Royal National Orthopaedic Hospital, Brockley Hill, Stanmore, London Borough of Harrow: An Archaeological Evaluation Report

National Grid Reference Number: TQ 1735 9402 AOC Project no: 7928 Site Code: OPH07 Date: 23-05-2008



ARCHAEOLOGY

HERITAGE

CONSERVATION

Royal National Orthopaedic Hospital, Brockley Hill, Stanmore, London Borough of Harrow

An Archaeological Evaluation Report

On Behalf of:	John Cobb and Partners Lincoln House 83 Manor Road Wallington Surrey SM6 0DE
National Grid Reference (NGR):	TQ 1735 9402
AOC Project No:	OPH07
Prepared by:	Catherine Edwards Paolo Guarino
Illustration by:	Jonathan Moller
Date of Excavation:	5 th to 9 th November 2007
Date of Report:	May 2008

This document has been prepared in accordance with AOC standard operating procedures.Author: Paolo GuarinoDate: 23-05-2008Approved by: Melissa MelikianDate: 27-05-08Draft/Final Report Stage: Melissa MelikianDate: 27-05-08

Enquiries to: AOC Archaeology Group Unit 7 St Margarets Business Centre Moor Mead Road Twickenham TW1 1JS Tel. 020 8843 7380 Fax. 020 8892 0549 e-mail. london@aocarchaeology.com



Contents

		Page
No	on-Technical Summary	iv
1.	INTRODUCTION	1
	1.1 Site Location	
	1.2 Geology and Topography	1
	1.3 Planning Background	1
	1.4 Aims and Objectives	2
	1.5 Methodology	2
2.	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	
	2.1 Prehistoric (before circa AD 43)	3
	2.2 Roman (circa AD 43 - 450)	
	2.3 Anglo-Saxon (circa AD 451 - 1065)	5
	2.4 Medieval (circa AD 1066 - 1485)	6
	2.5 Post-Medieval (circa AD 1485 - modern)	6
3.	RESULTS	7
	3.1 Trench 1	7
	3.2 Trench 2	
	3.3 Trench 3	
	3.4 Trench 4	9
4.	FINDS	10
5.	CONCLUSIONS AND RECOMMENDATIONS	11
6.		
Ap	opendix A: Context Register	14
Ap	opendix B: Assessment of the Roman pottery from Brockley Hill	
	opendix C: Assessment of the post-Roman pottery from Brockley Hill	
Ap	opendix D: Assessment of the glass from Brockley Hill	22
Ap	opendix E: Assessment of the clay pipes from Brockley Hill	
Ap	opendix F: Report on the Building Material from Brockley Hill	27
Ap	opendix G: Assessment of the flint from Brockley Hill	33
Ap	opendix H: Assessment of the animal bone from Brockley Hill	
Ap	opendix I: Assessment of the plant remains from Brockley Hill	39
Ap	opendix J: Assessment of the metalwork from Brockley Hill	41
Ap	opendix K: OASIS form	

List of illustrations

Figure 1: Location Map Figure 2: Detailed Location Map Figure 3: Trench Location Figure 4: Trenches 1 and 2 Figure 5: Trench 3 Figure 6: Trench 4, plan Figure 7: Trench 4, sections

Non-Technical Summary

An archaeological evaluation was undertaken by AOC Archaeology Group between 5th- 9th November 2007 at the Royal National Orthopaedic Hospital, Brockley Hill, Stanmore, London Borough of Harrow on behalf of John Cobb and Partners. The aim of the evaluation was to assess the site for archaeological potential prior to confirming a development scheme and submitting a planning application.

The evaluation comprised the excavation of four machine excavated trenches measuring 2n° 15m x 1.80m, 1n° 13m x 1.80m and 1n° 11m x 1.80m at base. Natural London Clay was identified at between 133.47mOD and 136.61mOD. Only two trenches contained archaeological remains. Trench 2 contained post-medieval structural remains in the form of a wall and brick lined garden feature. Trench 4 contained one pit and kiln structure that has been dated to the Roman period. The remaining trenches contained evidence of land management. The site was covered by a 0.30-0.40m thick deposit of topsoil.

1. INTRODUCTION

1.1 Site Location

- 1.1.1 The site is located at the Royal National Orthopaedic Hospital, Brockley Hill, Stanmore, London Borough of Harrow. The proposed development is centred on National Grid Reference (NGR) TQ 1735 9402 (Figure 1).
- 1.1.2 The site is roughly rectangular in shape and is bounded by agricultural land to the north, Watling Street to the east, and by access roads and buildings relating to the hospital to the south and west. The site measures *c.* 130m (east-west) by 80m (north-south) (Figure 2). The area affected by the development covers a total area of approximately 1.04 hectares.

1.2 Geology and Topography

- 1.2.1 The British Geological Survey map (BGS Sheet 256), indicates that the underlying geology of the area is London Clay. The site itself lies on a prominent ridge formed by a glacial pebble deposit that caps the Claygate Beds which in turn overlies the London Clay. This ridge rises here to *c*. 150m OD and runs south-west to north-west for more than 30 km, between Northwood in Middlesex and Ware in Hertfordshire.
- 1.2.2 The land around Brockley Hill falls away on all sides; to the south the land drops down sharply towards Canon's Corner at *c*. 65mOD. The topography of the site itself slopes from east to west; from 133.10mOD on Brockley Hill to 130.10mOD north of the site boundary. Beyond the site boundary the land falls away fairly steeply into a valley, which contains a number of ponds and streams. Data obtained from archaeological investigations to the south of the site indicate that the original surface level of the natural deposits is generally to be found at less than *c*. 0.50m below the current ground surface.
- 1.2.3 No geotechnical investigations have been conducted within the proposed development area.

1.3 Planning Background

- 1.3.1 The local planning authority is the London Borough of Harrow. Archaeological advice to the Borough is provided by the Greater London Archaeological Advisory Service (GLAAS).
- 1.3.2 The Greater London Archaeological Advisory Service (GLAAS) advisor recommended that any application for development of the site, outside the area of the Scheduled Ancient Monument (the western half of the site), must be accompanied by the results of an archaeological field evaluation. Further advice from the English Heritage Monument Inspector relating to the area within the footprint of the Scheduled Ancient Monument is that, where there are existing buildings, reasonable steps may be taken to retain, maintain and refurbish them and that existing drainage and service routes and connections be re-used to minimise ground disturbance. Any works of refurbishment involving ground-works and any works of demolition would require Scheduled Monument Consent. This is in accordance with *Planning Policy Guidance: Archaeology and Planning* (PPG 16) issued by the Department of the Environment in 1990 (DoE, 1990).
- 1.3.3 The western half of the site does not lie within an Archaeological Priority Zone or Area of Archaeological Importance or designated area of archaeological importance, as defined by The London Borough of Harrow's *Unitary Development Plan*. Currently the site is occupied by a locally

listed building; Brockley Hill House, and lies north of an Archaeological Priority Area (the possible site of the Roman settlement of *Sulloniacae*). The eastern half of the site has Scheduled Ancient Monument Status due to the presence of Roman pottery kilns and settlement (GL119) lying in a strip alongside Watling Street (Brockley Hill).

- 1.3.4 A planning application has not yet been submitted to develop the site. The first stage in the archaeological investigation was the production of a Desk Based Assessment (MoLAS 2006). This was followed by a Written Scheme of Investigation for an evaluation produced by AOC Archaeology prior to the commencement of works, (AOC 2007).
- 1.3.5 This report discusses the results of the archaeological evaluation undertaken to identify any archaeological remains that might be threatened by the proposed development. The results of the evaluation conducted on site may be used in support of a future planning application.

1.4 Aims and Objectives

- 1.4.1 The aims of the evaluation were:
 - To establish the presence/absence of archaeological remains within the site.
 - To determine the extent, condition, nature, character, quality and date of any archaeological remains encountered.
 - To record and sample excavate any archaeological remains encountered (including evidence of past environments).
 - To assess the ecofactual and environmental potential of any archaeological features and deposits.
 - To determine the nature and extent of existing truncations of the archaeological deposits.
 - To enable the Planning Archaeologist, GLAAS to make an informed decision on any future planning application, and any possible conditions for further work required if the application is approved
 - To make available to interested parties the results of the investigation in order to inform the mitigation strategy as part of the planning process.
- 1.4.2 The specific objectives of the evaluation were to:
 - Establish whether the line of Roman Watling Street runs through the site.
 - Define the date and build of the Roman road if present.
 - Establish the presence of any pottery kilns and associated features on the site.
 - How far do the Roman pottery kilns extend westwards of the Roman road?
 - Is there any evidence for Roman Sulloniacae?
 - What is the nature of any 3rd or 4th century AD occupation of the area after the decline of the pottery industry?
 - Can the line of medieval and later Watling Street be established and how does it relate to its Roman predecessor?
- 1.4.3 The final aim is to make public the results of the investigation, subject to any confidentiality restrictions.

1.5 Methodology

- 1.5.1 Before the start of works a unique site code was obtained from the Museum of London; OPH07.
- 1.5.2 The evaluation consisted of four machine-excavated trenches measuring 2n° 15m x 1.80m, 1n° 13m x 1.80m and 1n° 11m x 1.80m at base (Figure 3). Due to the presence of live services Trench 1 was excavated in two sections and reduced in size by 4m. Trench 4 was also reduced in length by 2m due to restrictions for machine movement. This represented 2% of the site area outside of the footprint of the Scheduled Ancient Monument (SAM).
- 1.5.3 Before excavation the entire site was visually inspected and all trenches were scanned with a Cable Avoidance Tool (CAT) to check for live services.
- 1.5.4 All overburden was removed down to the top of the first recognizable archaeological horizon or the natural deposit in the event that no archaeological horizons were present, using a 13 ton tracked excavator with a 1.8m wide toothless ditching bucket.
- 1.5.5 All machining was carried out under direct control of an experienced archaeologist.
- 1.5.6 Any excavated material was examined in order to retrieve artefacts to assist in the analysis of the spatial distribution of artefacts.
- 1.5.7 On completion of machine excavation, all faces of trenches that required examination or recording were cleaned using appropriate hand tools.
- 1.5.8 All excavation was undertaken with a view to avoiding damage to any archaeological features or deposits which appeared to be demonstrably worthy of preservation *in situ*.
- 1.5.9 After recording, the trenches were backfilled with excavated material.
- 1.5.10 A Temporary Bench Mark was set up on site, transferred from a Bench Mark on the Brockley Hill at a height of 139.95m OD (Figure 2).
- 1.5.11 The evaluation work was undertaken in five days by Paolo Guarino, Project Supervisor, under the overall project management of Ron Humphrey and Andy Leonard, Project Managers.

2. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

A number of evaluations, excavations, and watching-briefs have been undertaken in the vicinity of the site, and there are numerous entries within the Greater London Sites and Monuments Record (GLSMR) for archaeological features or chance finds within the 1km radius of the site. The following background information is drawn from the Desk Based Assessment (MoLAS 2006). No previous archaeological investigations have been undertaken on the site itself.

2.1 Prehistoric (before circa AD 43)

2.1.1 There is little evidence for *in situ* prehistoric occupation on or in the vicinity of the site. It has conventionally been assumed that prehistoric settlement patterns favour lighter well drained soils and not the heavy wetter land such as London Clay. The clay zone would require both extensive land clearance and the use of heavy ploughs, beyond the technology of that period. However, the distinction between light and heavy soils for prehistoric settlement and land use is beginning to break down and evidence for these periods (especially the pre-Roman Iron Age) is now beginning to be

revealed on the London Clay. It may be, for example that the more heavily wooded lands were being utilised for distinct activities more appropriate to a forest environment. The presence of a good water supply via the many streams in the area would also have been a key factor.

2.1.2 Isolated prehistoric finds have been located in close proximity to the site, mostly during archaeological excavations designed to investigate the Roman road and pottery kilns (see below). A Mesolithic core and other undated flint tools, flakes and cores have been discovered to the north of the site. Other prehistoric finds have been recorded to the south and west, including Palaeolithic flint artefacts. Fieldwalking on the east side of Watling Street found flints including a Bronze Age arrowhead and Iron Age lynchets. A Neolithic stone adze was found in the lining of a Roman pit at the base of Brockley Hill.

