An Archaeological Investigation at the Diana Fountain, Bushy Park, London Borough of Richmond upon Thames.

Site Code: DIA 09

Central National Grid Reference: TQ 1581 6919

Written and Researched by Stuart Watson Pre-Construct Archaeology Limited, May 2009

Project Manager: Tim Bradley

Commissioning Client: The Royal Parks

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

 Tel:
 020 7732 3925

 Fax:
 020 7732 7896

 Email:
 tbradley@pre-construct.com

© Pre-Construct Archaeology Limited May 2009

© The material contained herein is and remains the sole property of Pre-Construct Archaeology Limited and is not for publication to third parties without prior consent. Whilst every effort has been made to provide detailed and accurate information, Pre-Construct Archaeology Limited cannot be held responsible for errors or inaccuracies herein contained.

CONTENTS

1	Abstract	3
2	Introduction	4
3	Geology and Topography	8
4	Archaeological and Historical Background	9
5	Archaeological Methodology	12
6	Archaeological Phase Discussion	14
7	Conclusions	18
8	Acknowledgements	20
9	Bibliography	21

Figures

1	Site location	5
2	Trench Locations	6
3	Trench Details	7

Appendices

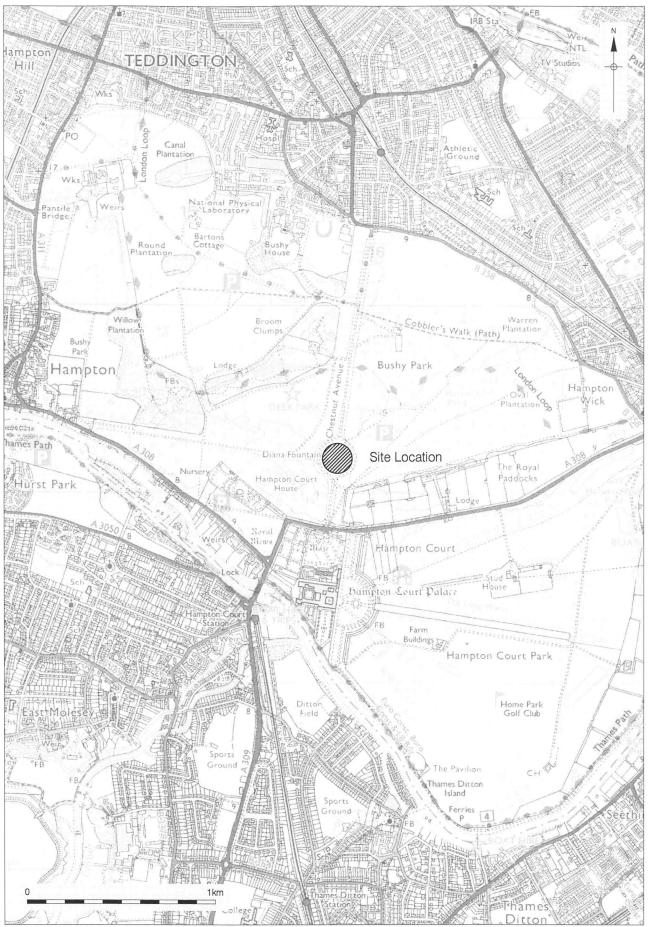
1	Context Description	22
2	Matrix	23
3	Site Photographs	24
4	OASIS Form	26

1 ABSTRACT

- 1.1 This report details the results of an archaeological investigation undertaken during the draining and de-silting of the Diana Fountain Pond as part of an ongoing program of maintenance and restoration at Bushy Park, London Borough of Richmond upon Thames.
- 1.2 The area of investigation was confined to the drained basin of the Diana pond which is located on the southern part of Chestnut Avenue, within the confines of Bushy Park.
- 1.3 The earliest feature encountered during the investigation was deposits of natural sand, part of the Kempton Park Gravel sequence. The investigation also exposed and recorded a late 17th-early 18th century retaining wall of the pond, which was observed to survive for the full circumference of the pond. Additionally a fountain base was exposed and recorded in the centre of the pond that was contemporary with the retaining wall, and pre-dates the existing Diana Fountain. Both features are presumed to relate to the original construction of the pond in 1699.

