

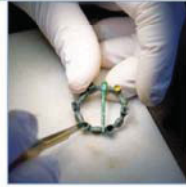
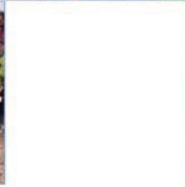
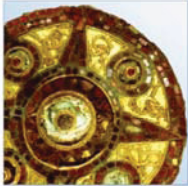
Lebanon Park Day Nursery, Twickenham London Borough of Richmond: An Archaeological Watching Brief Report

Planning Application Number: 08/2525/FUL
National Grid Reference Number: TQ 16726 73403

AOC Project no: 30436

Site Code: LPY 09

Date: January 2010



ARCHAEOLOGY

HERITAGE

CONSERVATION

Lebanon Park Day Nursery, Twickenham London Borough of Richmond: An Archaeological Watching Brief Report

On Behalf of: **Ian Cosier**
C/O Lebanon Park Day Nursery
Little Ferry Road
Twickenham
TW1 3DP

National Grid Reference (NGR): **TQ 1672 7340**

AOC Project No: **30436**

Prepared by: **Ian Hogg**

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Date of Fieldwork: **July 2009**

Date of Report: **December 2009**

This document has been prepared in accordance with AOC standard operating procedures.

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Non-Technical Summary

A Watching Brief was carried out at Lebanon Park Day Nursery, Twickenham by AOC Archaeology on behalf of Lebanon Park Day Nursery during July 2009. Natural deposits were observed at a height between 6.16m and 4.75m OD.

Post-medieval features including quarry pits, rubbish pits, pig and horse burials were recorded within the site. Much of the activity represented was of domestic and agricultural origin, while the quarry pits illustrated some low level industrial activity occurring within the site.

1. INTRODUCTION

- 1.1 This document is a report on the fieldwork carried out on the development at Lebanon Park Day Nursery, Twickenham, London Borough of Richmond (Figure 1).
- 1.2 The site was located off Little Ferry Road, Twickenham and was occupied by a day nursery and a single building attached to the back of 55 Lebanon Park. The site was bounded to the north and east by residential properties, to the west by Ferry Road and by Little Ferry Road to the south. It was centred on NGR TQ 1672 7340 and measured approximately 558m² (Figure 2).
- 1.3 The development proposed the demolition of the existing single storey nursery building and change of use to a residential dwelling, including single storey extension and refurbishment of the existing billiard room and ancillary accommodation.

2. PLANNING BACKGROUND

- 2.1 The local planning authority is the London Borough of Richmond. Archaeological advice to the council is provided by the Greater London Archaeological Advisory Service.
- 2.2 Planning permission to undertake the proposed development was granted under the Town and Country Planning Act (1990). In accordance with Planning Policy Guidance: Archaeology and Planning (PPG16) issued by the Department of the Environment in 1990 (DoE, 1990) and the recommendations of the archaeological advisor, an archaeological investigation was carried out to inform the planning decision about an appropriate mitigation strategy, in relation to the destruction of the potential archaeological resource.
- 2.3 A Written Scheme of Investigation (AOC 2009) was prepared to satisfy the requirement within the planning condition for a detailed project design for the archaeological investigation.
- 2.4 The site did not contain any Historic Environment Record entries, Listed Buildings, or Scheduled Ancient Monuments. The site lay within the Twickenham Riverside Conservation Area.
- 2.5 The WSI fulfilled the requirement for a detailed archaeological project design for an Archaeological Watching Brief.

3. GEOLOGY AND TOPOGRAPHY

- 3.1 The British Geological Survey map (BGS Sheet 270) indicated that the site was situated upon Brickearth overlying river terrace sands and gravels.
- 3.2 No geotechnical investigations had been conducted within the proposed development area.

4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 4.1 No previous archaeological investigations had occurred on the site and little in the way of archaeological excavation had occurred in the area. There are a number of entries in the Greater London Sites and Monuments Record (GLSMR) for archaeological features or chance finds within 500m of the site. The site is in close proximity to a number of Grade II listed buildings.

Prehistoric (Before c.AD 43)

- 4.2 The earliest traces of human activity in the area are a number of Pygmy flints, thought to be Mesolithic Microliths found on Eel Pie Island. An excavation on Church Street, approximately 350m to the west of the site, conducted by the Twickenham Historical Society (THS) revealed a Mesolithic blade and other implements (possibly 12)

under a layer of alluvium interpreted by the Society as a sealed stream bed. The THS also discovered a Mesolithic flint rod found with associated flakes and cores, although the exact location of these finds is not specified (AOC 2007).

- 4.3 Neolithic finds have also been recovered in Twickenham, again on an excavation conducted at Church Street, approximately 200m to the south of the proposed development area. In the region of 200 flints were found in a feature interpreted as a stream bed excavated by the THS in 1966. Animal bones were also found in association with these flints mostly coming from oxen. Furthermore circa 140 sherds of Neolithic pottery were discovered which are thought to represent at least 12 pots and bowls. Further discoveries were made opposite Orleans House about 350m to the east of the site, when a polished axe and a chipped adze were found near the Thames (AOC 2007).
- 4.4 There is only one entry in the SMR for Bronze Age material in the area. At the site on Church Street, approximately 100m west of the site, a number of Bronze Age items were found. These were Bronze Age flints and beaker sherds found in the sealed river bed (AOC 2007).
- 4.5 There is a similar scarcity of archaeological evidence for the Iron Age period in the area. There is only one findspot of Iron Age date relating to a group of nine tin coins found on Eel Pie Island approximately 400m south of the site. They are said to be part of a hoard called the Gunnersbury hoard (AOC 2007).
- 4.6 Two prehistoric finds of uncertain date have been made in the vicinity of the site. Flint flakes were discovered at 30 Cole Park Road approximately 550m to the northwest of the site and more flint flakes were recovered from the Thames next to the Neolithic axe and adze. They were originally classified as Neolithic, being from the same context, but the exact date remains unknown (AOC 2007).
- 4.7 Although, there is no clear evidence of prehistoric settlement, the finds are indicative of human activity close to the watercourse of the River Thames throughout the prehistoric period. The Thames Landscape Strategy states that "The Thames was always the obvious route for traders and colonisers linking Britain through the Rhine with Europe" (1995:15). Therefore there is moderate potential for finds of prehistoric date existing upon the site.

Roman (c.AD 43 – 410)

- 4.8 The site is situated at a significant distance from the bounds of the Roman settlement of *Londinium*. Little is known of Roman activity in the area; there are only three entries in the SMR for Roman finds.

Anglo-Saxon (c.AD 410 – 1066)

- 4.9 There is little evidence for Saxon activity in the area. The only recorded site within the locale was a burial site on the other side of the Thames from which several grave goods were retrieved, now stored in the British Museum (AOC 2007).

Medieval (c.AD 1066 – 1485)

- 4.10 Although Twickenham is not mentioned in the Domesday Book of 1086, it was included in the Manor of Isleworth.
- 4.11 In 1988 an excavation at Church Street identified a 10m long drainage ditch dating from the 14th century to the mid 16th century. The Church of St Mary was also established at around this time, approximately 100m to the west of the site (AOC 2007).

