



WANSTEAD PARK Epping Forest

London Borough of Redbridge

WNK07

Archaeological Evaluation
2007-09



Wanstead
Parklands
Community Project



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Archaeological Evaluation

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Project Manager: Ralph Potter (WPCP)

Field Director: John Shepherd (WEAG)

Authors: Ralph Potter and John Shepherd

Photography: Eileen Handley, Ralph Potter and John Shepherd

Illustrations: Ralph Potter and John Shepherd

West Essex Archaeological Group

Hon. Secretary: Theresa Pell

6 Tickenhall Drive

Church Langley

Harlow CM17 9PF

Wanstead Parklands Community Project

Hon. Secretary: Richard Arnopp

17 Halstead Road

Wanstead

London

E11 2AY

Cover image: Wanstead Park seen from the East. The barren area of the Plain is visible alongside the two large ponds.

SUMMARY

This report presents the results of a Work Phase of archaeological evaluation carried out by the West Essex Archaeological Group and the Wanstead Parklands Community Project on Wanstead Park, Epping Forest, in the London Borough of Redbridge.

The programme of work was initiated by the Wanstead Parklands Community Project with the support of the West Essex Archaeological Group. The overall aim of the project was to increase knowledge about the archaeology of the Plain, an open area on the south side of Wanstead Park. It was also hoped to be able to add further knowledge regarding the whereabouts in the Park of a Roman villa, suggested by the discovery in 1715 of a lavish mosaic. Relevant licences were received, on application, from the City of London and work has been carried out intermittently since 2007.

An initial Work Phase (Work Phase I - 2007-08) of geophysics was carried out over the Plain. Magnetometry and Ground Penetrating Radar surveys were carried out in unison and the results revealed an active archaeological landscape beneath the surface of the Plain. Geological formations were also identified. An auger survey complemented the geophysical survey. This was carried out by the Museum of London Archaeology Geoarchaeological team

Interpretation of the geophysical results was hampered by a lack of knowledge of the depths of archaeological remains in other areas of the Plain. Therefore, six evaluation trenches (Work Phase 2. 2008. Tr1-Tr6) were excavated at select locations. These revealed the nature of natural geology as well as indicating the presence of cut features, of pre-Roman date. All of these features were seen in section only.

A further limited programme of evaluation trenches was carried out to examine archaeological features in plan in order to assess survival of archaeological deposits (Work Phase 3. 2009. Tr7 and Tr8). These revealed a ditch of late Iron Age or Roman date as well as a number of linear Roman features.

Contents

- 1 Introduction**
 - 1.1 Site background**
 - 1.2 Project and procedural framework**
 - 1.3 Project background**
 - 1.4 Origin and scope of report**
 - 1.5 Aims and objectives**
 - 1.5.1 General research questions*
 - 1.5.2 Trench specific research questions*
- 2 Topographical and historical background**
 - 2.1 Description of Parkland**
 - 2.2 Description of the Plain**
 - 2.3 Previous work in the area**
 - 2.3.1 The search for the Roman villa*
 - 2.3.2 Late 20th century gardens and parks research*
 - 2.3.3 Archaeological observations in Wanstead Park*
 - 2.3.4 Archaeological observations in vicinity of Park and within Parklands*
- 3 The evaluation**
 - 3.1 Work Phase 1 – Geophysics and auger survey**
 - 3.1.1 Geophysics methodology*
 - 3.1.2 Geophysics results and interpretation*
 - 3.1.2.1 Magnetometry*
 - 3.1.2.2 Ground Penetrating Radar*
 - 3.1.2.3 Resistivity*
 - 3.1.3 Auger survey methodology*
 - 3.1.4 Auger survey results and interpretation*
 - 3.1.4.1 Auger hole 1*
 - 3.1.4.2 Auger hole 2*
 - 3.1.4.3 Auger hole 3*
 - 3.1.4.4 Auger hole 4*

- 3.2 Work Phase 2 – Trenches 1 to 6**
 - 3.2.1 General comments and methodology*
 - 3.2.2 Trench 1 results and interpretation*
 - 3.2.3 Trench 2 results and interpretation*
 - 3.2.4 Trench 3 results and interpretation*
 - 3.2.5 Trench 4 results and interpretation*
 - 3.2.6 trench 5 results and interpretation*
 - 3.2.7 Trench 6 results and interpretation*
- 3.3 Work Phase 3 – Trenches 7 and 8**
 - 3.3.1 General comments and methodology*
 - 3.3.2 Trench 7 results and interpretation*
 - 3.3.3 Trench 8 results and interpretation*

4 – General results

- 4.1 Geophysics**
 - 4.2 Auger survey holes**
 - 4.3 Evaluation trenches**
- 5 Assessment by EH criteria**
 - 6 Acknowledgements**
 - 7 Bibliography**

List of Illustrations

Front cover: Wanstead Park seen from the East. The barren area of the Plain is visible alongside the two large ponds.

Figure 1. Locations of trenches 1 to 8

Figure 2. Survey layout plan.

Figure 3. Magnetometer survey 1 x 0.25m, 20m transects, SN zigzag progressing E, -2 to +3nT, dark positive (processed by Dr Tim Dennis, University of Essex)

Figure 4. Showing the circular features in the south-east corner of study area in greater detail. The strong linear feature across the bottom of the image is a power cable. Highlighted responses are iron sockets for tennis net posts. The green circle marks the position of Trench 4 when this socket was exposed and removed

Figure 5. Tennis net post socket exposed in Trench 5.

Figure 6. Tennis net post socket removed

Figure 7. Magnetometer survey – detail of south-east corner of study area showing circular features, resurveyed following the removal of tennis post socket in Trench 3

Figure 8. Ground Penetrating Radar survey 0.5 x 0.05m, 20m transects, SN zigzag progressing E, samples 512, sampling frequency 5000MHz, time window 100ns, time slice at approximately 40ns (processed by Dr. Tim Dennis, University of Essex)

Figure 9. Detail of Figure 8 showing west side of the Plain

Figure 10 Detail of Figure 8 showing east side of Plain just north of the Perch Pond

Figure 11 This Google Earth image shows the relative location and scale of the circles of postholes north of the Perch Pond

Figure 12. Resistivity survey 1 x 1m, 20m transects, twin probe configuration, 0.5m probe spacing, SN zigzag progressing E, processed using supplied interface software, image enhanced using PaintShop Pro ohms range 100 to 1000 Dark low resistance

Figure 13. 1947 view of the Plain showing crop marks of the tennis courts before the area became inundated with anthills

Figure 14. The power auger in use.

Figure 15. Auger sample 1

Figure 16. Auger sample 2

Figure 17. Auger sample 3

Figure 18. Auger sample 4

Figure 19. Trench 1 after removal of turf showing top of redeposited gravel

Figure 20. Trench 1 showing natural gravel and diagonal firm brown sand layer. Note shallow depth of trench

Figure 21. The west side of the Plain showing the relative positions of Trench 2 (right) and Trench 3 (left)

Figure 22. Plan of Trench 2

Figure 23. Section and plan of Trench 3.

Figure 24. Sherds of grog-tempered LBA/IA date (top) and shell tempered pottery (below) from Trench 3

Figure 25. Trench 4 under excavation looking north-west. Note the sloping gravel behind the excavator.

Figure 26. The bottom of Trench 4 looking north. Natural gravel at the base with archaeological deposits above.

Figure 27. Plan of Trench 4

Figure 28. Trench 5 looking south-east showing Feature 3 behind the scale, Feature 5 in the centre and the larger Feature 6 in the foreground

Figure 29. Plan and section of Trench 5

Figure 30. The ditch in Trench 7 under excavation

Figure 31. Silver siliqua of Constantius II.

Figure 32. Plan of Trench 7 and section through ditch looking north.

Figure 33. Trench 8 from the north. The small gully (Feature 1) can be seen in the foreground under excavation. The larger feature is being cleaned up.

Figure 34. The coin of Constantine I

Figure 35. Plan of Trench 8 on left with details of Features 1 (top) and 4 (bottom)

1 Introduction

This report details the work of the Wanstead Parklands Community Project (WPCP) in association with the West Essex Archaeological Group (WEAG) in Wanstead Park, Epping Forest, London Borough of Redbridge, between 2007 and 2009. It has been prepared according to a Museum of London template and presents the reasons for the work being undertaken, the methods and results of geophysics, powered auger survey and evaluation excavation and attempts to establish a value on the discoveries in terms of their period, relative completeness, condition, rarity and group value

1.1 Site background

Wanstead Park includes the publicly accessible areas to the east and west of Warren Road and is “owned” by the Corporation of the City of London and managed by the Conservators of Epping Forest. The Park as defined above lies within the London Borough of Redbridge and is subject to its statutory regulation for such matters as planning and tree conservation. Wanstead Park also falls within the bounds of the Greater London Authority and is included in a number of GLA proposals such as the Green Arc, Green Grid and Blue Ribbon Network.

1.2 Project and procedural framework

Before any work could commence a licence was required from the City of London. A Project Design was prepared according to guidelines set out in *The Management of Research Projects in the Historic Environment PPN3: Archaeological Excavation*. This PD, submitted in May 2007, requested access to conduct non-invasive geophysical work. This has been on-going since 2007.

A change request to the licence was made in late 2007 to enable the drilling of four auger samples and the excavation of six small test pits (Trenches 1 to 6). This request was accepted and the auger survey and evaluation excavations were conducted in early 2008.

In 2009 a new licence was sought to extend the excavation potential to cover a small open area and a single 29m long machine cut trench on the south side of the Plain (Trenches 7 and 8). This exercise was linked with the popular Festival of British Archaeology 2009 organised by the Council for British Archaeology.

All the work has been research in its nature – none has been in advance of, or associated with, any development or utility ground works. The monitoring of these projects in Wanstead Park is carried out by commercial sector archaeologists with Institute For Archaeologists “Registered Organisation” status.

1.3 Project background

Wanstead Parklands consists of a multi-period landscape, the most visible remains of which can be dated to the 18th century. Beneath this hand-sculpted landscape, however, there exists evidence for earlier occupation going back beyond the Roman period. The aim of this project was to explore this multi-period archaeological and historic landscape using mainly non-intrusive techniques of geophysical prospection and limited evaluation excavation. An important element of the whole exercise was to share

the results of this study with the community at large through a series of public outreach and educational exercises. The project was led by Ralph Potter of the Wanstead Parklands Community Project (WPCP), with John Shepherd for the West Essex Archaeological Group (WEAG). Members of both groups combined to conduct the geophysical surveys, excavation and outreach exercises. Craig Halsey and William Mills of the Museum of London Archaeology Service Geoarchaeological team contributed freely their time and equipment to conduct the auger survey.

1.4 Origin and scope of report

The project as a whole originated from the concerns of a group of individuals all with knowledge of, and interest in Wanstead Park and a desire to protect its heritage for future generations. Wanstead Parklands Community Project was formed in response. The WPCP committee has representatives at committee level from three local historical groups representing several hundred members. Two members regularly give guided historical tours of the Park. Local schools have been approached and have given their support. They also have very close connections with local conservation and Archaeological Groups

1.5 Aims and objectives

In July 2006 the WPCP were successful in an application for HLF Local Heritage Initiative funding. The purposes of the grant were:-

- a) to raise the profile of the Park and engage all sections of the local population in gathering information on the historic features of the park through non-invasive archaeology and desk based research
- b) to promote a better understanding of the site by using the results of the research for the creation of a variety of interpretative materials
- c) to encourage the involvement of the local community in the care and protection of the site.

1.5.1 General research questions

The Roding valley lies between two areas of archaeological research and interest – the study of the ‘City-centric’ London region and the study of the County of Essex. Accordingly, the site of Wanstead Park does not feature strongly in the overarching research design of either area.

For example the villa is not mentioned in the Museum of London (MoL) research framework, (Nixon, T et al 2002), although Wanstead Park receives two brief references (as is the case for all sites cited) in the Archaeology of Greater London. The villa is described as ‘...a number of Roman structures, at least one of which had a mosaic pavement...set in an area of 20ha overlooking the Roding Valley near a road junction: this was either a widely dispersed villa complex or two or three such establishments located close to each other.’

The second reference relates to the Grotto, a site which the Museum of London Archaeology Service (MoLAS) had conducted work upon prior to the publication of the guide (see site code GWP97 in section 2.3.3).

However a number of the Research Framework objectives, a document that is sadly City focused (City of London, Westminster and Southwark), apply to this site. For example:- R1, Late Iron Age – Roman transition; R2, Define relationships between landscape and settlement; R3, Relationship of central core to hinterland; R4, Infrastructure – roads, forests etc; R7, People; R12, Agriculture,- town and country food production; R13, Urban centre as consumer.

Wanstead Park is not mentioned in the Essex volumes – but the same applies for many sites, the documents intending to be discussions of a research approach and research resources (Glazebrook, J. (ed) 1997 and Brown, N., and Glazebrook, J. (eds) 2000). However, in these volumes, the Roman section emphasises the need to understand population centres, villas, road systems, relationships between urban and rural economies.

On the eastern side of the Roding Valley, the site of Uphall Camp is of great significance to our understanding of Wanstead Park and the two sites should not be interpreted in exclusion of each other. Uphall Camp was first described by the antiquary Samuel Lysons in 1796 – a plan shows it as a double set of earthworks right on the east bank of the River Roding, alongside a small tributary to the Roding that flowed along the north side of the Camp. It was built during the 2nd century BC and was located to guard the Barking Creek. Its ditches were several metres deep and its ramparts at least 6m high. It is likely that during the Iron Age it was an important tribal or political centre on the western boundary of the land of the Trinovantes tribe. Excavations on the interior have shown that it was extensively occupied with a clear zone in front of the defences themselves. Each group of houses included an enclosure and granaries stored grain. The main western entrance to the camp lay alongside the small stream mentioned previously, suggesting that the river was extensively used. Finds from the Camp display contact with areas as far as Dorset and parts of the south-east as well as more locally produced material.