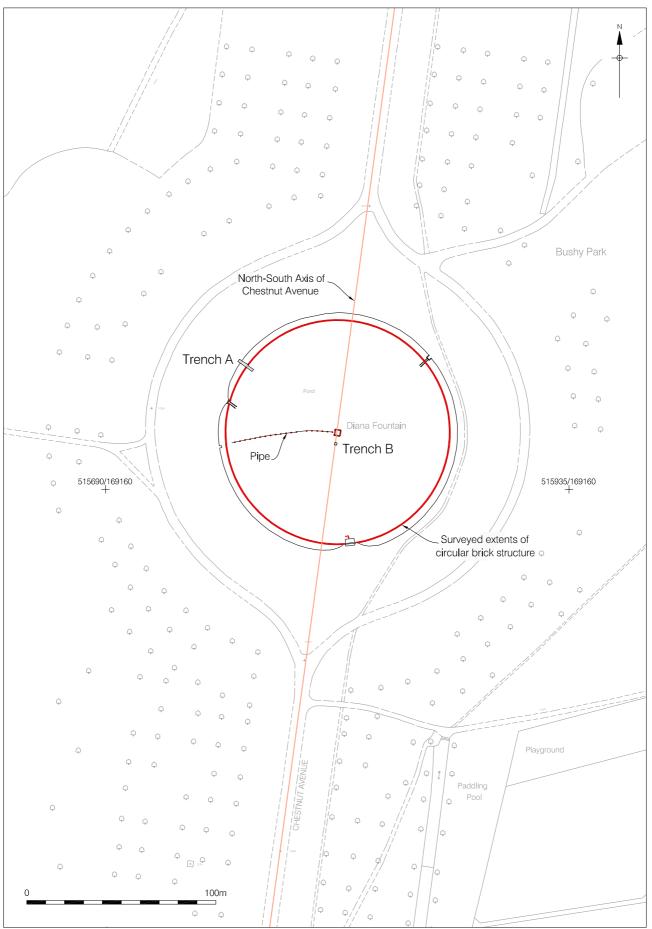
2 INTRODUCTION

- 2.1 An archaeological investigation was conducted by Pre-Construct Archaeology Ltd at The Diana Fountain Pond, Bushy Park, London Borough of Richmond upon Thames from 28th April to 1st May 2009. The work was commissioned by Huntley Cartwright on behalf of the The Royal Parks. The fieldwork was project managed for Pre-Construct Archaeology by Tim Bradley and supervised by the author.
- 2.2 The site is located within the area of the pond of the Diana Fountain, which is currently drained for maintenance and restoration work. The pond itself is located within the southern section of Bushy Park and forms a constituent part of Chestnut Avenue, the main north-south road through the park which exits south opposite the Lion Gate, Hampton Court Palace (fig. 1).
- 2.3 The National Grid Reference of the site is TQ 1581 6919 and the site was allocated the code DIA 09.
- 2.4 The archaeological work was instituted after contractors exposed a circular brick wall running inside the line of the existing wall of the pond during de-silting work. Following consultation with English Heritage, an investigation if this wall was recommended, which was undertaken by field staff of Pre-Construct Archaeology limited.
- 2.6 The Diana Fountain and pond is a grade II Listed Building.



© Crown copyright 2007. All rights reserved. License number 36110309 © Pre-Construct Archaeology Ltd 2009

> Figure 1 Site Location 1:20,000 at A4



C Crown copyright 2008. All rights reserved. License number PMP36110309 C Pre-Construct Archaeology Ltd 2009

Figure 2 Detailed Site Location 1:2,000 at A4

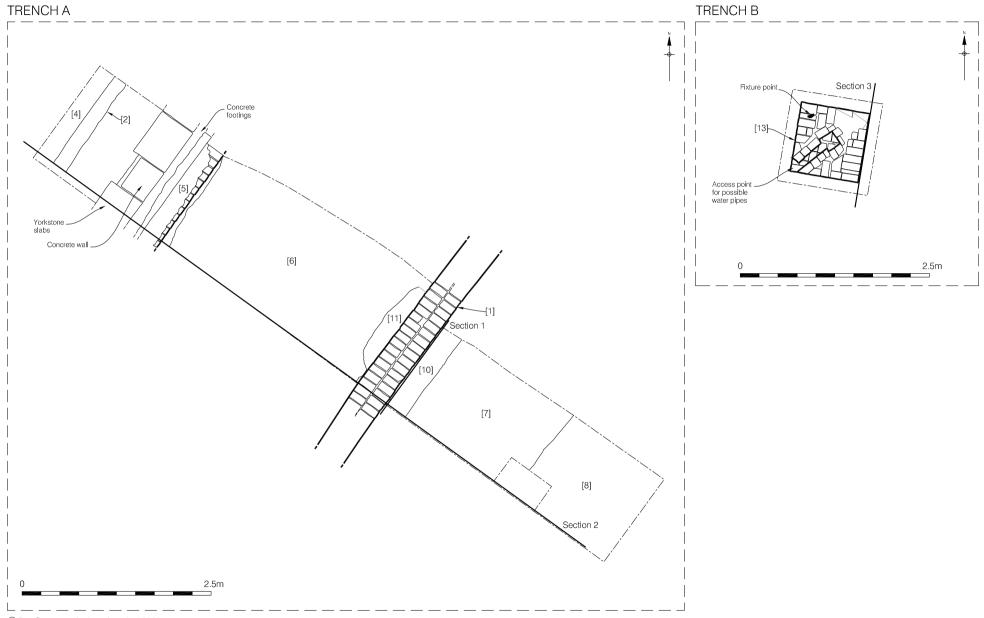




Figure 3 Plans of Trenches A and B 1:50 at A4

3 GEOLOGY AND TOPOGRAPHY

- 3.1 The site is located on Post-Diversionary Thames River Terrace Deposits, Kempton Park Gravels (British Geological Survey 1998). Natural sand deposits from this sequence were observed in the base of Trench A, the top of which was recorded at 8.10m OD.
- 3.2 The topography of the study area is formed by a man-made circular pond basin with gradually sloping sides around the outer edge that drops down to the base of the pond at 7.90m OD. The surrounding land surface has been embanked and raised to c. 9.55m OD.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1. Recent Archaeological work in Bushy Park has been limited to two main sites in the north-west section of the park, that within and around and the grounds of the National Physical Laboratory (Divers 1998, Clough 2004), and that in the area of Bushy Park Water Garden, Upper Lodge (Currie 2003, 2004, Lythe 2008).