Post-Medieval (c.AD 1485 - Modern)

- 4.12 Roque's map of 1745 depicts the settlement of Twickenham as still being fairly self-contained. The property of the estate is already demarcated by York Street to the north, Syon Row to the east and the riverside to the south.

- 4.13 By the 18th century Twickenham was already becoming a desirable area and this is reflected in the cartographic evidence as the town began to expand.
- 4.14 As well as 13 Listed Buildings within close proximity of the site, several archaeological surveys, watching briefs and excavations have been conducted within close proximity of the site. Most of the remains identified have dated to the 18th and 19th centuries in a variety of forms, be they pits, made ground, garden soils and building remains.

5. AIMS OF THE INVESTIGATION

- 5.1 The aims of the watching brief were defined as being:
- 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.
 - To assess the ecofactual and environmental potential of any archaeological features and deposits.
 - To determine the extent of previous truncations of the archaeological deposits.
 - To enable the archaeology advisor to the London Borough of Richmond to make an informed decision on the status of the condition on the planning permission, and any possible requirement for further work in order to satisfy that condition.
- 5.2 The specific objectives of the investigation were:
- To determine the presence of any remains of post-medieval date.
 - To determine the presence of any remains of medieval date.
- 5.3 The final aim was to make public the results of the investigation, subject to any confidentiality restrictions.

6. SCOPE OF WORKS AND STRATEGY

- 6.1 AOC Archaeology was in attendance during all intrusive groundworks on site including any topsoil or subsoil stripping.
- 6.2 Fieldwork procedures followed the Museum of London's Archaeological Site Manual (MoL 1994).
- 6.3 All work was undertaken in accordance with the Written Scheme of Investigation (AOC 2009)
- 6.4 A unique site code (**LPY 09**) for the project was obtained from the Museum of London before commencing work on site.
- 6.5 The watching brief was undertaken by a Project Supervisor, under the overall direction of Andy Leonard, Project Manager.
- 6.6 The Watching Brief was monitored by Diane Abrams, Greater London Archaeological Advisory Service on behalf of the London Borough of Richmond.

7. METHODOLOGY

- 7.1 The archaeologist was present to observe groundworks, comprising the complete reduction of all overburden within the footprint of the new building using a 360° tracked excavator fitted with a toothless ditching bucket.
- 7.2 Archaeological recording followed the Written Scheme of Investigation and consisted of:
- Hand excavation of sondages and half-sections through all archaeological features identified during the work, sufficient to characterise, date and establish the sequence of events on the site.
 - The collection of dating evidence from in-situ deposits and spoil scans.
 - A scaled photographic record of representative exposed sections and surfaces, along with sufficient photographs to establish the setting and scale of the groundworks.
 - A record of the datum levels of archaeological deposits.
- 7.3 Records were produced using pro-forma context and trench record sheets. A multi-context plan for the site was created at a scale of 1:50 with single context 1:20 plans of all individual archaeological features. Sections were drawn at 1:10.
- 7.4 All finds and samples were treated in a proper manner and to standards agreed in advance with the Museum of London. Finds were exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in United Kingdom Institute for Conservation's Conservation Guidelines No. 2 (UKIC 1983).
- 7.5 Excavated material was examined in order to retrieve artefacts to assist in the analysis of their spatial distribution.
- 7.6 During the course of the fieldwork Diane Walls (GLAAS) was kept informed of progress and the completion of the on-site work.

8. RESULTS

Natural Deposits

- 8.1 Natural yellowish brown sands (3) were observed across the site at a height between 6.16m and 4.75m OD.

Animal Burials

- 8.2 The natural sand was cut by a series of pits and three animal burials. Two pig burials (9) and (11) were found within burial cut [10] in the north of the site. The cut was elliptical in shape, 2.60m long, 0.60m and 0.30m deep, it was aligned east-west. The pig burials themselves both faced west with the head of skeleton (9) almost touching the tail of (11). Skeleton (11) had extended rear legs while (9) had flexed rear legs. Analysis of the two pig skeletons indicates that the pigs would have reached their prime meat producing age at the time of death (14 to 21 months); although none of the bones display any evidence of butchery suggesting that the animals represented died of natural causes. The careful placement of the two burials highlights a possible emotional attachment to the deceased animals. The skeletons were overlain by inhumation fill (8), a mid yellowish brown sandy silt. The fill contained several bone fragments from a third pig carcass and a single fragment of roof tile. No dating evidence was recovered. This small assemblage is likely to represent random debris present in the vicinity of the site at the point of burial.
- 8.3 In the south of the site a horse skeleton (18) was excavated, the skeleton lay within cut [19], this was irregular in shape and measured 1.70m in length, 0.85m in width and 0.14m in depth. The horse skeleton (18) had been heavily disturbed in the past with only the torso and part of the forelegs remaining; it faced north-west and was

buried on its side. Analysis of the remains indicated the animal was approximately 3.5 years old at the time of death, with no evidence of butchery, burning, gnawing or pathology visible on the bone. This evidence suggests the animal may have died from disease, and was buried as a means of disposing of the remains. The burial fill (17) consisted of mid brown sandy silt, no dating evidence was found.

- 8.4 The animal burials suggest the area was used for farming, with the burial of these animals due to disease. Dead animals would usually be consumed or used in another process such as glue making. Cartographic evidence suggests the site was open until the end of the 19th century (OS, 1896) reinforcing the idea of agricultural activity.

Quarry Pits

- 8.5 Two quarry pits [6] and [31], both in the east of the site, were only partially revealed during the groundworks. Only the southeastern corner of pit [6] was revealed, it was 2.10m long, 0.58m wide and 1.40m deep, the sides of the pit were not exposed. The primary pit fill (7) consisted of 0.22m of dark brownish grey sandy silt with moderate inclusions of brick and tile, other finds included iron nails, clay tobacco pipe stem, butchered sheep-sized animal bone and redware pottery dated to 17th to 19th century. The upper fill (5) consisted of soft dark brownish grey sandy silt containing iron nails, animal bone, bottle glass and redwares and Tin-Glazed wares dated to the 17th – 19th century, it was 1.18m thick.
- 8.6 Only the northeastern corner of the second quarry pit (31) was revealed, it extended 3.50m north-south and 3.00m east-west, and was 1.05m deep with near vertical sides. The primary pit fill (30) consisted of 0.45m of mid brown sand, this was overlain by 0.42m of mid grey sand (29) with occasional charcoal inclusions, two CBM fragments and a clay tobacco pipe stem were retrieved from this fill. The upper fill (28) consisted of 0.50m of dark brown silty sand with frequent CBM inclusions and finds of glass, clay tobacco pipe and animal bone. The glass was dated to the late 19th/ early 20th century.
- 8.7 These quarry pits were probably contemporary and may represent the extraction of sand during the 18th or 19th centuries.

