	B	Roman	3b	Fill of Pit [1624]					*												***h(sr)	*	V dense oak hw. Damp.	200+	BC
BVK11	580	1610	B	Roman	3b	Fill of Pit [1624]																	***hsr		Large flot, small charcoal Fs. Lots of oak hw	200+	B
BVK11	575	1609	B	Roman	3b	Fill of Pit [1624]					cf.												**hs	*		50+	BC
BVK11	576	1609	B	Roman	3b	Fill of Pit [1624]																	**s		Oak mostly sapwood (sw)	90+	BC
BVK11	572	1608	B	Roman	3b	Fill of Pit [1624]																	**hsr		Lots of Cu deposits in vessels. Sw common	60+	BC
BVK11	573	1608	B	Roman	3b	Fill of Pit [1624]																	**hs	*	Sm crumbly charcoal. Nutshell & cereals present	150+	BC
Area B - Domestic & industrial rake out deposits - Pit 1618																											
BVK11	598	1619	B	Roman	3b	Fill of Pit [1618]					*		*	**	?	*	?						**sr(h)	*	Oak sw & roundwood (rw). Analyse if time.	70+	B
BVK11	599	1619	B	Roman	3b	Fill of Pit [1618]					*		**r	*	?	*							**hs	*	Very diverse sample	250+	B
Area B - Domestic & industrial rake out deposits - Pit 1622																											
BVK11	600	1621	B	Roman	3b	Fill of Pit [1622]																	***hs	*	Oak hw most common	100	BC
BVK11	597	1617	B	Roman	3b	Fill of Pit [1622]																	***hsr	*	V variable oak Fs	250+	B
PHASE 3c - Late 1st century																											
BVK11	511	860	A2	Roman	3c	Occupation layer					***												***hs	**	Oak most hw. Birch and hazel inc. rw	400+	AB
Dumps/work ing area																											

BVK11	512	577	A1	Roman	3q	Opus signinum surface/ bedding/ repair				*	**	*				*	***hs		**	*	Oak mostly cf. sw	250+	B	
BVK11	542	1367	A1	Roman	3q	Fill of flue [1369]/[1370]				?	*	**	*	*	?	*	?	**h(sr)		*	Some v large charcoal Fs. Nut shell & seed present	500+	B	
BVK11	516	979	B	Roman	3q	Occupation layer											****(hsr)		**	*	Non charcoal rich & mat. not well preserved.	50F (all <4mm)	BC	
BVK11	532	1211	B	Roman	3q	Fill of Pit [1215]				?	**	**					***h(sr)	*r	**		Elm rw	1000	AB	
BVK11	530	1196	B	Roman	3q	Fill of shaft [1196]				?	?	*				**	*	**s(h)				200+	B	
BVK11	527	1156	B	Roman	3q	Burnt horizon				cf.	*					cf.	*	**	*	*		>100	AB	
BVK11	523	1028	B	Roman	3q	Occupation layer											***r		*	*		300+	B	
PHASE 3h - Late 2nd/early 3rd century																								
BVK11	525	1064	B	Roman	3h	Fill of Pit [1065]				*	*	*r				**		**hs		***	*	Lots of DP wood	400+	B
BVK11	524	1059	B	Roman	3h	Occupation layer						*	*		*	**		*s		*	*		25	B
BVK11	521	1024	B	Roman	3h	Fill of Beamslot [1073]						*	*			**		**hs		*		Much bone in flot. Oak includes fast grown wood.	300+	BC
PHASE 4a - Late 4th century																								
BVK11	508	809	B	post Roman	4a	Fill of Post pipe [810]				*	*	*						**s(h)		*	*	Oak Fs very sim: wide rings, mostly sw, large vessels in late wood	100	BC
BVK11	520	1023	B	post Roman	4a	Occupation layer										*		***h		*		Dusty charcoal	>100	B
BVK11	507	795	B	post Roman	4a	Fill of Pit [796]				*	*	*	***r			*	*	**sr(h)	**	*	*	Check RP for Castanea. Prunus spinosa	200+	B
PHASE 4b - 9th/10th century																								
BVK11	506	791	B	post Roman	4b	Fill of Pit [792]				*	*	*			?	**		**hs		*	*	Oak sw more common	300+	B
BVK11	504	647	B	post Roman	4b	Fill of Pit [649]				*	*	*						***hsr		**	*		800+	B
BVK11	503	637	B	post Roman	4b	Fill of Pit [648]						**r	*			*		***hsr		*	*r		1000+	B
PHASE 5b - 12th/14th century																								
BVK11	509	822	B	post medieval	5b	Fill of PH [823]						*r	*	*		*		**hs		*		Sample w min. seed	150-200	B

APPENDIX 17: MACROFOSSILS ASSESSMENT

Kath Hunter

During excavations by OA-PCA at 11-15 Borough High Street (BVK11) in 2011, 95 bulk samples were taken to recover plant remains including waterlogged, mineralised and charred plant remains. The samples date to the Roman, post-Roman, medieval and post-medieval periods; the results of the assessment, together with the volumes of soil processed, are given in Table 1.