4.2 PREHISTORIC

4.2.1 There is little archaeological evidence for the Palaeolithic, Mesolithic or Neolithic periods within the study area. There is, however, evidence of Bronze Age activity seen to the north and west of the site, observed during an earlier excavation (Divers 1998). There is also evidence of Bronze Age activity to the north-east of the site, which comprised a large burial mound that once stood in Sandy Lane, Teddington, (TQ 1629 7037, SMR ref: 020991) which was excavated in the mid 19th century (Akerman 1854). It should be noted, however, that this apparent absence of evidence may be due to a lack of modern development in Bushy Park and the surrounding area, limiting opportunities for archaeological research.

4.3 ROMAN

4.3.1 No definitive evidence for the Roman period has been found in the study area, although a series of parallel features have been noted, at ten degrees west of north, that cover the entire park, extending beyond it, which are believed to represent Roman agricultural activity (field edges, ditches, fence lines). It is also suggested that Upper Lodge is built over, and respects the lines of, a Roman Marching fort (White & Foster 1997). Again, as noted above, the absence of evidence is likely to be due to limited archaeological investigations.

4.4 SAXON

4.4.1 A possible Saxon burial was recorded within the Bronze Age burial mound at Sandy Lane (Divers 1998), but no other Saxon activity has been noted in this area.

4.5 MEDIEVAL

4.5.1 During the medieval period the area now covered by Bushy Park was used for arable and pasture land. Evidence of medieval ridge and furrow agriculture is still visible in

Bushy Park, particularly in the area to the west of the Diana Fountain. By 1236, the Manor of Hampton had been acquired by the Knights Hospitallers. It remained property of the order until 1514, when it was confiscated during the Reformation (Weinreb & Hibbert, 1993, Currie 2003, Currie 2004). A survey of land use around Hampton in 1338 by the Prior of the Hospital of St John indicates 800 acres of land rented out for barley and rye, which covers much of the extent of Bushy Park (Sheaf & Howe 1995).

4.6 POST- MEDIEVAL

- 4.6.1 After the Dissolution of the Monasteries, the Manor of Hampton was leased by Thomas Wolsey. He was responsible for demolishing the earlier manor house owned by the Knights Hospitallers and commissioning the earliest phase of the palace that would soon become the Royal residence of Hampton Court (Weinreb & Hibbert, 1993). The land now occupied by Bushy Park was henceforth used as a deer park associated with the new palace. It was placed in the care of Thomas Heneage, who became the first individual to receive the newly created title of Ranger (Currie 2003, 2004).
- During the late 17th century Sir Christopher Wren, as Surveyor to the King (William 4.6.2 III), was tasked with modernizing and rebuilding the Tudor Hampton Court Palace. Part of Wren's scheme was to create a new approach to Hampton Court Palace running north-south across Bushy Park, known as the Great Avenue (later to become Chestnut Avenue from the lines of Horse Chestnut trees that flank the road). The work, supervised by William Talman, the Comptroller of the King's Works, was begun in the summer of 1699 and at the point where the new road crossed the Longford River, a large circular pond was constructed 120m in diameter and 1.5m deep. The road was taken around the pond and continued south to enter Hampton Court Palace via the Lion Gate. Originally it was planned that two avenues of trees would connect with the pond at right angles to the Great Avenue, but the eastern arm was never completed. After the death of William III in 1702, Wren's plans were never fully implemented and only one wing of the Palace was ever remodeled, allowing the majority of the Tudor palace to survive. Wren's Great Avenue, while certainly built, was never to fulfill its function as a grand entrance to the palace, and over time it simply became the main road through the park. The Great Avenue was finished by the end of 1699 at a cost of £3000 with an extra £1050 for the digging of the pond.
- 4.6.3 Fourteen years after the pond was constructed, the fountain base and statue now known, together with the pond, as the Diana Fountain, was installed in the centre of the pond basin in 1713. Some confusion surrounds the exact identity of the main

statue, at times (often the same time) it has also been named as Arethusa or Venus, as well as the goddess Diana. The sculptor, up until recently, was thought to be the Italian artist Francesco Fanelli, but during restoration work in 1976 Dr Charles Avery, then Deputy Keeper of Sculptures at the Victoria and Albert Museum, demonstrated the statue to be the work of Hubert Le Sueur (c.1585-c.1658). Le Sueur also undertook approximately fifty commissions for Charles I, including portrait busts which were rare at the time, and he also produced temporary monuments for the funeral of James I at Westminster Abbey (White & Foster 1997).