During the 1st century BC the camp was abandoned – although some activity continued in the Roman period when large quantities of Roman pottery were dumped in the ditches. It has been suggested that this activity was part of a ritual carried out on a religious site in the camp. There are no Saxon traces but during the medieval period the Camp became the manor of Uphall, later Uphall Farm.

The general aims, therefore, are:-

- a) To gather information to enable us to understand the surface of natural geology beneath the Park
- b) To gather information to reconstruct the surface of the early 18th century landscape

- c) To identify possible archaeological features pre-dating the 18th century landscaping through a programme of geophysics
- d) To see if it is possible to identify the location and nature of any Roman occupation on the site and to compare it with 18th century observations and 20th century excavations.
- e) To take regard of the 18th century, and later, landscaping features.

Ancillary to these academic objectives are two outreach targets:-

- f) To present the archaeology of the Park in a series of open air Public outreach exercises, static exhibitions and displays and some publications (pamphlets, leaflets, books, DVD)
- g) To propose a new programme of fieldwork to elucidate the history and technique of construction of a number of 18th century landscape feature – e.g. the Long Walk, the amphitheatres, the Engine House, the Fortifications, the Mounds etc

1.5.2 Trench specific research questions

A total of eight trenches were opened in 2008 (Trenches 1 to 6) and 2009 (Trenches 7 and 8). These were located in response to geophysical anomalies and were scattered across the Plain in order to maximise recovery of data from a limited number of interventions.

Trench 1

Located to the immediate north-east of the refreshment kiosk on the south side of the Plain, this trench was located to examine a regular-shaped geophysical anomaly. 2007-08 GPR results suggest the presence of linear features, possibly walls.

The objectives of this trench were:

- To examine 18th century and later deposits immediately under the turf line
- To examine the depth of archaeological remains and the nature of the remains, in particular to identify the nature of the linear feature believed to exist on this part of the site
- To identify the level and nature of natural geology
- To assess the potential for the survival of deep cut features

Trench 2

Located on the west side of the Plain, the intention of this trench was to examine a ridge in the topography on which both magnetometer and GPR surveys suggested possible disturbance beneath.

The objectives of this trench were:

- To examine 18th century and later deposits immediately under the turf line

- To examine the depth of archaeological remains along a ridge in the Plain and the nature of the remains, in particular to identify the nature of the linear feature believed to exist on this part of the site
- To identify the level and nature of natural geology
- To assess the potential for the survival of deep cut features

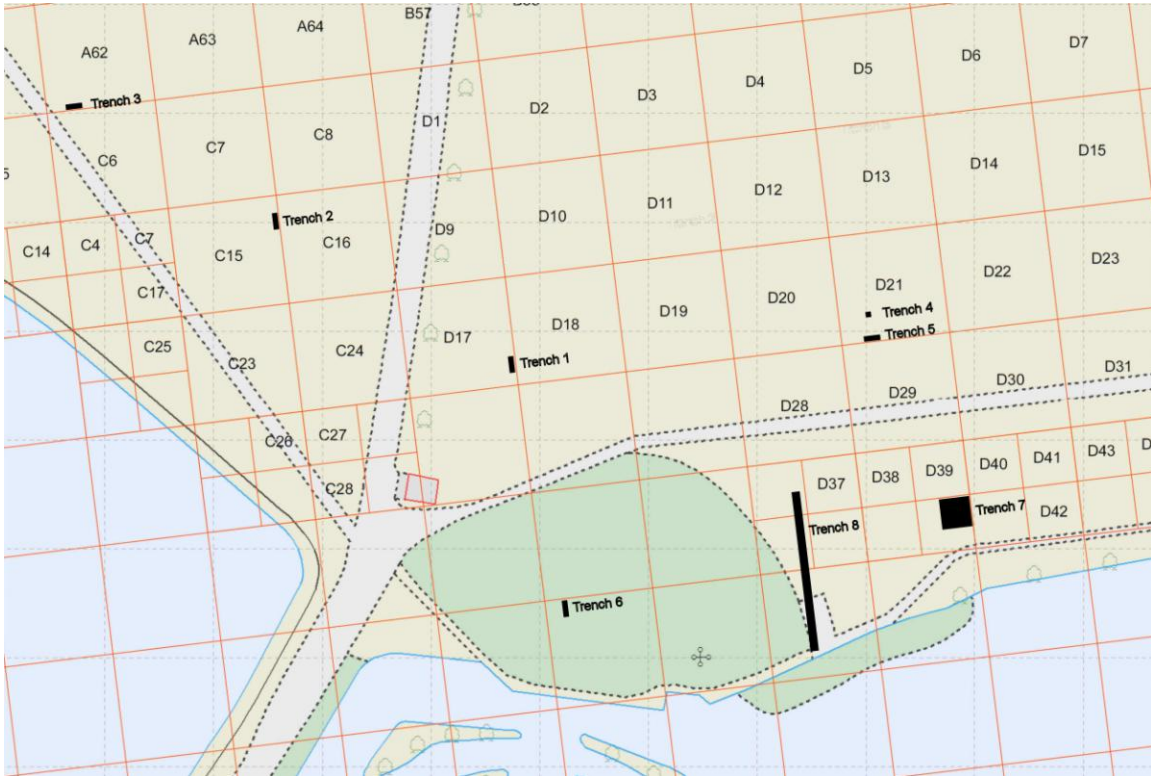


Figure 1. Locations of Trenches 1 to 8

Trench 3

Located on the far side of the west side of the Plain, this trench was located to examine a linear geophysical anomaly. 2007-08 GPR results suggested the presence of a wall trench or ditch.

The objectives of this trench were:

- To examine 18th century and later deposits immediately under the turf line
- To examine the depth of archaeological remains and the nature of the remains, in particular a high magnetic anomaly and to identify the nature of the linear feature at this part of the site
- To identify the level and nature of natural geology
- To assess the potential for the survival of deep cut features

Trench 4

Located on the east side of the Plain at a point where 2007-08 magnetometry results showed the presence of circular features.

The objectives of this trench were:

- To examine 18th century and later deposits immediately under the turf line
- To examine the depth of archaeological remains and the nature of the remains, in particular to identify the nature of the round feature at this part of the site
- To identify the level and nature of natural geology
- To assess the potential for the survival of deep cut features
- To examine the site of a 20th century tennis post socket

Trench 5

Located to the immediate south of Trench 4, this was also intended to examine the features revealed in the 2007-08 magnetometry surveys.

The objectives of this trench were:

- To examine 18th century and later deposits immediately under the turf line
- To examine the depth of archaeological remains and the nature of the remains, in particular to identify the nature of the linear feature and strong magnetic anomaly at this part of the site
- To identify the level and nature of natural geology
- To assess the potential for the survival of deep cut features

Trench 6

Located to the south-east of the refreshment kiosk among the undergrowth. This was positioned to examine the slope at this point in the plain.

The objectives of this trench were:

- To examine 18th century and later deposits immediately under the turf line
- To examine the depth of archaeological remains and the nature of the remains, in particular to identify the nature of the linear feature believed to exist on this part of the site
- To identify the level and nature of natural geology
- To assess the potential for the survival of deep cut features

Trench 7

Located on the north bank of the Perch Pond, south of Trenches 3 and 4, the aim of this trench was to examine a geophysical linear anomaly, believed to be a ditch, that ran from the south-east to north-west across this part of the site. The trench was opened as part of the 2009 Festival of British Archaeology organised by the Council for British Archaeology.

The objectives of this trench were:

- To examine the depth of archaeological remains and the nature of the remains, in particular to identify the nature of the linear feature and a circular arrangement of point anomalies at this part of the site
- To identify the level and nature of natural geology
- To assess the potential for the survival of deep cut features
- To examine the fill of the linear feature seen in the 2007-08 geophysics survey

Trench 8

Located on the north side of the Perch pond, and to the south-west of trenches 3 and 4, this long machine-cut trench was intended to examine in plan a series of linear features seen in the geophysics survey for this part of the site. It too was opened as part of the 2009 Festival of British Archaeology organised by the Council for British Archaeology.

The objectives of this trench were:

- To examine the depth of archaeological remains and the nature of the remains, in particular to identify the nature of the round feature at this part of the site
- To identify the level and nature of natural geology
- To assess the potential for the survival of deep cut features
- To examine the fill of the linear features seen in the 2007-08 geophysics survey

2 Topographical and historical background

2.1 Description of Parkland

- a) The maximum extent of the historical parklands is probably best illustrated by Jean Rocque's 1746 plan of the Wanstead Estate from part of a plan of the whole of London. It shows avenues of trees extending to Snaresbrook and Leytonstone in the west and the gardens extending east beyond the River Roding to Ilford. The area today known as the Plain has historically been referred to as "the Park".
- b) The London Borough of Redbridge created the Wanstead Park Conservation Area encompassing much but not all of the historic Wanstead Estate. The boundaries to the south along Northumberland Avenue and to the east along the River Roding are coincident with the Corporation of the City of London's but to the north and west the Conservation Area takes in the Wanstead Golf Course and some private houses along Overton Drive and Raynes Avenue. It omits Bush Wood to the west of Blake Hall Road and areas to the north.
- c) The Corporation of the City of London has historically regarded Wanstead Park as the area to the east of Warren Road. This area was enclosed and has its own byelaws. The area to the east is considered part of Epping Forest and is managed and regulated in the same way as the rest of the Forest. There is an area to the southeast known as "the exchange lands" formerly a sewage works now managed as part of Epping Forest but outside the historic boundary of the Wanstead Estate although at one time owned by the Tylney family.

2.2 Description of the Plain

The Plain is an open area north of the Heronry and Perch ponds. It has never in recorded history been built upon. There are traces of broad ridge and furrow on the east side of the area. In earlier times it was part of an area known as "The Park" originating from its use as a Tudor hunting park. Before the construction of the ponds in about 1735, the limited cartographical evidence suggests that the Plain was probably grassland sloping down to a stream flowing west to east into the River Roding. At various times avenues of trees have been planted across the Plain notably a Union Jack design in the early 19th century and an unknown design on the occasion of the discovery of a Roman pavement in 1715.

2.3 Previous work in the area

The discovery of a Roman mosaic here in 1715 (see 2.3.1 below) has resulted in a number of small-scale campaigns to try to locate the building it once decorated. In addition there have been a number of development and utility-related projects.

The first to search for the building was Jack Elsdon Tuffs in 1962-3. Using information from Smart Lethieullier's 1735 letter, and another subsequent letter sent to Charles Lyttelton in 1746, Tuffs deduced that the probable location for the 1715 discovery was in

the area on the north-west bank of the Perch Pond, in the southern part of Wanstead Park. Tuff's exploratory trenches revealed traces of Roman occupation but no surviving structures. He recognised, however, that the building 'must lie close at hand'.

His work was followed by WEAG, led by Frank Clark, who set about exploring the same area but with a view to reconstructing the levels of Roman occupation across the site. Clark also failed to locate a structure but his work did reveal large quantities of building material such as brick, tile and wall plaster, much of it in a pristine condition, confirming that a building was nearby. He observed that although the Roman finds appeared at a constant depth in his exploratory trenches, they were covered by an overburden of a minimum of 75cm of re-deposited material derived from the excavation of the ponds in the middle of the eighteenth century. Clark concluded that any building would have either been destroyed during the excavation of the ponds or would be located further to the north, beneath a considerable amount of eighteenth century landscaping.

The result of all this work shows that there is a spread of Roman material close to the north-east bank of the Perch pond. None of it, however, can be attributed to a building of sufficient scale or size to accommodate the mosaic. *Tesserae* have been found in large numbers, but the great majority are plain cubes, approximately 20mm³. Very few small *tesserae*, of the kind one would expect from a decorated mosaic, have been found.

Survey work was conducted in 1990 by the Debois landscape Survey Group, with the aim of plotting all the evidence of landscaping in the park, including the neighbouring golf course, not only as a record and an aid to understanding its history, but also as a means for identifying what is worth protecting in the Park today. Also, and on behalf of Thames Water, GSB Prospecting carried out earth resistance, magnetometry and Ground Penetrating Radar (GPR) surveys across the Plain. Some results were produced but, at the time, it was not possible to discern their real meaning or significance.

In 2005 the Wanstead Parklands Community Project (WPCP) was formed to raise awareness of historic Wanstead Park and its rapidly declining condition. Documentary evidence and chance finds of flint tools and arrowheads suggest the Park has seen periodic occupation from as early as, perhaps, the Mesolithic period, through the Roman era, to the present day. Given this history, its proximity to London and relatively easy access, surprisingly little interest has been shown in the archaeology of the site other than those brief campaigns described above. The WPCP felt that recent popular reawakening of interest in archaeology should be exploited to highlight the importance of the site thus strengthening the case for desperately needed funding to protect the heritage of Wanstead Park for future generations. The WPCP entered into collaboration with WEAG to undertake what would initially be a non-invasive geophysical survey. The WPCP successfully applied for a Local Heritage Initiative grant to partially fund the work and the project was approved and licensed by the owners of the Park, the City of London.

All other discoveries on this site relate to the 18th century house, its gardens and features and later 19th or 20th century use of the area.

