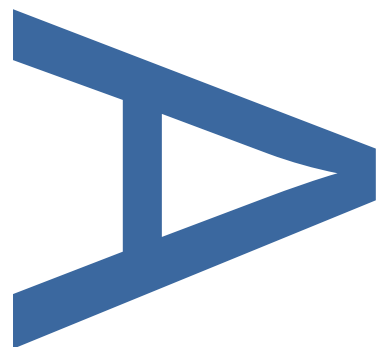
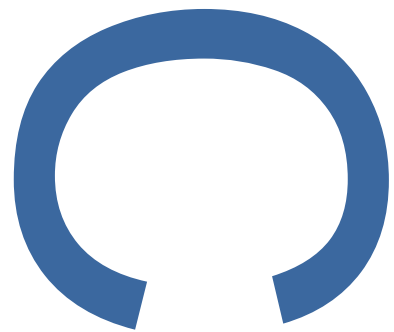


**HOME PARK IRRIGATION WORKS
AND KINGSTON GATE ACCESS
ROAD WIDENING SCHEME,
HAMPTON COURT PALACE
AN ARCHAEOLOGICAL WATCHING
BRIEF**

SITE CODE: HCP177

**LOCAL PLANNING AUTHORITY:
ROYAL BOROUGH OF RICHMOND UPON
THAMES**

APRIL 2019



**HOME PARK IRRIGATION WORKS AND KINGSTON GATE ACCESS ROAD
WIDENING SCHEME, HAMPTON COURT PALACE
AN ARCHAEOLOGICAL WATCHING BRIEF**

Site Code: HCP177

Central NGR: TQ 16067 68571
TQ 17494 69336

Local Planning Authority: Royal Borough of Richmond upon Thames

Accession Code: 3910113

Commissioning Client: Historic Royal Palaces

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April 2019

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DOCUMENT VERIFICATION

Site Name

**HOME PARK IRRIGATION WORKS AND KINGSTON GATE ACCESS
ROAD WIDENING SCHEME, HAMPTON COURT PALACE**

Type of project

An Archaeological Watching Brief

Quality Control

Pre-Construct Archaeology Limited Project Code			K6061
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1 ABSTRACT

- 1.1 This report details the results of an archaeological watching brief carried out by Pre-Construct Archaeology at Home Park, Hampton Court Palace, London Borough of Richmond KT8 9AU. The field work was undertaken between 18th and 21st March 2019. The work was commissioned by Historic Royal Palaces (HRP).
- 1.2 The archaeological watching brief recorded natural gravel deposits between 0.27m and 0.34m below ground level, which were consistent with the known underlying geology as described by the British Geological Survey (BGS) as Kempton Park Gravel. Natural brickearth deposits were also recorded between 0.4m and 0.6m below ground level, c. 5.9m OD in the Kingston Gate Access Road widening area.
- 1.3 No archaeological deposits, features or structures were recording during the watching brief. Only modern made ground, subsoil and topsoil deposits were recorded and directly sealed the underlying natural strata.

2 INTRODUCTION

- 2.1 This report details the results and working methods of an archaeological watching brief undertaken by Pre-Construct Archaeology Ltd at Home Park, Hampton Court Palace, London Borough of Richmond KT8 9AU (Figure 1).
- 2.2 The archaeological watching brief encompassed two phases of work undertaken (Figure 2); a watching brief on the installation of a mains irrigation pipe at the north west end of Home Park (centred on TQ 16067 68571) and an access road widening scheme located at Kingston Gate at the far north eastern end of Home Park (TQ 17494 69336).
- 2.3 The methodology for the watching brief was outlined in a site specific Brief (Stevenson 2019) which was prepared prior to the fieldwork by the Curatorial Department of Historic Royal Palaces. The site lies within the grounds of Hampton Court Palace, a Scheduled Monument (No: SM LO 83, HA 1002009), the palace, gardens and grounds of which form an archaeological and historical site of national importance.
- 2.4 The archaeological watching brief was instructed by Historic Royal Palaces (HRP), project managed by Helen Hawkins and supervised by Patric Cavanagh both of Pre-Construct Archaeology.

3 PLANNING BACKGROUND AND OBJECTIVES

3.1 Site Specific Planning Background

3.1.1 As part of the commitment to HRP's Conservation Principles, and due to the archaeological importance of the area, HRP Curators asked that an archaeologist be in attendance to undertake a watching brief during the excavation of the two areas (Stevenson 2019).