- 4.6.4 The statue of Diana/Arethusa was not originally commissioned for its eventual placement in Bushy Park. It was a much earlier commission for Charles I to adorn a fountain in the grounds of Somerset House in London at some time around 1637. During the Commonwealth, Oliver Cromwell removed the statue in 1656 to Hampton Court Palace, where it was placed on top of a scrolled stone fountain pedestal in the Privy Garden. Eventually, in 1713, the statue and its stone scrolled base was reerected on to an additional base in the Bushy Park pond (White & Foster 1997) where it has become known, by common consent, as the Diana Fountain.
- 4.6.5 It appears that the pond was prone to flooding up until the modern period (*pers. comm.* Bushy Park gardener). The water in the pond is constantly fed from the Longford River (in fact a canal constructed in 1640 from the Colne River to supply water to Hampton Court Palace) which was notorious in the mid 17th century for flooding along its entire length (White & Foster 1997). Presumably this problem also affected the pond. Eventually in the 20th century the pond's edge was raised and contained within a low perimeter wall and the surrounding land surface raised.

5 ARCHAEOLOGICAL METHODOLOGY

- 5.1 An extensive programme of restoration and refurbishment is being undertaken in Bushy Park. As part of that program the Diana Fountain pond has been drained to allow for the de-silting of the pond, and to allow restoration work to be carried out on the Diana Fountain. During the de-silting phase, contractors from Fountains Limited exposed a red brick wall running round the full circumference of the pond, approximately 3.70m inside the line of the current pond edge. After consultation with English Heritage, the main contractor Huntley Cartwright, acting for the Royal Parks Agency, was advised to conduct an archaeological investigation, which was conducted by Pre-Construct Archaeology and supervised by the author.
- 5.2 Initially a single evaluation trench, approximately 10.0m long, was positioned on the north-west side of the pond extending transversely across the pond edge, extending out into the pond base to encompass the red brick wall. The trench was excavated by a small (3 tonne) mechanical excavator, and finished by hand. The final excavated dimensions of the trench, designated as Trench A, was 9.24m east-west by 1.50m north-south and to a depth of 0.85m at the western end and 0.95m at the eastern end (Figs 2 & 3).
- 5.3 During the archaeological investigation, a small area of bonded red brick was noted in the middle of the drained pond, 3.80m south of the Diana statue. An initial investigation identified a 0.90m square brick built feature, and after on-site consultation with Mr Ian Jupp of Huntley Cartwright it was agreed to extend the remit of the investigation to include this feature. A small exploration trench (designated Trench B) was then excavated by mechanical excavator on the eastern side of the feature to expose the base (Fig 2 & 3).
- 5.4.1 The sides and bases of the trenches were hand-cleaned prior to recording. Representative sections were then drawn, along with plans of the trenches. All recording systems were fully compatible with those most widely used elsewhere in London, which has developed out of the Department of Urban Archaeology Site Manual, now published by the Museum of London Archaeology Service (MoLAS 1994). Individual descriptions of all archaeological strata and features excavated and exposed were entered onto pro-forma recording sheets. Plans and sections were recorded on polyester based drawing film; plans at a scale of 1:10 and 1:20 as appropriate and sections at 1:10. The OD heights of all principal strata were calculated and indicated on the appropriate plans and sections. A full photographic record of the investigations was prepared, including 35mm black and white print film, 35mm colour slide film, and digital format photography.

5.5 The proximity of Trench A to an Ordnance Survey benchmark (value; 10.01m OD), located on top of a stone pillar of a sluice gate on the ponds western edge, allowed levels to be read directly from it. Trench B required a temporary benchmark to be established in the centre of the pond, which had a value of 7.97m OD. The trenches, baselines, principal archaeological features and existing pond features were located using GPS survey equipment and were tied into the Ordnance Survey grid.

6 ARCHAELOGICAL PHASE DISCUSION

6.1 The following description of the stratigraphy details the main characteristics of each context and its position in the phased stratigraphic matrix. Further information regarding the contexts can be found in Appendix 1.

6.2 Phase 1, Natural geology (Figs 3 & 4)

6.2.1 The earliest deposit encountered was natural layer [8], observed in the base of Trench A. This was a firm light yellow brown mixed with orange grey 'clean' sand, interpreted as deposits of Kempton Park Gravels. The top of this layer was recorded at between 8.10mOD and 7.87mOD, and was encountered at between 0.60m and 0.10m below current ground level. The discrepancy in height is due to the embanked ground surface, which slopes down from west to east forming the outer edge of the pond.

6.3 Phase 2, Post-Medieval late 17th-early 18th Centuries (Figs 3 & 4)

- 6.3.1 The earliest phase 2 features encountered in Trench A was a series of 17th/18th century dump layers of made ground to construct the banking around the pond edge, consisting of layers [7], [10], [16], [11] and [18], all to the east of wall [1]. The earliest layer [7], a 0.18m thick layer of dark greyish brown gravely clinker, sealed the natural sand [8] below. Layer [10] was a 0.20m thick deposit of dark orange red gravely silty sand that abutted layer [7] and is the same as layer [6]. Sealing both [7] and [10] was layer [16], a 0.05m to 0.45m thick deposit of mid grey brown gravelly silt. Above [16] was layer [11], a 0.10m to 0.25m thick deposit of dark greenish grey silty sand. This was sealed by layer [18], a 0.15m thick deposit of mid grey brown silty sand, the top of which formed the sloping sides of the pond at between 8.72m OD to the west and 8.22m OD to the east.
- 6.3.2 Built on top of layer [11] was brick wall [1]. Constructed from unfrogged type 3033 red brick, the wall was three courses deep (0.23m) and was observed to continue around the entire circumference of the pond (118.16m in diameter). The wall was 0.45m wide (east-west). No evidence was observed of any mortar deposits on the top surface, or any higher courses above the level exposed, therefore it is presumed that the wall survives in its original form. The wall was constructed in English Bond and the bricks themselves measured 221 223mm long by 100mm wide by 61mm thick and were hand-made stock bricks. The bonding material was a very friable light brown sandy, with chalk inclusions, lime mortar. Dating of the bricks gives a late 17th century date (this type 3033 hand made stock brick goes out of use after 1700) and the mortar is typical of the 17th/18th century. The level at the top of wall [1] was recorded at 8.71m OD and the base of the wall at 8.47m OD. No construction cut was visible for the wall