2.2 Roman (circa AD 43 - 450)

- 2.2.1 The site lies adjacent to and/or on the line of a Roman road known as Watling Street. Watling Street connects London (*Londinium*) in the south to St. Albans (*Verulamium*) to the north. It follows the line of the Edgware Road towards London and at Marble Arch a spur road runs along the route of Oxford Street-Holborn and enters the city at Newgate. The exact line of all of Watling Street in the Brockley Hill area has yet to be definitely established or understood.
- 2.2.2 Brockley Hill has been long thought to be the site of the Roman settlement of *Sulloniacae*, mentioned in a Roman document (Antonine Itinerary) as being 12 miles from London and nine miles from St. Albans. Archaeological investigations to the south of the site began after 1909 when quantities of Roman pottery (rejected, flawed items from a nearby kiln) were found during landscape gardening in the area of the tennis court. A series of excavations designed to locate the site of *Sulloniacae* and the line of Watling Street, and to record pottery kiln sites took place between the 1930s and the 1970s. Excavation of a sewer trench north of the site in 1965 revealed a pottery kiln and a quantity of Roman pottery and tile fragments (Castle 1976). Other archaeological investigations have been concentrated on the east side of Watling Street, opposite the site and either side of Watling Street as far south as Canon's Corner from the 1930s to the present day.
- 2.2.3 The line of the Roman road is thought to run along the east side of the site to the west of the present road. The western flanking roadside ditch has been found during recent excavations at Brockley Hill House and during excavations in the 1950s to the west of the tennis court. To the south of the site various ditches, banks and metalled surfaces have been recorded and the conjectured line of the road proposed.
- 2.2.4 The complete line of the road in the Brockley Hill area has yet to be conclusively proved. Evaluation during 2005 on the Royal National Orthopaedic Hospital site failed to find any evidence of Watling Street or an associated ditch within trenches just south of the site area and adjacent to the western edge of Brockley Hill. Excavations in 1952 to the south of Wood Lane located a wide v-shaped ditch parallel to modern Watling Street, thought to be the Roman roadside ditch, although it contained some medieval pottery. The Roman road with a ditch on the west side was found directly below the topsoil during archaeological investigations further south, on the site of a present golf course adjacent to the modern road. Limited investigation showed that the road had been constructed on a bank of clay and gravel layers, and had undergone periodic maintenance as indicated by a number of successive road gravels and re-cutting of the ditch when it had silted up. Dating evidence confirmed the road was in use into the 4th century AD. Further south a geophysical survey located the two north-south aligned ditches *circa* 13m apart. These are likely to be the flanking roadside

ditches for Roman Watling Street and are located in a strip of grassland alongside the current road. The western flanking roadside ditch was found further south in the continuation of the strip of grassland. A section of the Roman road and its eastern ditch were recently found during archaeological excavations at Canon's Corner. The location of the road section to the east of the modern A5 suggests that it swung over from the west towards the bottom of the hill, although it is quite possible that this part represents a widening of the road in the 3rd to 4th century AD.

- 2.2.5 Archaeological investigations between 1937 and 1977 in the Brockley Hill area to the south of the site discovered considerable amounts of Roman material. Although there was little evidence of the settlement of *Sulloniacae* these archaeological investigations revealed an important Romano-British industry site. A recent article has argued that the site of *Sulloniacae* may in fact lie nearer to London.
- 2.2.6 At least 15 kilns and numerous pits, many of which were initially used as quarries for clay extraction and then backfilled with wasters and kiln debris, have been recorded (Seeley & Thorogood 1994). The pottery kilns produced coarse-ware pottery and was one of the most important suppliers to *Londinium* during the 1st and 2nd centuries AD. The *Verulamium* region pottery was responsible for 50% of all mortaria used in the province during that period. A wide range of bowls, flagons and mortaria were produced. Many of the mortaria were stamped with the name of the potters or workshops and 427 stamps have been recorded from the kiln excavations including the most prolific potter *Doinus*. The industry was most active between AD 70 and 120 although there is some evidence of 3rd and 4th century occupation after the industry declined.
- 2.2.7 Eight Roman pottery kilns have been located in close proximity to the site, alongside Watling Street. Alongside these kilns are a number of associated features such as clay extraction pits, cobbled working surfaces and the remains of temporary structures such as drying sheds. All the archaeological investigations alongside Watling Street have produced considerable quantities of Roman pottery normally in the form of kiln wasters. A further six pottery kilns have been located on the east side of Watling Street and one to the south of Wood Lane. Pits and ditches dating to the 1st and 2nd centuries were found in evaluation trenches just south of the site. They identified evidence for metalworking activity, possibly on the periphery of pottery production sites of similar date noted on earlier excavations in the vicinity.
- 2.2.8 Excavations in Pear Wood on the slopes of Brockley Hill recorded a large ditch and bank earthwork, possibly a defensive system and dated to the late Roman period. It has been suggested that this is an extension to Grims Ditch found further west in Harrow due to its alignment and comparative size.
- 2.2.9 Excavations alongside Watling Street at the base of Brockley Hill have located an area of intercutting Roman ditches, large pits and postholes. The nature of this occupation remains somewhat enigmatic but it may have served as a road maintenance depot and also as a watering place for drovers travelling from *Londinium* to *Verulamium*.
- 2.2.10 The area immediately around Brockley Hill in the early Roman period is well known. There is a particular lack of knowledge about the character of the area in the 3rd and 4th centuries AD after the demise of the pottery industry although some evidence for continued activity in the area in the 3rd century has been found.

2.3 Anglo-Saxon (circa AD 451 - 1065)

- 2.3.1 The Domesday Book of 1086 mentions the manor of Little Stanmore within which the site lies; it also records a church at Great Stanmore. The site at this time is likely to have been heavily wooded with the former Roman Watling Street still used as a route through the area.
- 2.3.2 The area immediately around the site in the Saxon period is not well known and there are no Saxon find spots in the vicinity of the site.

2.4 Medieval (circa AD 1066 - 1485)

- 2.4.1 During the medieval period, the site lay in the manor of Little Stanmore and, as with the Saxon period, was likely to have been heavily wooded. The only documented building on the top of Brockley Hill in the medieval period is Brockley Hill Farm. There is some evidence that parts of Watling Street were robbed during the medieval period and re-laid to the east of the Roman road. Various observers report a long ditch and a number of excavations have revealed the remains of a hollow way between the line of Roman Watling Street and modern Watling Street. Where the route has been observed it has a metalled surface of rammed gravel with clay (at least 30 ft wide) and in places 1 ft 6 in thick.
- 2.4.2 Pear Wood to the south of Wood Lane derives its name from William Parys who owned 35 acres (14 ha) of woodland on Brockley Hill in 1277. By 1552 it was called Pares or Pear Wood (Bowlt 1998). There is a reference to a medieval windmill to the west of the site.

2.5 Post-Medieval (circa AD 1485 - modern)

- 2.5.1 Rocque's map of 1754 shows the site lies on the edge of a heavily wooded area (Crabtree Orchard) with Watling Street, Wood Lane and the prominent ridge clearly visible. Much of the surrounding area has been cleared of woodland apart from Pear Wood to the south of Wood Lane. Pear Wood was sold off as part of the estate of the Duke of Chandos in 1740. To the north of the site Brockley Hill Farm is visible. Excavations on the east side of Watling Street opposite the site located the foundations of a late 17th to 18th century house, thought to have been built by Thomas Napier.
- 2.5.2 A hollow way between the line of Roman Watling Street and the modern Watling Street that was apparently in use in the medieval period continued in use, certainly during the 18th century as shown from the finds evidence. This route is supplanted in 1827 by the modern road.
- 2.5.3 Some excavations in the vicinity of the site have recorded post-medieval ditches and landscape features.
- 2.5.4 In 1750 W M Sharpe, secretary to the Duke of Chandos, erected a stone obelisk (to the east of the site) with a Latin inscription on all four lower sides that commemorates *Cassivellaunus* and the *Suellani* tribe, and records the fact that the obelisk is midway between London and St Albans.
- 2.5.5 The Ordnance Survey map of 1822 shows little has changed from the time of Rocque's map, although there now appears to be a small building on the site, in the northwest corner. This building is still extant today. The Ordnance Survey map of 1864 indicates that the land alongside Watling Street has been divided into open fields with a building aligned parallel with the road now lying on the eastern perimeter of the site area. The land north of the site has also been divided into open fields.
- 2.5.6 By 1896 the property on the site has expanded and a number of new buildings have appeared along Watling Street, including Brockley Hill House. To the south of the site is a new substantial building

known as Convalescent Home. This was a house owned by Miss Mary Wardell called *Sulloniacae*, which she converted into a convalescence home in 1882 for children suffering from infectious diseases.

- 2.5.7 At the time of the 1913 Ordnance Survey map a further building had been constructed on the northern edge of the site and the trackway to the south extended westwards.
- 2.5.8 The Royal National Orthopaedic Hospital opened its country branch on top of Brockley Hill in 1922, taking over existing buildings and soon purchasing more land along Wood Lane and the north side of Brockley Hill. During the First World War, it was used as a military hospital.
- 2.5.9 The 1935 Ordnance Survey map shows small ancillary buildings have been added to the farm complex on the site. There have been some alterations to the grounds of Brockley Hill House and the tennis court to the north is now visible. The two wards north of the Convalescent Home seem to have been replaced by a single building. Subsequent development and expansion of hospital buildings has taken place right up until the 1990s. Given the large size of the site it appears to have been unnecessary to demolish any buildings prior to the construction of new wards and buildings. In fact, all the buildings that appear on the Ordnance Survey maps from 1864-1935 are still standing apart from Lymes Farm and the ward north of the Convalescent Home. Many of the early buildings in the southeast corner of the site are now locally listed by the local authority.
- 2.5.10 There area number of documented 19th or 20th century landfill areas in the vicinity of the site; both to the north and to the south.
- 2.5.11 There is little evidence for the use of the site in the post-medieval period prior to that seen on the Ordnance Survey map of 1822.

3. **RESULTS**

3.1 Trench 1 (Figure 3 and 4)

Level (OD)	Context Number	Description
135.27 – 134.97mOD	(1/001)	Dark grey silty sand with inclusions of modern CBM and occasional loose stones. Topsoil .
134.97 – 134.57mOD	(1/002)	Compacted light brown yellow silty clay with inclusions of modern CBM and loose stones. Redeposited natural.
134.57 – 133.97mOD	(1/003)	Compacted dark grey sandy silt with inclusions of brick and CBM. Dump layer .
133.97 – 133.47mOD	(1/004)	Loose grey sand with inclusions of rubble, glass bottles and metal fragments. Dump layer .
133.47mOD NFE	(1/005)	Light brown silty clay. Natural

- 3.1.1 Trench 1 was located to the east of the site (Figure 3). Due to the presence of services, Trench 1 was divided into two smaller trenches measuring, 5m x 1.80m and 3m x 1.80m.
- 3.1.2 Natural London Clay (1/005) was observed at 133.47mOD. No archaeological remains were present overlying or cutting this deposit. Overlying the natural clay were two thick dump layers, (1/004) and (1/003), comprising loose grey sand and dark grey sandy silt. No archaeological remains were present overlying or cutting either deposit. Both layers (1/004) and (1/003) may have been deposited

on site for the purpose of levelling the area ahead of development or as part of a general landscaping scheme. These layers were sealed by a 0.40m thick deposit of redeposited natural (1/002) overlaid by topsoil (1/001) to a maximum height of 135.27mOD.

3.1.3 No significant archaeological remains were identified in Trench 1.

3.2 Trench 2 (Figure 3 and 4)

Level (OD)	Context Number	Description
136.51 – 136.31mOD	(2/001)	Dark brown silty sand with inclusions of post-medieval pottery fragments. Topsoil .
136.31mOD NFE.	(2/004)	Light yellow brown silty clay. Natural.

- 3.2.1 Trench 2 was located to the north of the site on a steep east-west slope (Figure 3). Trench 2 measured 15m by 1.80m at base.
- 3.2.2 Natural London Clay (2/004) was recorded at a height of 136.31mOD in the east of Trench 2 and at 134.60mOD in the west due to the natural slope of the site.
- 3.2.3 Cutting into the natural clay were two brick structures [2/002] and [2/003] (Figure 4). Linear structure [2/002] ran northwest–southeast measuring 2.20m x 0.22m x 0.20m deep. It was comprised of frogged red bricks and is likely to represent a small garden wall rather than the structural remains of a building. Structure [2/003] was also constructed of red brick and was rectangular in shape, measuring 2.30m x 1.10m x 0.10m deep. The full extent of the structure was not exposed due to the proximity of the trench edge. The structural remains are likely to relate to an earlier brick-lined garden feature.
- 3.2.4 Overlying the trench was a 0.20m thick deposit of topsoil (2/001) recorded at a maximum level of 136.51mOD.