Other Pits and Postholes

- 8.8 A series of rectangular pits [21], [23], [25] and [27] were excavated in the southwest of the site. Pit [21] was rectangular with vertical sides and measured 1.50m x 1.00m x 0.55m, the pit fill (20) consisted of dark brown sandy silt and contained pottery, glass and clay tobacco pipe all dated to the 18th century.
- 8.9 Pit [23] was square in shape, again with vertical sides; it was 3.10m long, 2.80m wide and 0.67m deep. The pit fill (22), a dark reddish brown silty sand, contained modern CBM and pottery dated to the late 19th or 20th century. The fill also contained a fragment of cattle femur which displayed signs of butchery.
- 8.10 Pit [27] was rectangular, with vertical sides; it measured 2.00m x 1.10m x 1.00m. The pit fill (26) consisted of dark greyish brown sandy silt with finds dated pottery dated between 1750 and 1850 and clay tobacco pipe dated to the 19th century. Other finds collected included a sheep-sized fragment of rib with evidence of butchery.
- 8.11 Fill (26) was cut to the north by pit [25], a rectangular pit 2.20m long, 0.95m wide and 0.37m deep. The pit fill (24) consisted of soft grey black sandy silt with pottery dated to the 18th and 19th centuries. The similarity in the shape of these pits makes it likely they were associated and may represent a series of rubbish pits used during the 18th and 19th centuries.
- 8.12 A pair of postholes [16] and [33], aligned north-south were excavated in the northeast of the site. Posthole [16] was subrectangular with vertical sides and a flat base, it measured 0.68m x 0.53m x 0.32m and contained fill (15) which consisted of dark grayish brown silty sand. The finds from this context included CBM, iron nails, glass fragments and a clay tobacco pipe stem tentatively dated to the 18th century.

- 8.13 The second posthole [33] was subcircular in shape with steep sides and a concave base; it was 0.47m long, 0.42m wide and 0.11m deep. The posthole fill (32), a soft mid brown silty sand contained no finds.
- 8.14 In the north of the site a single pit [14] was partially exposed, rectangular in shape with vertical sides, it measured 0.95m x 0.44m x 0.24m and contained fill (13). The lower fill, a dark grayish brown sandy silt 0.12m thick, contained animal bone, window glass, and pottery dated to the 18th century. The upper fill (12) of mid yellowish brown sandy silt 0.13m thick contained no finds.

Made Ground

- 8.15 All of the features were overlain by a deposit of made ground (2) 0.40m thick, which consisted of mid grey sandy silt with inclusions of modern material. This was overlain by dark grey sandy silty topsoil (1) 0.25m thick.

9. FINDS

- 9.1 Finds were retained from 11 contexts (5), (7), (8), (15), (20), (22), (24), (26), (28) and (29), the finds included pottery, animal bone, ceramic building material, metalwork, glass, clay tobacco pipe and oyster shell. A fill assessment of the finds is included as Appendix B.

Pottery

- 9.2 Pottery was retained from eight contexts (5), (7), (8), (13), (20), (22), (24), (26). The pottery can be roughly divided into two phases, the first dating to 1660-1700 contained redwares and tin glaze pottery from contexts (5), (7) and (8), quarry pit fills and the pig burial fill. The second pottery phase postdates 1750 and includes various domestic wares from the other pits. Most of the assemblage is domestic in origin.

Glass

- 9.4 The glass is a typical domestic assemblage of 19th century date; including wine bottles; window glass and a complete early 19th century medicine bottle from pit fill (22).

Ceramic Building Material

- 9.5 The ceramic building material assemblage included brick, peg tile, floor tile and hip tile and was all of a post-medieval date, however given its fragmentary nature no further analysis can be made.
- 9.6 Other building material included two pieces of slate and two pieces of thick mortar.

Clay Tobacco Pipe

- 9.7 Clay tobacco pipe fragments were retained from eight contexts, (5), (7), (15), (20), (22), (26), (28), and (29). These included two complete bowls and many stem fragments. The earliest bowl is from context (28) and dated from 1690 to 1710. The second bowl, from context (20) dated to the late 18th century and was decorated with the Royal Crest. The stem fragments date from the 18th and 19th centuries.

Other finds

- 9.8 The metalwork consisted of six iron nails from context (5), possible from the same object and four nails and a pieces of strapping from context (7).

- 9.9 Oyster shell was retrieved from contexts (5), (7) and (28); also clinker was found in contexts (5) and (15) this seems to be domestic in origin.

Animal Bone

- 9.10 Full analysis of the animal bone assemblage was undertaken, indicating that the assemblage contains 1432 fragments of animal bone from 15 contexts. In general, the assemblage was in good condition with a number of large fragments and complete bones remaining. Pig remains dominated the assemblage, with horse, cattle, sheep, cat and bird also being represented. Some evidence for butchery was also identified. Of central interest was the articulated animal burials, two of pig (9) and (11), and one of horse (18). The analysis revealed information concerning the post-medieval animal husbandry regimes undertaken at the site.

10. CONCLUSIONS

- 10.1 Archaeological remains were recorded across the site, and seemed to represent various phases of activity.
- 10.2 Quarrying features appear to represent the first phase of activity during the 17th and 18th centuries; this was probably for the extraction of sand. The second phase was represented by the series of square pits, generally of 19th century date in the west of the site, and the pit and postholes in the north. These may be representative of a series of domestic activity with a series of rubbish pits.
- 10.3 The undated animal skeletons probably dated to prior to 1900 as the area became less agricultural at that time. The CBM found in one of the burial fills may indicate a post medieval date. Generally a low level of domestic and agricultural activity was present with the only signs of industry being the quarry pits.
- 10.2 The retrieved finds have been assessed (Appendix B). Due to the limited nature of the results it is recommended that no further work is required. However, the final decision rests with Diane Abrams of GLAAS.
- 10.3 The results of the watching brief will be made public via the ADS OASIS project (Appendix C) and a summary in the London Archaeologist Fieldwork Round-up. A copy of this report will be sent to the Diane Abrams, the local museum and made available to the local studies library.