Aims and Objectives

The aim of this assessment was to characterise the quantity and quality of plant remains preserved in deposits in order to assess the value of the material to answer site-based and regional research questions. To do this, the following categories of information were considered:

The quantity of the material preserved

The quality and type of preservation.

The range of species represented.

Indicators of human activity such as domestic and agricultural practice

Identify indicators of the local environment.

Other sites within the region that may have comparable assemblages.

Methodology

Samples taken for the recovery of environmental remains were processed by a flotation technique at OA using 250µm mesh to recover the flot and a 500µm mesh to recover the residue.

For this assessment, a portion of each flot was scanned in total using low powered microscope at magnification of between x10 and x20 (MTL5) at Oxford Archaeology South (OAS). The presence, relative abundance and type of preservation of plant remains were recorded along with any bone, insect, molluscs and artefactual remains. The frequency of charcoal and wood fragments larger and smaller than 2mm was also noted. Charcoal and wood >2mm in all dimensions is potentially identifiable and suitable for species analysis and dating.

Where delicate or individual specimens of particular interest were found they were placed in a glass tube (in water if waterlogged) and returned to the flot in order to protect them and to enable them to be found easily at the analysis stage. As this was a rapid assessment of the plant remains the level of identification was limited. Where identified the nomenclature for the plant remains follows Stace (2010). Please note that the term seed might include achene, mericarp etc. Where animal bone has been identified this was carried out by Lena Strid. The list of all the samples assessed and a detailed record of all the plant remains is given in Table 1. A number of retained residues were also scanned for mineralised remains and the results are given in Table 2

During the scanning process the frequency of the different types of charred/waterlogged and mineralised plant remains were recorded using the following key:

* 1-5 items

** 6-10

*** 11-50

**** 50-100+

The portion of charcoal/wood greater than 2mm in all dimensions from the total frequency are shown in brackets in Table 1. Table 3 shows the samples that have been prioritised for further analysis.

The criteria used to select samples for further analysis is based on a scheme developed by archaeobotanist Wendy Carruthers which allows various factors to be taken in to account when assessing samples. The priority categories used in this assessment are as follows:

A = high potential on archaeobotanical grounds (i.e. rare or interesting plant taxa or exceptional preservation) or due to the scarcity of information from this type of deposit (e.g. Neolithic contexts).

B = good potential due to reasonable preservation and/or frequent identifiable charred plant remains, i.e. the assemblage can provide a useful amount of information.

C = some plant material but present in very low concentrations or very poorly preserved. These samples would only be worth including if part of a group, or if the context is especially important or particular information is required.

D = no plant material or so few to have been fully identified and recorded. Any information recovered from C and D samples can be included in the final report if necessary.

(Carruthers 2011)

This system also allows for the provision of intermediate categories for example B/C where further information may be required about the samples such as phase or feature type.

Results

Plant remains

The results of this assessment can be found organised by sample in Table 1. The assessment of charcoal has been carried out separately (see report Appendix 16).

Other biological remains

The presence of marine mollusc shell, bone and insects was also noted (Table 1).

Discussion/Recommendations

Six samples have been recommended for sorting and full analysis (see Table 3) of charred, mineralised and waterlogged plant remains.

Although the majority of the flots and residues assessed from the whole site contain identifiable plant remains, many of them occur in very small quantities. These small assemblages do not warrant a further analysis process, but have value as a collective assemblage from across the site and in comparison with assemblages recovered from the other Thameslink sites. Therefore, it is recommended that these remains are tabulated based on these assessment results and discussed in the full analysis report and in any synthesis of all sites from the Thameslink excavations.

Collectively the plant macrofossil data from this site may address the following research questions:

The character of food remains on the site

Evidence of economic crops

The exploitation of natural resources

The character of the local environment

Potential changes in local vegetation types throughout the occupation of the site

Comparisons with the plant assemblages from other areas of excavation and other sites on a local and regional scale.

The remains would provide additional information concerning the food resources available to the inhabitants of Southwark in the Roman and medieval periods and could usefully be compared to assemblages from other sites in Southwark and wider London (details as in Thameslink Assessment 3). Full analysis of the waterlogged, charred and mineralised seeds from the six samples is therefore recommended (Table 3).