2.3.1 *The search for the Roman villa*

This section is a reprint of *History of Roman Mosaic Wanstead Park* by W.H. George, originally printed on pp 66-69 of a volume of WEAG excavation reports (Clark 1990). It is reproduced with permission from Mr F Clark.

“The site of the Roman mosaic in Wanstead Park has been intensively investigated by two local people. Smart Lethieullier in the period 1715-1746 and J. Elsdon Tuffs between approximately 1947-1973. Smart Lethieullier (1701-1760) of Aldersbrook was both a Fellow of the Royal Society and of the Society of Antiquaries, Lord of the Manor of Barking and a prolific letter writer (Wroth 1909 p.1011 & Chown 1927 pp. 19-39). He gave detailed descriptions of the pavement in two letters dated 1735 and 1746.

Smart Lethieullier wrote from Aldersbrook to Roger Gale on 12th July 1735 giving an account of a Roman pavement in Wanstead Park. He stated that the mosaic was found about 20 years before in Earl Tilney's Park and added that it was now obliterated and the face of the ground much changed. The discovery was made when holes were being dug for an avenue of trees from the gardens. The gardener Adam Holt recognized the pieces of mosaic or tesserae but was refused leave to fully expose the pavement. He determined its extent to be about 20 feet from north to south and 16 feet from east to west. It was constructed of black, white and red tesserae of which Lethieullier had examples. The mosaic was reported to have a foot wide border of red dice about 3/4 inch square 'within which were several ornaments, and in the middle the figure of a man riding upon some beast and holding something in his hands'. Holt's examination was hurried and patchy. A silver and a brass coin were found. It would appear therefore that Lethieullier did not actually see the mosaic but subsequently visited the site frequently and collected *tesserae*, brick and tile. He interpreted the *imbrex* to be guttering. He recorded the site as follows:

‘The pavement was situated on a gentle gravelly ascent towards the north, and at a small distance from the south end of it I remember a well of exceedingly fine water, now absorbed in a great pond. From this well the ground rises likewise toward the south till it comes to a plain, which extends a considerable way, and is now my warren’.

Lethieullier added that about 300 yards due south from the well and pavement ruins of foundations were formerly to be seen near the park pales, but were destroyed by tree planting. He conjectured the mosaic to be the floor of a banqueting house (Lethieullier 1735).

Some eleven years later Smart Lethieullier wrote to Dr. Charles Lyttelton about the Roman pavement. He reiterated the account from Adam Holt. The beast was now described as a horse and the site as being upon an easy declivity fronting the south, close by a beautiful well of bright water. Lethieullier had changed his interpretation of the pavement as being part of a banqueting house or 'place of mirth and pleasure' because in the summer of 1746 Lord Tilney had further alterations made on the spot where the pavement formerly lay. The workmen found fragments of broken pots, bones and teeth.

He visited the site and found 'fragments of several urns of different colours, but of the coarsest earth with a great deal of brick and tiles'. Roman coins were found and Lethieullier supposed this to have been the mausoleum of some private family whose villa perhaps stood on that more elevated situation where Wanstead now stands (Lethieullier 1746).

Lethieullier's descriptions of the site are rather vague, but consistent. He clearly stated that the site was on a gentle south facing slope near a well, that the mosaic was obliterated or destroyed and the environs totally changed. To ensure that no further accounts of this site by Lethieullier had been missed a search of his papers at Breamore House, Hampshire previously thought to have been destroyed in a fire there in 1857 (Lockwood 1973 pp.6-7, 20) was most kindly undertaken on the Group's behalf by Sir Westrow Hulse but no further information was found. Some of this material together with Lethieullier's portrait was recently displayed in the Huguenot exhibition at the Museum of London (1985 pp. 154-158). A search at the Society of Antiquaries failed to reveal any further information. Mr. P.A.S. Pool kindly went through the Lethieullier letters to William Borlase in the Morrab Gardens Library, Penzance, Cornwall but no mention of the Wanstead material was found. His obituary in the Gentleman's Magazine (1760 pp.394 & 443) gives no further information. Smart Lethieullier was buried in the family vault beneath their chapel at St. Mary the Virgin, Little Ilford, Essex. The Lethieullier vault and its contents was recently examined during renovations to the church (Redknapp 1985 pp.36-37).

Mr. S.S. Campbell-Adams who has researched the history of Wanstead Park and its gardens was contacted and he replied that in 1820 William Wellesley Pole erected extensive hot houses in the kitchen gardens and formed one of the largest American gardens in England and personally saw the uncovering of part of a large mosaic pavement six or seven hundred feet north-west of Heronry Pond. Unfortunately, the reference for this was lost by Mr. Campbell-Adams in a fire.

No further original work was done on this site for some two hundred years following Lethieullier's accounts. His work has been extensively quoted and copied. For example Morant (1768 p.28) stated that the pavement was found in 1715 while planting an avenue of trees in the park 'on the south side of the lower part of the Gardens'. He added the mosaic was situated on a gentle gravelly ascent towards the north; at a small distance from the south end of it was a spring, or well, of fine water, now absorbed in a great pond. According to Morant the coarse urns were found about 300 yards directly south of the well and pavement. Lysons (1796 pp.231-232) made a passing reference to Lethieullier's account of the mosaic pavement. Elizabeth Ogborne (1814 p.69) recorded the Roman villa or some small station at Wanstead in exactly Lethieullier's words although she changed some of the Latin terms but she gave the wrong page reference to his article in *Archaeologia*. This bibliographic error was repeated by James Thorne (1876 p.667). White (1848 p.261) incorrectly stated the mosaic was found in 1735 which was in fact the date of Lethieullier's letter to Gale. Dawson (c.1910 pp.27-28) faithfully quoted Lethieullier but on his map of Wanstead Park the site is marked adjacent to the Ornamental Water, just south of the grotto.

A brief record of the site was included in the R.C.H.M. Inventory of Essex (1921 Vol. II pp.248-249). It was described as being in Wanstead Park north or north-west of the Heronry Pond and about one mile north of the Roman road from London to Colchester. The mosaic was interpreted as possibly Bacchus on a panther. It added that in 1846 Roman finds were made 'apparently some two or three hundred yards further north. More recently, pottery and glass have been found in the gravel pits near the sewage farm, in the S.E. corner of the parish'. According to the note some of the pottery was in East Ham Museum.

This account was repeated in the Roman Essex volume of the Victoria County History (1963 p.198). Winifred Phillips (1946 p.11) mentioned that the mosaic was excavated in 1715 north of Heronry Pond when the foundations were being prepared for the Great Wanstead House. She added 'To the lasting regret of local antiquarians, this valuable mosaic was ordered to be destroyed almost as soon as it was discovered. The reason for making so arbitrary an injunction is by no means clear; but it would seem that it was little more than a perverse whim that deprived Wanstead of a priceless piece of historical evidence'.

The second person to have extensively studied this site was J. Elsdon Tuffs who having read Lethieullier's reports was determined to locate the site of the mosaic and began his investigations in 1947. He re-examined the earlier reports, studied maps and conducted field work. Elsdon Tuffs started his excavations to the north of Heronry Pond but only found 17th and 18th century brick, china and clay tobacco pipes. He then examined the western end of the north side of Perch Pond and a few yards from the bank found among tangled roots in a trench 'four feet square (sic) two inches of top soil, about five inches of tiles, brick etc. packed tightly in layers, below this were pottery fragments, oyster shells, a coin (A.D. 330-335), a few bones, nails and a number of tesserae cubes of various sizes and colours on a mortar bed three inches thick and tolerably flat'. His investigations 20 feet to the north and 16 feet to the east of the original area excavated also revealed fragments of mortar and tesserae. Accordingly Elsdon Tuffs concluded this was the site of the mosaic. He added that from accounts of the pavement the man riding on an animal was in fact, the god Bacchus riding on a panther, holding a thyrsus in one of his hands and a goblet in the other and suggested the Wanstead mosaic was possibly a copy of that found in Leadenhall Street, London (Elsdon Tuffs 1962).

Some eleven years later Elsdon Tuffs issued a supplementary report on his rediscovery of the Roman villa. He concentrated his efforts on the allotments immediately south of the villa where Lethieullier had previously recorded foundations but nothing of especial interest was found. Indeed Elsdon Tuffs suggested the possibility the foundations may have been of a medieval date with reused Roman material. He confirmed however that much of the material excavated during the construction of the Perch Pond was dumped on the south side of the pond. In 1966 a trench was machined along the artificial bank between the Heronry and Perch Ponds to lay an electricity cable. Roman roofing tile and pavement mortar was thrown up. In addition in 1972 due to the ravages of Dutch Elm disease several trees adjacent to the Roman site were felled and pottery, roofing tile, flue

tile and stone found in the upturned roots of one tree. He also briefly detailed pre-Roman and Roman sites in the area including arrow heads found during the re-excavation of Heronry Pond in 1905-1906 (Elsden Tuffs 1973).

Investigations began again when the West Essex Archaeological Group offered its services to the Corporation of London, which manages Epping Forest and Wanstead Park, in 1978 as part of the centenary celebrations. The then Superintendent of Epping Forest Mr. A. Qvist asked if the Group would endeavour to locate the Roman remains. Accordingly records were searched as detailed above. At this time the Forest authority was repairing Heronry Pond and were to install a pump and lay a pipeline to lift water from the Perch Pond. A detailed report on the lake system of Wanstead Park, in particular the problems associated with the Heronry Pond was produced in 1978 (Berry & Cornish 1978). Although the Group was notified of the date and Mr. F. Harvey attended, the operation was delayed and the pipe trench dug later. Much Roman material was thrown up including tile and pottery. However the opportunity to examine a section was lost. In 1983 the West Essex Archaeological Group commenced systematic excavations adjacent to the pipe line and conducted resistivity surveys (Clark 1985 pp.1-2)".

2.3.2 Late 20th century gardens and parks research

Debois Landscape Survey Group:1990

Summary of findings (extracts)

- Our first aim in this survey was to plot all the evidence of landscaping in the Park (the golf course and public park), not only as a record and an aid to understanding its history, but also to find out what there is that is worth protecting in the Park today. This evidence consisted largely of the earthworks, recorded by the Royal Commission on the Historical Monuments of England (RCHME), and shown on Plan 1.
- We combined this evidence with the plans of John Rocque (c1735 and c1745) to produce Plan 2, a schematic reconstruction of the landscape in about 1740 which can be read as a key to the surviving features of historical interest. This plan shows graphically how invaluable the work done by the RCHME will be as a tool of management.
- As a result we have distinguished for the first time between works projected and works actually carried out on the great series of plans and elevations by John Rocque. We have also been able to record for the first time the large scale of the changes brought about in the 1760's by the 2nd Earl of Tylney, and, again for the first time, the even more extensive changes carried out by William Pole-Tylney-Long-Wellesley in the early C19 (probably with the advice of Humphry Repton). This last discovery includes plotting in some detail the very rare survival of the parterre laid out by Repton off the west front of the house.
- The RCHME has also shown how widely the important earthworks are distributed through the park and how carefully therefore any replanting scheme must be monitored.

See also Sally Jeffery *The Gardens of Wanstead; Proceedings of a study day held at the Temple, Wanstead Park, Greater London, 25th September 1999* (London Parks and Gardens Trust) for detail upon the study of the 18th century and later landscape.

2.3.3 Archaeological observations in Wanstead Park

No site code 300yds north of Pails, Wanstead Park, 1715

Adam Holt/Lord Tilney.

A mosaic was discovered in the course of the digging of holes for the planting of an avenue of trees. Roman building material and pottery also found.

No site code 300yds north of Pails, Wanstead Park 1746

Lord Tilney.

Further work in vicinity of site of mosaic revealed Roman artefacts.

No site code Digging of Heronry Pond. c.1900

Excavations to lay a concrete lining for the Heronry Pond are said to have revealed some flint arrowheads and other small flint tools. These were presented to the Mayoress. There is no further record of them.

No site code North-east of Perch Pond, 1962 and 197*

J Elsdon Tuffs.

Two main campaigns of archaeological excavation were carried out on the north side of the Perch pond, Tuffs (at various times between 1947 and 1972) and Clark (1983 to 1989). Both campaigns failed to locate the remains of the villa buildings *in situ* but large quantities of redeposited building materials were found, including *tesserae*, painted wall plaster (in very good condition) and other ceramic building materials. The stratigraphy could not be properly understood, the scale of excavation being so small, and Clark believed that there was the likelihood that one at least of his trenches might have discovered a tree planting hole (pers. Comm. F Clark 2006). There is no doubt that Roman archaeology representing a domestic building, at least, is in the immediate vicinity and traces of this can still be seen eroding from the north bank of the Perch Pond.

Other excavation to the south and outside of the Park – in the area of the allotments - by Tuffs (c.1962) revealed traces of Roman occupation, which could not be properly determined. There was no evidence of a substantial building

GM448 North-east corner of Perch Pond, Wanstead Park, 1962

J Elsdon Tuffs.

Finds from this site included sherds of coarse ware and Samian ware, sections of flue and plain tiles and tesserae.

WT-TP92 Temple Pond, Wanstead Park, 1992
Passmore Edwards Museum.

A post-medieval pond was investigated to establish its size and nature. It appeared to have been ground-water fed and was backfilled in two Work Phases in the 19th and 20th century. (London Archaeologist Round-up 1992)

WT-GR93 The Grotto, Wanstead Park, 1993
Newham Museums Service.

A small trench was excavated in the south part of the former boathouse which was part of the 18th century grotto. It revealed the internal arrangements of the entrance at the south end of the boathouse and some evidence for the sequence of construction and remodelling of the structure during its lifetime. (London Archaeologist Round-up 1993)

WT-PP95 Waterpipeline, Wanstead Park, 1995
Newham Museums Service.