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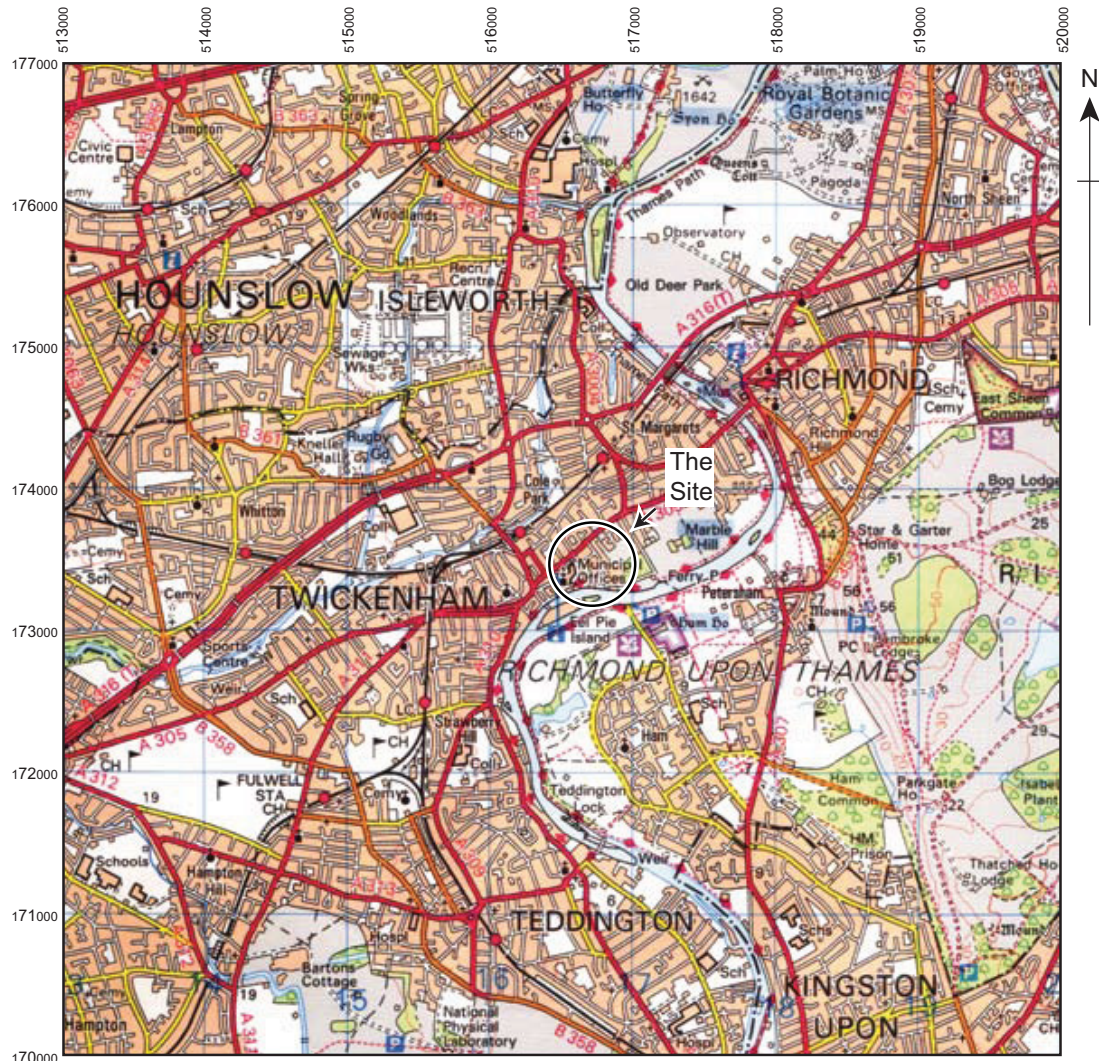
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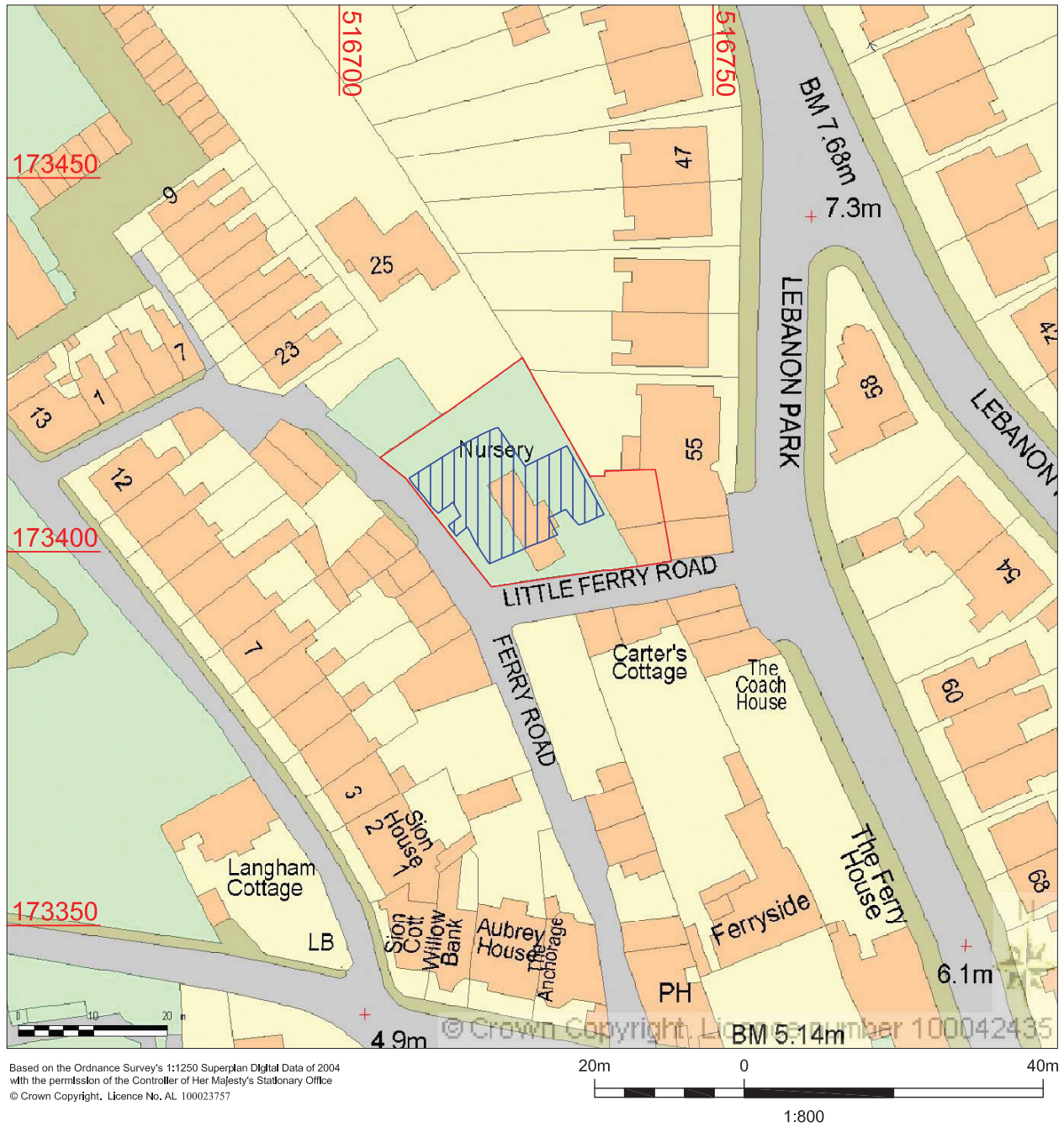
LEBANON PARK DAY NURSERY, TWICKENHAM, LONDON BOROUGH OF RICHMOND:
AN ARCHAEOLOGICAL WATCHING BRIEF REPORT