Level (OD)	Context Number	Description
137.47 – 137.07mOD	(3/001)	Soft dark brown sandy silt. Topsoil.
137.07 – 136.52mOD	(3/002)	Brown sandy silt with inclusions of CBM and post-medieval pottery fragments. Dump layer .
136.52 – 135.97mOD	(3/003)	Compacted dark brown sandy silt with frequent inclusions of CBM. Dump /levelling layer .
135.97mOD NFE	(3/014)	Light brown silty clay. Natural.

3.3 Trench 3 (Figure 3 and 5)

- 3.3.1 Trench 3 was located to the south of the site (Figure 3) and measured 15m x 1.80m at base.
- 3.3.2 Cutting into the natural clay (3/014), located at 135.97mOD, were a series of land drains [3/004], [3/005] and [3/008] that ran northwest-southeast. The drains measured 0.30m, 0.50m and 1.20m in width and 0.31m, 0.75m and 0.50m deep respectively. The land drains contained ceramic drain pipes at the base of each cut which were overlain by dark brown sandy silt, (3/009), (3/010) and (3/013). Finds collected from the excavation of the drains included glass, CBM and pottery fragments.

- 3.3.3 Two further linear features were recorded in Trench 3, [3/006] and [3/007], similarly aligned to the land drains. Linear cut [3/006] measured 1.20m wide and 0.55m deep and was filled by (3/011), a dark grey silty sand. Feature [3/007] measured 1.30m wide and 0.20m deep and was filled by (3/012), a dark brown sandy silt. The similarity in alignment and the backfill composition suggest that the linear features are roughly contemporary with the land drains, possibly with a similar function, i.e. drainage gully.
- 3.3.4 Overlying the drains were two dump layers, (3/003) and (3/002) which may have been deposited on site for the purpose of levelling the area ahead of development or as part of a general landscaping scheme. These layers were sealed by a 0.40m thick deposit of topsoil (3/001) recorded at 137.47mOD.
- 3.3.6 Aside from some residual prehistoric/Roman pottery sherds in deposits (3/002), (3/010) and (3/011), all the finds collected from Trench 3 were dated to the late post-medieval period; 18th to 19th century (see Section 4 below). No significant archaeological remains were identified in Trench 3.

Level (OD)	Context Number	Description
139.16 – 138.86mOD	(4/001)	Soft dark brown sandy silt with inclusions of concrete, glass, tile and post-medieval pottery fragments. Topsoil
138.86 – 138.61mOD	(4/002)	Brown sandy silt with inclusions of CBM, glass bottles and post- medieval pottery fragments. Dump layer .
136.61mOD NFE	(4/010)	Orange yellow silty clay. Natural.

3.4 Trench 4 (Figures 3, 6 and 7)

- 3.4.1 Trench 4 was located to the west of the site (Figure 3) and measured 13m x 1.80m at base.
- 3.4.2 Cutting into the natural clay (4/010) were pit [4/004] and kiln structure [4/006] (Figures 6 and 7). Circular pit [4/004] was recorded in the northern extent of Trench 4 measuring 1.00m in diameter and 0.55m deep. The pit contained two fills (4/008) and (4/009). The primary fill (4/009) was a friable light grey silt with inclusions of small round stones and occasional sherds of pottery. The secondary fill (4/008) was a loose dark grey sandy silt with inclusions of small rounded stones, pottery sherds and a single iron nail. This feature is thought to be Roman and the finds retrieved from pit [4/004] suggest a date between AD 50 and AD 180.
- 3.4.3 Approximately 8m to the south of pit [4/004] was a kiln structure [4/006] (Figures 6 and 7). The structure was only observed in section due to later truncation. The kiln measured 1.20m wide and 0.80m deep. The structure appeared to contain two chambers or flues which were approximately 0.40m wide. The kiln was lined by dark grey burnt clay (4/015) approximately 50mm thick, with tiles forming the 0.14m wide outer structural wall (4/016). The backfill of the kiln (4/014) comprised compacted reddish brown burnt clay with frequent fragmentary tile and occasional pottery sherds. The tile and pottery recovered from (4/014) is dated to the Roman period. The kiln may be related to the production of pottery as four pieces of what may be light coloured potting clay were recovered from the infill of feature [4/007] (see below).
- 3.4.4 Both these features were truncated by feature [4/007], which dominates the archaeological horizon in Trench 4. The feature measured 13m x 1.30m x 0.50m deep and contained two fills (4/005) and (4/011). The primary fill (4/005) was a compacted reddish brown burnt clay deposit with frequent tile fragments and pottery sherds. This fill appears to relate to kiln structure [4/006] and is likely to have

been deposited as a result of its truncation by [4/007]. The secondary fill was (4/011); a friable brown silty clay with inclusions of gravel, flint fragments, oyster shell, tile, brick and post-medieval pottery sherds. Feature [4/007] is thought to relate to a period of landscaping on site.

- 3.4.5 Sealing [4/007] was a layer of brown sandy slit (4/002) with inclusions of tile, concrete and glass bottles. This deposit represents a disturbed subsoil or made ground.
- 3.4.6 Cutting into (4/002) in the northern extent of Trench 4 was feature [4/003], a northeast-southwest linear cut which measured 2.00m x 0.40m x 0.50m deep. The fill (4/013), a loose dark brown sandy silt and hardcore rubble, contained fragments of post-medieval pottery, animal bone and glass. The linear cut relates to the modern path which runs northeast-southwest immediately to the north of Trench 4.
- 3.4.7 Sealing Trench 4 was (4/001), a 0.30m thick deposit of dark brown sandy silt topsoil.

4. FINDS

4.1 The finds recovered from the investigations at the site have been processed and assessed by finds specialists. The results of the assessments are included in the Appendices (see Appendices B to J). Finds were retrieved from deposits (2/001), (3/001), (3/002), (3/003), (3/009), (3/010), (3/011), (3/013), (4/001), (4/002), (4/005), (4/008), (4/009), (4/011), (4/013) and (4/014) (Table 1).

Trench No.	Context	Find Type	Date		
2	2/001	Pottery, glass,	Post Medieval		
	3/001	Pottery, CBM, Animal Bone.	Post-Medieval		
	3/002	Pottery, CBM, Flint.	Bronze Age (residual), Roman (residual), Post-Medieval		
3	3/003	Pottery, CBM, Animal Bone.	Post-Medieval		
5	3/009	CBM	Post-Medieval		
	3/010	Pottery, CBM, Clay Tobacco Pipes.	Roman (residual), Post-Medieval		
	3/011	Pottery, CBM, Glass.	Roman (residual), Post-Medieval		
	3/013	Pottery, Clay Tobacco Pipes.	Post Medieval		
	4/001	Pottery, Glass, CBM, Ceramic Drain Pipe.	Post-Medieval		
	4/002	Pottery, Glass, CBM.	Post-Medieval		
	4/005	Pottery, Glass, CBM, Animal Bone, Plant Remains.	Roman		
4	4/008	Pottery, Iron Nail, Plant Remains.	Roman		
	4/009	CBM, Plant Remains.	Roman		
	4/011	Pottery, CBM, Shell, Charcoal.	Post-Medieval		
	4/013	Pottery, Glass, CBM, Charcoal.	Post-Medieval		
	4/014	Over-fired Ceramic, CBM.	Roman		

Table 1. Summary of Finds Assemblage

4.2 The assemblages from Trenches 2 and 3 included pottery, building material, animal bone, flint, clay tobacco pipes and glass. Aside from the residual pottery in deposits (3/002), (3/010) and (3/011), all the finds collected from Trenches 2 and 3 were dated to the post-medieval period.

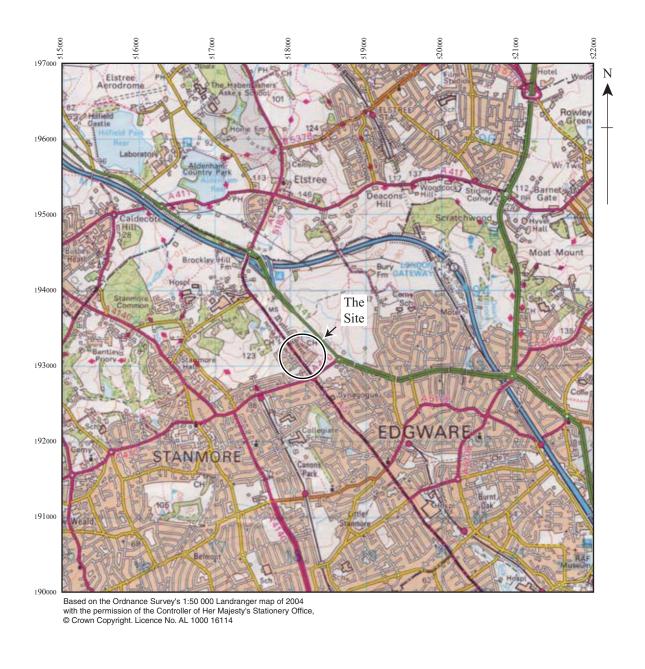
4.3 In Trench 4 the pottery, glass and CBM retrieved from fills (4/008), (4/009) (backfills of [4/004]), (4/014) (backfill of [4/006]) and from deposit (4/005) were predominantly dated to the Roman period by the specialists, this is consistent with the interpretation presented on the basis of the fieldwork results. The finds retrieved from pit [4/004] suggest a possible date between AD 50 and AD 180. The kiln [4/006] may be related to the production of pottery as four pieces of what may be light coloured potting clay were recovered ([4/005], [4/011]), all from the infill of feature [4/007].

5. CONCLUSIONS AND RECOMMENDATIONS

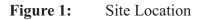
- 5.1 The archaeological investigations at the site indicated that post-medieval landscaping and land management has potentially impacted on the archaeological horizon across the majority of the proposed development site.
- 5.2 Only Trench 4 contained significant archaeological remains which have been dated to the early Roman period (1st to 2nd century AD). Due to the presence of substantial landscaping activity within the trench, significant archaeological remains are restricted to the area immediately northeast of Trench 4. The Roman features are industrial, consisting of a kiln and features thought to be associated with activity at the kiln. It is not certain what was fired within the kiln. However, the discovery of a small amount of potting clay within associated features and given the other Roman pottery kilns known from the locality, they are probably for pottery production.
- 5.3 No evidence of Roman Watling Street was identified at the site.
- 5.3 Should a planning application be granted permission further archaeological mitigation work may be required in this area if it is to be impacted upon. Any such decision will rest with the London Borough of Harrow and its archaeology advisor, Kim Stabler (GLAAS).
- 5.4 Publication of the results will be through the ADS OASIS form (Appendix K) with a short summary submitted to the London Archaeologist fieldwork round-up.