A watching brief along the pipeline trench and at the pumping station recovered unstratified Roman, medieval and 19th/20th century finds, particularly building material and including a coin of the House of Constantine AD 330-335. Pits and deposits of the post-medieval period until the 19th-20th century were recorded. (London Archaeologist Round-up 1995)

GWP97 The Grotto, Wanstead Park. 1997 and 1998
Museum of London Archaeology Service.

A survey and reconstruction drawings of the ruined Grotto were carried out. Situated at the S end of Perch Pond, it was originally constructed as a boat-house, with chambers above for a boatkeeper, within the park of Wanstead House (rebuilt in 1781). A fire caused substantial damage to the Grotto in 1884 and more recent erosion, robbing, and vandalism have caused widespread damage, leaving the building very ruinous. The E wall of the boat-house dock, uncovered in previous excavations, was re-surveyed. ((London Archaeologist Round-up 1997)

Work in 1998 involved the excavation of the boat dock begun the previous year (LA 8, supp. 3 (1998), 95) and the evaluation of small areas across the entrance passage to the S of the boathouse and in the causeway E of the lakeside entrance to the dock. The entire length of the surviving 18th century dock structure was revealed; it is constructed of red bricks, has a shallow concave base with low vertical walls on either side rising to a curved wall at the S end. The E and W causeways were constructed as raised platforms on brickearth packing above a stepped brick form work; the surfaces were of pebbles or stone respectively. A probable landing stage of blue/black marbled stone was located at the front edge of the W causeway. More of the gravel surface within the boathouse, partially recorded in 1993 (London Archaeologist Round-up 7, 8 (1994), 211 (WT-TG 93)), was exposed; it was found to be continuous, with a substantial path constructed between two dwarf walls of roughly dressed stone extending through the entrance. On the opposite bank of the Ornamental Water at the water's edge, the brickwork for the N bridge abutment was exposed when the water level had been lowered. Photographs taken

during dry weather conditions in the past have shown evidence of piers for the bridge, and stone debris extending across the bed of the lake towards The Grotto. (London Archaeologist Round-up 1998).

WPK99 The Temple, Wanstead Park, 1999
Essex County Council Field Archaeology Unit.

An evaluation was carried out on the W, N and E sides of the temple to provide information to assist in its restoration. The temple was built in the mid-18th century during landscaping of the grounds of Wanstead House, following its latest rebuilding in 1715. The mansion was demolished in 1824, but the temple survives as a feature of the park, built in classical mock-Tuscan style with a central portion and W-facing portico flanked by wings of plainer design extending to N and S. It was found that the N wing and the central part of the building appear to have been of one build. A timber extension to the N wing, built in the 19th century on low brick sleeper walls and demolished in the 1950s, was located. The mound in front of the temple had not substantially changed from its original form, and had been consolidated by turving over when new. The original gravel path running along the W frontage was also recorded. The existing gravel surface to the E (rear) of the temple had a relatively modern brick rubble base, the original surface having probably been destroyed. (London Archaeologist Round-up 1999).

WND01 The Temple, Wanstead Park, 2001
LH/Compass Archaeology

The Temple is part of the mid-18th-c historic park of Wanstead House (rebuilt in c. 1716). A mock-classical building, it lies behind an artificial mound which was formed at the same time and as part of the same design as the Temple. The location of the original edge of the mound was located; it is dated to the mid-18th century. Residual Roman tile fragments were also found; these may relate to Roman features recorded in the area in the 18th century. (London Archaeologist Round-up 2001).

TWN02 The Temple, Wanstead Park, 2002
Museum of London Archaeology Service.

An evaluation took place to ascertain the location of and details about a former pond known to have existed until the late 19th -early 20th centuries, so that it may be reinstated. Part of a brick slipway into the pond and part of the pond lining, probably dating to the 18th or 19th centuries, were found above the natural gravels. An 18th-c circular brick structure, probably an ice house and broadly contemporary with the Temple nearby, was also recorded. (London Archaeologist Round-up 2002).

No site code The Plain, Wanstead Park
GSB prospection Limited for Thames Water.

In October 2005, Thames Water, in response to concerns from the public over plans to install a pipeline across the site of the Roman Villa marked on the OS map, commissioned GSB Prospection to undertake a limited geophysical survey of a 3ha area covering the supposed site of the Roman Villa. This 5 day survey was undertaken in very wet weather conditions and the bulk of the survey was by magnetometry with smaller areas surveyed using GPR and resistivity.

GSB concluded there was no obvious evidence of any structure in the area of concern although the wider survey revealed a pair of potential ring ditches, 10m and 20m in diameter. The majority of anomalies lacked the kind of characterising form that would allow precise interpretations to be made, with nothing that appeared to represent wall lines or foundations.

Given that it is known that the area surveyed was extensively landscaped in the early 18th century and the ground level could have been raised by as much as 2 metres, GSB's conclusions were not entirely unexpected. GSB carried out only a brief GPR survey of the area to a depth of only 1.5 metres so a more careful survey to greater depth would certainly be worthwhile.

In brief their final, but unpublished, report results are as follows (extract from unpublished Thames Water Survey results)-

“There appear to be few, if any, detectable archaeological remains around the present borehole. To the west of the current pump housing there are some high amplitude GPR responses that, although lacking any characterising form, may be of significance. This is close to where Roman remains were found in the 1960s excavations but the adjacent wooded area means that these responses could conceivably be associated with a dense root mass.

The wider survey has shown a pair of potential ring ditches, 10m and 20m in diameter. There also appear to be a number of linear ditch-like features associated with these. Other anomalies in the main survey area appear to relate to modern intervention and landscaping or natural features. The majority of anomalies lacked the kind of characterising form that would allow precise interpretations to be made, with nothing that appeared to represent wall lines or foundations.

In the northeast of the park, a possible former footpath has been detected along with a wide but shallow spread of high amplitude GPR anomalies. The archaeological potential of these anomalies is not thought to be high.”

2.3.4 Archaeological observations in vicinity of Park and within Parklands

WT-SR90 M11 Link Rd, Seagry Road, 1990

Passmore Edwards Museum.

Evidence for late 18th century improvement schemes in the form of a mole drain were discovered, as well as some undateable cuts. (London Archaeologist Round-up 1990).

WT-GG90 George Green

Passmore Edwards Museum.

No summary available.

WT-BH90 M11 Link Rd, Blake Hall Road, 1990

Passmore Edwards Museum.

Evidence for late 18th century improvement schemes in the form of a mole drain were discovered, as well as some undateable cuts. (London Archaeologist Round-up 1990).

WT-TG91 The Green, 1991

Passmore Edwards Museum.

No summary available.

WT-OD92 Overton Drive, 1992

Passmore Edwards Museum.

The area had been substantially disturbed in the 20th century. (London Archaeologist Round-up 1992).

NTV98 Emergency Control Centre (former), Northumberland Ave.

Pre-Construct Archaeology.

Natural deposits were not observed and the site had been severely truncated by the building of the centre. (London Archaeologist Round-up 1998).

3 The evaluation

3.1 Work Phase 1 – Geophysics and Auger survey

3.1.1 Geophysics methodology

Geophysics Equipment.

Bartington 601-1 gradiometer system, funded by WPCP's HLF grant.

MALA RAMAC X3M Ground Penetrating Radar system with 500MHz antenna, loaned by the University of East London

TR/CIA Resistivity Meter, owned by WEAG, funded by the London Borough of Redbridge Arts Council

As mentioned above, in October 2006 a limited geophysical survey undertaken by GSB Prospection for Thames Water showed that although the terrain was not terribly conducive to standard geophysical techniques some surprisingly good results could be achieved. Magnetometry revealed many features of archaeological interest in particular two large circular features on the central, south part of the Plain that might predate the Roman period. However magnetometry failed to show anything clearly indicating Roman structure, or at least not in the immediate vicinity described by Elsdon Tuffs and Clark. This is most probably due to the thick overburden of eighteenth landscaping material in this particular vicinity. If the two circular features are indeed pre-Roman, recorded at a high level by magnetometry, their location might give an indication of the contours of the pre-landscaping surface of the Plain and that the upcast from the digging of the lakes was used to level off a slope in this area.

GSB Prospecting used GPR over a very limited area, but possibly due to prolonged and torrential rain at the time of the survey, this failed to reveal any significant archaeological remains.

However given the possibility that any archaeological features could have been capped by as much as 2 metres of overburden during the construction of the lakes and extensive landscaping between 1735 and 1745, it still seemed likely that GPR held the most potential to locate anything.

In February 2007 a new MALA RAMAC X3M GPR system, equipped with a 500MHz antenna, was made available on loan from the University of East London. It has to be admitted that at the start the project team had little experience in survey methods, operation, data collection and most importantly analysis and presentation so a rapid self learning exercise was embarked upon and we would like to record our thanks to Dr Tim Dennis, University of Essex, for his patient supervision of our early efforts.



Figure 2. Survey layout plan.

The first outing with the GPR in Wanstead Park highlighted many of the practical difficulties in particular the need to avoid being over ambitious with the survey area, quality of data being more important than quantity, and the need to gather data in a way that can be best handled by the analysis software.

At the third attempt a smaller area of relatively flat ground was chosen with the aim of gathering good quality radargram data and to assess the repeatability of the system by surveying part of the same area at 90 degrees. The area was chosen largely for its convenience but it was located just north of the supposed location of the villa. GSB's magnetometry survey had shown the area to be devoid of any significant archaeological interest however they had not surveyed this area with GPR.

This use of geophysics equipment with a community project identified a number of key issues that were presented to a professional forum for discussion (Environmental and Industrial Geophysics Group, 8th Meeting on Recent Work In Archaeological Geophysics, 16 Dec 2008, The Geological Society, Burlington House, London, UK), namely:-

- training was recognised as essential but this proved to be impossible to procure.
- an alternative “teach yourself” approach was adopted, using the instrument manuals, a variety of books on the subject and holding several practice sessions with obvious limitations.
- the lack of experience meant that the survey proper began with the instruments being set on safe factory defaults and not particularly well optimized for local conditions.
- differences in operator ability was most noticeable in the magnetometer survey, in particular the preliminary balancing process when it would take some much longer to complete the process and some unable to do it at all
- processing the collected data proved to be most frustrating. The resistivity data was relatively straight forward using supplied interface software and a photo editor to enhance the image. The magnetometry data proved more difficult largely due to noise to signal ratio and lack of understanding of the filtering required. Professional support came from Dr Tim Dennis (University of Essex).
- processing the ground penetrating radar data was most challenging largely because of the three dimensional data filtering required.
- interpretation of the survey images has predictably been controversial.
- the project has generated large volumes of valuable data that needs to be archived for future reference. This process lacks proper professional guidance

Given these issues and drawbacks, it is commendable that so much was achieved by the WPCP and WEAG.

The first survey area was 35m approximately NS by 14m WE constrained by a row of trees to the W and areas of scrub to the N, S and E. It was located to the immediate north-easts of the refreshment kiosk. During the survey it was evident from the real-time radargram display that there was a great deal of “activity” in the data. This was not

considered surprising at the time given the extent of the early eighteenth century landscaping. However when the data was processed, using MALA's Easy3D visualisation software, it was possible to identify solid features running parallel and perpendicular to each other. It was even more pleasing to see the same features were also clearly evident on the second survey. The processing involved applying various filters to enhance the output and a three-dimensional visualization was generated that allowed animated horizontal slices to be viewed.

The actual depth of the feature was uncertain as the velocity of the radio waves travelling through different soil types with different moisture content can vary considerably and the velocity assumed by the software was a preset default value. There is no known non-invasive method of determining the real depth which might in fact be anywhere between 1.5 and 3 metres.

The findings were validated by independent experts. Dr Tim Dennis from Essex University and Dr Dean Goodman from the Geophysical Archaeometry Laboratory in California kindly agreed to undertake a blind analysis of the raw GPR data. Both experts agreed the quality of the raw data, processing and presentation was good and were able to show the same features of interest using their own processing software. The independent reproduction of the findings provided reassurance that the observed structure was real.

Based upon the success of this initial survey, the geophysics programme was extended across the entire area of the Plain. A grid was established and both magnetometry and GPR were undertaken across the area. Due to the presence of anthills, however, the GPR survey was less extensive than the magnetometer survey.

3.1.2 Geophysics results and interpretation - summary

3.1.2.1 Magnetometer

General Summary

Most obvious features are rows of high magnetic responses in pairs spaced about 13m apart. These are iron sockets for tennis net posts last used about 1935. There are three strong linear features, probably power cables, radiating from the refreshment kiosk (the blue roofed structure, bottom centre of image). West of the NS central path there is a faint outline of a large rectangular feature with inner features on the same alignment. East of the NS path and just north of the Perch Pond, two circular features are evident, the larger about 20m diameter. One of several diagonal linear features is tangential to the larger circle. Two very large responses appear in the NW quadrant. Subsequently the 20m grid containing Trench 4 was resurveyed revealing more detail of the larger circular feature. Consequently there may be a case for removing the other highlighted objects to reveal even more detail of not only both circular features but other areas of the Plain.