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Site	Sample No	Context	Trench/ area	Dating Decision	Phase	Feature Type	Mesh size Flot/µm	sample vol/L	% scanned	Grain	Cereal NFI	Chaff	Legume	Seed	fruit/ nut	other	Charc	Mineralised	seed	wood	insect	mineralised sediment	seed	leaf / stem	wood	fruit /nut	fish	amph	mammal S	Mammal L	Bird	insect	marine	other	insect	egg shell	Other	Comments	Plant remain analysis Potential	Charcoal potential
BVK11	500	591	A1	Post Rom	4a	Dump/levelling	250			*					*		(****)****	**	**			*		**			***		*	*	**		*					Charred. Grain.Mineralised. Grape, fig and potential a type. Waterlogged blackberry.Coal,CBM, glassy slag, abundant small mortar fragments,HNS	C/B	GOOD
BVK11	502	627	B	Post Med	6a	Fill of pit 262	250			***				*	**		(****)****						*								**						Charred- hulled barley, wheat cereal nfi, ?lentil,gallium aperine. Fuel ash slag	B/C	GOOD	
BVK11	503	637	B	Post Rom	4b	Fill of pit [648]	250			**	**			*			(****)****						*			****				**	****						Charred-wheat, cereal nfi. Waterlogged- elder seed. Pottery	C	GOOD	
BVK11	504	647	B	Post Rom	4b	Fill of pit [649]	250			*							(****) ****									*		*	*		*						Charred-Grain. Amorphous charred fragments,Fuel ash slag,	D	GOOD	
BVK11	505	806	A2	Post Rom	4a	Dump/levelling	250										(***)***	*														****				?modern wood, coal, Fe slag, Fe sphere, Amorphous organic charred fragments.	D	MOD		
BVK11	507	795	B	Post Rom	4a	Fill of pit [796]	250							*			(***)****						*			*	*	*	*	*	***		**			Waterlogged elder, Charred HNS, CBM,glassy slag,mortar,	D	FAIR		
BVK11	509	822	B	Post Med	5b	Fill of posthole [823]	250			*							(***)***	***			*				*	***		**								Flot- Charred-wheat, mineralised- prunus** kernal, grape*, fig***, elder*,Waterlogged cherry type.grape,rubus.Residue - mineralised grape ***, apple *and Prunus type* seeds larvae.ceramic	A	FAIR		
BVK11	513	886	A2	Rom	3b	Fill of ditch [887]	250							*			(****)****														*					HNS,ceramic	C	GOOD		
BVK11	514	890	A2	Rom	3b	Fill of ditch [887]	250										(****) ****				*	*							***	*						Fuel ash slag, Mineralised-insect larvae, pottery	D	GOOD		
BVK11	515	978	B	Rom	3e	Fill of pit [967]	250										(****)****								*											V.large charcoal fragments.abundant fuel ash slag, rare charred amorphous fragments.	D	FAIR		
BVK11	516	979	B	Rom	3g	Occupation layer	250										(***)****								*		*			**						CBM, Op sig, ?plaster, fuel ash slag	D	FAIR		
BVK11	517	926	A2	Rom	3c	Levelling layer	250							*			(***)***				****				*	*		**								Bracken type frond tip, Fe.metal working sphere,CBM	D	FAIR		
BVK11	518	1001	B	Rom	3e	Fill of pit [1033]	250							**			(****)****						*							*						? Waterlogged seed Cf. Fulmaria sp.Amorphous organic charred fragments.Fired clay, CBM, Fuel ash slag	D	GOOD		
BVK11	520	1023	B	Post Rom	4a	Occupation layer	250										(****)****								**			***	?		*					Fuel ash slag.	D	GOOD		

Sample	Context	Type	Comments	No of bags	Full analysis for plant remains	Finds
503	637	pit fill	marine shell , fish bone, egg shell, charcoal	1	n	X
509	822	fill of post hole 823	cessy concretions with plant remains/mineral replaced "tabby weave" textile (weave ID Lena Strid) /Fe obj./bone	2	y	X
509	822	fill of post hole 823	impression of <i>Agrostemma githago</i> (Corn cockle) seed in cessy concretion, Grape and prunus kernels, mineralised wood, charcoal	1	y	X
510	850	Occ layer	mineralised concretions/fe obj./?bone pin frag.	2	n	X
511	860	Roman occ. Layer	No further work	1	n	
513	886	Roman pit 887	No further work	1	n	
532	1211	grey/green layer	cessy concretions/mineralised concretions/?CBM	3	n	?X
533	1222	burnt layer with shell	No further work	1	n	
561	1585	fill of cut1586	No further work	1	n	
564	1587	charc dep in 1586	mineralised concretions/bone/fe obj./? Cu alloy corosion	3	n	X
566	1601	charcoal and Cu alloy rich	?coprolite/mineralised concretions/? Metal slag/?Cu alloy staining	3	n	?X
599	1619	kiln	mineralised wood/Fe obj	1	y	X

Table 2: Mineralised plant remains

Site	Sample No	Context	Trench/ area	Dating Decision	Phase	Feature Type
BVK11	597	1617	B	Roman	3b	Fill of pit [1622]
BVK11	544	1455	B	Roman	3d	Fill of posthole [1456]
BVK11	547	1468	B	Roman	3d	Dump/ levelling
BVK11	552	1471	B	Roman	3d	Levelling layer
BVK11	500	591	A1	Post Roman	4a	Dump/ levelling
BVK11	509	822	B	Medieval	5b	Fill of posthole [823]

Table 3: Samples with preserved plant remains recommended for full analysis

APPENDIX 18: SHELL ASSESSMENT

Rebecca Nicholson

Introduction and Aims

The shellfish from this site were relatively numerous; almost all the came from the residues of bulk sieved soil samples and almost all are native oyster (*Ostrea edulis* L.). Shells were hand collected from only one context ([519]) and comprised only 15 oyster valves. Recommendations for further work are given at the end of this report.