and the various dump layers had been heaped up against it. This wall is interpreted as the original retaining wall from the 1699 pond construction.

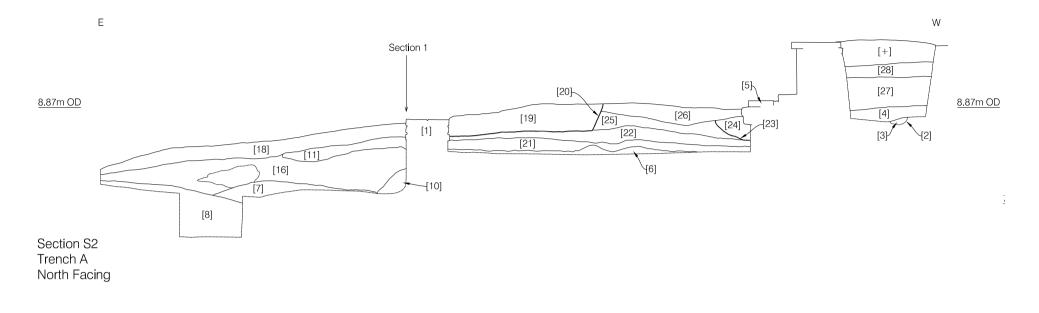
- 6.3.2 The earliest phase 2 feature in Trench B was construction cut [15], 1.20m square in plan, with vertical sides and the base flat. It had been cut to a depth of 0.53m with the top of the cut recorded at 7.90m OD and the base at 7.28m OD.
- 6.3.3 Constructed within cut [15] was brick built feature [13]. Constructed from unfrogged type 3033 red bricks, this feature was 8 courses deep (0.54m) and was 0.92m square. Running diagonally from the south-west corner to the centre was a brick built channel constructed into the top surface of this feature, measuring 0.10m wide by 0.13m deep, ending in a 0.20m square hole 0.13m deep, probably representing the access for a lead water pipe (a fragment of lead was recovered from the backfill of the channel). This feature was constructed in English Bond, but no mortar was visible. On the top surface scaring was visible, along with a slight depression on the north-west corner, which indicates this feature supported an unknown structure. The brick fabric type and brick dimensions are identical to wall [1] and brick samples have been dated to the late 17th century therefore this feature appears to be contemporary with wall [1]. The level recorded on the top of this feature was 7.85m OD and the base at 7.30m OD. This feature is interpreted as a foundation base of a previously unknown fountain.
- 6.3.3 In the base of Trench A, to the west of the modern pond retaining wall, a shallow north-south aligned linear cut [2] was observed at 0.80m below ground level. Measuring 1.40m north-south, as exposed, by 0.20m east-west, this feature was 0.08m deep. This feature runs parallel with, and 4.80m west of, wall [1]. A fragment of Clay Tobacco Pipe stem recovered from the dark grey silty sand fill [3] has been dated to the 17th/18th century. It is unclear as to the function of this shallow gully, but the dating of the Clay Tobacco Pipe suggests a possible contemporary date with wall [1].
- 6.3.4 To the west of wall [1] was a similar sequence of dump layers; [6], [21], [22] [25] and [26]. The lowest layer, [6], was the same as [10] as described above. This was sealed by layer [21], a 0.08m to 0.13m thick deposit of mid grey brown silty sand. This in turn was sealed by layer [22], a 0.12m thick deposit of light grey sand, probably redeposited natural. Above this was layer [25], a 0.09m to 0.20m thick deposit of dark grey brown silty sand. This was overlain by layer [26], a 0.08m to 0.18m thick deposit of mid orange brown silty sand, the top of which formed the sloping edge of the pond at between 8.92m OD and 8.87m OD. Cutting down from the top of [26] was cut [20], which had a sharp concave side and a flat base and had been cut to a depth of

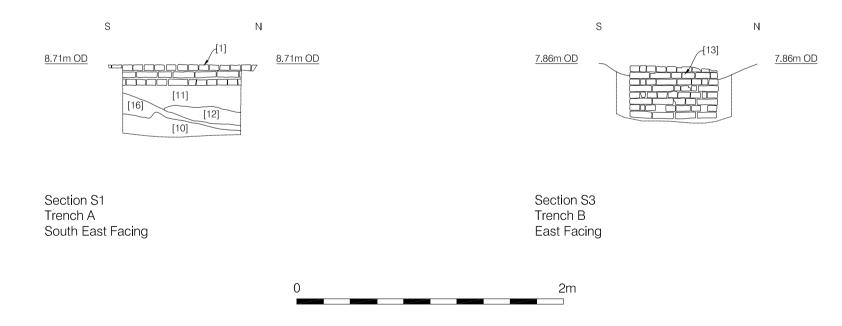
0.28m. The top of the cut was recorded at 8.92m OD and the base at 8.57m OD. The cut was filled with [19], a compact mid yellow brown silty sand, the top of which formed the sloping edge of the pond at between 8.77m OD and 8.92m OD. The function of this cut feature is unknown, but is presumed to relate to the embanking of the pond.