3.1.2 Hampton Court Palace is a Scheduled Monument (No: SM LO 83, HA 1002009). The palace, gardens and grounds form an archaeological and historical site of national importance.

3.2 Project aims and objectives

3.2.1 The following research aims and objectives were set out in the site specific brief (Stevenson 2019);

3.3 General Aims

- To record the presence or absence, date, nature and extent of any archaeological material within the excavation area.
- To preserve by record any archaeological material uncovered as part of the project.
- To establish a broad phased plan of any archaeological remains revealed during the works.
- To prepare a fully illustrated report on the results of the archaeological watching brief that is proportionate to the findings and compliant with all the relevant regulations, policy, guidance and good practice.
- To archive all documents, material and digital records created as a result of this watching brief with Historic Royal Palaces.

3.4 Specific Objectives

- To investigate, record and sample any potential remains associated with the 19th century paddocks in the north west of Home Park.
- To record and leave in situ any significant structural remains associated with 16th century brick-making associated with Cardinal Wolsey's and Henry VIII's tenure of Hampton Court Palace. This may potentially include brick clamps, brick kilns or workshop buildings.
- To record and where possible date any remains pre-dating the occupation of the Tudor Palace.

4 GEOLOGICAL AND TOPOGRAPHICAL BACKGROUND

- 4.1 The British Geological Survey illustrates that the bedrock geology of the site comprises London Clay, formed approximately 48 to 56 million years ago in the Palaeogene Period, overlain by superficial deposits of the Kempton Park Gravel Member formed up to 2 million years ago in the Quaternary Period. The Kempton Park Gravel Member is described as sand and gravel which were formed in a local environment previously dominated by rivers.
- 4.2 The site is located less than 300m east of the meander of the River Thames.
- 4.3 Modern ground level in the location of the Kingston Gate Access Road Widening Scheme was located at c. 6.5m OD.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 The following is summarised from the archaeological and historical background which was included within the site specific brief for the archaeological watching brief (Stevenson 2019). This background is relevant to Home Park, the general historical background of Hampton Court is well documented and need not be repeated here.

5.2 General

5.2.1 Hampton Court Palace is a Scheduled Monument (No: SM LO 83, HA 1002009). The palace, gardens and grounds form an archaeological and historical site of national importance.

5.3 Prehistoric

5.3.1 The land occupied by Home Park has a long history likely spanning as far back as prehistoric times. Although little is known about the landscape prior to the medieval period, glimpses of its past have been offered by a number of flint and pottery scatters uncovered in the vicinity of the park. Its location within a meander of the River Thames at the confluence of the Hoggsmill, Ember and Mole Rivers, and its free-draining soils would have made it an attractive site for early farmers.

5.3.2 Prehistoric flint and pottery, hinting at activity during the Neolithic and Bronze Age, were recorded during the archaeological watching brief of the replacement carriageway of Home Park Road (HCP114).

5.4 Roman

5.4.1 The only evidence for activity dated to the Roman period in the vicinity of Home Park was the recovery of a scatter of Roman pottery during the watching brief of the replacement carriageway of Home Park Road (HCP114).

5.5 Medieval

5.5.1 The present-day park has its origins as part of the medieval Manor that was leased to the Knights Hospitallers of St John in 1180. The Extent of 1338 indicates that there was 800 acres of arable land, most of which was located in today's Bushy Park, with around 100 acres in Home Park. Eroded ridge and furrow earthworks can still be seen today in aerial photographs during favourable weather conditions, and it is thought that some of these might be scars in the landscape left behind from this era.

5.6 Post-Medieval

5.6.1 By 1484 the Order of St John was renting part of the Manor at Hampton to John Wode and later in 1494 it was passed on to the Daubeney family (Thurley 2003,7-9). Given the status of Giles Daubeney and the huge increase in the value of the property at this time, it is thought that he must have been the one to have instigated the early Tudor rebuilding of

Hampton Court Manor, transforming it into a grand brick-built moated complex as well as purchasing a further 300 acres of plough-lands in Hampton Court Park.