Methodology

Marine shells were extracted from samples taken from 40 contexts. Those from sample 505 [806], sample 536 [1184] and 528 [1169] were particularly numerous. For this assessment all shells have been identified without reference to identification guides and rapidly quantified by number of left and right valves in the case of oysters, total number of valves in the case of other bivalves and number of individuals in the case of gastropods (Table 1). Bivalve counts are based on the number of umbones present.

Assemblage Summary

Sample 528, [1169] from a dump/levelling deposit phased as Roman, includes a minimum of 229 oysters, 43 mussels (*Mytilus* cf. *edulis* L.), 3 whelks (*Buccinum undatum* L.), 1 cockle (*Cerastoderma* sp.) and 2 rough periwinkles (*Littorina* cf. *Saxatilis Olivi*), recovered from only 15L of sediment. The majority of oysters are of the standard rounded shape for this native species; a range of sizes are present and approximately < 1/4 of shells are potentially measurable (following Winder 2011). Evidence of epibiont infestation is minimal. Several valves exhibit clear opening notches.

Sample 536 [1184], also from a Roman dump/levelling deposit, includes a minimum of 556 oysters, 1 mussel and 1 cockle, recovered from 35L of sediment. The shells are generally in poor condition, with only around 1/6th of the valves potentially measurable. As before, the oysters are generally of the traditional round shape, although a few elongate examples are present. Mature oysters and juvenile spat are present, but none of the valves are particularly large. Traces of epibiont infestation seem to be rare, although visibility is hampered by the poor shell condition (many valves are crumbly and fragmented). Several valves have evidence of gastropod drill holes and fragments of shell perforated by the sponge *Cliona celata* are also present. Several fragments are likely to be from the saddle oyster *Anomia ephippium* L., a shellfish which colonises hard substrates and which is found regularly with oysters. A few valves exhibit evidence of iron and/or charcoal staining.

Sample 535 [1179], again from a Roman dump/levelling deposit, includes a minimum of 130 oysters in similar condition to those from sample 536, as well as at least 43 mussels and 3 whelks.

Sample 505 [806], 38L of sediment from a Roman or post-Roman levelling deposit, includes a minimum of 383 oysters, in slightly better condition than those from samples 535 and 536, but still significantly fragmented. Again, mature individuals and spat are present. Fewer than 1/5th valves are potentially measurable. Epibiont infestation appears to be low. Several valves exhibit sponge or gastropod boreholes.

Sample 525 [1064], 25L of fill from pit [1065], phased as Roman, includes three worked oyster valves, one (left valve) with a longitudinal 'bar-shaped' perforation and the other two, smaller left valves, with a circular hole perforating the shell (larger than those left by drilling gastropods). The purpose of these is unclear.

Other samples contained few shells. Quantities are listed in the Table below.

Discussion and Recommendations

Several of the sampled deposits included a large collection of shells, all of which are currently phased as Roman. The range of sizes and shapes of shell suggest that shells were collected from natural, "wild" rather than managed beds. Sieved to 0.5mm, the samples include shells from both the larger mature individuals and from younger shellfish, the latter usually overlooked in hand collected material (which form the great majority of published assemblages). It is therefore unfortunate that many of the valves are fragmentary and therefore not measurable, since biometric analysis provides a means of studying the population structure of the collected shellfish so allowing conclusions to be drawn concerning the type of bed exploited, the means of collection and the possible location of the harvested beds (the last point would also draw on evidence of infestation and encrustation). The only sample likely to include >100 measurable left valves is sample 536, although measurable shells from sample 535 could be added, since these appear to be from a layer closely related in time and space. Sample 528 includes around potentially 90 measurable shells and may be worthy of further analysis. Presuming that the contexts contain securely phased dumps of shell, full recording and analysis of these larger assemblages would enable comparison with other analysed oyster assemblages from London including the (Saxon) Royal Opera House (Winder and Gerber Parfitt 2010), Pudding Lane (Winder 1984), Moorgate (Winder 1987a) and Guildhall House (Winder 1987b). It would be preferable if this further work was carried out by a specialist in the analysis of oyster shells.