6.3.5 The remainder of the sequence in Trench B consisted of [14], a 0.53m thick dark grey gravelly sand that was the backfill to construction cut [15].

6.4 Phase 3, modern (Figs 3 & 4)

- 6.4.1 The earliest phase 3 feature was observed in Trench A and consisted of cut [23], the construction cut for wall [5]. The cut had gradual concave sides and a flat base and the top of the cut was at 8.74m OD and the base at 8.54m OD. It was backfilled with [24], a mid grey brown silty sand 0.25m thick. The cut contained wall [5], a single course of yellow stock brick built on to concrete footings, presumed to date to the 20th century. Mortar deposits and the remnants of higher brick courses indicate a higher wall existed at some time, possibly a previous pond wall. This wall abutted the existing retaining wall of the pond which appeared to be built from concrete, and faced on the inner visible side with yellow stock brick, topped by Yorkstone flags which formed the current ground level at 9.55m OD. Personal comment from one of the long serving gardeners at Bushy Park recalls the ponds base lined with yellow stock bricks that extended from the pond edge as far as wall [1]. These bricks were said to have been lifted in the 1950's and sold off. It is possible that wall [5] is a remnant of this surface, and it is also possible (if this oral history is correct) that the facing to the modern pond edge came from this source.
- 6.4.2 To the west of the existing pond wall was a series of modern dump layers to raise the ground level at the pond edge, layers [4], [27] and [28]. These were sealed by a 0.25m thick layer of modern topsoil, topped by grass which formed the current ground level at 9.58m OD.





© Pre-Construct Archaeology Ltd 2009

Figure 4 Sections 1 to 3 1:40 at A4

7 CONCLUSIONS

- 7.1 The following is a summary of the archaeological evidence recovered to formulate interpretations and conclusions from the archaeological investigations.
- 7.2 Wall [1] which runs around the entire perimeter of the pond, approximately 3.70m inside the existing pond edge, has been dated from the brick fabric and mortar samples to the late 17th century. This correlates with the date that the pond was originally built in 1699 and is presumed therefore to be part of the original construction.
- 7.3 The wall is quite shallow, being only three courses deep, and no evidence was observed of any higher courses having existed, and therefore can be interpreted as surviving complete. Wall [1] is built midway within the embanked edge of the pond, and its top surface is in line with the top surface of the embanking and appears not to have projected above that level. It is therefore it is likely the wall was not a visible decorative edge, as exists today, but instead functioned as a bulwark to support the earth bank and prevent water erosion. This suggests that the 1699 pond had a 'natural' edge, with the grassed land surface sloping down to meet the waters edge. A similar effect was used in the Upper Lodge Water Gardens at Bushy Park, built slightly later between 1709-1715 (Lythe 2008). The entire wall was surveyed in using GPS equipment and is a perfect circle. It has a diameter is 118.16m, which, given that this is not the outer edge of the pond, fits well with the ponds original diameter of 120m as stated in the literature (White & Foster 1997, 50) (Figs 2, 3, 4, 5).
- 7.4 The shallow gully exposed in the western end of Trench A [2] contained within its fill [3] a Clay Tobacco Pipe stem dated to the 17th /18th century. There is a possibility, given its date, that it may be associated with the 1699 construction of the pond. While only a short length was exposed, it appears to run parallel with the pond, and is perhaps a 'marking out' trench to define a circle, but this is purely conjectural and is based on limited dating evidence.
- 7.5 The more intriguing feature is the brick foundation [13]. Located 3.80m south of the existing Diana Fountain, it is almost certainly the foundation of a fountain, as evidenced by the presence of a diagonal channel built into the top surface, which would have fed water via a lead pipe. The slightly larger square hole at the end of the channel, in the centre of the foundation, would accommodate a join to a vertical pipe. Scarring on the top surface, along with an oblong depression in the north-west corner, strongly suggests the fitting of either a stone or metal ornamental structure. The foundation base is not large, approximately 0.90m square, and therefore the structure it supported was not large (certainly nowhere near the scale of the existing Diana Fountain), but it would

have been big enough to support either a single statue, or an urn style basin. It is probable that the dramatic effect of this fountain was provided by the cascading water, rather than the ornament itself (Figs 2,3,4,6,7).