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Figure 1: Site Location



□ Site Outline ▨ Trench Outline

Figure 2: Detailed Site Location Plan/Trench Location Plan

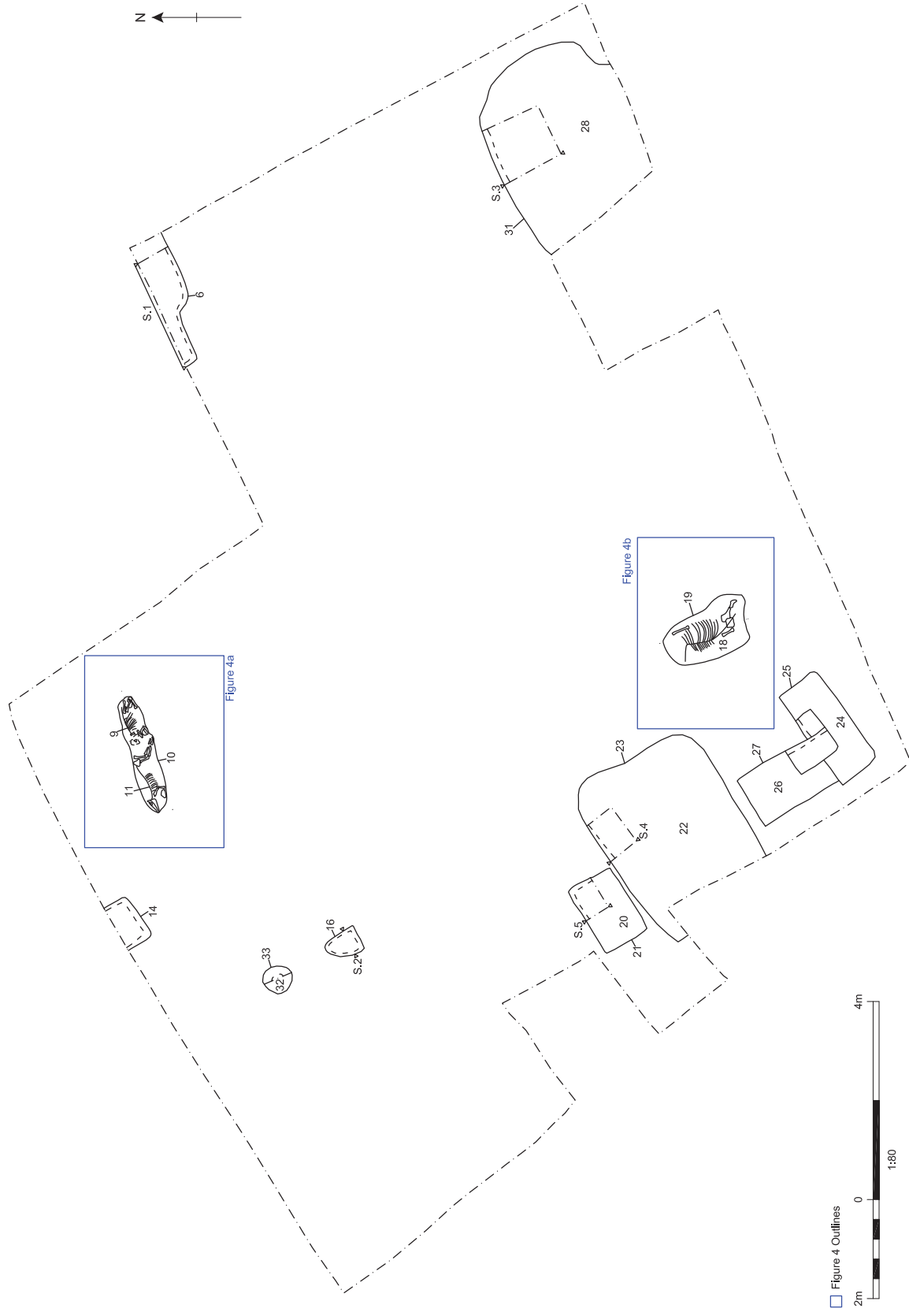


Figure 3: Plan Showing Archaeological Features

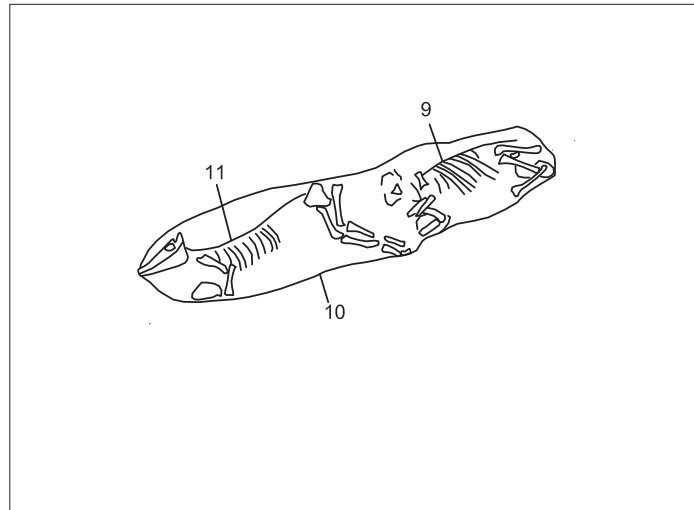


Figure 4a: Pig Burials

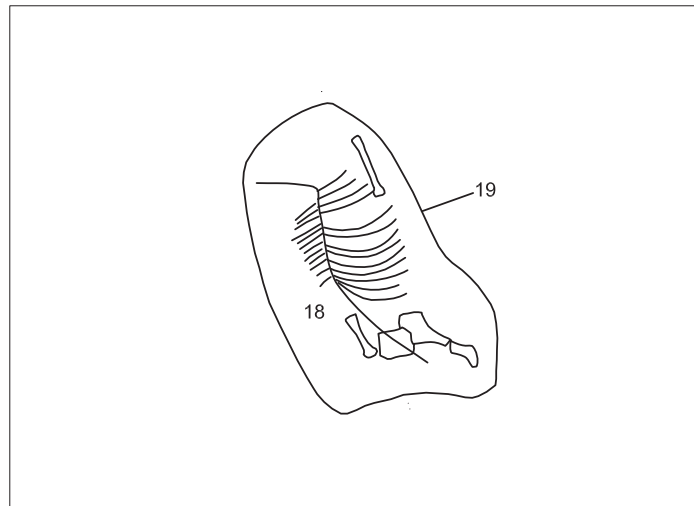


Figure 4b: Horse Burial

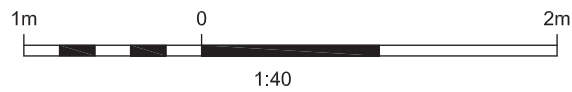


Figure 4: Plan of Animal Burials

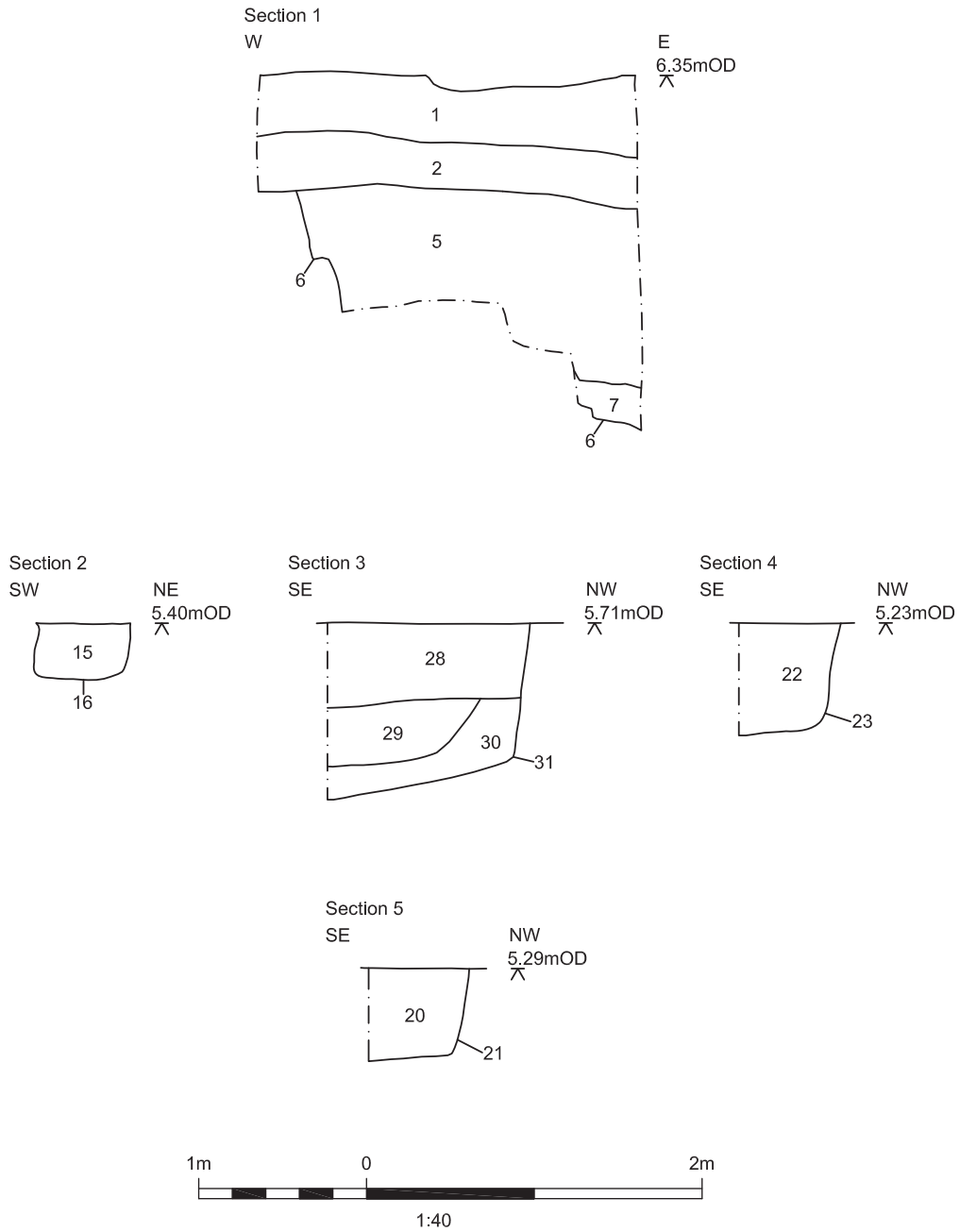


Figure 5: Sections

Appendices

Appendix A: Context Register

Context No.	Context Description	Length	Width	Depth	Plan No.	Section No.
1	Topsoil. Dark grey sandy silt.	20.00m	16.50m	0.25m	-	1
2	Made Ground. Mid grey sandy silt	20.00m	16.50m	0.40m	-	1
3	Natural Sand	20.00m	16.50m	0.10m	1	1
5	Quarry Pit fill	2.10m	0.58m	1.15m	-	1
6	Quarry Pit	2.10m	0.58m	1.40m	1	1
7	Quarry Pit fill	2.10m	0.58m	0.25m	-	1
8	Pig Burial Fill	2.60m	0.70m	0.15m	-	-
9	Pig Skeleton	1.00m	0.60m	-	2	-
10	Cut for pig burial	2.60m	0.70m	0.15m	1&2	-
11	Pig Skeleton	1.40m	0.60m	-	2	-
12	Posthole Fill	0.95m	0.44m	0.13m	-	-
13	Posthole Fill	0.95m	0.44m	0.12m	-	-
14	Posthole Cut	0.95m	0.44m	0.25m	1	-
15	Pit Fill	0.68m	0.53m	0.32m	2	-
16	Pit Cut	0.68m	0.53m	0.32m	1	2
17	Horse Burial Fill	1.70m	0.85m	0.14m	-	-
18	Horse Skeleton	1.40m	0.50m	-	1&3	-
19	Horse Burial	1.70m	0.85m	0.14m	1&3	-
20	Pit Fill	1.50m	1.00m	0.14m	1	3
21	Pit Cut	1.50m	1.00m	0.14m	1	3
22	Pit Fill	3.10m	2.80m	0.67m	-	3
23	Pit Cut	3.10m	2.80m	0.67m	1	3
24	Pit Fill	2.20m	0.95m	0.37m	1	-
25	Pit Cut	2.20m	0.95m	0.37m	1	-
26	Pit Fill	2.00m+	1.10m	1.00m+	1	-
27	Pit Cut	2.00m+	1.10m	1.00m+	1	-
28	Quarry Pit fill	3.50m	3.00m	0.50m	1	3
29	Quarry Pit fill	1.20m	1.00m	0.42m	-	3
30	Quarry Pit fill	1.20m	1.00m	0.45m	-	3
31	Quarry Pit	3.50m	3.00m	1.05m	1	3
32	Posthole Fill	0.47m	0.42m	0.11m	1	-
33	Posthole Cut	0.47m	0.42m	0.11m	1	-