6. BIBLIOGRAPHY

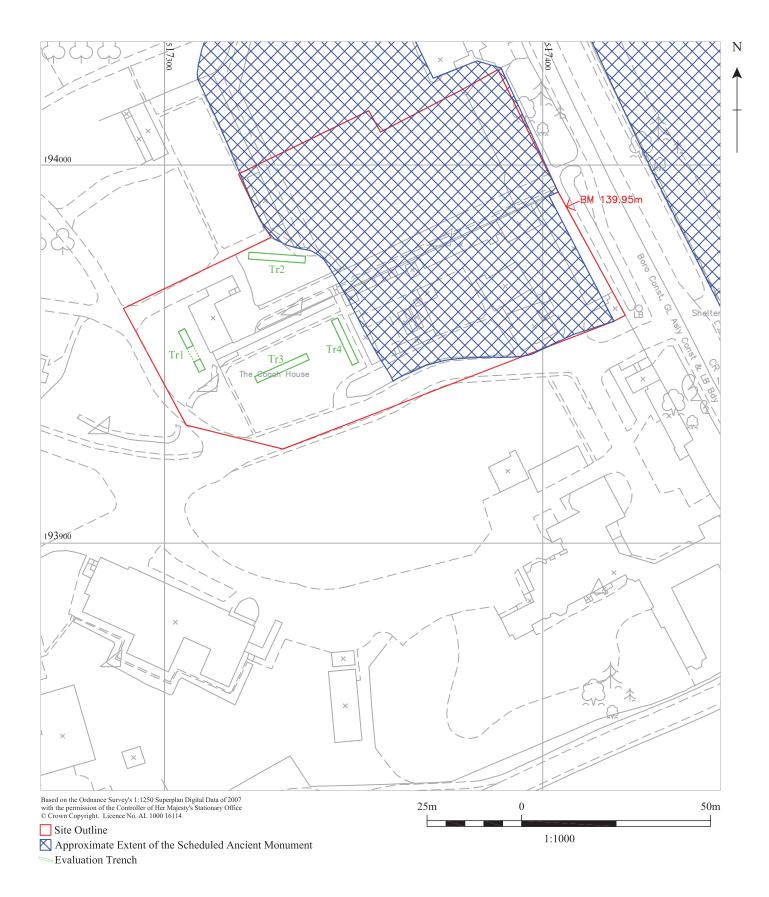
- AOC Archaeology Group (2007) Royal National Orthopaedic Hospital, Brockley Hill, Stanmore, London Borough of Harrow. A Written Scheme Of Investigation For An Archaeological Evaluation.
- Bowlt E M (1998). Stanmore Past. London
- British Geological Survey (1993). North London, England and Wales, Sheet 256, solid and drift geology, 1:50,000 (Nottingham)
- Castle S A (1976) Roman Pottery from Brockley Hill, Middlesex, 1966 and 1972-74 Trans London Middlesex Archaeol Soc 27, 206-27
- English Heritage (1991). Management of Archaeological Projects.
- English Heritage London Region (1992). Archaeological Assessment and Evaluation Reports (Guidelines) Archaeological Guidance Paper: 5.
- English Heritage (1998): English Heritage London Region Archaeological Guidance Paper 2
- English Heritage (1998a). Archaeological Guidance Paper 3: Standards and Practices in Archaeological Fieldwork. (English Heritage London Region).
- English Heritage (1998b). Archaeological Guidance Paper 4: Standards and Practices in Archaeological Reports. (English Heritage London Region).
- English Heritage (2002). Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation.
- Institute of Field Archaeology (1992). Standards and Guidance and Guidelines for Finds Work.
- Institute of Field Archaeologists (1994, revised 2001). Standard and Guidance for Archaeological Field Evaluation.
- Institute of Field Archaeologists (1997). Code of Conduct.
- Museum of London (1994). *Archaeological Site Manual (3rd ed)*.
- MoLAS (2006) Royal National Orthopaedic Hospital, NHS Trust, Brockley Hill, Stanmore, HA7 4LP, London Borough of Harrow: Archaeological Assessment
- Seeley F & Thorogood C (1994) Back to Brockley Hill. Lond Archaeol 7, 223-8
- United Kingdom Institute for Conservation (1983). Conservation Guidelines No 2.
- United Kingdom Institute for Conservation (1990). Guidance for Archaeological Conservation Practice.















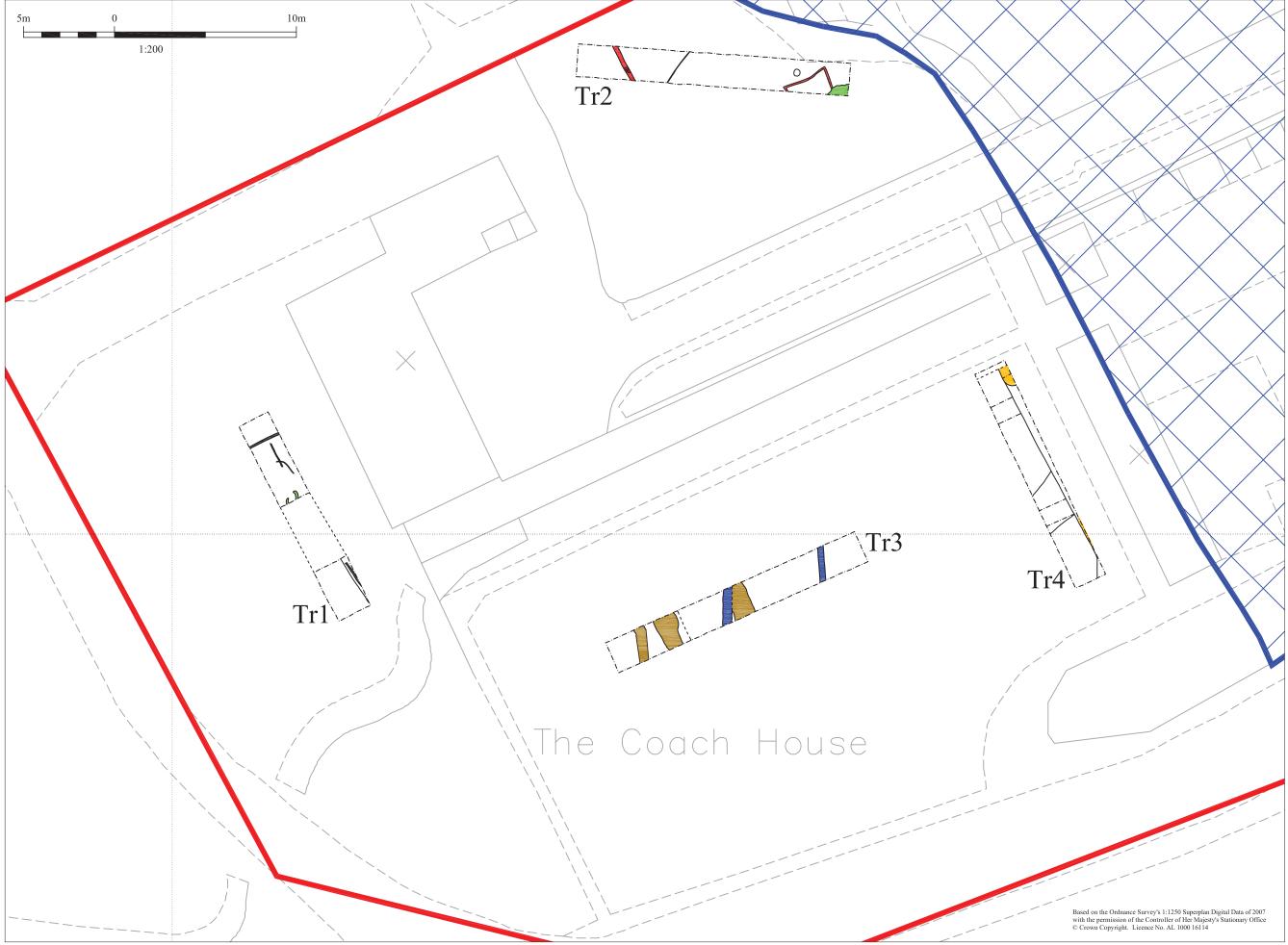
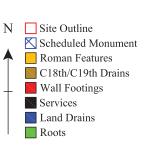


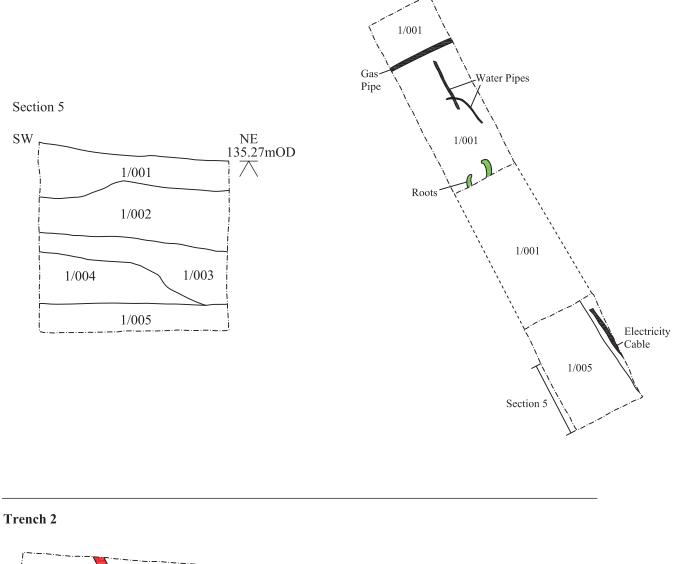
Figure 3: Trench Location and Feature Plan











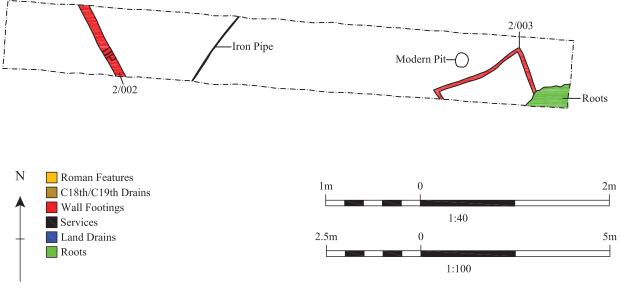
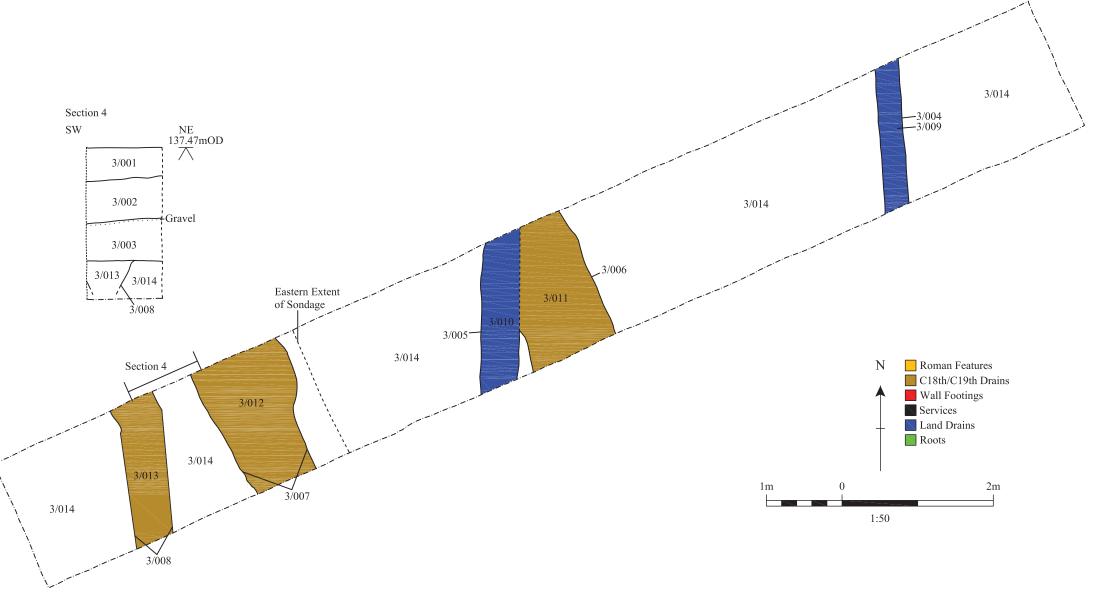
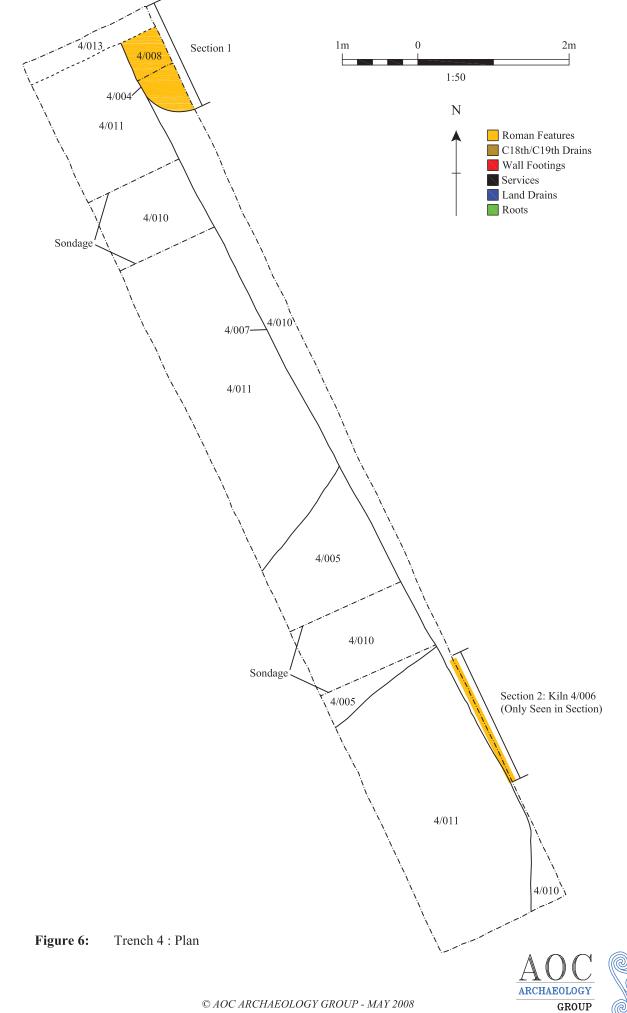