It is also recommended that undiagnostic/countable shell fragments (virtually exclusively oyster), which are present in considerable quantities in the larger samples, are discarded prior to archiving.

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Sample	Context	Phase	Oyster L	Oyster R	Mussel	Whelk	Cockle	Periwinkle	Other	Indet
528	1169	Roman	229	61	86	3	1	2		1
536	1184	Roman	556	198	1		1		4 possible saddle oyster(s)	
535	1179	Roman	130	61	85	3				
505	806	Roman	383	109			1	2		
527	1156	Roman	27	16						
558	1559	Roman			2					
532	1211	Roman	5	2	2					
554	1532	Roman	1							
556	1535	?Roman								
543	1417	Roman			2					
545	1461	Roman		2						
561	1585	Roman	15	9						
587	1612	Roman		1						
564	1587	Roman		1	3					
530	1196	Roman			1					
567	1593	Roman		2						
547	1468	Roman			1					
525	1064	Roman	27	29	6					
560	1584	Roman	2	19	8			1	1 barnacle	
511	860	medieval	25	24	1					
513	886	Roman	10	10	1					
544	1455	Roman		3	2					
510	850			2	1		1			
516	979	Roman	1	3	3				1 limpet	
503	637	post-Roman	9	5						
500	591	Roman	6	1	1					
506	791	medieval		3	1				1 small clam	
507	795	medieval	3	2						
508	809	Roman		1	1					

509	822	medieval			4					
512	877	medieval			2					
504	647	medieval	1	2						
515	978	Roman		1						
531	1199	Roman			2					
550	1249	Roman	1	4						
540	1623	Roman	1							
569	1600	Roman	1							
520	1023	post-Roman			1					
522	1015	Roman			4					
521	1024	Roman	1		3					

Table 1. Numbers of Shells from the sieved samples

APPENDIX 19: SOIL MONOLITHS ASSESSMENT

Richard I Macphail

Introduction

Ten x 0.3-0.5m-long soil monoliths from Thameslink site BVK11 – 11-15 Borough High Street, Southwark, London were assessed at Oxford Archaeology. These samples, which had been logged by Julia Meen (OA), were from Roman and post-mediaeval contexts associated with a prestigious Roman building (baths) and a medieval and post-medieval hospital (St Thomas's Hospital precinct) (Rebecca Nicholson, pers. comm.).

Monoliths were assessed employing standard techniques as applied to archaeological sites (Goldberg and Macphail 2006; Hodgson 1997). More specifically, reference was made to previous ge archaeological studies at Southwark, including Thames alluvial geology, Roman soils, local and imported raw constructional and manufactured building materials (Cowan 2003; Goldberg and Macphail 2006, 268-283; Macphail 1994; 2003a; 2003b). The monoliths were assessed in their entirety, but this report focuses on contexts which have the most potential for advancing the understanding of the site (see Table 1).

Results and Discussion

Results of assessment are given in Table 1, where individual contexts are highlighted in terms of their preliminary interpretation and what added information they can provide through a combined microstratigraphical study (soil micromorphology [with EDS where necessary], chemistry [LOI, fractionated phosphate], mineral magnetics [magnetic susceptibility and MSmax] and particle size analysis [PSA])(Courty *et al.* 1989; Crowther 2003; Crowther and Barker 1995; Goldberg and Macphail 2006; Weiner 2010).

Thematic investigations

Clay constructional material and floors (and raw materials)

Brickearth materials seem to include both upper subsoil Eb and lower subsoil Bt/Ct horizon material. Brickearth is not present in Southwark and would have had to be imported from the City of London or from farther afield in Kent (see Macphail 2003). There are both Roman and post-Roman examples of its use. At BVK538, [1292] appears to include the subsided remains of a Fe-P(?) stained clay floor (cf. subsided Roman stratigraphy in Yule 1990). At BVK537 [1269] and [1270] there are the horizontal remains of probably in situ constructional layers which included a wooden sill or plank. These are probably not demolition layers. Equally, and more strikingly [1266] is a series of intact floors employing carefully selected brickearth subsoil clay with pinkish colour – again this is not a

demolition layer – but rather a series of well-maintained floors (cf. Spitalfields Hospital; Goldberg and Macphail 2006, 246).

At BVK519 there are weathering mortar floors (mortar was tempered with local river sand), and includes a beaten/domestic use floor layer ([1028]). Such floors can be compared to those formed by animal stabling and artisan/industrial use (Macphail *et al.* 2004; Macphail and Goldberg 2010).

Clay was probably also locally collected from mid-Holocene Thames alluvium(?), and used in some cases as sealing layers in a cess pit (see below). There is also a possible marine inundation/flood sediment (cf. Macphail 2003) on the site (BVK526; [732]) – there may have been others. Micromorphology and particle size analyses can be employed to properly identify inundation events (as at the Park Street, Southwark, sites), alluvial reworking of occupation deposits, etc (Cowan 2003; Macphail *et al.* 2012).