Appendix B: Finds Assessment

Assessment of the Finds

by Les Capon
AOC Archaeology Group

Introduction

The finds are all post-medieval in date, with a preponderance of 18th century and later material. There are no unusual or unexpected forms or fabrics within the pottery or glass assemblage. The finds are typical of household waste, with storage jars, tablewares and personal items all represented. Personal items include clay tobacco pipes and a bottle of “cephalick snuff” to cure complaints of the head. Daily household life is indicated by porcelain and china from a table service, as well as a teapot. The best-preserved item is a porringer of 17th century date: this is a cooking pot. Further work on the finds may be undertaken if necessary.

The assemblage as a whole contains only domestic items: plates, cups, bowls, jugs and storage jars. Of interest is the porringer (context 24), which is almost whole and may merit a photograph or illustration should the results of the project be published.

There appear to be two phases of activity on the site, according to the dates given by the pottery. The earlier phase dates to the 1670-1700, and contains tin-glazed wares and redwares (contexts 5, 7 and 8). The later assemblage post-dates 1750, possibly after 1850, although the date of the porringer is slightly earlier. None of the pieces indicate a wealthy household, and represent middle class urban society.

Table of pottery finds

Context	Fabric	Date	Comments	Quantity	Form
5	TGW	1630-1700	Internal and external decoration. May not be all of same vessel	10	Jar
	TGW	1630-1700	Internal blue decoration	2	Plate
	BORDY	1550-1700	Body sherd	1	-
	CBW	1350-1500	Body sherd	1	-
	LONS	1670-1900	Body sherd	1	-
	PMFRG	1580-1700	Splash glaze external, internal glaze	2	Jar
	PMBL	1480-1600	Patchy glaze	1	-
	CHPO BW	1580-1900		1	Teabowl
	UNID		Poss burnt?		