Figure 4: Trench 1 & 2: Plans (1:100) & Section (1:40)









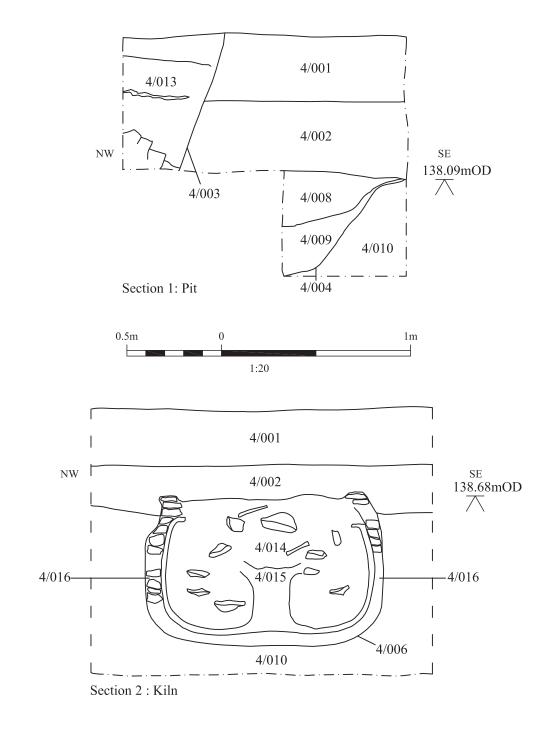


Figure 7: Trench 4 : Sections







Context No.	Context Description	Length	Width	Depth
1/001	Topsoil layer	8.00m	1.80m	0.30m
1/002	Redeposited natural clay	8.00m	1.80m	0.60m
1/003	Dump/leveling layer	8.00m	1.80m	0.60m
1/004	Dump/leveling layer	8.00m	1.80m	0.50m
1/005	Natural clay	8.00m	1.80m	NFE
2/001	Topsoil layer	15.00m	1.80m	0.20m
2/002	Brick wall	2.00m	0.20m	0.20m
2/003	Brick garden structure	2.50m	0.11m	0.10m
2/004	Natural clay	15.00m	1.80m	NFE
3/001	Topsoil layer	15.00m	1.80m	0.40m
3/002	Subsoil layer	15.00m	1.80m	0.50m
3/003	Dump/leveling layer	15.00m	1.80m	0.50m
3/004	Land drain cut	1.90m	0.30m	0.31m
3/005	Land drain cut	1.90m	0.50m	0.76m
3/006	Linear cut	1.80m	1.20m	0.55m
3/007	Linear cut	1.80m	0.90m	0.20m
3/008	Land drain cut	1.80m	1.20m	0.50m
3/009	Fill of 3/004	1.90m	0.30m	0.31m
3/010	Fill of 3/005	1.90m	0.50m	0.76m
3/011	Fill of 3/006	1.80m	1.20m	0.55m
3/012	Fill of 3/007	1.80m	0.90m	0.20m
3/013	Fill of 3/008	1.80m	1.20m	0.50m
3/014	Natural clay layer	15.00m	1.80m	NFE
4/001	Topsoil layer	13.00m	1.80m	0.40m
4/002	Subsoil layer	13.00m	1.80m	0.45m
4/003	Linear cut	1.80m	0.40m	0.50m
4/004	Pit cut	-	1.00m	0.55m
4/005	Primary fill of 4/007	2.30m	1.80m	0.10m
4/006	Cut for kiln	-	1.20m	0.80m
4/007	Linear cut	13.00m	1.80m	0.50m
4/008	Secondary fill of 4/004	13.00m	1.80m	0.50m
4/009	Primary fill of 4/004	-	1.00m	0.25m
4/010	Natural clay	13.00m	1.80m	NFE
4/011	Secondary fill of 4/007	13.00m	1.80m	0.50m
4/012	VOID			
4/013	Fill of 4/003	1.80m	0.40m	0.50m

Appendix A: Context Register

Context No.	Context Description	Length	Width	Depth
4/014	Fill of 4/006	-	1.20m	0.80m
4/015	Clay lining for 4/006	-	1.20m	0.05m
4/016	Kiln	-	1.20m	0.80m

Appendix B: Assessment of the Roman pottery from Brockley Hill

Beth Richardson

Museum of London Archaeological Services

The Roman Pottery

Quantification

There is one standard-sized box of pottery from OPH07 containing 93 sherds of pottery from an estimated 54 vessels, weighing 1442grams.

Methodology

The Roman pottery assemblage was examined using a binocular microscope and the data (using MoLAS fabric and form codes) entered onto an Excel file (rpot02.xls).

The Pottery

The pottery, all from Trench 4, is noticeably abraded with a small sherd size; several pieces weigh less than two grams. The majority of identifiable sherds are in Verulamium/London region white ware (VRW) which was made in several kilns in the London/St Albans/Radlett/Brockley Hill area. Most are body sherds: there are few identifiable forms, all of which date from the mid to late 2nd century; all except one of these came from the fill of linear cut 4/007.

Three features were recorded in the trench. A circular pit, 4/004, contained two fills 4/008 and 4/009. The primary fill, 4/009, contained five small abraded body sherds of pottery dated by a sherd of Verulamium region white ware to c AD 50–180. The secondary fill (4/008) contained 26 sherds of pottery, again mainly small abraded body sherds but dated by a rim from a bead-rimmed jar to c AD 50–160.

A kiln, 8 metres from the pit and seen only in section, contained in its backfill (4/014) four fragments of grogtempered and oxidised pottery dated AD50–400. The kiln was truncated by feature 4/007 with a primary fill, 4/005, which contained the largest and least abraded group of pottery from the site: 38 sherds including a small reed-rimmed bowl with a thickened chamfered rim, a necked jar with an almond-shaped rim and a narrow-necked jar with stabbed decoration on the rim and shoulder, all in Verulamium region white ware, and a cupped-mouth ring-necked flagon, dated 120–180 in a fine silty red oxidised ware which may be a local Brockley Hill fabric (it is very similar to an earlier (1st century) Brockley Hill white-slipped ware found in London). OPH07

Context	Fabric	Form	Dec	Sherds	Est vessels	Weight (gms)	Date range	Comments
3/002	VRW	4A		1	1	18	50-180	Probably mid 2nd c; cf Ver types 681-5
	VRW	2 or 4		1	1	48	50-180	
3/010	OXID			1	1	3	50-400	abraded
3/011	SAMLG	4		1	1	11	50-100	abraded
	?AMPH	8		1	1	24	50-400	orange-red, very micaceous
4/001	RWS			1	1	2	50-400	abraded
	OXID			5	3	40	50-400	
	OXID	?2		1	1	3	50-400	rim frag; trace of pitch or paint
4/005	VRW	2G		1	1	18	50-180	Probably early-mid 2ndc
	VRW			16	3	54	50-180	abraded
	VRW	2	STABBED	1	1	64	50-180	Probably mid 2nd c; cf Ver type 643
	OXID	2T		1	1	14	50-400	Finer than VRW & different rim form; abraded
	RWS	?1		5	3	54	50-400	abraded
	RWS			8	2	11	50-400	abraded
	REDU			5	2	6	50-400	abraded
	RWS	1B7-9		1	1	49	120-180	abraded
4/008	VRW	7		2	2	93	50-180	abraded
	VRW	2 or 4		1	1	26	50-180	
	VRW			2	2	11	50-180	
	RWS	?1		6	3	62	50-400	abraded
	REDU			5	3	14	50-400	abraded
	REDU	2A		1	1	3	50-160	small everted bead-rim; abraded
	OXID			8	4	13	50-400	abraded
		_						?Gillam 238-type;no rim, flint trit grits, very
	?NFSE	7		1	1	740	50-200	burnt
4/009	VRW			3	2	5	50-180	abraded
	RWS			1	1	3	50-400	abraded
	OXID			1	1	3	50-400	abraded
	REDU			4	4	4	50-400	abraded
4/011	OXID	4		1	1	26	50-400	hard brickearth-like orange/red fabric (residual)
	OXID			1	1	5	50-400	residual
	RWS	1 or 2		2	1	11	50-400	residual
4/014	OXID			3	1	2	50-400	abraded
	GROG			1	1	2	50-400	abraded
				93	54	1442		

Analysis of Potential

The pottery is small and abraded, possibly re-deposited. There are very few identifiable forms. It has (limited) dating potential for the contexts in which it was found.

Significance of data

The assemblage has local site significance.

Revised Research Aims

None.

Method Statements

No further work recommended.

Bibliography

Davies, B J, Richardson, B, and Tomber, R S, 1994 *The archaeology of Roman London: Vol 5, A dated corpus of early Roman pottery from the City of London,* CBA Res Rep 98, London

Frere S 1972, Verulamium Excavations Vol I, The Society of Antiquaries, London

Appendix C: Assessment of the post-Roman pottery from Brockley Hill

Jacqui Pearce

Introduction and methodology

The pottery from OPH07 was spot-dated in accordance with standard MoLAS practice, and recorded using current codes for fabric, form and decoration. The finds were quantified by sherd count (SC), minimum vessel count (ENV) and weight in grammes, and the data were entered onto an Excel spreadsheet.

A total of 41 sherds from a minimum of 34 vessels (526 g) were recovered from 11 small contexts. There are minimal joining sherds and no vessel profiles; most sherds are small and chipped suggesting a pattern of casual disposal and re-deposition.

The Pottery

All contexts have been dated to the 19th century, although it is very difficult to refine the chronology on the basis of a collection of somewhat anonymous fragments and such a small sample size. The presence of transfer-printed wares with underglaze blue decoration that includes both lines and stippling (TPW2) places some contexts after c 1807, although close dating is greatly hindered by the size of sherds and the occurrence of long-lived, popular patterns such as the ubiquitous 'willow'. Contexts given a TPQ of 1807 are [4/011], [3/013] and [3/010], but it is quite likely they were deposited rather later in the 19th century than this suggests. Sherds from a large, thick-walled serving or meat dish in [3/003] are decorated with a rural scene and probably date to the mid to late 19th century, as do sherds from two similar dishes in [2/001]. One of these has the pattern name marked under the base, although it is incomplete and cannot be deciphered. The other dish has a mid-blue floral pattern around the rim, including convolvulus flowers. The context has accordingly been dated to c 1830–1900, but could well be later. Part of a large jug or ewer, possibly from a wash stand, were found in context [3/002] and are decorated with a classical pediment and flowers; the style of decoration, albeit fragmentary, again suggests a mid to late 19th-century date.

There are several sherds of bone china (BONE) scattered across the various trenches. This rapidly became the standard English porcelain body after its introduction at the end of the 18th century, but since the sherds found at Brockley Hill are all relatively small and featureless, they are difficult to date any more closely than post-1800. Cups, a slop bowl and a saucer are all represented and some have slight traces of gilding in the form of a band around the rim or footrim. There is also part of a very small toy saucer in [3/001], which would originally have formed part of a child's tea set.

There are few other fabrics in the sample recovered. A complete, but broken, flat-topped lid in plain, refined white earthenware (REFW) was found in [2/001] and would have been made for a small jar or 'box' for cosmetics or similar substances. This context is also dated to the mid to late 19th century and includes sherds of TPW2 and BONE in addition to the base of a cylindrical bottle in English brown salt-glazed stoneware (ENGS), probably made for ginger beer.

Part of a plate in pearlware (PEAR) with a blue shell edge rim was found in context [3/013], and could have been made as early as the end of the 18th century. However, the earliest post-Roman pottery recorded on the site consists of two sherds of white salt-glazed stoneware (SWSG) from context [3/013] (part of a mug, burnt) and part of a plate from [3/003]. SWSG was first made c 1720 in the Midlands and was in widespread use until the 1780s. Context [3/003] also yielded sherds of creamware (CREA), which was very popular and widely used from the 1740s onwards until the mid 19th century. Part of a CREA plate from context [3/010] has a 'royal' pattern rim and the dark cream-coloured glaze typical if the early years of production in the mid 18th century. The earliest pottery, therefore, dates to this period and all appears to have been found in

Trench 3. The rim of a bowl in London-area redware (PMR) from [3/011] could also be of 18th-century date, although the form is a long-lived one.