Figure 3. Magnetometer survey 1 x 0.25m, 20m transects, SN zigzag progressing E, -2 to +3nT, dark positive (processed by Dr Tim Dennis, University of Essex)

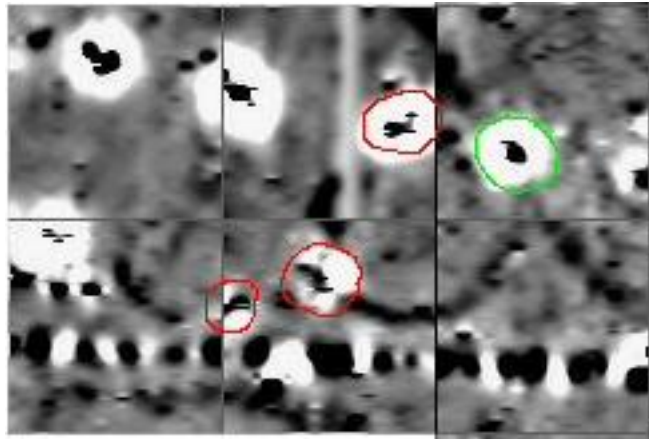


Figure 4. This shows the circular features in the south-east corner of study area in greater detail. The strong linear feature across the bottom of the image is a power cable. Highlighted responses are iron sockets for tennis net posts. The green circle marks the position of Trench 5 when this socket was exposed and removed



Figure 5. Tennis net post socket exposed in Trench 5



Figure 6. Tennis net post socket removed

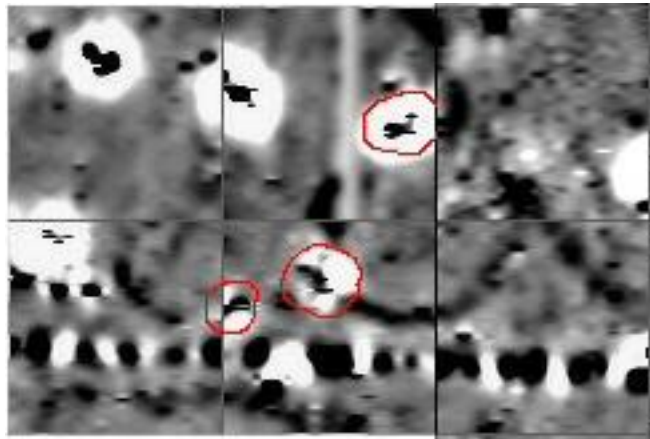


Figure 7. Magnetometer survey – detail of south-east corner of study area showing circular features, resurveyed following the removal of tennis post socket in Trench 3. Compare with Figure 4

3.1.2.2 Ground Penetrating Radar

General Summary

The greater definition of the GPR image shows the rectangular feature to be a double linear extending southwestwards towards and under the Heronry Pond (see Figure 9). At its north-east end it appears to curve towards the east. Also on the north side of the Heronry Pond just to the immediate east of the double linear feature, there is a smaller complex of rectilinear features on the same alignment – these appear to form a double-ditch enclosure.

North of the Perch Pond is an area of considerable detail (see Figure 10) where on a larger scale many point reflections arranged in circles and lines are evident. In the NW corner a 5m diameter circle appears. Large anthills prevented GPR survey of the two circular features found in the magnetometer survey.

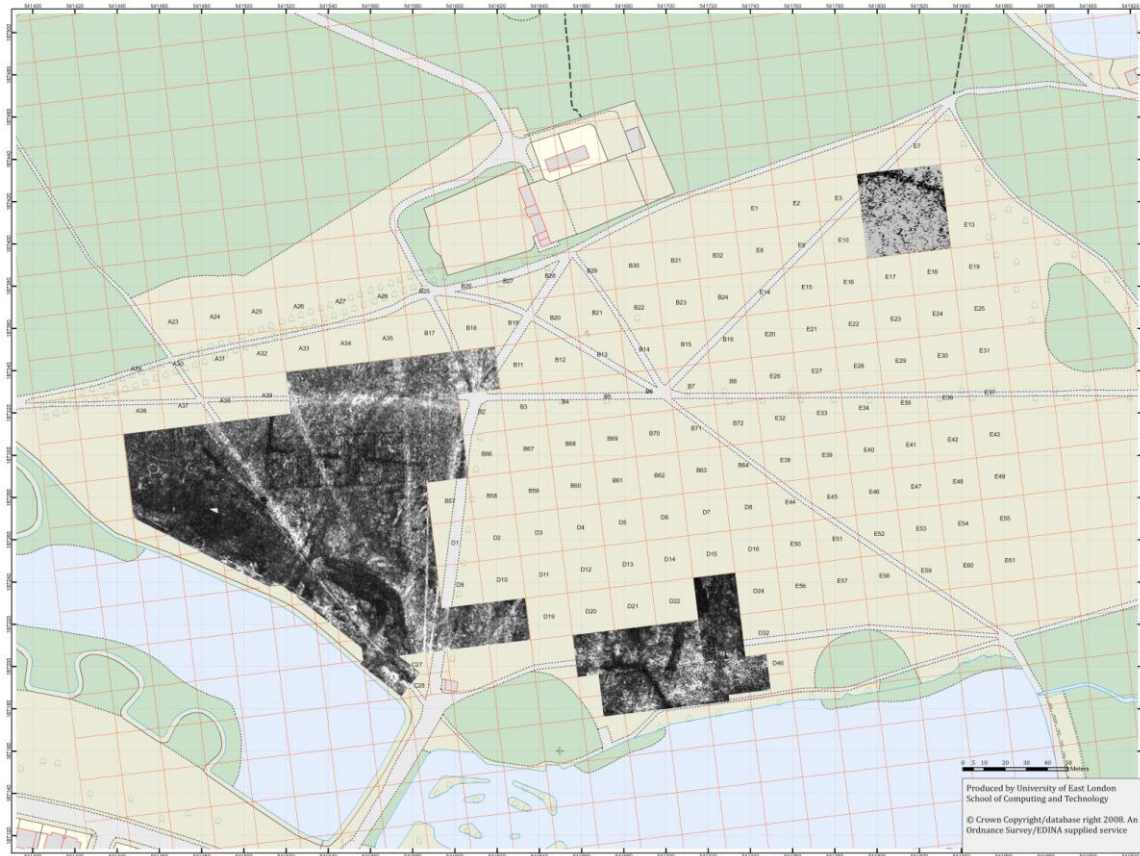


Figure 8. Ground Penetrating Radar survey 0.5 x 0.05m, 20m transects, SN zigzag progressing E, samples 512, sampling frequency 5000MHz, time window 100ns, time slice at approximately 40ns (processed by Dr. Tim Dennis, University of Essex)

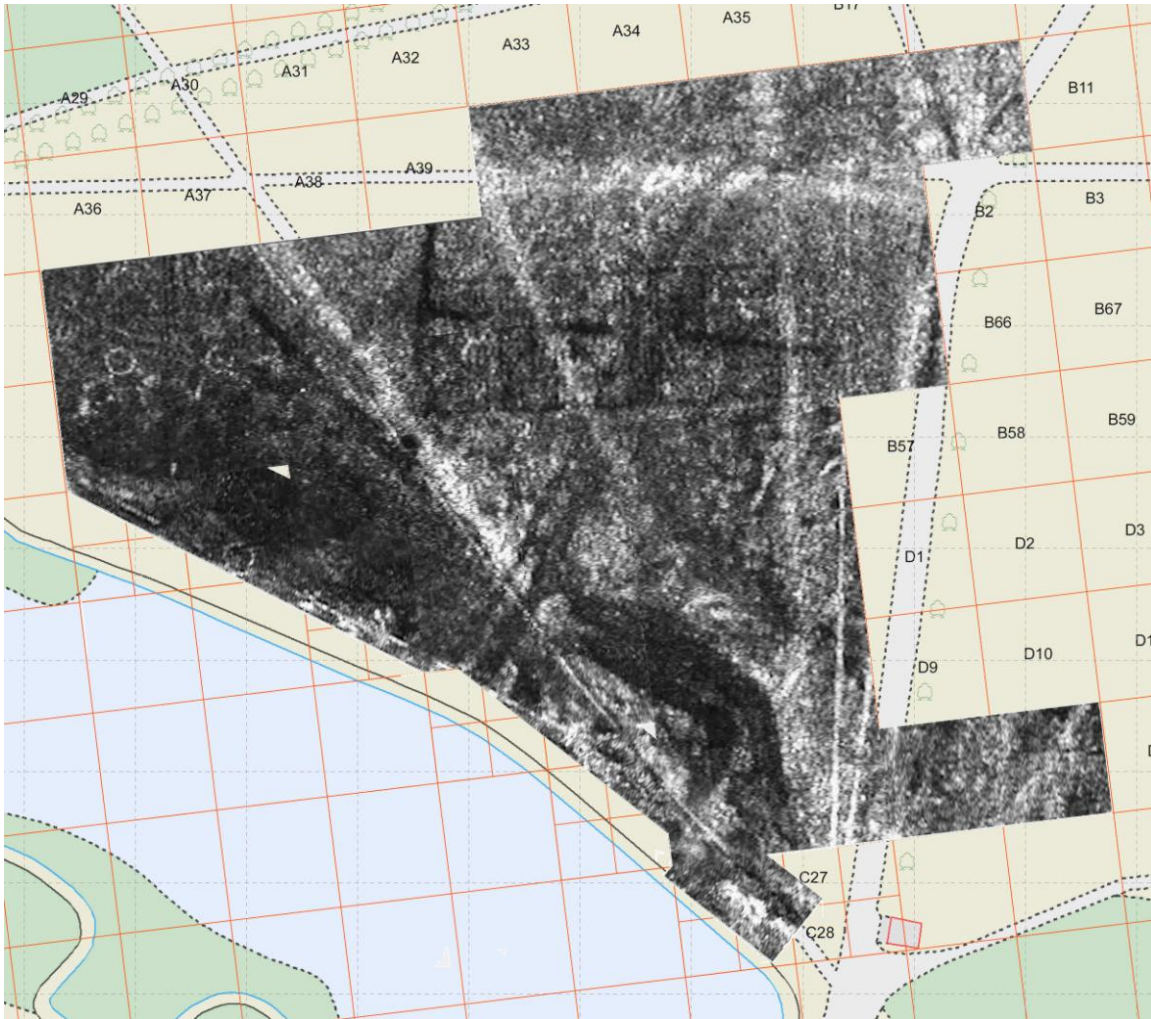


Figure 9. Detail of Figure 8. showing west side of the Plain

Figure 9, showing a detail of the west side of the Plain, shows the power cables radiating from the refreshment kiosk. Also visible are the tennis courts and underlying linear features – one approximately running north to south and a second perpendicular to this. The origin of these is not certain. There is no record of them being WWII feature – it is possible that they could be related to an earlier garden layout for which we have no plan. It needs to be investigated. There seems to be another connected linear feature running diagonally to the south-west of these linear features. The long parallel feature can be seen turning at the northern end. In this view it seems less likely to be connected to the double rectangular feature that appears to disappear under the lake. On the western side of this image there are at least five circular features with centre objects arranged in rectangular pattern that may be containers for early tree planting.

Figure 10 shows two circular arrangements of postholes bisected by a dark linear feature (two squares south of D21). This linear feature turns west and appears to form the corner of an enclosure.

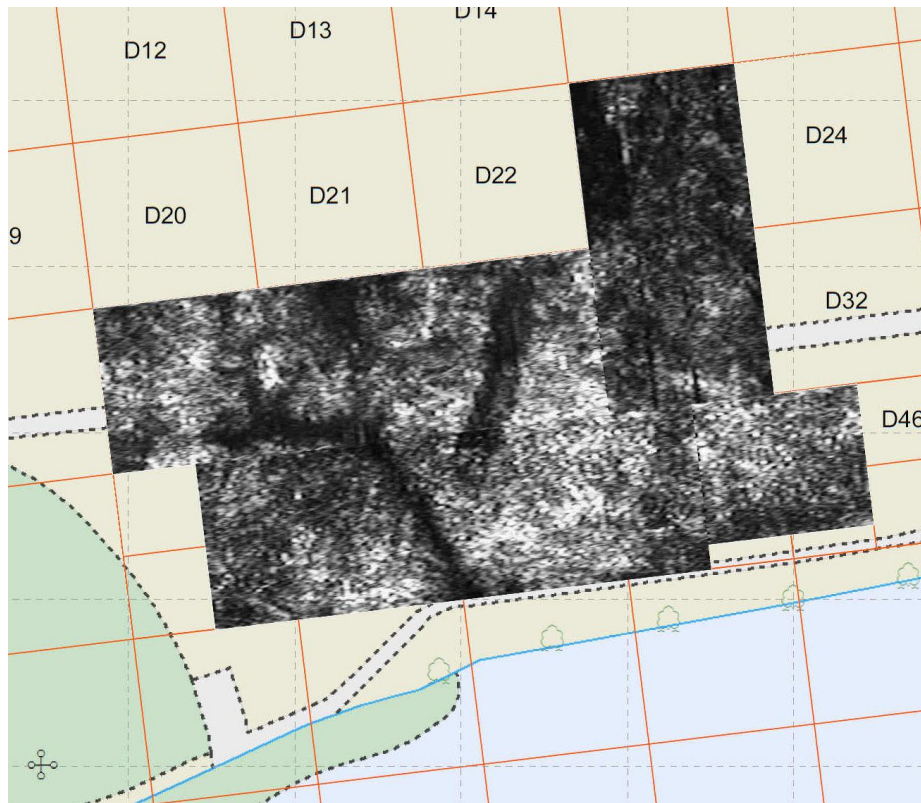


Figure 10. Detail of Figure 8. showing east side of Plain just north of the Perch Pond.



Figure 11. This Google Earth image shows the relative location and scale of the circles of postholes north of the Perch Pond

3.1.2.3 Resistivity

General Summary

The outlines of numerous tennis courts can be seen in great detail. To the west of the north to south central path a strong linear feature underlies the tennis courts – this is described above in the section on GPR – it is unlikely to be WW2 in origin. It is possibly part of an unrecorded garden layout. Fainter underlying features generally aligning with features seen in the GPR and magnetometer surveys can be seen. Density and size of anthills restricted access to other areas. Interference from a buried power cable darkened and obscured detail in the triangular area north of the Heronry Pond.