Context	Fabric	Date	Comments	Quantity	Form
7	PMR	1580-1900	rim	2	Jar
	PMBL	1480-1600		2	Jar
	STMB	1680-1800		1	Plate
8	TGW	1630-1700	Glaze lost	1	
13	PMR	1580-1900	One with lead glaze	2	Bowl
	CHPO BW	1580-1900		1	Teabowl
	LONS	1670-1900		1	Jar
	TGW	1630-1700	Blue decoration	2	Jar
	ENPO	1745-1900		2	Bowl
20	TGW	1630-1700	Handle	1	
22	LONS	1670-1900		1	Jar
	ENPO	1745-1900	Painted blue pattern	1	Plate
	ENPO	1745-1900	Imitation Chinese design	2	Bowl
	STMB	1680-1800		1	Bowl
24	PMFRG	1580-1700	80% of vessel, internal and external green/clear lead glaze	1	Porringer
	ENPO	1745-1900		1	Plate
	BBAS	1770-1900	spout	1	Teapot
26	WEST	1590-1800	Circular floral designs	5	Bowl
	LONS	1670-1900	White	7	Jar
	LONS	1670-1900	..STERE.. ..WHITES..	1	Bottle
	TGW BLUE	1630-1800		2	Bowl
	ENPO	1745-1900	Parts of 3 plates, one with scalloped edge, one with octagonal shape	7	

Glass

The assemblage of glass is a typical domestic assemblage: wine bottles are the dominant form, but there is also a sherry glass and part of a perfume bottle. The only complete item is a medicine bottle of early 19th century date, for "True Cephalick Snuff" (context 22). No further work is recommended for the assemblage.

Table of glass finds

Context	Object	Quantity	Comments	Date
5	Wine bottle	3	Green. Incl neck,	18 th century
5	Wine bottle	1	Polygonal.	18 th century
13	Window	1	Clear	
15	Bottle	1	Green, thin	
20	Wine bottle	2	Green, incl. neck	1750-1800
22	Wine bottle	1	base	1850+
22	Medicine bottle	1	Whole, moulded. TRUE CEPHALICK SNUFF BY THE KINGS PATENT	1740-1860
24	Sherry glass	1	Full profile, rim decoration	19 th century
24	Wine bottle	3	1 base, two necks	1820+
26	Wine bottle	4	1 base, 3 body sherds	Late 19 th
28	Perfume bottle	1	Base, moulded	19 th / 20 th century

Ceramic Building Material

The ceramic building material assemblage consists of bricks, roof tiles and floor tiles. None of the pieces are whole. The size of the bricks indicates a post-medieval date for all measurable pieces, but there are many fragments which have no complete dimensions. Most of the brick has mortar attached, indicating it comes from buildings. The pegtile has probably also been used, as has the floor tile fragments. This may not represent a large-scale demolition event, but possibly modifications to buildings in the immediate area, debris being discarded into the nearest pits.

Table of ceramic building material

Context	Item	Quantity	Comments
5	Pegtile	8	Fragment
	Ridge tile	2	Fragments
	Brick	8	Fragments, one is 62mm thick
	Floor tile	1	32mm thick
	Floor tile	1	25mm thick
7	Brick	2	Fragments
	Pegtile	9	Fragments
	Hip tile	1	Fragments
8	Roof tile	1	Fragment
11	Pegtile	1	Fragment
13	Brick	3	Fragments
	Pegtile	2	Fragments
15	Brick	5	Fragments
	Pegtile	4	Fragments
20	Brick	1	100mm breadth, 60mm thickness
	Brick	1	104mm breadth, 62mm thickness
22	Pegtile	1	Fragment
	Brick	1	100mm breadth, 62mm thickness
26	Floor tile	1	30mm thick
	Brick	1	58mm thick, coarse fabric
28	Pegtile	4	Fragments
	Brick	2	65mm thick
29	Pegtile	1	Fragment
	Brick	1	Clayey, early fabric?

Other Building Materials

Very few other building materials were collected from the excavations, Two pieces of slate (Context 20), could have been from a roof. There are also two pieces of thick render-like mortar with crushed flint inclusions (context 5). These probably come from the same source as other building material in the context.

Clay Tobacco Pipe

The clay pipe assemblage includes two complete bowls and many stem fragments, including mouthpieces. Both bowls are common types. The earlier is from Context 28 and is plain, dating from 1690-1710. The spur is missing, so any makers initials are also lost. The second bowl is late 18th century, and is decorated with the Royal crest and stylised plumes. One of the mouthpieces is finished with red lead.

The complete bowls should be accessioned, but no further work is recommended for the clay pipe assemblage

Table of Clay tobacco pipes

Context	Item	Comments	Date
5	11 stem, 2 bowl frags		C18 th ?
7	1 stem		C18 th ?
15	2 stem, 1 mouthpiece		C18 th ?
20	1 mouthpiece, 1 bowl	Mouthpiece with red lead; bowl type 26, missing spur, royal crest and plumes	1740-1800
22	1 stem		
26	2 stems		19 th century
28	6 stems, 1 full bowl, one fragment	Bowl type 19 damaged spur, milling.	1690-1710
29	1 stem		

Iron

Six iron nails from Context (5) are each 51mm (2 inches) long, and may be fixings from a single item. Four iron nails from Context 7 are larger, but fragmentary. There is also a short length of iron strapping. No further work is recommended.

Shell

Oyster shell (from contexts 5, 7 and 28) is evidence of diet. Interestingly, these contexts also contain the earliest of the finds. No further work is recommended.

Clinker

Two pieces of clinker (from contexts 5 and 15) are probably of domestic origin, being fire waste. No further work is recommended.

Flint

Two pieces of flint from context (5) should be discarded, and do not merit further analysis.

The Animal Bone

by Gemma Ayton
Archaeology South-East

The assemblage contains 1432 fragments of animal bone from 15 contexts dated to the 17th, 18th and 19th centuries. The assemblage is in a good condition with a number of large fragments and complete bones remaining. The bone derives primarily from pit fills and will be analysed to reveal information concerning the post-medieval animal husbandry regimes undertaken at the site.

Methodology

Wherever possible, bone fragments have been identified to species and skeletal element represented using the ASE reference collection and *The Atlas of Animal Bone* (Schmidt 1972). Bone fragments that cannot confidently be identified to species level have been recorded according to their size. These fragments consist primarily of long bone, rib, vertebrae and cranial fragments which have been recorded as either sheep-sized or cattle-sized.

The resulting data has produced NISP (Number of Identified Specimen) and MNE (Minimum Number of Elements) counts. The NISP totals include all elements including those recorded according to size. To assist with the MNE calculations and in an attempt to avoid the distortion caused by differing fragmentation rates, the elements have been recorded according to the part and proportion of the bone present. The MNI (Minimum Number of Individuals) has been calculated from the most common element according to the MNE, by taking sides into consideration.

Epiphyseal fusion has been recorded and subsequently interpreted using data provided by Silver (1969). Dental wear has been recorded using Grant's system (1982) and interpreted using Hambleton (1999). Pig skeletons have been sexed using the canine teeth.

Where measurements are possible these have been undertaken using methods outlined by Von Den Driesch (1976). Digital callipers have been used for the smaller fragments and an osteometric board for complete long bones.

Each fragment was studied for signs of butchery, burning, gnawing and pathology.

Results

NISP

The species represented include cattle (*Bos taurus*), horse (*Equidae*), sheep/goat (*Ovis/ Capra*), pig (*Sus scrofa*), cat (*Felis domesticus*) and bird. The NISP counts are shown in Table 1 and show that pig dominate the assemblage.

SPECIES	NISP	NISP %
CATTLE	15	2
SHEEP	34	5
PIG	683	92
CAT	4	<1
BIRD	1	<1

Table 1: Number of Identified Specimens (NISP).