Potential and significance

The post-Roman pottery from OPH07 has little potential for further work beyond the findings of the present assessment. The possibilities of refining the site chronology are remote, given the size and state of the sample, and the material is too fragmented to support any useful analysis of supply and function. The significance of the ceramic assemblage is limited to the site alone.

Recommendations

No further work is proposed.

Site	Ctxt	Per	Size	TPQ	TAQ	Fabric BONE	?	Form	?	Dec	SC	ENV	Wt	Cond	Comments
OPH07	4/013	PM	S	1800	1900	PNTD		CUP		GILD	1	1	2		Rim
OPH07	4/011	PM	S	1807	1900	BONE		MISC		PNTD	3	1	4		Square/rect base with crude yellow overglaze painting
OPH07	4/011	PM	S	1807	1900	TPW2		CUP			1	1	2		
OPH07	4/002	PM	S	1800	1900	BONE		CUP			1	1	4		Rim
OPH07	4/002	PM	S	1800	1900	REFW		MISC		BAND	1	1	13		
OPH07	4/001	PM	S	1800	1900	PMR		FLP			1	1	8		
OPH07	4/001	PM	S	1800	1900	BONE		BOWL	?		1	1	10		
OPH07	3/013	PM	S	1807	1850	TPW2		MISC			1	1	1		
OPH07	3/013	PM	S	1807	1850	PEAR BW		PLATE		BLSH	1	1	3		Rim
OPH07	3/013	PM	S	1807	1850	CREA		BOWL	?		2	2	3		
OPH07	3/013	PM	S	1807	1850	SWSG	?	MUG CYL			1	1	2	В	Rim
OPH07	3/011	PM	S	1800	1900	ROCK		JUG	?		1	1	2		Rim
OPH07	3/011	PM	S	1800	1900	PMR		BOWL		GLI	1	1	7		Rim
OPH07	3/010	PM	S	1807	1900	TPW2		PLATE			1	1	5		
OPH07	3/010	PM	S	1807	1900	CREA		PLATE		QUEE	1	1	3		Rim - chipped
OPH07	3/010	PM	S	1807	1900	CREA		MISC			1	1	1		
OPH07	3/010	PM	S	1807	1900	CREA		MUG CYL			1	1	2		
OPH07	3/003	PM	S	1830	1900	SWSG		PLATE OCT			1	1	7		Rim
OPH07	3/003	PM	S	1830	1900	CREA		PLATE	?		1	1	1		
OPH07	3/003	PM	S	1830	1900	TPW2		PLATE			1	1	1		
OPH07	3/003	PM	S	1830	1900	TPW2		DISH SERV		LAND	1	1	12		Base - probably mid 19C
OPH07	3/002	PM	S	1830	1900	TPW2		PLATE		WILL	1	1	15		Rim
OPH07	3/002	PM	S	1830	1900	TPW2		JUG	?		2	1	20		Classical pediment with flowers
OPH07	3/002	PM	S	1830	1900	BONE		SAUC			1	1	2		Base
OPH07	3/001	PM	S	1800	1900	BONE		BOWL		GILD	1	1	22		Base with band gilding round footrim
OPH07	3/001	PM	S	1800	1900	BONE		SAUC TOY			1	1	2		Profile - v small
OPH07	3/001	PM	S	1800	1900	REFW		MISC			1	1	2		
OPH07	2/001	PM	S	1830	1900	ENGS		BOT CYL			2	1	195		Base - bloated in firing
OPH07	2/001	PM	S	1830	1900	REFW		LID			3	1	103		Complete for cosmetic etc pot
OPH07	2/001	PM	S	1830	1900	TPW2		DISH SERV		FLOR	1	1	48		Rim - convolvulus design
OPH07	2/001	PM	S	1830	1900	TPW2		DISH SERV		MARK	2	1	21		Base - mark incomplete
OPH07	2/001	PM	S	1830	1900	TPW2		MISC			1	1	2		
OPH07	2/001	PM	S	1830	1900	BONE		CUP			1	1	1		Rim/handle
											41	34	526		

Appendix D: Assessment of the glass from Brockley Hill

Beth Richardson

Museum of London Archaeological Services

Quantification

There is one box of glass from the site, weighing approximately 1.5kg. Most of the glass (1.4kg) is from one context, 2/001.

Methodology

The glass was identified, dated, quantified and weighed by context. It is listed in glass.xls.

Description

Roman

There are two small fragments of Roman vessel glass from Trench 4. A natural blue body- fragment from the primary fill of pit 4/004 (4/009) is 1st or 2nd century. A green body-fragment with pitted surfaces from the backfill of the kiln 4/006 (4/014) is later Roman (3rd or 4th century).

Post-medieval

The rest of the glass is all late post- medieval. There is a large bag of late 19th or early 20th century glass from 2/001 (modern topsoil in Trench 2). It is all bottle glass, mainly base and body fragments, from an estimated five wine bottles, three beer bottles, a mineral water or comestible (food or sauce) bottle and a panelled medicine bottle. None is embossed or marked in any way. There are three pieces of glass from the fills of land drains in Trench 3: two pieces of green window glass from 3/010 (this is probably late 17th century or later, rather than medieval) and a piece of 20th century bottle from 3/011.

There are five pieces of post-medieval glass from Trench 4: from 4/001 (topsoil) a fragment of wine bottle, from 4/002 (modern made ground) a tall cylindrical bottle in apple green glass (probably a mineral water bottle), from 4/005 a piece from a Victorian or early 20th century glass intrusive in a Roman fill and from 4/013 (modern linear cut fill) a bottle fragment (probably a milk bottle) and a piece from an ornamental piece of fluted blue pressed glass vessel or ornament.

Analysis of potential

The glass helps date the features in which it was found. Some of it is intrusive.

Significance of data

The glass has local significance only.

Method statements

No further work recommended

OPH07

					est			
Trench	context	form	colour	quantity	vessels	weight	date	comments
	2/001	wine bottle	green	22	5	962	19/20thc	bases and body frags
		beer bottle	brown	10	3	420		bases and body frags
		bottle	It blue	4	1	5		prob mineral water/food
		medicine bottle	lt green	5	1	24		panelled
	3/010	window	green	2		8	17thc+	
	3/011	bottle	colourless	1	1	9	20thc	
	4/001	wine bottle	green	1	1	11	L18thc+	
	4/002	bottle	green	1	1	70	20thc	mould-made; ?mineral water
	4/005	bottle	colourless natural	1	1	25	L19/20thc	ornamental pedestal base
	4/009	vessel	blue	1	1	1	1/2ndc	Roman
	4/013	bottle	colourless	1	1	4	20thc	
		vessel/ornament	blue	1	1	5	20thc	fluted pressed glass
	4/014	vessel	green	1	1	1	3/4thc	Roman

Appendix E: Assessment of the clay pipes from Brockley Hill

Tony Grey

Museum of London Archaeology Service

Quantification

Summary/Introduction

A total of seven clay pipe fragments were submitted for assessment. These comprised two bowls (with one recommended for registering as a small find) and one stem. There were no mouthpieces. A detailed breakdown of the assemblage is given in Table 1. The pipes were recovered from two contexts, (3/010) and (3/013). There are no decorated pipes and one marked pipe. The broken and fragmentary pipe bowls were possibly identifiable by form based on the typology of Oswald and Atkinson's London pipe forms (1969).

The dateable pipe bowls included two plain bowls but the dating is not certain owing to the fragmentary and incomplete nature of the material.

The pipes showed signs of having been smoked and were in a fragmentary condition. Neither pipe appeared to be of high quality with no evidence of burnishing or milling. The pipes were probably of local London manufacture.

The marked pipe from Context (3/010) bears the initials **WT** moulded in relief on the sides of the heel. The maker William Tingey, 1845-51 of Peckham (Oswald 1975, 147) seems too late for the suggested date of this pipe but he might be a suitable candidate if the pipe dates slightly later than 1780-1820 (type AO27) or another family member could be considered.

Total no. of fragments	7
No. of bowl fragments	6
No. of stem fragments	1
No. of mouthpieces	1
Accessioned pipes	1 accessionable
Marked pipes	1
Decorated pipes	1
Imported pipes	0
Complete pipes	0
Wasters	0
Kiln material fragments	0

Table 1: Clay tobacco pipe quantification

Table 2: Clay tobacco pipe dates by context (B – bowl; M – mouthpiece; S – stem)

2
1
3
-

Methodology

The clay tobacco pipe assemblage was recorded in accordance with current MoLAS practice and entered onto an Excel file. Quantification and recording follow guidelines set out by Higgins and Davey (1994; Davey 1997). Identification and dating of tobacco pipe bowls followed the type series for London pipes devised by Atkinson and Oswald (1969).

Analysis of Potential

The assemblage only has very limited potential for further research to try to establish the identity of the pipe maker from marked pipe as it so fragmentary as not to be securely datable and to establish where the pipes were manufactured.

Significance of data

The tiny assemblage has local site significance only.

Revised Research Aims

None.

Method Statements

Bibliography

Atkinson. D.R. and Oswald, A., 1969, London clay tobacco pipes, J British Archaeol Assoc, 32, 171-227

Davey, P., 1997, Clay pipes from Bolsover church, unpub. archive rep.

Higgins, D.A. and Davey, P., 1994, *Draft guidelines for using the clay tobacco pipe record sheets,* unpub. rep.

Higgins, D.A., 1981, 'Surrey clay tobacco pipes', in Davey, P. (ed) *The archaeology of the clay tobacco pipe VI: Pipes and kilns in the London region*, BAR 97, Oxford

Oswald, A., 1975, Clay pipes for the archaeologist, BAR 14, Oxford

Oswald, A., 1960, 'The archaeology and economic history of English clay tobacco pipes', *J British Archaeol Assoc* 23

Context	Accn.	Туре	TPQ	TAQ	Bowls	Stems	Mpieces	State	Mark	I/R	M/S	Pos	Mill	Burnish	BF	Comments
																Broken, heel only, ID uncertain, maker
3/010	Yes	?AO27	?1780	?1820	1	1		S	WT	R	Μ	SH				unkown
3/013		?AO26	?1740	?1800	1			S							С	5 joining frags, heel missing, ID uncertain
					2	1										Total 3

Appendix F: Report on the Building Material from Brockley Hill

Ian M. Betts

Museum of London Archaeological Service

Quantification

Summary/Introduction

The building material assemblage from OPH07 comprises 20.9 kg of tile, brick and stone from 14 contexts. The building material would appear to be a Roman and post-medieval in date. The assemblage comprises principally Roman roofing tile and brick and post-medieval peg roofing tile, pipe and brick. A small quantity of roofing slate and other stone is also present.

Methodology

All the building material has been recorded using the standard recording forms used by the Museum of London. This has involved fabric analysis undertaken with a x10 binocular microscope. The information on the recording forms has been added to an Excel database (bmdata.xls).

Dating

Almost all the Roman building material is in fabric group 2815, dated to the period AD50–160. Much of the post-medieval building material cannot be dated with any precision, but most is probably 18th or 19th century.

Building Material

Roman

The Roman building material present on the site is mainly residual material from post-medieval contexts. As Brockley Hill is a known centre of tile and brick production its presence is still of significance. The types of tile present comprise roofing tile (both tegula and imbrex) and brick. There are also two small fragments of what may be keyed box-flue tile ([4/001], [4/002]) and a solitary tile with a knife scored base ([3/002]). The latter may be a wall tile of late 1st–early 2nd century date.

All but one of the Roman tiles recovered belongs to fabric group 2815, which has a date range of AD50-160. Previous excavations at Brockley Hill have recovered tiles in individual fabric types 2452, 2459A and 3006 and these same three fabrics are also present at OPH07. The forth member of the 2815 group – sandy fabric 3004, is currently unknown from Brockley Hill. One tile ([4/001]) is in fabric 3060, believed to have been made at Radlett, Hertfordshire in around AD 50-120. This appears to be a Roman tegula, although a post-Roman date cannot entirely be discounted.

Many of the Roman tiles from Trench 4 have burnt or vitrified edges indicating they were incorporated into some sort of kiln structure. One fragment also has a clay/daub like material attached, probably bonding material to bind the tiles together in the kiln. Similar fine sandy clay was recovered from [4/014]. The burnt tiles almost certainly came from the kiln structure [4/006] found on the site. Most burnt brick and roofing tile was recovered from the kiln backfill and the infill ([4/005]) of feature [4/007].