Fire installations

The site provides a wide variety of evidence of these. For example, there are ‘burned layers’ with burned clay surfaces, use of local river sand – as a ‘refractory material’ – for furnaces and ovens (sand can be a major component in crucibles), numerous ash and ashy sand spreads, and enigmatic use of possible peat/humic sands, either as fuel or oven bases. These can all be investigated as inside or exterior industrial/artisan activities, including estimating temperatures attained (Berna *et al.* 2007). Deposits containing copper waste, are also perhaps associated with sedimentary indications of artisan work. Non-ferrous metal processing/working employing tin, lead, copper alloys have been previously aided by combining EDS (Energy dispersive X-ray spectrometry) with microprobe and standard thin section micromorphology (Macphail and Goldberg 2010; Macphail *et al.* 2012), including examples from Spitalfields Hospital (Macphail and Crowther 2006).

Occupation waste management

The site supplies many examples of backfilling and levelling/ground-raising deposits, many of which include anthropogenic materials. At BVK526, the contexts do not appear to be surfacing or levelling deposits, but a series of cesspit deposits running from Phase 3c to 3g. These are marked by ‘composted’ cess and ‘clay’ sealing layers; charcoal and fine mortar have been added to sweeten these deposits (Macphail and Crowther 2006; Macphail and Goldberg 2010). This is typical of cesspits as found in Roman Canterbury, Saxon Winchester and Medieval Spitalfields (Macphail and Crowther 2007). These deposits require study, first to confirm this theory, and secondly to ascertain if the lowest fill ([732]) was characterised by clay sealing or marine flooding, and to see if latrine waste management changed through time. One of the major aspects of Roman urban organisation was management of human waste (Macphail, 2010).

Post-excavation study

It is suggested above, and in Table 1 that a number of themes can be investigated at this BVK11 site. The suggested methods are thin section micromorphology (including energy dispersive X-ray spectrometry – EDS, Weiner 2010) and bulk soil analyses (LOI [estimated organic matter], fractionated Phosphate-P, magnetic susceptibility including MSmax and particle size analysis [PSA]). Monoliths will have to be subsampled for bulk soil studies and cut up for thin section processing. One caveat is that micromorphology can only be best employed on intact samples – some were quite fragmented. Extra resin conservation may be required.

Suggested studies are divided into ‘Priority 1’ and ‘Priority 2’, according to assessment observations and perceived needs of the excavation project (see Table 1).

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Table 1: BVK11; Assessment monoliths

AREA/ Monolith	Context interest	of Phase	Preliminary interpretation and study aims	No. of analyses (Priority 1)	No. of analyses (Priority 2)
Area A1 BVK538	1292	3g	Junction between Fe-P stained brickearth floor and coarse mixed sandy fill containing charcoal etc. Possible remains of constructed clay floor which has subsided in more sandy levelling layer – cf Yule 1990.		1 TS, 1 BD
Area A1 BVK538	1292/1293	3b	Burned fuel and burned clay layers; clay surfaces and hearths and spreads. Use of space/ovens?	2 TS, 2 BD	
Area A1 BVK538	1294	3a	Strongly reddened sands and blackened horizons – use of 'refractory' sands – medium alluvial sands of Thames origin (early Holocene) and fuels to be investigated; furnace temperature studies (cf Berna <i>et al.</i> 2007)	1 TS, 1 BD (If intact material)	
Area A1 BVK540	1297/1319/1311	3c	Sloping layered spreads of hearth and fuel waste, with copper waste in fill of cut 1312; useful for seeing if spread or dump, with fuel origins and sediments associated with copper waste working.	2 TS (with EDS), 2 BD	
Area A1 BVK540	1314	3b	Possible in situ hearth with 'refractory' sands (cf crucible material) and charred peaty sediment/peat? constructional layer. (humic peaty sands found elsewhere – properties of peat as fuel and as oven floor?)	2 TS (with EDS), 2 BD	
Area B BVK526 (Monolith marking is upside- down)	728	3g 3e	Compacted brickearth clayey and charcoal rich trampled spread, sealing layer, Over Clayey fill with included fine mortar and charcoal fragments. This is a sealing layer over composted cess. (729 and 730 are also composted cess pit fills sealed by a series of dumped clay layers, some employing likely alluvium)		1 TS, 1BD
Area B BVK526 (Monolith marking is upside- down)	732	3c	Strongly partially homogenised composted cess with remains of clay sealing layers (silty alluvium clay), and charcoal and fine mortar employed to help sweeten the fill. 728, 729, 730, 732 thus record history of cess pit fill from phase	1 TS, 1 BD	