- 7.6 The brick samples taken from foundation [13] are identical in both form and fabric to the pond wall [1] and as there is no sign of reuse in the bricks from either structure, a secure date is possible. The foundation [13] is dated to the late 17th century and therefore it may be assumed to be part of the original 1699 construction, making the wall and the foundation contemporary with each other. The 1699 date for the foundation is further reinforced by the fact that the foundation was built exactly on Wren's original north-south axis for his Great Avenue, placing it in direct line with the Lion Gate at Hampton Court Palace to the south (Fig 2). However, a centre point projected from wall [1] places foundation [13] approximately 5m south of the centre, with the central point occupied by the 1713 Diana Fountain.
- 7.7 Two of the existing sluice gates to the pond appear to follow the line of wall [1]. The modern outer wall of the pond has to cut in to meet these structures, indicating that while the present construction of the sluices is a later rebuild, they occupy the original late 17th century locations. Just to the north of the southern sluice gate are two short sections of parallel red brick walls, badly degraded, that appear to be the same fabric as wall [1] and are probably the remains of the original water inlet/outflow of the pond (Fig 2).
- 7.8 The top surface of foundation of the existing Diana Fountain was exposed and observed to be constructed of red brick. The monument itself was of Portland stone and noted on the lowest course of stone were numerous carved masons marks (the Roman numeral VIII repeated several times); higher up on the stonework was observed a carved name; 'John Puruis'. The name, perhaps the master masons' moniker, is presumed to date to the construction of the monument as a later repair to the stone has cut through the upper part of the last letter.
- 7.9 As far as this author is aware, evidence of an earlier fountain was, until now, unknown. To date it has been assumed that the original pond was only ornamented with a centre piece some fourteen years after its construction. The discovery of the foundation base during this present investigation indicates that from its inception the pond in Bushy Park had a central ornamental fountain, and as such this surviving structure, along with the outer wall, has important historical significance.

8 ACKNOWLEDGEMENTS

- 8.1 Pre-Construct Archaeology Limited would like to thank Ian Jupp of Huntley Cartwright and The Royal Parks for commissioning the work.
- 8.2 The author would like to thank Patrick Cavanagh and the contractors of Fountains Limited for there assistance on site, Lisa Lonsdale for logistics, Aiden Turner for surveying and Mark Roughley for the CAD illustrations. Tim Bradley was project manager and also undertook the editing.

9 **BIBLIOGRAPHY**

Akerman, J.Y. 1854. 'Notes of Antiquarian Researches in the Summer and Autumn of 1854' Archaeologia, volume 36.

British Geological Survey, 1998. South London. England and Wales Sheet 270. Solid and Drift Geology. 1:50 000. Map.

Clough, H. 2004. 'An Archaeological Evaluation at Bushy House, former National Physical Laboratories, London Borough of Richmond upon Thames.' Pre-Construct Archaeology Ltd unpublished Report.

Currie, C.K., 2003. "Archaeological Excavations at Upper Lodge, Bushy Park, London Borough of Richmond, 1997-1999" *Post Medieval Archaeology. The Journal of the Society for Post-Medieval Archaeology* **37**: 1, 90-125

Currie, CK., 2004. Archaeological Recording of the Cascade and Brewhouse at Upper Lodge, Bushy Park, London Borough of Richmond, 2002-04. CKC Archaeology: Unpublished Report

Divers, D. 1998. 'An Archaeological Evaluation and Excavation at the National Physical Laboratories, Teddington, London Borough of Richmond upon Thames.' Pre-Construct Archaeology Ltd unpublished Report

Lythe, R. 2008. 'An Archaeological Watching Brief and Excavation on the Cascade and Lower Pond in Bushy Park Water Garden, Upper Lodge, Bushy Park, London Borough of Richmond.' Pre-Construct Archaeology Ltd unpublished Report

Sheaf, J and Howe, K 1995. Hampton and Teddington Past. Historical Publications.

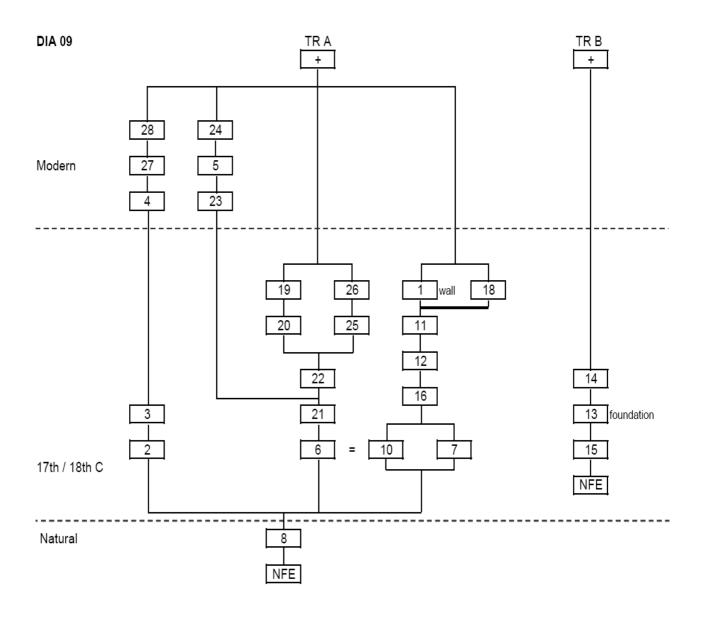
Weinreb, C. & Hibbert, C. 1993. The London Encyclopaedia. MacMillan: London.