Figure 12. Resistivity survey 1 x 1m, 20m transects, twin probe configuration, 0.5m probe spacing, SN zigzag progressing E, ohms range 100 to 1000 Dark low resistance



Figure 13. 1947 view of the Plain showing crop marks of the tennis courts before the area became inundated with anthills

3.1.3 Auger survey methodology

The methodology follows English Heritage guidelines for auger/borehole surveys (EH 2002; 2004). Three auger holes were drilled across the west side of the Plain in a north-south pattern, 15m apart. A fourth was located to the north-east of the refreshment kiosk on the south side of the Plain.

The four auger holes were drilled and recorded by a team of two MOLA Geoarchaeologists using a Cobra pneumatic hand-held power auger fitted with various diameter window-sampling bits.

Each auger hole was drilled into the surface of Pleistocene gravels. The deposits brought up in each window sample were cleaned and described according to standard geoarchaeological practice (which attempts to characterise the visible properties of each deposit, in particular relating to its colour, texture, compaction, bedding, inclusions, clast size and dip). The depths and nature of interfaces were noted and a provisional on-site interpretation made of what each deposit represents, its origin, depositional environment and any post-depositional processes that may have impacted upon it. No artifacts were recovered

The auger hole locations were marked and, at the end of the survey, the locations and levels of the holes were recorded by the MOLA Geoarchaeologists. The Auger hole locations were transformed onto the OS Grid and recorded depths converted to heights measured in metres above Ordnance Datum.



Figure 14. The power auger in use.

3.1.4 Auger survey results and interpretation

3.1.4.1 Auger hole 1

Ground level at 15.01m OD

Depth below Ground (m)	Description	Interpretation
0–0.05	Loose dark brown humic silty clay	Topsoil horizon
0.05–1	Friable light tan brown fine sandy silty, with moderate root fragments, occasional poorly sorted small to medium sized rounded, sub-rounded and sub-angular gravel clasts. Occasional charcoal flecks. Becomes more mid orangey brown in colour with depth	Redeposited brick earth and terrace gravel material possibly associated with 18th century landscaping and pond construction
1–1.3	Soft mid orangey brown clay with some fine sand within the matrix	
1.3–1.7	Soft dark to mid orangey brown clay with some fine sand within the matrix. Moderate quantities of small to medium rounded, sub-rounded and sub-angular gravel clasts	
1.7–1.95	Compact light tan brown sandy clay, with moderate quantities of small to medium sub-rounded and sub-angular gravel clasts. Sharp contact with unit above	Possible Pleistocene soliflucted deposit. Sharp contact with unit above suggests truncation
1.95–2.42	Compact mid orangey brown coarse sand and gravel with light grey lenses of redeposited London clay	Taplow gravel terrace



Figure 15. Auger sample 1

3.1.4.2 Auger hole 2

Ground level at 14.84m OD

Depth below Ground (m)	Description	Interpretation
0–0.10	Loose dark brown humic silt	Topsoil
0.10–0.68	Loose light tan brown fine sandy silt with frequent small to large rounded and angular gravel clasts	Redeposited brick earth and terrace gravel material possibly associated with 18th century landscaping and pond construction
0.68–1	Compact mid orangey brown coarse sand and gravel. Sand lens between 0.85 and 0.92m below ground level	Taplow gravel terrace



Figure 16. Auger sample 2

3.1.4.3 Auger hole 3

Ground level at 14.41m OD

Depth below Ground (m)	Description	Interpretation
0–0.10	Loose dark brown humic silt	Topsoil
0.10–0.92	Loose light tan brown fine sandy silt with frequent small to large rounded and angular gravel clasts	Redeposited brick earth and terrace gravel material possibly associated with 18th century landscaping and pond construction
0.92–1.25	Firm mid orangey brown sandy silt with frequent small to medium angular and sub-angular gravel clasts	
1.25–1.35	Very compact mid orangey brown silty clay, with occasional greyish mottling. Sharp interface with unit above	Fine grained Pleistocene deposit possibly deposited as loess or in a fluvial environment.
1.35–1.50	Compact mid orangey brown coarse sand and gravel.	Taplow terrace gravel



Figure 17. Auger sample 3

3.1.4.4 Auger hole 4

Ground level at 14.42m OD

Depth below Ground (m)	Description	Interpretation
0–0.10	Loose dark brown humic silt	Topsoil
0.10–0.45	Loose light tan brown fine sandy silt with frequent small to large rounded and angular gravel clasts	Redeposited brick earth and terrace gravel material possibly associated with 18th century landscaping and pond construction
0.45–0.70	Compact mid orangey brown coarse sand and gravel.	Taplow terrace gravel



Figure 18. Auger sample 4

3.2 Work Phase 2 – Trenches 1 to 6

3.2.1 General comments and methodology

The combined results of the geophysics programmes and the auger survey demonstrated that, although there was a lot of detail beneath the surface of the Plain we were lacking empirical data to interpret what this information meant. It was decided, upon application to the City of London for permission, to carry out a limited programme of evaluation excavation. This was in the form of three four by one metre trenches (Tr. 1, 2, 3, 5 and 6) and a single one by one metre sondage (Tr.4).

The trenches were located and aligned on the grid at points that intersected known geophysical anomalies. They were hand-dug, all excavations being carried out during periods of good weather. All the work in each trench was completed in a single day and backfilled the same day. Finds were recorded by single context and retained for further study.

3.2.2 Trench 1 results and interpretation (Figures 19 and 20)

Location	The Plain, central
Dimensions	3m x 1m, aligned north-south
Level at top	N end: 14.538m OD. S end: 14.444m OD
Highest level of natural surface	Approx 14.10m OD across trench
Max. thickness of deposits above natural	400mm

Trench 1 was located to the immediate north-west of the refreshment kiosk. Its purpose was to examine the geophysical anomaly seen in the first ground penetrating radar survey conducted early in 2007. The position of the trench overlay the southern part of the anomaly and was hoped to intersect it in two places.



Figure 19. Trench 1 after removal of turf showing top of redeposited gravel

Natural gravel was seen at approximately 14.10m OD. This was made up of compact gravels with interleaved beds of sand and grit. At the south end of the trench, a band of firm brown sand running obliquely across the trench coincided with the position of the geophysical anomaly



Figure 20. Trench 1 showing natural gravel and diagonal firm brown sand layer, Note shallow depth of trench

Above natural gravel was a 400mm thick layer of gravel intermixed with a dark grey silty soil (c. 80% gravel). This contained a few sherds of ceramics and some brick or tile fragments. Pottery included post-medieval forms and fabrics (e.g. stoneware). This layer can be interpreted as the 18th century overburden from the excavation of the lakes and the landscaping of the Plain. The shallow depth of this layer was a surprise. It was anticipated that there would be a considerable thickness of 18th century overburden.

In summary, no archaeological features were recorded other than the 18th century overburden. It is possible that the gravel seen was not the natural surface, although this is unlikely. The gravel was over-cut in one place and showed little change, other than natural lenses of sand, for almost 300mm.

3.2.3 Trench 2 results and interpretation (Figures 21 and 22)

Location	The Plain, west
Dimensions	3m x 1m, aligned north to south
Level at top	N end: 15.037m OD. S end: 14.772m OD
Highest level of natural surface	Approx 15.60m OD at north end
Max. thickness of deposits above natural	400mm

Trench 2 was located on the west side of the main north to south path across the Plain, on a slight east-west aligned ridge. Magnetometry and GPR indicated the presence here of anomalies. The trench was only partially excavated.



Figure 21. The west side of the Plain showing the relative positions of Trench 2 (right) and Trench 3 (left)

Natural gravel was seen at the north end of the trench at approximately 15.60m OD. This consisted of very loose orange/brown gravel with only a few bands of sand. At the southern end of the trench, a layer of slightly darker gravel and silty loam suggested possible archaeological activity. A few sherds of pottery, including one Roman sherd, came from this layer.

This was overlaid by an approximately 400mm layer of light gravel and grey silt overburden which contained brick and tile as well as sherds of post-medieval ceramics, This is evidently part of the 18th century landscaping of the Plain.

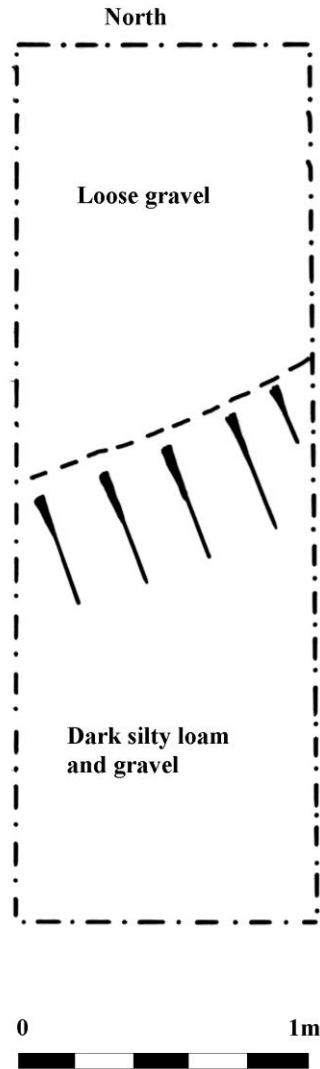


Figure 22. Plan of Trench 2

3.2.4 Trench 3 results and interpretation (Figures 23 and 24)

Location	The Plain, west
Dimensions	3m x 1m, aligned east to west
Level at top	W end: 14.82m OD. E end: 14.774m OD
Highest level of natural surface	13.40m OD
Max. thickness of deposits above natural	2000mm

Trench 3 was located on the west side of the Plain at a point where the site grid intersected the large south-west to north-east running anomaly seen on both the magnetometry and GPR.

Natural orange/brown gravel was seen deep in the eastern side of the trench, approximately 1.50m below the ground surface. This was not flat but sloped downwards with a straight edge. This was mirrored by a similar slope on the other side of the trench. It would appear that this represented the two sides of a ditch. The secondary fill (layer 2) consisted of dark gravel with no finds whatsoever. Deep in the feature, in a layer of very dark gravel (layer 3) however, there were sherds of coarse pottery. Two fabrics were evident: one, a coarse shell-tempered pottery, can be broadly dated as anything from the Iron Age to the Early medieval; the second, a grog tempered ware, is more typical of Late Bronze Age or Early Iron Age ceramics from this region.

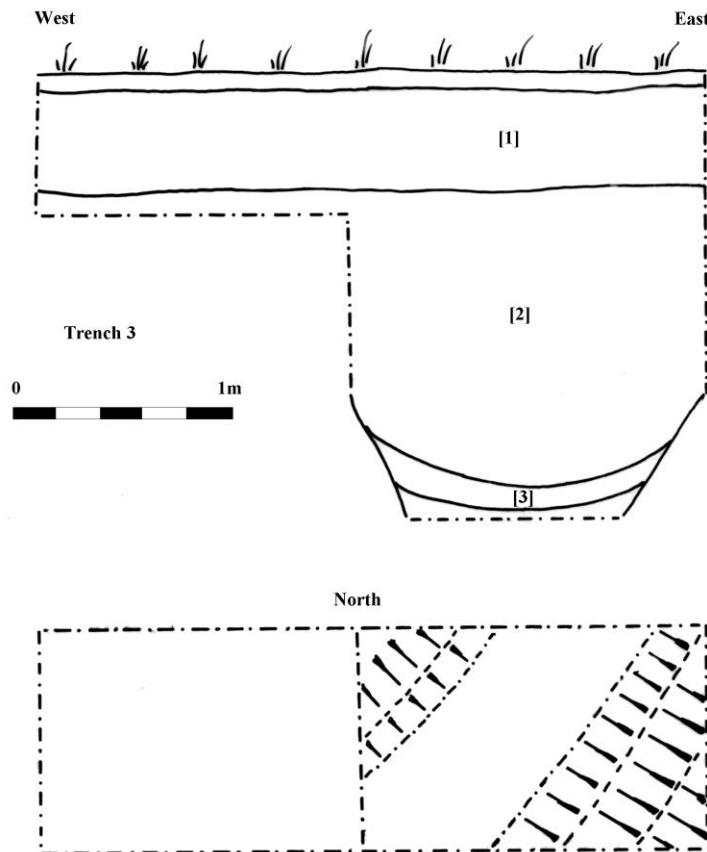


Figure 23. Section and plan of Trench 3.

It would appear, therefore, that the linear feature is a ditch of Late Bronze Age or early Iron Age date. The absence of any Roman brick and tile fragments, a frequent find in the trenches to the south-east, perhaps confirms the pre-Roman date of this feature. However, it should be noted that this trench was the farthest from the concentration of Roman activity around the Perch Pond. The trench was too small and narrow to allow a more detailed study of this feature. The small parts of the ditch sides that were seen suggest that it was well-cut with steep straight sides. The absence of erosion of the gravel cut might also suggest that the ditch was not open for too long. However, this is inconclusive.

The dark gravel at the base of the trench was the deepest deposit that could be examined safely. It is not certain if this is a primary fill of the ditch or a later deposit.



Figure 24. Sherds of grog-tempered LBA/IA date (top) and shell tempered pottery below from Trench 3

The fill of the ditch (Layer 2) was sealed by a grey silty gravel layer, which contained brick and tile fragments (Layer 1). This would appear to be the ubiquitous 18th century landscaping layer seen elsewhere on the site.