			3c to 3g		
Area B BVK537	1266	6d	Horizontal post-medieval, moderately high status constructed series of floors; carefully employed Btg/Ctg brickearth clay employed as floors, with clean sand levelling in between. Hospital floors (cf Spitalfields). Also some floor trample showing use ('domestic'). NOT DEMOLITION	1 TS	
Area B BVK537	1270	6d	Horizontal post-medieval brickearth clay layers with decaying wood sill/plank in situ. This with 1269 could be examined in terms of being constructional phases within indoor space. NOT DEMOLITION		1 TS
Area B BVK519	1027/1028/1029	3g	Weathered in situ, mortar floors with 1cm-thick trample/use layer. Identify use of space in building.		1 TS, 1 BD
Area B BVK519	1030	3f	Mixed and semi-layered deposits containing copper traces. Investigate deposit in terms of artisan/industrial activity background.	1 TS (with EDS), 1 BD	
Area B BVK601	1608/1609	3b	Inwashed(?) humic and some burned sands, with some coarse rubefied sand clasts. Possibly humic sandy material included – wash from peaty fuels?		1 TS, 1BD
Area B BVK604	1179upper and lower	3e	1179upper, heterogeneous (dump?) deposit rich in charcoal and brickearth remains over 1179lower – a predominantly dark silty clay with occasional coarse inclusions with mid-Holocene Thames alluvial characteristics (Macphail 2003). Flood event and reclamation.	1 TS, 1 BD (with PSA)	
Area B BVK604	1179lower/1184	3e	Silty clay sealed layered deposits (alluvial phase 1?), becoming layered hearth debris (ashes etc) with possible in situ hearth spread. Nature of hearth activity? Domestic, processing, industrial?	1 TS, 1 BD	
Area B BVK604	1184/1249	3e	Trampled ash layers, rake out etc. Nature of hearth activity? Domestic, processing, industrial?	1 TS, 1 BD	
Area B BVK605	1441	3d	Series of layers within 1441: 1441upper – trampled layers – occupation surface recording ?activities. 1441middle – layered leached ashy-sands(?) – nature of hearth activity – indoor/outdoor space? 1441lower – mottled/gleyed sands with possible bioworking of dumped deposits (stasis/exposure?).	2 TS, 3 BD	

Area B BVK606- 607	1179 - 1607	3e – 3a	Various backfill deposits including sands showing burning, which with depth become more brown (1532) because of increasing wetness; 1593-1607 are permanently waterlogged sandy layers, with some mineralisation.		
			Total	15 Thin section studies	5 Thin section studies
				15 Bulk data analyses	4 Bulk data analyses
				1 PSA	

TS – thin section micromorphology (including energy dispersive X-ray spectrometry – EDS, Weiner, 2010); BD – bulk data (LOI, fractionated Phosphate-P, magnetic susceptibility including MSmax; and including particle size analysis – PSA for)

APPENDIX 20: AMORPHOUS 'MINERALISED MATERIAL' ASSESSMENT

Rebecca Nicholson

Quantities of amorphous mineralised material were recovered from the dried residues from 19 of the bulk samples processed at Oxford Archaeology (Table 1). The samples varied considerably in both colour and texture. Most appeared in the hand to be aggregations of inorganic soil particles bound together in an inorganic matrix. A few resembled coprolites and on closer inspection contained inclusions, notably small splinters of large mammal bones, indicating they were probably dog droppings. One sample (S509, from posthole fill [822]) included fragments of what appears to be mineralised textile; the remaining material within this sample is typical of concretions found in cesspits. Brief details of each sample are provided in Table 1.

Sample	Context	Description	Wt (g)
560	1586	Dark brown amorphous concreted fragments ?cess	3
587	1612	Brown concreted soil with charcoal flecks	40
530	1196	Dark brown cylinder 20x10mm; includes bone frags; dog coprolite	4.3
517	1926	Greenish concreted soil	5
516	979	Dark brown concreted soil	5
522	1015	Pale brown chalky amorphous, flakey concretions	106
509	822	Pale brown amorphous, flakey concretions, includes mineralised textile impressions	111
566	1601	Pale brown amorphous chalky concretion with charcoal flecks. One is spherical, c. 20mm diameter. Dog/cat coprolite	30
523	1028	Mid brown amorphous concretions	2
561	1593	Mid brown concretions with wood impressions; ?mineralised wood	169
532	1211	Greenish brown amorphous concretions, includes one 22x10mm coprolite. ?dog.	
559	1579	Greenish brown amorphous concretions	1
564	1587	Mid brown semi-spherical concretions ? industrial	25
579	1610	Mid brown soily concretions with CBM, charcoal and Copper alloy staining. ?Industrial	520
503	637	Pale brown, amorphous, chalky concretions with charcoal flecks and bone frag. Ca. 22x15mm. Squashed dog coprolite	
545	1417	Dark brown, small spherical concretions. ?Industrial	
599	1619	Mid brown concretions with orange Fe stains and charcoal. Includes ?Fe object	
500	591	Amorphous grey ?fuel ash slag	17
547	1468	Orange brown amorphous/irregular concretions with pale/chalky mottles, charcoal and bone; ?dispersed coprolite with soil?	13