MNI

The MNI counts for the above species are represented in Table 2 and also show that pig bones dominate the assemblage.

SPECIES	MNI
BIRD	1
CATTLE	1
SHEEP	2
PIG	3
CAT	1

Table 2: Minimum Number of Individuals (MNI)

MNE

Cattle and sheep are represented by both meat bearing and non-meat bearing elements. The majority of the pig bone derives from two articulated skeletons (9) and (11) found within pit [10]. All elements of the skeleton were recovered including the epiphyses which are normally destroyed due to their fragile nature

Age Data

Tooth wear was recorded according to Grant's attrition age estimation. The mandibular wear scores were then converted to definite ages using the technique outlined by Hambleton (1999).

SPECIES	MWS	AGE
SHEEP	43	6-8YRS
SHEEP	37	3-4YRS
PIG	29	14- 21MTHS
PIG	23	14- 21MTHS

Table 3: Dental attrition ages

Pig bones were also recovered from context [28]. Information regarding epiphyseal fusion has been interpreted using Silver and the recovery of an unfused distal humerus from context [28] ages this animal to less than one year at the time of death.

Sexing

Two pig canines were recovered from context [11]. One was identified as male and the other as female.

Modification

No evidence of burning, gnawing or pathology was identified. Butchery marks were noted on a sheep-sized fragment of rib recovered from context [26], and sheep sized fragment of vertebrae from context [7]. Butchery marks were also noted on the proximal articulation of a cattle femur recovered from context [22].

Discussion

The animal bone assemblage is likely to be associated with agricultural and domestic activities on site during the 18th and 19th centuries. The majority of the bone derives from the two pig burials, [9] and [11] found within burial cut [10] to the north of the site (Hogg 2009). The analysis of element distribution has shown that at least three pigs are represented within burial cut [10] with the third animal represented by a small number of bones including an unfused proximal tibia. Age data derived from tooth wear and epiphyseal fusion suggests that the pigs would have reached their prime meat producing age at the time of death. The pig bones did not display any evidence of butchery which suggests that the animals represented by the two articulated skeletons died of natural causes and were discarded with a small number of bones possibly deriving from domestic waste. The two articulated skeletons were not unceremoniously dumped into the pit but appeared to have been carefully placed facing west with the head of [9] almost touching the tail of [11] (Hogg 2009). This careful placement of the pig carcasses is more reminiscent of the burial of a beloved domestic pet than the discard of a diseased farm animal.

Butchery evidence from sheep and cattle bones suggests that these animals contributed to the diet of the inhabitants of Twickenham. Tooth wear data suggests that older sheep were present on the site. This may indicate an older population retained to provide secondary products such as wool and milk. The mandible could also represent the remains of an older population retained for breeding.

Context Analysis

Pit [19] contained 113 fragments of horse bone and 4 fragments sheep bone. A number of vertebrae, rib and scapulae fragments have been recorded as 'cattle-sized' as they cannot be positively identified as either horse or cattle. No dating evidence was recovered from this feature so consequently the bone has not been included in the above analysis of the Post-Medieval assemblage. The feature has been tentatively dated to prior the 1900 as the area became less agricultural at this time (Hogg 2009).

A number of horse bones from the torso and fore limb were articulated and an array of disarticulated skeletal elements was recovered including those of the hind limb, metapodials and phalanges. Fragments of the cranium and teeth were absent. Although the cranium is prone to destruction, teeth generally survive well due to the hard enamel surface. There is no butchery evidence to suggest that the head was removed prior to deposition. It is likely that the context was subject to post-depositional disturbance.

The proximal end of a humerus was recovered with the fusion line still visible which suggests that the animal was around 3.5 years old at the time of death. No evidence of butchery, burning, gnawing or pathology was visible on the bone. A number of measurements were taken on complete long bones and are shown in Table 4. Wither's Heights have also been calculated using the values of Kiesewalter and indicate that the animal was between 151cm and 166 cm tall.

SPECIES	BONE	GL	Bd	Bp	SD	GLI	GLC	HEIGHT (cm)
---------	------	----	----	----	----	-----	-----	-------------

H	TIB	380	83.1		46.8			166
H	HUM					321	299	
H	PHG2	52	53	56	48			
H	MTT	284		54				151
H	HUM					316	297	

Table 4: Horse bone measurements (in mm) and Wither's Heights (in cm).

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Appendix C: Oasis Data Collection Form

OASIS ID: aocarcha1-57991

Project details

Project name Lebanon Park Day Nursery

Short description of the project A Watching Brief was carried out at Lebanon Park Day Nursery, Twickenham by AOC Archaeology on behalf of Lebanon Park Day Nursery during July 2009. Post-medieval features including quarry pits, rubbish pits, pig and horse burials were recorded within the site. Much of the activity represented was of domestic and agricultural origin, while the quarry pits illustrated some low level industrial activity occurring within the site.

Project dates Start: 20-07-2009 End: 24-07-2009

Previous/future work No / No

Any project codes associated reference LPY09 - Sitecode

Any project codes associated reference 30436 - Contracting Unit No.

Type of project Recording project

Site status None

Current Land use Community Service 1 - Community Buildings

Monument type PITS Post Medieval

Monument type QUARRY PITS Post Medieval

Monument type ANIMAL BURIALS Post Medieval

Monument type POSTHOLES Post Medieval

Significant Finds	POTTERY Post Medieval
Significant Finds	ANIMAL BONE Post Medieval
Significant Finds	CLAY TOBACCO PIPE Post Medieval
Investigation type	'Watching Brief'
Prompt	Direction from Local Planning Authority - PPG16

Project location

Country	England
Site location	GREATER LONDON RICHMOND UPON THAMES TWICKENHAM Lebanon Park Day Nursery, Twickenham
Postcode	TW1 2DE
Study area	558.00 Square metres
Site coordinates	TQ 1672 7340 51.4470446804 -0.320194639145 51 26 49 N 000 19 12 W Point
Height OD / Depth	Min: 4.75m Max: 6.16m

Project creators

Name Organisation	of AOC Archaeology
Project originator	brief Local Planning Authority (with/without advice from County/District Archaeologist)
Project originator	design AOC Archaeology
Project director/manager	Andy Leonard

Project supervisor Chris Clarke

Project supervisor Paul Fitz

Type of Developer
sponsor/funding
body

Name of Lebanon Park Day Nursery
sponsor/funding
body

Project archives

Physical Archive LAARC
recipient

Physical Contents 'Animal Bones','Ceramics','Glass','Metal'

Digital Archive LAARC
recipient

Digital available Media 'Images raster / digital photography','Survey'

Paper Archive LAARC
recipient

Paper Contents 'Stratigraphic'

Paper available Media 'Context sheet','Plan','Report','Section'

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

Title Lebanon Park Day Nursery, Twickenham, London Borough of Richmond. A

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Author(s)/Editor(s) Edwards, C.

Date 2009

Issuer or publisher AOC Archaeology

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Title LEBANON PARK DAY NURSERY, TWICKENHAM, LONDON BOROUGH OF RICHMOND: AN ARCHAEOLOGICAL WATCHING BRIEF REPORT

Author(s)/Editor(s) Hogg, I.

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