- 5.6.2 The splendour of the manor attracted the attention of Cardinal Wolsey, who purchased the estate in 1514/15, immediately setting about further developing the complex, transforming the building into a magnificent palace. The extant boundaries of Bushy and Home Park were also established at this time and Lord Daubeney's parkland was expanded with an additional 1,700 acres. Cardinal Wolsey enclosed the parkland with a simple timber paling with internal sub-divisions. He also provided a water supply for the palace by installing conduits stretching across the parkland, though their exact location remains uncertain. Coombe conduit, which was once attributed to Wolsey is now thought to have been installed later by Henry VIII after analysis of brick typology. However, debate continues, as it remains possible that the later Henrician water conduit lies on the same line as Wolsey's pipeline extending all the way from Kingston Hill some 3 miles away, crossing Home Park and passing under the present day Stud House.
- 5.6.3 When Henry VIII took over the palace in 1529, he continued the development of the buildings and its parks and gardens, transforming the estate into an ever more ostentatious site. The parks were ideal spaces to indulge in his love of hunting and he quickly set about improving the land incorporating it into his vast royal hunting chase. He replaced Wolsey's timber palings with brick walls and further sub-divided Hampton Court Park by building a wall dividing the Course to the north and House Park to the south. The wall known as The Deer Park wall was designed to prevent deer from entering the chase. Part of the wall survives as an extant structure within the Stud in Home Park, but the rest lies hidden beneath the ground, appearing as a dark line in satellite imagery.
- 5.6.4 Little is known about the types of buildings that might have existed in today's Home Park. However, primary records describe the kilns producing the millions of bricks required to build the new Tudor palace. There were two main phases when bricks were being produced on the palace grounds. The first one was during Wolsey's construction phase, and the second was between 1533 and 1537 when around 16 million bricks were fired in the grounds of Hampton Court (Heath Archive, V.16). Until 2014, no archaeological evidence had ever been found of these.
- 5.6.5 Little work was undertaken on the parklands after Henry VIII's death until the 17th century when a narrow sunken garden was planted within the former moat along the East Front by 1611, called 'Moat Ditch Garden'. Both James I and Charles I were keen hunters, and Hampton Court remained a favourite residence for hunting. In 1621-22, a new timber framed building was constructed on the Chase out in Home Park under the order of the Duke of Buckingham. It formed the original Stud building and was the residence of the Master of the Horse and the breeding establishment for the King's horses.
- 5.6.6 Charles I created a new artificial waterway in 1638/9, known as the Longford River. This was an expensive undertaking, and the reasons behind are not entirely clear. It is

presumed to have been partly to improve the fresh water supply, although this was already catered for by the Coombe Conduit. It may also have been created for a scheme of ornamental works that were never commenced due to the Civil war.

- 5.6.7 One of the most significant changes to the park to occur after the Tudor period was undertaken by Charles II in the 1660's, when he had the Long Water excavated - a great canal lined with Dutch lime trees extending three-quarters of a mile from the east front of the palace across Home Park. It had landing jetties at either end to facilitate various boating entertainments. Charles II also had a new bowling green created by the Thames at the western end of the park and created an extension of the Longford River running into Home Park towards the Stud.
- 5.6.8 William III and Mary II continued to shape the gardens into their present day form in the late 17th century, and Charles II's work formed the basis of the elaborate garden scheme designed by Daniel Marot on the East Front. In Home Park, two more radiating avenues of lime trees were planted stretching out into the distance with a cross-avenue linking their far eastern ends, forming a Patte-d'Oie either side of the Long Water
- 5.6.9 Under the direction of Henry Wise in the early 18th century, Home Park was subject to further substantial changes. He created a terrace overlooking the Thames on the south side of the park, which would become the Pavilion Terrace and would lead to the creation of a new raised bowling green with four pavilions, one on each corner. He also implemented a parterre at the eastern end of the Long Water, which became known as the Lower Wilderness. During the reign of Queen Anne (1702-1707), part of the Longford River was remodelled once again, by moving the channel slightly away from the palace front in 1703. It was then further altered in 1711 by incorporating it into the Fountain Garden as a new arrangement of semi-circular canals parallel with the Broad Walk. A series of chaise landings were laid out in Home Park and Bushy Park to allow Queen Anne to hunt from a light carriage.
- 5.6.10 The Royal Stud as it became known by the early 18th century, was further expanded during the reign of George IV (1820-30). John Nash was instructed to create 26 brick walled paddocks in Home Park and Bushy Park, the building of new horse shelters and an extension and refurbishment of the Stud House and its ancillary buildings.
- 5.6.11 A number of surveys of the palace grounds and parklands were produced in the 18th and 19th centuries, notably by Charles Bridgeman and later by Henry Sayers. They show the landscape in varying amounts of detail, and provide an interesting glimpse of what the parkland looked like during these periods.
- 5.6.12 In the late 19th century a new railway and new roads were established making access to Hampton Court much easier for the public. This meant that it became increasingly difficult to keep the parks free of illicit visitors. As a consequence, Queen Victoria opened the park

to the public in 1893 and two years later Home Park Golf Club was established to the south of the Ditton Avenue.