The kiln may be related to the production of pottery as four pieces of what may be light coloured potting clay were recovered ([4/005], [4/011]), all from the infill of feature [4/007].

Post-medieval

The most-medieval assemblage comprises mainly peg roofing tile (fabrics 2271, 2276, 2586, 2816, 3203, 3216) and brick (fabrics 3032, 3034, 3038, 3047, 3250). Where present the nail holes in the peg tiles are relatively small: 6-7 mm diameter. This would suggest a eighteenth or nineteenth century AD date, as nail holes in earlier peg tiles are often twice as large. The only unusual peg tile came from a dump layer (3/003). This is made from a white speckled clay more normally associated with pantiles. Presumably the peg tile in this speckled fabric was brought into the Brockley Hill area from a separate tilery.

The only possible pantile (fabric 3090), although only the nib area survives, was found in a dark brown sandy silt layer in Trench 3 ([3/013]). There is no indication of date, although such tiles were mainly used in central London from the mid seventeenth to the nineteenth century AD.

The bricks are highly fragmentary, which makes exact determination of the date very difficult. Most however, have sharp edges suggesting a eighteenth or nineteenth century AD date. A brick with the deep frog from [3/002] is almost certainly nineteenth century AD, whilst the machine-made brick with the lettered frog from [4/001] is probably Victorian, but could even be twentieth century AD in date.

There are a number of thinner bricks (44-51 mm) from contexts [3,003] and [3/011]. These well made, very regular shaped bricks were frequently used in London around window and door openings. Many of the Brockley Hill examples have fine moulding sand attached, which would again indicate a eighteenth or nineteenth century AD date.

A number of circular pipe fragments were recovered (fabrics 2586, 3090, 3261) in Trench 4. The unglazed examples from 4/001 and 4/002 by well be field drains of eighteenth or nineteenth century AD date, whilst the examples with internal and external brown glaze could be water pipes. The latter, which are probably nineteenth century AD or later in date, were recovered from contexts [4/001] and [4/013]. What may be an unglazed pipe was also found in Trench 3 (3/001) but this could also be part of a Roman imbrex.

Probably contemporary with the brick are various pieces of dark grey and purple coloured slate. This is probably roofing material, although no signs of attachment have survived. A fine grained, light brown sandstone from [4/011] may also have been used as roofing, although as it was found with both Roman and post-medieval building material, its date is uncertain. Other stone present includes a small chip of flint [3/009] and a light grey micacous mudstone/slate with a smoothed top surface [3/002].

OPH07									
context	fabric	form	corners	weight	length	breadth	thickness	number	comments
3/001	2815	imbrex	0	40				1	fabric 3006
3/001	2815	?	0	140				5	abraded
3/001	2271	pipe?	0	60			14	1	round water pipe, or fabric 2452, Roman imbrex!
3/002	3115	roof?	0	100			8	3	x1 purple slate, x2 dark grey slate
3/002	3120	?	0	10				1	light grey, micacous mudstone/slate, smoothed top
3/002		inlay?	0	60			17	1	decayed fine grained white marble, thi=c.17mm
3/002	3032	brick	1	180			64	1	sharp edged, deep frog
3/002	2816	?	0	80				1	odd type of roof tile?
3/002	2586	peg	2	500			13	6	thi=12-13mm, x1 near silty varient of 3216, x1 round nail hole 15mm dia
3/002	2816	peg	0	180			14	3	
3/002	2815	imbrex	1	380				2	fabric 2459A
3/002	2815	teg	0	260				2	fabric 2452 & 3006, part abraded
3/002	2815	?	0	160				1	fabric 2452, tegula or brick, abraded
2/000	0045	wall	0	400			05	4	fabric 2000, according worth and based worth advantages
3/002	2815	tile?	0	190			25	1	fabric 3006, scored in part smoothed base, part edge burnt
3/003	2815	imbrex	0	160			E 4	1	fabric 3006
3/003	2815	brick	0	70			51	1	fabric 2452, abraded
3/003 3/003	2815 3032	tegula brick	0 0	60 100				1	fabric 2459A, abraded
3/003	3032	DHCK	0	100				1	thi=13-14mm, some nr 2271, round nail hole 6mm dia, x1 slight silty
3/003	2586	peg	1	220			14	4	varent
3/003	3203	peg	1	370			13	1	speckled pantile fabric, faint finger/scrap marks in top
3/003	3115	roofing?	0	100			5	1	dark grey slate, cut edge
3/009	3117	?	0	10				1	flint chip (BM?)
3/009	3250	brick	2	3020			46	22	
3/009	3047	brick	2	620			47	14	thi=43-51mm -most 47mm+, near 3250, sharp edged, normal sanding
3/009	2586	peg	0	180			13	3	thi=12-14mm, x1 nr 2271, x1 slight silty varient, x1 near fabric 3216
3/010	3034	brick	0	100				1	frogged
3/010	3047	brick	0	50				1	top, side & broken edge (soot?) blackened
3/010	2586	peg	0	100			13	6	thi=12-13mm
3/010	3216	peg	0	20			11	1	
3/010	2816	peg	0	60				2	round nail hole 7mm dia, slight silty varient
3/011	2815	brick	0	250				1	fabric 3006, part abraded
3/011	3032	brick	0	190				1	
3/011	3250	brick	0	700			49	13	thi=47-50mm, fine moulding sand, sharp edged
3/011	2586	peg	0	120			13	2	thi=12-13mm

3/01	11 3115	roofing?	0	10	1	d	dark grey slate
3/01	13 2586	peg	0	30	13 1	C	or Roman BM
3/01	13 2815	?	0	30	1	t	egula or brick
3/01	13 3090	pantile?	0	60	1	n	nib area?
4/00	01 3261	pipe	0	80	14 2	2 v	water pipes, 11mm & 14mm thick, brown glazed inside & out
4/00	01 2586	pipe	0	310	22 1	n	near fabric 2816, unglazed, external dia 160mm
4/00	01 3038	brick	0	40	2	2 n	machine-made, lettered frog
4/00	01 3101	mortar	0	210	2	2 h	nard cream mortar with brick frags (fabric 3250)
4/00	01 3032	brick	0	60	2	2	
4/00	01 2271	peg	0	20	13 1		
4/00	01 2586	peg	0	30	13 2	2 x	<1 slightly silty fabric
4/00	01 2815	imbrex	0	100	1		abric 3006
4/00	01 2815	brick	0	170	35 1	fa	abric 2452, part abraded
4/00	01 2815	flue?	0	20	1		abric 3006, keyed?, box-flue?
4/00	01 2815	tegula	0	640	1		abric 2452
4/00		tegula	0	30	1	c	or Post-Roman?
4/00	02 3090	pipe	0	240	17 1	fi	ïeld drain, external diameter 100mm
4/00	02 3032	brick	1	70	1		burnt black broken surface
4/00	02 2276	peg	0	80	2	2	
4/00	02 2815	flue?	0	40	1	fa	abric 3006, scored/keyed surface, box-flue?
4/00	02 2815	imbrex	0	180	1		abric 3006, abraded
4/00	02 2815	brick	0	260	30 1	t	hi=29-31mm, fabric 2452, part overfired
4/00	02 2815	tegula	0	760	1		abric 2459A
4/00	02 2815	brick?	0	70	1	a	abraded
4/00	02 2815	?	0	80	4	ŀ	
4/00	02 3115	roofing?	0	5	1	d	dark grey slate
4/00	02 2586	peg	0	40	13 2		
4/00	05 2815	brick	0	1060	32 11	t	hi=30-34mm, fabs 2452, 2459A, 3006, many part overfired - see sheet
4/00	05 2815	tegula	0	250	2	2 fa	abric 3006, x1 part burnt
		-					abric 3006, x1 totally reduced & slightly warped, x1 part
4/00		imbrex	0	470	5		reduced/overfired
4/00		?	0	390	32 7		abric 2452, x2 totally reduced, x1 clay/daub kiln? bonding attached
4/00		daub?	0	80	3		very fine sandy fabric
4/00		?	0	60	2	2 0	creamy-white sandy clay with very fine white clay bands-potting clay?
4/00		brick	0	10	1		
4/00		peg	0	10	14 1		
4/00	09 2815	tegula	0	60	1	fa	abric 2452, small area of sign mark, abraded

4/000	0045	le si e le	0	00	4	4	
4/009	2815	brick	0	80	Ĩ	I	
4/011	3216	peg	0	100	12 1	1	prob Post-Medieval
4/011	3032	brick	0	140	2	2	
4/011	3121	roofing?	0	20	11 1	1	light brown, fine grained micacous sandstone
4/011	2815	brick?	0	40	1	1	fabric 2452 (if Roman BM), abraded
4/011	3500	?	0	40	2	2	fine layers white, ink, greyish-blue clay, potting clay?
4/011	3115	roofing?	0	110	4	1	dark grey slate, rectangular (nail hole?), hole 8x2mm - see sheet
4/013	3261	pipe	0	590	10 1	1	water pipe, brown glazed inside & outside, external diameter 130mm
4/013	2271	peg?	0	10	1	1	abraded
4/013	2816	peg	0	40	11 1	1	slight silty varient
4/014	2815	brick	1	3330	36 14	1	Thi=30-41mm, fabrics 2452, 2459A, 3006, part burnt, +some vitrified
4/014	2815	tegula	0	770	7	7	3006, x1 burnt edge, x1 burnt & vitrified edge
4/014	3102	daub?	0	580	5	5	fine sandy clay
4/014	2815	imbrex	1	200	2	2	fabric 3006

Analysis of Potential

The Roman building material provides additional important information regarding tile and pottery production in the Brockley Hill area. Much of the Roman tile and brick in Trench 4 clearly derives from the kiln structure found on the site, or originates from a similar structure located nearby. The presence of what may be pottering clay suggests the manufacture of pottery somewhere in the locality, perhaps in the kiln structure itself.

The post-medieval building material assemblage would seem to be eighteenth or nineteenth century AD in date. Most probably related to the piecemeal nineteenth century AD development of the area as much of the associated pottery is nineteenth century AD.

Significance of data

Brockley Hill is a well known centre of tile and pottery manufacture, so the presence of a further Roman kiln structure is of particular interest. The Roman building material is significant as it confirms the fabric types already known from previous work. It is also significance as it provides further information as to the tile and brick products made in the Brockley Hill, many of which were transport along Watling Street for building work in London. Other building material may have travelled north for use in Verulamium (St Albans).

The post-medieval roofing material, brick and ceramic pipes are of less significance, unless they can be related to any of the ninetheenth century AD buildings known to have been present on or near the site.

Method Statements

Task 1: The building material assemblage should be compared with the stratigraphical sequence, other building material assemblages from the same area (if available) and all available dating evidence = 0.5 (half) Day

Task 2: Comparision with other Roman building material from Brockley Hill = 1 Day

Task 3: Write publication report = 1 Day

Total time required = 2.5 Days

Appendix G: Assessment of the flint from Brockley Hill

Tony Grey

Museum of London Archaeology Service

Quantification

Summary/Introduction

One piece of flint was submitted for identification. This piece is a side/nosed end scraper worked on a core fragment. The core piece bears flake, blade and bladelet removal scars and is in a mottled pale, mid- and dark grey flint with 20-30% buff cortex. The scraper has been formed by steep and stepped retouch on the convex end and down one oblique side of the core fragment. The piece is quantified in Table 1 below.

The raw material is of average quality flint derived from a nodule from a chalk based environment.

Table 1: Quantification of flint by type and context

Contex	Flakes	Blade	Cores,	Retouche	Total	Comments
t		s	frags	d		
3/002				1	1	Side/end scraper on a core fragment
Total				1	1	

The technology is hard hammer with an opportunistic reuse of a shattered core fragment.

The technology indicates probable Bronze Age characteristics.

Methodology

Standard methods of analysis and identification in use by MoLAS were implemented.

Analysis of Potential

The material does not have potential for further research.

Significance of data

The material is of local significance only.

Revised Research Aims

No further research recommended.

Method Statements

No further work required.

Bibliography

Butler, C., 2005, Prehistoric Flintwork, Tempus

Inizan, M, Roche, H and Tixier, J 1992, Technology of Knapped Stone, CREP Meudon, France

Appendix H: Assessment of the animal bone from Brockley Hill

Alan Pipe

Museum of London Archaeology Service

Quantification

Summary/Introduction

This report quantifies, describes and interprets the assemblage of animal bone recovered by hand-collection from OPH07. It then assesses this group in terms of potential value for further study, and specifies the time required for such work.