3.2.5 Trench 4 results and interpretation (Figures 25 to 27)

Location	The Plain, east
Dimensions	1m x 1m, aligned on grid
Level at top	
Highest level of natural surface	
Max. thickness of archaeological deposits	1500mm

Trench 4 was a one square metre sondage located over the position of a tennis post socket. It was also hoped to dig beneath this socket to examine part of one of the round features seen in the magnetometry survey.



Figure 25. Trench 4 under excavation looking north-west. Note the sloping gravel behind the excavator.

Natural gravel was first seen at 400mm below the ground surface in the north-east corner of the sondage. The surface of the gravel sloped towards the south-west, evidently the sloping side of a cut feature. The fill of this feature and the material above the highest level of the gravel was of a uniform mixed gravel and silt (80% gravel). Small fragments of brick and tile were found throughout this layer but of special interest is a small sherd of Samian ware that came from the fill below the top level of the natural gravel, therefore probably coming from the fill of the feature itself. Other coarse pottery was found, none of it diagnostic by form or date.



Figure 26. The bottom of Trench 4 looking north. Natural gravel at the base with archaeological deposits above.

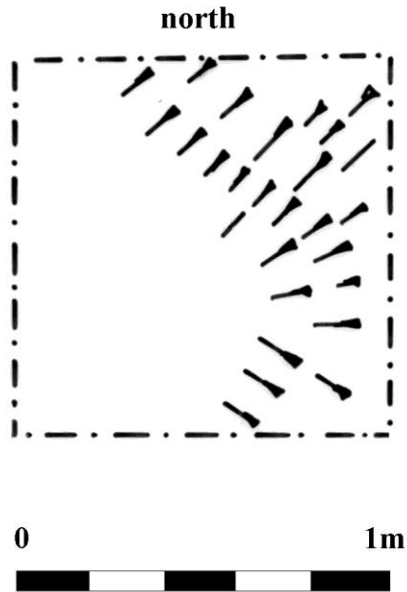


Figure 27. Plan of Trench 4

3.2.6 Trench 5 results and interpretation (Figures 28 and 29)

Location	The Plain, east
Dimensions	3m x 1m, aligned east to west
Level at top	W end: 14.66m OD; E end: 14.62m OD
Highest level of natural surface	14.44m OD in centre of trench
Max. thickness of archaeological deposits	400mm

Trench 5 was located on the east side of the Plain, in the vicinity of one of the round features seen on the magnetometry survey. It was aligned east-west and measured four by one metres. The aim of the trench was to locate any linear features in this area and to try to recover dating evidence from them.

Three shallow ditches (Features 3, 5 and 6 – all aligned north to south), were recorded. These contained few finds but those that survive suggest the features are Roman or later in date.



Figure 28. Trench 5 looking south-east showing Feature 3 behind the scale, Feature 5 in the centre and the larger Feature 6 in the foreground

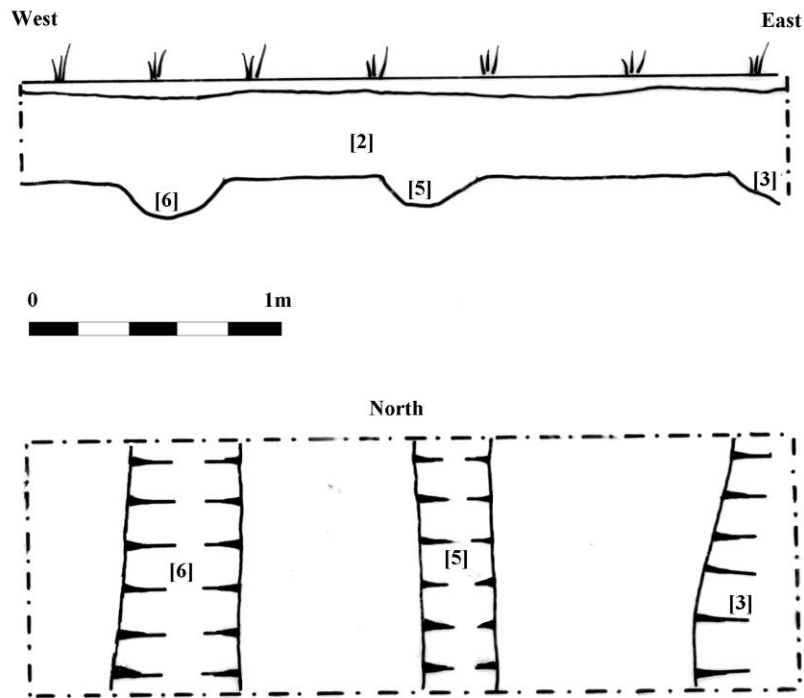


Figure 29. Plan and section of Trench 5

3.2.7 Trench 6 results and interpretation

Location	The Plain, central
Dimensions	3m x 1m
Level at top	
Highest level of natural surface	
Max. thickness of archaeological deposits	250mm

A trench was cut along the trackway leading from the path alongside the refreshment kiosk towards the Perch Pond. This was located among the undergrowth to the south-east of the kiosk. It was hoped to reveal some of the earlier discoveries made by Tuffs and Clark. A shallow overburden, approximately 300mm thick, of grey silty gravel was recorded, containing brick and tile of Roman and post-medieval date. The gravel beneath this, 200mm thick, also contained a few small fragments of brick and a single sherd of black burnished ware, suggesting that this gravel had been redeposited. No other features were recorded.

3.3 Work Phase 3 – Trenches 7 and 8**3.3.1 General comments and methodology**

Work Phases 1, the geophysics and auger survey, and Work Phase 2, evaluation trenches, produced valuable information about the nature of archaeological survival on this site. The results of the two were, however, somewhat contradictory. Whereas the geophysics showed there to be an extensive archaeological landscape beneath the surface of the Plain, the evaluation trenches revealed little of this. This might, in part, be due to the small size of the trenches. Both Trenches 3 and 5 cut deep into the fills of ditches which made it difficult to complete and determine the size and scale of the features. Also, Trench 4 revealed three shallow features. Archaeological features did exist, therefore, but it was hoped to recover better information from a brief, intense campaign of fieldwork focusing on one particular area of the site – the north side of the Perch Pond.

Geophysics in the area, in particular GPR (see Figure 10), had revealed a number of interesting targets, which deserved further attention. The most important of these was a large feature, probably a ditch, which ran from the south east beneath the pond and ran north-west where it turned westwards. Adjacent to this ditch are two clusters of what appeared to be pits or postholes. The GPR suggested these were in a circular fashion, but this might be deceptive.

A new licence was successfully applied for from the City of London and the work was conducted on the weekend of 25/26th July 2009. This coincided with the Council for British Archaeology Festival of British Archaeology 2009. An opportunity was taken therefore to encourage the public to view the excavation under progress and ask questions.

Two trenches were opened. Both showed the grey gravel silt that had been seen elsewhere during Work Phase 2 of the work on the Plain. However, the larger trenches enabled the archaeological features sealed by this material to be examined in more detail.

3.3.2 Trench 7 results and interpretation (Figures 30 to 32)

Location	The Plain, south, by the Perch Pond
Dimensions	5.5 x 5.5 m, aligned north-south
Level at top	N end: 13.28m OD. S end: 12.89m OD
Highest level of natural surface	NW corner – 12.93m OD; SW corner 12.59m OD
Max. thickness of deposits above natural	1110mm

Natural gravel was seen on the west side of the trench and in the north-east corner. At the north-west corner, the level of natural gravel was 12.93m OD sloping down to 12.59m OD in the south-west corner, a slope of 340mm over 5.5m.

A pale brown spread of brickearth covered the centre of the trench. On excavation, this proved to be the upper fill of a round bottom ditch, approximately 2m wide and 50cms deep. Low down in the fill of the ditch was a seam of stones and gravel. Small fragments of Roman brick and tile came from the fill but, other than these, there were no other finds. The sides of the ditch were shallow and sloping. On the west side the cut of the ditch coincided with a post hole. It appeared that the post-hole had been cut into the upper fill of the ditch. This post hole was probably one of those seen in the GPR scan. A second was seen *c* 2m to the west. They appear to be Roman in date, Roman building material coming from the fill of the second. The first post-hole was not fully excavated.



Figure 30. The ditch in Trench 7 under excavation.

Lying over the top of the fill of the ditch was a spread of clayey brickearth containing a large quantity of exclusively Roman building material. This comprised *tegula* and *imbrex* fragments and a few box tile pieces. No pottery was identified. A silver *siliqua* of Constantius II was recovered from the southern end of the trench from among this

material. This coin was in mint condition and suggests that the dump of material happened during the late Roman period, specifically during the 4th century. The relationship of this material with the post-holes was not clear. These Roman deposits were sealed by the ubiquitous layer of 18th century silty gravel overburden.



Figure 31. Silver siliqua of Constantius II.

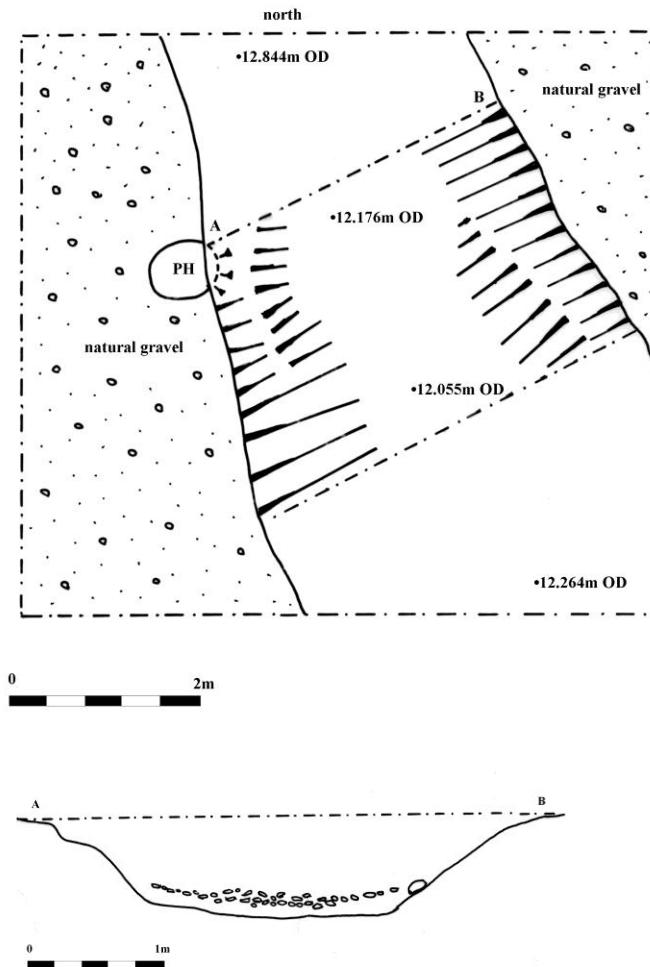


Figure 32. Plan of Trench 7 and section through ditch looking north (note different scales).

3.3.3 Trench 8 results and interpretation (Figures 33 to 35)

Location	The Plain, south by Perch Pond
Dimensions	29m x 1.5m, aligned north-south
Level at top	N end: 13.264m OD. S end: 12.264m OD
Highest level of natural surface	Approx 14.10m OD across trench
Max. thickness of deposits above natural	400mm

Trench 8 was a long machine cut trench running from the path that runs from the refreshment kiosk eastwards at the north, south to the Perch Pond. It measured 29m in length and was 1.5m in width.

Natural gravel was seen at the north end of the trench at a height of 13.264m OD. At the south end of the trench, natural gravel was at 12.264m OD, a fall of exactly 1m over 29m.



Figure 33 Trench 8 from the north. The small gully (Feature 1) can be seen in the foreground under excavation. The larger feature is being cleaned up.

Five features of significance were recorded.

1) At the north, 4m from the north edge of the trench, a narrow ditch or gully was excavated. This contained mainly late Roman pottery and brick and tile, as well as an AE coin of Constantine I (2 Standards type – GLORIA EXERCITUS).

2) South of this was a wide feature – measuring c.5.5m wide. It was excavated to a depth of 30cms but work was discontinued at the end of the weekend on site. This appeared to be a ditch similar to that seen in Trench 2 but the fill was a dark silt, unlike the brickearth fill of the ditch in Trench 7.

3) At 24m from the north end of the trench, a small semi-circular feature was seen in the trench side. This contained Roman brick and tile.

4) At 27m from the north end of the trench a second small gulley or ditch was found. This too contained Roman material. Of interest was its location alongside a spread of stone and gravel.

5) From the edge of the ditch/gully previously described at 24m to the south end of the trench there was a spread of gravel and small stones suggesting a made up surface of some sort – possibly a path or courtyard surface.

Throughout the trench, these features were sealed with an overburden of grey silty gravel containing Roman and post-medieval material.