5.6.13 During World War I, the paddocks in the northern half of the park were converted to Grace and Favour allotments and part of the park was used as agricultural land, though the extent of this is not certain. The paddocks then became derelict and all but four were demolished between 1931 and 1935, the western-most paddock now being used as the 20th Century Garden. The parkland was put to use again during World War II with the construction of a grid of anti-glider defences formed by linear ditches. Many of these are visible in aerial images of the period. Home Park and the East Front suffered from bomb damage during air raids in 1940 and 1941.

5.7 Previous archaeological excavations in Home Park

5.7.1 A number of archaeological investigations including geo-physical survey, watching briefs, desk-based assessments, and building recording projects have been carried out over the last two decades in Home Park. Considering the large expanse covered by Home Park, the extent of archaeological excavations in the park has been sparse and there is still much to be learnt about the development of the parkland.

5.8 Home Park Service Trench – HCP113

5.8.1 In 1996, Oxford Archaeology monitored and recorded excavation works associated with the installation of a 360m-long service pipe for the provision of water supply during the Hampton Court Palace Flower Show. The trench was located in the north-west part of Home Park, running in a north-south direction. Three manholes were also excavated. Part of the trench ran alongside the east wall of the eastern-most remaining 19th century paddocks. Towards the southern end of the trench, the excavation uncovered the foundation of the south wall of the adjacent paddock, which was demolished in the 1930's. Unfortunately it is not known at what depth this feature appeared.

5.9 Geo-physical Survey

5.9.1 In 2006, Oxford archaeology undertook magnetic survey on the west end of Home Park focusing on six key areas at the west end of the parkland. The features in the survey for the most part lacked clarity, indicating anything from former ditches, enclosures or simple landscaping, to WWII activity. The line of the Coombe conduit was probably identified though it could equally have been an unknown ferrous service. Possible pathways were also indicated by linear anomalies but again, these may be associated with services.

5.10 Desk-Based Assessment – HCP49

5.10.1 A comprehensive desk-based assessment of Home Park was undertaken by Oxford Archaeology in 2006. It examined the historical development of the park using historically documented mapped and illustrated features, aerial photographs, and field walking as well taking into account any previous archaeological investigations or finds. The parkland has

the potential to yield a great deal of archaeologically significant features including remains from the pre-parkland landscape up to World War II. Areas lying outside of modern disturbances associated with the Hampton Court Palace Flower Show, World War II, and the Golf Course, are likely to be well preserved. The boundary of the Hampton Court Flower Show is shown to run alongside the south walls of the 4 remaining paddocks in the north-western corner of Home Park, turning southwards at the far eastern end of these extant features. The northern-most line of lime trees lining the Kingston Avenue are located c.6m south of the paddock walls. A service trench for a water pipe was proposed to run in an east-west direction at the base of the south paddock walls.

5.11 The Home Park Road – HCP114

5.11.1 One of the most fruitful archaeological excavations in Home Park to date was a watching brief undertaken by Oxford archaeology in 2014 during the replacement of the carriageway of Home Park Road from Kingston Gate to the Long Water. The earliest finds were scatters of prehistoric flint and pottery, hinting at the use of the land during the Neolithic and Bronze Ages. A scatter of Roman pottery was also uncovered suggesting a nearby occupation. However, the most significant findings relate to the Tudor occupation of the site, comprising the remains of two brick clamps. These are incredibly rare finds; indeed no such feature from the medieval period has ever been excavated. Furthermore, this is the first time evidence for the brick making documented in the palace Works Accounts has been recorded. Another significant find relates to the Deer Park Wall constructed in c.1538 as a sub-division in Home Park separating the Course from the deer park (House Park). Features associated with the Coombe Conduit, including the Park Tamkin were also investigated and provided evidence for the construction, maintenance and alterations of the feature, which functioned for almost 300 years as an important source of fresh water supply for the palace.