APPENDIX 21: OASIS FORM

OASIS ID: preconst1-153142

Project details

Project name	Excavations at 11-15 Borough High Street: Thameslink Archaeological Assessment 2
Short description of the project	An archaeological excavation was carried out at 11-15 Borough High Street following a series of monitoring exercises on isolated ground reduction areas. Excavations revealed a deeply stratified sequence dating from the early Roman (mid 1st century) up to the later post-medieval period. Clay and timber buildings and evidence of industrial activity was present in the 1st century AD. This was succeeded in the early 2nd century by a large Roman masonry building interpreted as a bath house which was modified and extended during the latter part of the century. The walls of this structure were robbed in the medieval period and large chalk foundations were constructed which were probably part of St Thomas's Hospital. Post-medieval remains consisted of a series of buildings fronting Borough High Street.
Project dates	Start: 15-08-2011 End: 06-11-2011
Previous/future work	Yes / No
Any associated project reference codes	BVK-11 - Sitecode
Any associated project reference codes	BVY-09 - Sitecode
Type of project	Recording project
Site status	Area of Archaeological Importance (AAI)
Current Land use	Transport and Utilities 2 - Other transport infrastructure
Monument type	GULLY Roman
Monument type	DITCH Roman
Monument type	POST HOLES Roman
Monument type	WALLS Roman
Monument type	WALLS Medieval
Monument type	POST HOLES Early Medieval
Monument type	POST HOLES Medieval
Monument type	POST HOLES Post Medieval
Monument type	DEMOLITION LAYER Post Medieval
Monument type	BURIED SOIL HORIZON Early Medieval
Monument type	LAND RECLAMATION Roman

Monument type	PITS Roman
Monument type	BATH HOUSE Roman
Monument type	HEARTH Roman
Monument type	ARCH Medieval
Monument type	PITS Medieval
Monument type	PITS Early Medieval
Monument type	PITS Post Medieval
Monument type	SHELL MIDDEN Roman
Monument type	COPPER WORKINGS Roman
Monument type	ASH PITS Roman
Monument type	CESS PITS Roman
Monument type	FLOORS Roman
Monument type	BEAM SLOTS Roman
Monument type	BEAM SLOT Medieval
Significant Finds	COPPER WASTE Roman
Significant Finds	COSMETIC ARTICLE Roman
Significant Finds	MOULDING Medieval
Significant Finds	CRUCIBLE Roman
Significant Finds	WALL PLASTER Roman
Significant Finds	NEEDLE Roman
Significant Finds	FLOOR TILE Medieval
Significant Finds	POT Roman
Significant Finds	BRACELET Roman
Significant Finds	POT Early Medieval
Significant Finds	POT Medieval
Significant Finds	POT Post Medieval
Significant Finds	CLAY PIPE (SMOKING) Post Medieval
Significant Finds	COINS Roman
Significant Finds	LOCK BOLT Roman
Investigation type	""Full excavation"", ""Test-Pit Survey"", ""Watching Brief""

Prompt Direction from Local Planning Authority - PPS

Project location

Country England
Site location GREATER LONDON SOUTHWARK SOUTHWARK 11-15 Borough High Street
Postcode SE1 9SF
Study area 390.00 Square metres
Site coordinates TQ 32738 80233 51 0 51 30 17 N 000 05 14 W Point
Height OD / Depth Min: 1.00m Max: 1.00m

Project creators

Name of Organisation OA-PCA (Joint Venture)
Project brief originator Network Rail and Southwark Council
Project design originator Network Rail and Southwark Council
Project director/manager Dan Poore
Project director/manager Peter Moore
Project supervisor Amelia Fairman
Type of sponsor/funding body Network Rail
Name of sponsor/funding body Network Rail

Project archives

Physical Archive recipient LAARC
Physical Archive ID BVK-11
Physical Contents "Animal Bones", "Ceramics", "Environmental", "Glass", "Industrial", "Metal", "Worked stone/lithics", "other"
Digital Archive recipient LAARC
Digital Archive ID BVK-11

Digital Contents	"Animal Bones","Ceramics","Environmental","Glass","Industrial","Metal","Stratigraphic","Survey","Worked stone/lithics","other"
Digital Media available	"Database","GIS","Images raster / digital photography","Survey","Text"
Paper Archive recipient	LAARC
Paper Archive ID	BVK-11
Paper Contents	"Animal Bones","Ceramics","Environmental","Human Bones","Industrial","Metal","Stratigraphic","Survey","Worked stone/lithics","other"
Paper Media available	"Context sheet","Correspondence","Diary","Drawing","Map","Matrices","Miscellaneous Material","Photograph","Plan","Report","Survey ","Unpublished Text"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
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