Figure 34. The coin of Constantine I

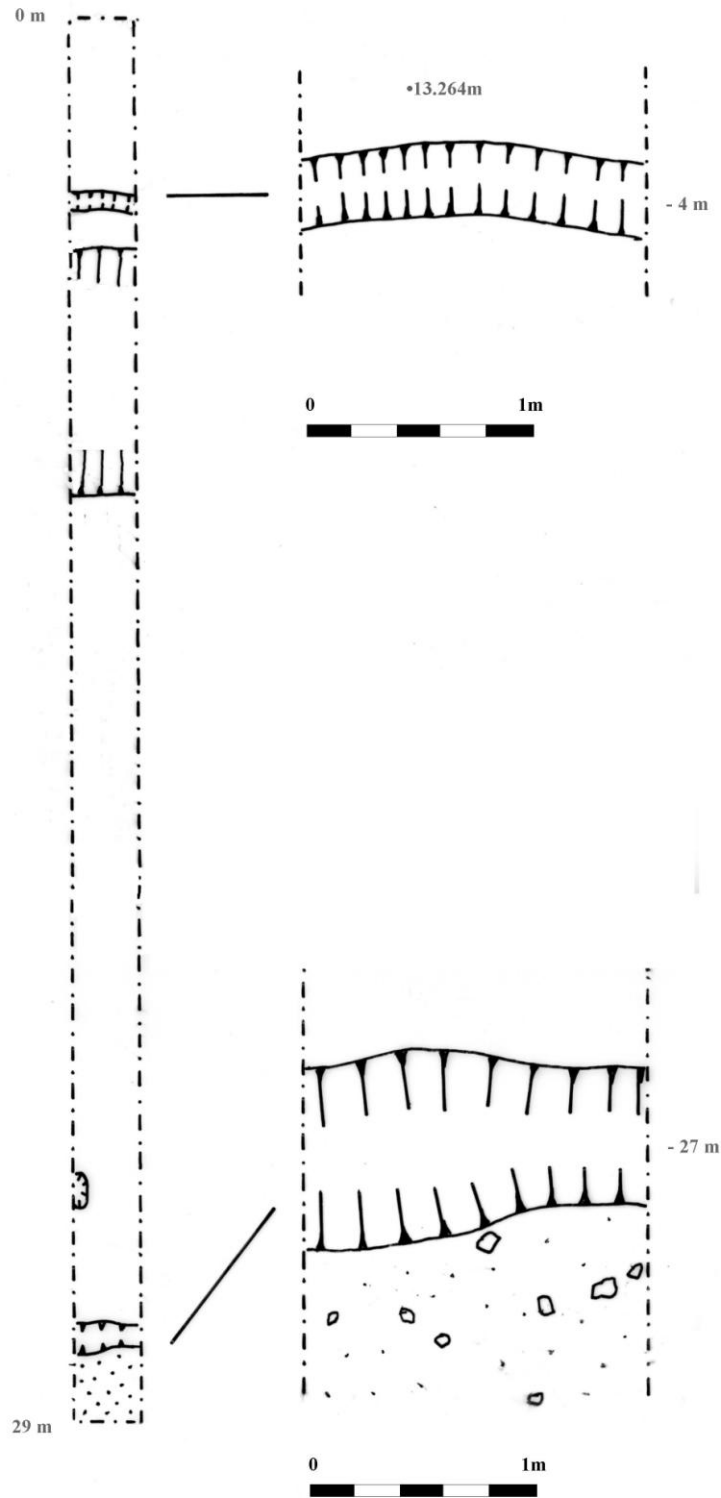


Figure 35. Plan of Trench 8 on left with details of Features 1 (top) and 4 (bottom)

4 – General results

4.1 Geophysics

The three techniques were, as to be expected, varied in their results. Resistivity proved to be the least productive in terms of archaeological detail, although it is interesting to note the presence of the lines of the tennis courts. Magnetometry carried out in 2007 and 2008 proved to be similar in effectiveness to the GSB survey carried out a few years previously. The same features were recorded but, other than the round and linear features on the south-west part of the survey area, no definition of the features elsewhere was possible.

The best results came from the GPR survey. This demonstrated that archaeological features, in particular linear features, extended across the entire site. In the north-west traces of what may prove to be an unrecorded garden layout contemporary with Wanstead House were noted underneath the tennis courts there. To the south are a pair of linear features at least one of which proved, by Trench 3, to be a ditch. Further to the south, on the north side of the Heronry Pond, is a pair of rectilinear ditches, suggesting a double-ditched enclosure. This certainly warrants further study in the future.

On the east side of the main north-south path in the Park, the use of GPR was seriously disrupted by the presence of anthills. However, the area on the north side of the Perch Pond could easily be surveyed. This produced more ditches at a different angle to those seen in the west, but also turning to suggest that at least one formed part of an enclosure. The GPR also detected a number of spot features – these appear to be post-holes or pits. Excavation of Trench 7 showed them to be post-holes. The GPR survey suggests that these are in circular patterns, however it is probable that not every post-hole was noted by GPR (the post hole that cut the ditch fill in Trench 7 was not recorded by GPR). More probably remain to be discovered.

In summary, the geophysics surveys combined demonstrate that there is a rich archaeological landscape under the Plain. Excavation of the trenches suggests that this dates from the Late Bronze Age/Iron Age to the Roman period.

4.2 Auger survey samples

The auger survey revealed the presence of an overburden that was much shallower than expected. Prior to this it was believed that the overburden from 18th century landscaping might be as much as 2m. However, it proved to be closer to 400mm. This discovery enabled the design of the evaluation trench Work Phase.

4.3 Evaluation trenches

The eight trenches all met their original objectives, some however with disappointing results. Listed below are the original objectives (in *italics*) with a summary of the results for each trench.

Trench 1

The objectives of this trench were:

- *To examine 18th century and later deposits immediately under the turf line*
A c.400mm layer of grey gravel and silt covered the natural surface. This contained post-medieval material consistent with being deposited during the 18th century.
- *To examine the depth of archaeological remains and the nature of the remains, in particular to identify the nature of the linear feature believed to exist on this part of the site*
The 18th century overburden was the only archaeological soil recorded.
- *To identify the level and nature of natural geology*
Natural gravel was seen across the entire trench.
- *To assess the potential for the survival of deep cut features*
No deep cut features were recorded

Trench 2

The objectives of this trench were:

- *To examine 18th century and later deposits immediately under the turf line*
A c.400mm layer of grey gravel and silt covered the natural surface. This contained post-medieval material consistent with being deposited during the 18th century.
- *To examine the depth of archaeological remains along a ridge in the Plain and the nature of the remains, in particular to identify the nature of the linear feature believed to exist on this part of the site*
A possible archaeological feature or layer was noted at the south end of the trench. This was not excavated.
- *To identify the level and nature of natural geology*
Natural gravel was seen at the north end of the trench.
- *To assess the potential for the survival of deep cut features*
The feature at the south end might be a deep cut feature. It was not excavated.

Trench 3

The objectives of this trench were:

- *To examine 18th century and later deposits immediately under the turf line*
A c.400mm layer of grey gravel and silt covered the natural surface. This contained post-medieval material consistent with being deposited during the 18th century.
- *To examine the depth of archaeological remains and the nature of the remains, in particular to identify the nature of the linear feature at this part of the site*
A deep feature was recorded on the line of the linear feature seen in the GPR survey. This contained LBA/IA pottery and nothing of a later date.
- *To identify the level and nature of natural geology*
Truncated natural gravel was seen in the base of the trench.

- *To assess the potential for the survival of deep cut features*
Survival of deep features at this point on the site is very good. The ditch recorded here survived to a depth of c 2m below ground surface.

Trench 4

The objectives of this trench were:

- *To examine 18th century and later deposits immediately under the turf line*
A c.400mm layer of grey gravel and silt covered the natural surface. This contained post-medieval material consistent with being deposited during the 18th century.
- *To examine the depth of archaeological remains and the nature of the remains, in particular to identify the nature of the round feature at this part of the site*
Three shallow cut features were recorded. These appeared to be Roman in date.
- *To identify the level and nature of natural geology*
Natural gravel was seen across the entire trench, including under the three features.
- *To assess the potential for the survival of deep cut features*
Cut features were recorded but these were very shallow – scarcely more than 300mm.

Trench 5

The objectives of this trench were:

- *Examine 18th century and later deposits immediately under the turf line*
A c.400mm layer of grey gravel and silt covered the natural surface. This contained post-medieval material consistent with being deposited during the 18th century.
- *To examine the depth of archaeological remains and the nature of the remains, in particular to identify the nature of the round feature at this part of the site*
A deep feature was recorded in the position of the anomalies seen on both the magnetometry and GPR surveys. Material from this feature included Roman samian ware.
- *To identify the level and nature of natural geology*
Truncated natural gravel was seen underneath the archaeological deposits.
- *To assess the potential for the survival of deep cut features*
Survival of deep features at this point on the site is very good. The ditch recorded here survived to a depth of c 1.5m below ground surface.

Trench 6

The objectives of this trench were:

- *To examine 18th century and later deposits immediately under the turf line*
A c.400mm layer of grey gravel and silt covered the natural surface. This contained post-medieval material consistent with being deposited during the 18th century.

- *To examine the depth of archaeological remains and the nature of the remains*
Other than the 18th century overburden, no archaeological features were recorded.
- *To identify the level and nature of natural geology*
Natural gravel was seen across the entire trench.
- *To assess the potential for the survival of deep cut features*
No features were recorded.

Trench 7

The objectives of this trench were:

- *To examine the depth of archaeological remains and the nature of the remains, in particular to identify the nature of the linear feature at this part of the site*
A c.400mm layer of grey gravel and silt covered the natural surface. This contained post-medieval material consistent with being deposited during the 18th century.
- *To identify the level and nature of natural geology*
Natural gravel was seen on the west and north-east parts of the trench. It had been truncated by a large ditch in the centre of the trench.
- *To assess the potential for the survival of deep cut features*
The presence of a large round-bottomed ditch indicates good survival. Two post-holes were also recorded but these were shallow, suggesting truncation. However, late Roman deposit of brick and tile sealed the latest ditch fill.
- *To examine the fill of the linear feature seen in the 2007-08 geophysics survey*
This proved to be a round-bottomed ditch approximately 2m wide and 0.5m deep.

Trench 8

The objectives of this trench were:

- *To examine the depth of archaeological remains and the nature of the remains*
A c.400mm layer of grey gravel and silt covered the natural surface. This contained post-medieval material consistent with being deposited during the 18th century.
- *To identify the level and nature of natural geology*
Natural gravel was seen at the north and south end of the trench. Brickearth deposits were seen in the centre.
- *To assess the potential for the survival of deep cut features*
A number of shallow features were recorded. One larger feature was also noted but its excavation was terminated. This is probably a large ditch running east-west.
- *To examine the fill of the linear features seen in the 2007-08 geophysics survey*
The fills of all the features proved to be Roman in date.

5 Assessment by EH criteria

The recommendations of the Greater London Archaeology Advisory Service (GLAAS) 1998 guidelines on *Evaluation Reports* suggest that there should be:

‘Assessment of results against original expectations (using criteria for assessing national importance of period, relative completeness, condition, rarity and group value)...’
(Guidance Paper V, 4 7)

An annex to PPG16 also highlights certain criteria with which to measure the importance of individual monuments, although this is in the context of the selection of sites for scheduling. However, these criteria are applicable here. They are as follows: *Period*; *Rarity*; *Documentation*; *Survival and/or Condition*; *Fragility/Vulnerability*; *Diversity*; and *Potential*. The guidance note stresses that ‘these criteria should not ... be regarded as definitive; rather they are indicators which contribute to a wider judgement based on the individual circumstances of the case’. It is not suggested here that the archaeological remains are candidates for further protection through Scheduling, but these criteria are used below.

Criterion 1: Period

Trench 3 produced material dating to the Late Bronze Age or Iron Age. Trenches 4, 5, 7 and 8 produced Roman material. Samian from Trench 5 is probably second century. Late Roman coins came from Trenches 7 and 8. No Saxon or medieval features were recorded. 18th century and later material sealed the site – probably as part of the landscaping of the Park during the post-medieval period.

Criterion 2: Rarity

This is the first time that LBA/IA material has been recorded *in situ* in this area of the Roding Valley. IA material at Uphall Camp was later from the 2nd century BC onwards. The Roman material adds further to our knowledge of Roman occupation in the Park, however the precise site of the Roman villa that contained the mosaic found in 1715 remains uncertain, though some of the features discovered during the present investigation are probably associated with it.

Criterion 3: Documentation

The collective archive for all the sites examined in Wanstead Park over the last twenty years is scattered. Some is retained by Newham Museums Service (former Passmore Edwards collection), some retained by the City of London at the Hunting Lodge, some in the London Metropolitan Archive, Some in the London Archaeological Archive and Research Centre, some maintained by the Archaeological Data Service, some still retained by commercial contractors and the work of this evaluation which is retained by the authors. This is to be deposited in due course at the London Archaeological Archive and Research Centre under the site code WNK07.

Criterion 4: Group Value

The presence of stratified and contextualised deposits dating to the pre-Roman period from Wanstead Park and the immediate environs is of immense value. The Roman material adds significantly to our understanding of the size and scale of Roman occupation in the area but adds little to our knowledge of the Roman building presumed to be on this site.

Criterion 5: Survival/Condition

Deep pre-Roman features have survived well. Roman features, however, may well have been truncated by later landscaping.

Criterion 6: Fragility

Deep pre-Roman features are intact. However, shallow Roman features proved to be closer to the surface than anticipated. These would be subject to damage from uncontrolled scrub and tree root ingress, shallow groundworks and utility works.

Criterion 7: Diversity

Recorded occupation focuses upon the LBA/IA and Roman periods. There is no evidence for late Iron Age or Saxon and medieval (note, however, broad ridge and furrow can be seen on the east side of the Plain). Other material, associated with 18th century and later landscaping, covers the site.

Criterion 8: Potential

There is clearly great potential for the examination of a well-preserved pre-Roman landscape on this site. The Roman material appears to be truncated but deep features demonstrate that material of that date too would survive well. Past work closer to the refreshment kiosk demonstrates an increase in quantity and quality of Roman material – it is possible that the 2007-09 evaluation programme has identified the margins of Roman occupation on this site. Further examination of the area to the west of Trench 8 would be of great interest.

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