White, K and Foster, P 1997. Bushy Park. Royals, Rangers and Rogues. Foundry Press.

Appendix 1: Context Descriptions

Context	Туре	Trench	Comments	Phase	Date
1	Masonry	TR A	Pond retaining wall	2	Late 17 th /early 18 th C
2	Cut	TR A	Shallow gully	2	17 th /18 th C.
3	Fill	TR A	Fill of [2]	2	17 th /18 th C.
4	Layer	TR A	Dump Layer	3	Modern
5	Masonry	TR A	Wall & Conc. footing	3	Modern
6	Layer	TR A	Dump Layer	2	17 th /18 th C.
7	Layer	TR A	Dump Layer		17 th /18 th C.
8	Natural	TR A	Kempton Park gravel	1	Natural
9	Void				
10	Layer	TR A	Dump Layer =[6]	2	17 th /18 th C.
11	Layer	TR A	Dump Layer	2	17 th /18 th C.
12	Layer	TR A	Lens of gravel	2	17 th /18 th C.
13	Masonry	TR B	Brick foundation base	2	Late 17 th /early 18 th C
14	Fill	TR B	Fill of [15]	2	Late 17 th /early 18 th C
15	Cut	TR B	C/cut of [13]	2	Late 17 th /early 18 th C
16	Layer	TR A	Dump layer	2	17 th /18 th C.
17	Void				
18	Layer	TR A	Dump Layer	2	17 th /18 th C.
19	Fill	TR A	Back fill of [20]	2	17 th /18 th C.
20	Cut	TR A	Cut	2	17 th /18 th C.
21	Layer	TR A	Dump Layer	2	17 th /18 th C.
22	Layer	TR A	Dump layer	2	17 th /18 th C.
23	Cut	TR A	C/cut of [5]	3	Modern
24	Fill	TR A	Fill of [23]	3	Modern
25	Layer	TR A	Dump Layer	2	17 th /18 th C.
26	Layer	TR A	Dump Layer	2	17 th /18 th C.
27	Layer	TR A	Dump layer	3	Modern
28	Layer	TR A	Dump Layer	3	Modern

Appendix 2: Matrix



Appendix 3: Site Photographs



Fig 5. Wall [1]. Looking west, scale is 0.5m



Fig 6. Fountain foundation base [13]. Looking west, scale is 0.5m



Fig 7. Diana Fountain, with foundation base [13] in foreground. Looking north.

1.1 OASIS ID: preconst1-59134

Project details	
Project name	An Archaeological Investigation at the Diana Fountain, Bushy Park, Richmond upon Thames
Short description of the project	An Archaeological investigation was undertaken in the drained pond of the Diana Fountain, Bushy Park, during restoration work. The investigation recorded the original 1699 brick wall of the pond edge. In the middle of the drained pond, just to the south of the existing Diana Fountain, a brick built 0.90m square foundation base of an original 1699 fountain was also discovered; a previously unknown feature.
Project dates	Start: 28-04-2009 End: 01-05-2009
Previous/future work	Not known / Not known
Any associated project reference codes	DIA 09 - Sitecode
Type of project	Field evaluation
Site status	English Heritage List of Parks and Gardens of Special Historic Interest
Current Land use	Woodland 6 - Parkland
Monument type	BRICK WALL Post Medieval
Monument type	BRICK FOUNDATION Post Medieval
Significant Finds	MASONRY Post Medieval
Significant Finds	CLAY PIPE Post Medieval
Methods & techniques	'Survey/Recording Of Fabric/Structure','Targeted Trenches'
Development type	Amenity area (e.g. public open space)

Prompt Listed Building Consent

Position in the Not known / Not recorded planning process

Project location	
Country	England
Site location	GREATER LONDON RICHMOND UPON THAMES TEDDINGTON AND HAMPTON Diana Fountain, Bushy Park
Study area	17.00 Square metres
Site coordinates	TQ 1581 6919 51.4093889776 -0.334661780189 51 24 33 N 000 20 04 W Point
Height OD / Depth	Min: 8.10m Max: 8.10m

Project creators Name of Organisation	Pre-Construct Archaeology Ltd
Project brief originator	Royal Parks
Project design originator	Pre-Construct Archaeology Ltd
Project director/manager	Tim Bradley
Project supervisor	Stuart Watson
Type of sponsor/funding body	Royal Parks
Name of sponsor/funding body	Royal Parks

Project archives

Physical Archive Royal Parks

recipient

Physical Contents	'Ceramics'
Digital Archive recipient	Royal Parks
Digital Contents	'Survey'
Digital Media available	'Survey'
Paper Archive recipient	Royal Parks
Paper Contents	'Ceramics'
Paper Media available	'Context sheet','Matrices','Photograph','Plan','Report','Section','Survey ','Unpublished Text'
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Investigation at the Diana Fountain, Bushy Park, London Borough of Richmond upon Thames
Author(s)/Editor(s)	Watson, S.
Date	2009
Issuer or publisher	Pre-Construct Archaeology
Place of issue or publication	London
Description	A4 bound report
E 4 11	
Entered by Entered on	Stuart Watson (tbradley@pre-construct.com) 7 May 2009
	1 Way 2003