Table 1: Archaeozoological archive/general summary

Animal bone (hand-collected)	0.655 kg, five fragments, in box'	one archive quality	'shoe-
Animal bone (wet-sieved)	nil		

PERIOD	DESCRIPTION	CONTEXT	WT (kg)	FRAG (mm)	PRES	NOS	LMAM	SMAM	FISH	BIRD	AMPH	MANDIBLES	MEAS	EPIPHYSES	COMPLET
post- medieval	topsoil	3/001	0.5	>75	good	3	3	0	0	0	0	0	0	2	0
post- medieval	dump/levelling layer	3/003	0.15	>75	good	1	1	0	0	0	0	0	1	1	1
post- medieval	primary fill of cut 4/007	4/005	0.005	25-75	good	1	0	0	1	0	0	0	0	0	0
TOTAL			0.655			5	4	0	1	0	0	0	1	3	1

Table 2 gives a summary of the hand-collected animal bone context groups in terms of weight (kg), estimated fragment count, fragmentation, preservation, faunal composition, and the recovery of evidence for ageing and stature.

PERIOD	DESCRIPTION	CONTEXT	TAXON	PART	AGE	STATE
post-				upper		
medieval	topsoil	3/001	ох	limb	juvenile	butchered
post-				lower		
medieval	topsoil	3/001	ох	limb	juvenile	butchered
					-	
post-	dump/levelling			lower		
medieval	layer	3/003	ох	limb	adult	
post-	primary fill of cut		fish,			
medieval	4/007	4/005	unidentified	head		

Table 3: gives a detailed summary of the hand-collected animal bone context groups in terms of faunal composition, carcase-part, modification and the recovery of sub-adult age groups.

A total of 0.655 kg, five fragments, of well-preserved animal bone was recovered from the whole hand-collected assemblage; there was no wet-sieved assemblage. Fragment size lay in the range 25->75mm.

The total assemblage derived largely from ox *Bos taurus* with a fragment of unidentified fish head element from [4/005]. There was no recovery of poultry, commensal species, game or human bone.

Carcase-part representation of ox showed recovery of juvenile upper and lower limb from [3/001] and an adult lower limb from [3/003]; areas of good and moderate meat-bearing quality. Context [/4/005] produced only a single unidentified fragment of fish bone. This suggests that the assemblage represents disposal of butchery and post-consumption waste, from prime beef carcase areas, with a component of waste from primary carcase processing of fish.

There was no recovery of foetal or neonate animals.

Clear butchery evidence was seen on cattle bones from [3/001]. There was no evidence for gnawing, burning, working or pathological change.

Methodology

Hand-collected animal bone from topsoil [3/001], dump/levelling [3/003] and fill [4/005] of cut [4/007] was recorded directly onto Excel spreadsheets. Each context group was described in terms of weight (kg), estimated fragment count, species, carcase-part, fragmentation, preservation, modification, and the recovery of epiphyses, mandibular tooth rows, measurable bones, complete long bones, and sub-adult age groups. The assemblage was not recorded as individual fragments or identified to skeletal element. All identifications referred to the MoLAS reference collection. The unidentifiable fragment from [4/005] was allocated to the approximate category 'fish, unidentified'. Each context assemblage was then grouped with the available dating and feature description.

Analysis of potential

The animal bone assemblage has only very limited potential for further study, in terms of the local meat diet, with particular reference to selection of carcase-part and age-class; and butchery, of beef. The fish bone from [4/005] is well-preserved and should be identifiable to species level. There is some very limited potential for study of cattle stature from [3/003].

The absence of amphibians and small mammals effectively precludes interpretation of local environmental conditions and there is no potential for this.

Significance of data

Post-assessment study of the fish and cattle bone fragments will produce data of limited significance in terms of local fish and meat diet, and patterns of waste disposal. Such study will not allow worthwhile *intra- or inter-*site comparison of post-consumption and primary processing waste; or allow comment on the dietary preferences and economic status of the consumers.

Revised Research Aims

RRA01 What fish species is represented?

RRA02 What beef carcase parts and age groups were selected?

RRA03 What is the estimated stature indicated by the measured ox bone?

RRA04 What butchery techniques were in use?

Method statement

The animal bone assemblage should be quantified and described, as individual bones, directly onto the MoLAS external site animal bone Access database, in terms of all standard parameters recorded at postassessment level by the MoLAS Osteology Section faunal analyst. The data will be interpreted as a discrete assemblage with reference to available stratigraphic data.

Resource requirements are-

Task 1: Recording of stratified animal bones onto database	0.25 pday
--	-----------

Task 2: Analysis of data/preparation of report/archive0.25 pday

TOTAL

0.50 pday

Appendix I: Assessment of the plant remains from Brockley Hill

Anne Davis

Museum of London Specialist Services

Quantification

Summary/Introduction

Flots from five samples were submitted for assessment from the archaeological evaluation at Royal National Orthopaedic Hospital, Brockley Hill (OPH07). Two of the samples came from fills (4/008 and 4/009) of pit 4/004, one from the backfill (4/014) of kiln structure [4/006], and two from fills (4/005 and 4/011) of a linear feature 4/007 which truncated the two earlier features. All features were provisionally dated to the Roman period. The purpose of the assessment was to determine the abundance, diversity, preservation and character of any botanical remains encountered, and to evaluate their significance and potential for any further work on the site.

Methodology

Sample processing was completed by AOC staff, and the flots were dried and presented to the author for assessment. The flots were briefly scanned using a low powered binocular microscope and recording the item frequency and species diversity, method of preservation and general nature of the plant macrofossils and any faunal remains in the individual samples. Table 1 shows details of the biological remains in each sample. Abundance and diversity of botanical remains were estimated using the following scale:

Abundance: 1 = 1 - 10; 2 = c.11-50; 3 = > 50 items

Diversity: 1 = 1 - 5; 2 = 6 - 10; 3 = >10 taxa

Analysis of Potential

Charred plant remains

All the flots contained occasional fragments of wood charcoal, several of which in samples {1} (4/008) and {4} (4/005) may be large enough for species identification if required. A single charred grain, probably of hulled barley (cf. *Hordeum vulgare*) was seen in sample {1} (4/008), and one glume base of probable spelt wheat (*Triticum* cf. *spelta*) in sample {4} (4/005). Very occasional charred seeds of wild plants in samples {1} (4/008) and {2} (4/009) included buttercup (cf. *Ranunculus* sp.) and lesser stitchwort (*Stellaria graminea*), both plants of grassy habitats.

Uncharred plant remains

All samples included root fragments and rootlets, as well as a number of uncharred seeds, all thought to be modern contaminants. These were most numerous in samples from 4/011 and 4/014, and included quite a wide range of species most of them characteristic of disturbed ground habitats. The site lies on a ridge, and is presumably well-drained, so survival of plant remains by waterlogging is unlikely.

Significance of data

Very few charred plant remains were recovered from these samples and the information to be gained from them is minimal, other than that barley and spelt wheat were in use on the site during the Roman period. As Roman activity is known to have taken place in the area however, any further excavations on the site should

be comprehensively sampled for charred remains, and samples should be at least 30 litres in volume to maximise recovery.

Method Statements

No further work is recommended.

Appendix J: Assessment of the metal finds from Brockley Hill

Beth Richardson

Museum of London Archaeological Services

Quantification

There is one metal find: a corroded iron nail from 4/008.

Methodology

Nails are not routinely x-rayed. The nail was examined by eye.

Description

The nail shank is 42mm long and square-sectioned. The head is missing. It was found in 4/008, the secondary fill of pit 4/004 which is dated by ceramics to AD 50–160.

Method Statement

No further work required.

Appendix K: OASIS Form

OASIS DATA COLLECTION FORM: England

OASIS ID: aocarcha1-36550

Project details

Project name ROYAL NATIONAL ORTHOPAEDIC HOSPITAL, BROCKLEY HILL, STANMORE, LONDON BOROUGH OF HARROW:

- Short description An archaeological evaluation was undertaken by AOC Archaeology Group at Royal National of the project Orthopaedic Hospital, Brockley Hill, Stanmore, London Borough of Harrow. The aim of the evaluation was to assess the site for archaeological potential prior to confirming a development scheme and submitting a planning application. The evaluation comprised the excavation of four machine excavated trenches. Natural London Clay was identified at between 133.47mOD and 136.61mOD. Only two trenches contained archaeological remains. Trench 2 contained postmedieval structural remains in the form of a wall and brick lined garden feature. Trench 4 contained one pit and kiln structure that has been provisionally dated to the Roman period. The site was covered by a 0.30-0.40m thick deposit of topsoil.
- Project dates Start: 05-11-2007 End: 09-11-2007

Previous/future No / Not known work

Any associated OPH07 - Sitecode project reference codes

Any associated 7928 - Contracting Unit No. project reference codes

- Type of project Field evaluation
- Site status Scheduled Monument (SM)
- Current Land use Other 3 Built over
- Monument type KILN Roman

Monument type PIT Roman

Significant Finds TILE Roman

Significant Finds POTTERY Roman

Methods & 'Sample Trenches' techniques

Development type Not recorded

Prompt Pre application

Position in the Pre-application planning process

Project location

Country	England
Site location	GREATER LONDON HARROW STANMORE National Orthopaedic Hospital, Brockley Hill, Stanmore, London Borough of Harrow
Postcode	WD6
Study area	1.04 Hectares
Site coordinates	TQ 1735 9402 51.6322573404 -0.304255916781 51 37 56 N 000 18 15 W Point
Height OD	Min: 133.47m Max: 136.61m

Project creators

Name of AOC Archaeology Organisation

Project brief AOC Archaeology originator Project design AOC Archaeology originator

Project Ron Humphrey director/manager

Project supervisor Paolo Guarino

Type of Developer sponsor/funding body

Name of John Cobb and Partners sponsor/funding body

Project archives

Physical Archive Museum of London recipient

Physical Archive OPH 07 ID

Physical Contents 'Ceramics','Textiles'

Physical Archive Archive to be retained at AOC until a decision as to any further work has been made. Evantual deposition with the Museum of London.

Digital Archive Museum of London recipient

Digital Archive ID OPH 07

Digital Contents 'none'

Digital Media 'Images raster / digital photography','Images vector','Spreadsheets','Survey','Text' available

Digital Archive Archive to be retained at AOC until a decision as to any further work has been made. Evantual

ROYAL NATIONAL ORTHOPAEDIC HOSPITAL, BROCKLEY HILL, STANMORE, LONDON BOROUGH OF HARROW: AN ARCHAEOLOGICAL EVALUATION REPORT

notes	deposition with the Museum of London.							
Paper Archive recipient	Museum of London							
Paper Archive ID	OPH 07							
Paper Contents	'Stratigraphic','Survey'							
Paper Media available	'Context sheet','Drawing','Manuscript','Map','Matrices','Microfilm','Photograph','Plan','Report','Section','Survey ','Unpublished Text'							
Paper Archive notes	Archive to be retained at AOC until a decision as to any further work has been made. Evantual deposition with the Museum of London.							
Project bibliography 1								
Publication type	Grey literature (unpublished document/manuscript)							
Title	Royal National Orthopaedic Hospital, Brockley Hill, Stanmore, London Borough of Harrow: An Interim Archaeological Evaluation Report							
Author(s)/Editor(s)	Edwards, C.							
Author(s)/Editor(s)	Guarino, P.							
Date	2008							
lssuer or publisher	AOC Archaeology							
Place of issue or publication	AOC Archaeology							

Project bibliography 2	
Publication type	Grey literature (unpublished document/manuscript)
Title	National Orthopaedic Hospital, Brockley Hill, Stanmore, London Borough of Harrow: A Written Scheme of Investigation for an Archaeological Evaluation
Author(s)/Editor(s)	Ainsworth, A.
Date	2007
lssuer or publisher	AOC Archaeology
Place of issue or publication	AOC Archaeology
Description	A4 bound document
Entered by	Paolo Guarino (paolo.guarino@aocarchaeology.com)
Entered on	23 May 2008

OASIS:

Please e-mail English Heritage for OASIS help and advice © ADS 1996-2006 Created by Jo Gilham and Jen Mitcham, email Last modified Friday 3 February 2006 Cite only: http://ads.ahds.ac.uk/oasis/print.cfm?ID=42870 for this page