6 METHODOLOGY

- 6.1 A detailed methodology for the archaeological watching brief was set out in the site specific Brief (Stevenson 2019). The methodology for the irrigation trench watching brief comprised the archaeological monitoring of a 120m long trench. 0.3m wide by up to 0.5m deep, located approximately 0.7m south of the four extant paddocks in Home Park. This trench was excavated by a mechanical digger with a flat-bladed bucket.
- 6.2 The methodology for the road widening watching brief consisted of the archaeological monitoring of the excavation of an area of soft landscape on the east side of the approach to the Kingston Gate which measured c. 39m in length with a width of 4m and a depth of 350mm. A north-south orientated French drain was also monitored as it was installed on the eastern side of the same area and required a narrow trench excavated to a depth of 600mm.
- 6.3 All recording systems adopted during the investigations were fully compatible with those most widely used elsewhere in London; that is those developed out of the Department of Urban Archaeology Site Manual, now published by Museum of London Archaeology (MoLAS 1994). Individual descriptions of all archaeological and geological strata and features excavated and exposed were entered onto pro-forma recording sheets. All plans and sections of archaeological deposits were recorded on polyester based drawing film, the plans being at scale of 1:20 and the sections at 1:10. The OD heights of all principle strata were calculated and indicated on the appropriate plans and sections. A full photographic record was taken in the digital format.
- 6.4 Ordnance datum heights were acquired for the area of the Kingston Gate Access Road Widening Scheme area from a survey drawing within the site specific Brief (Stevenson 2019, Figure 3). Modern ground level was c. 6.5m OD. No Ordnance Datum information was acquired for the Irrigation trench and measurements are as found below ground level.
- 6.5 The archaeological watching brief was assigned the unique site code HCP177 along with accession code 3910113 by Historic Royal Palaces and the complete site archive will be deposited with them under the accession code.

7 PHASED ARCHAEOLOGICAL SEQUENCE

7.1 Phase 1: Natural gravel

7.1.1 The earliest deposit recorded during the watching brief was a sandy-gravel layer, contexts [3] and [9]. This natural deposit was recorded throughout the eastern end of the irrigation trench, located between 0.27m and 0.34m below ground level.

7.1.2 Recorded in the western end of the irrigation trench was a natural brickearth deposit, [11]. This natural layer was recorded at 0.4m below ground level.

7.1.3 Natural brickearth was also recorded in the area of road widening, context [6], within the deeper excavated area associated with the installation of a 'French drain'. This natural deposit was recorded at 0.6m below ground level, c. 5.9m OD.

7.1.4 These natural deposits are consistent with the known underlying geology as described by the British Geological Survey as the Kempton Park Gravel.

7.2 Phase 2: Modern

7.2.1 Sealing the natural gravel and brickearth deposits throughout the entire length of the irrigation channel and the road widening area were modern deposits including made ground, subsoil and topsoil, contexts [1], [2], [8], [10], [7], [4] and [5]. These deposits were between 0.27m and 0.4m thick in the irrigation trench and 0.6m thick in the road widening area. The dating of the contexts was illustrated by a number of modern finds recovered during the watching brief including 20th century glass, late 19th- 20th century pottery and building material (Appendices 3, 4 and 5). Modern ground level in the location of the Kingston Gate Access Road Widening Scheme was located at c. 6.5m OD.

8 CONCLUSIONS

- 8.1 The archaeological watching recorded natural gravel deposits within the irrigation trench, recorded between 0.27m and 0.34m below ground level, which were consistent with the known underlying geology as described by the British Geological Survey (BGS) as Kempton Park Gravel.
- 8.2 Natural brickearth deposits were also recorded within the irrigation trench, located at 0.4m below ground level and within a deeper area excavated for the installation of a 'French drain' within the road widening area, located at 0.6m below ground level.
- 8.3 No archaeological deposits, features or structures were recording during the watching brief. Only modern made ground, subsoil and topsoil deposits were recorded which directly sealed the underlying natural strata. This is illustrated by the recovery of 20th century glass, late 19th- 20th century pottery and building material (Appendices 3, 4 and 5) from the deposits. A single sherd and fragment of unstratified 17th century pottery and glass recovered represented residual material and had little significance (*ibid*).

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PLATES



Plate 1: Irrigation Trench, facing west



Plate 2: Irrigation Trench, facing east



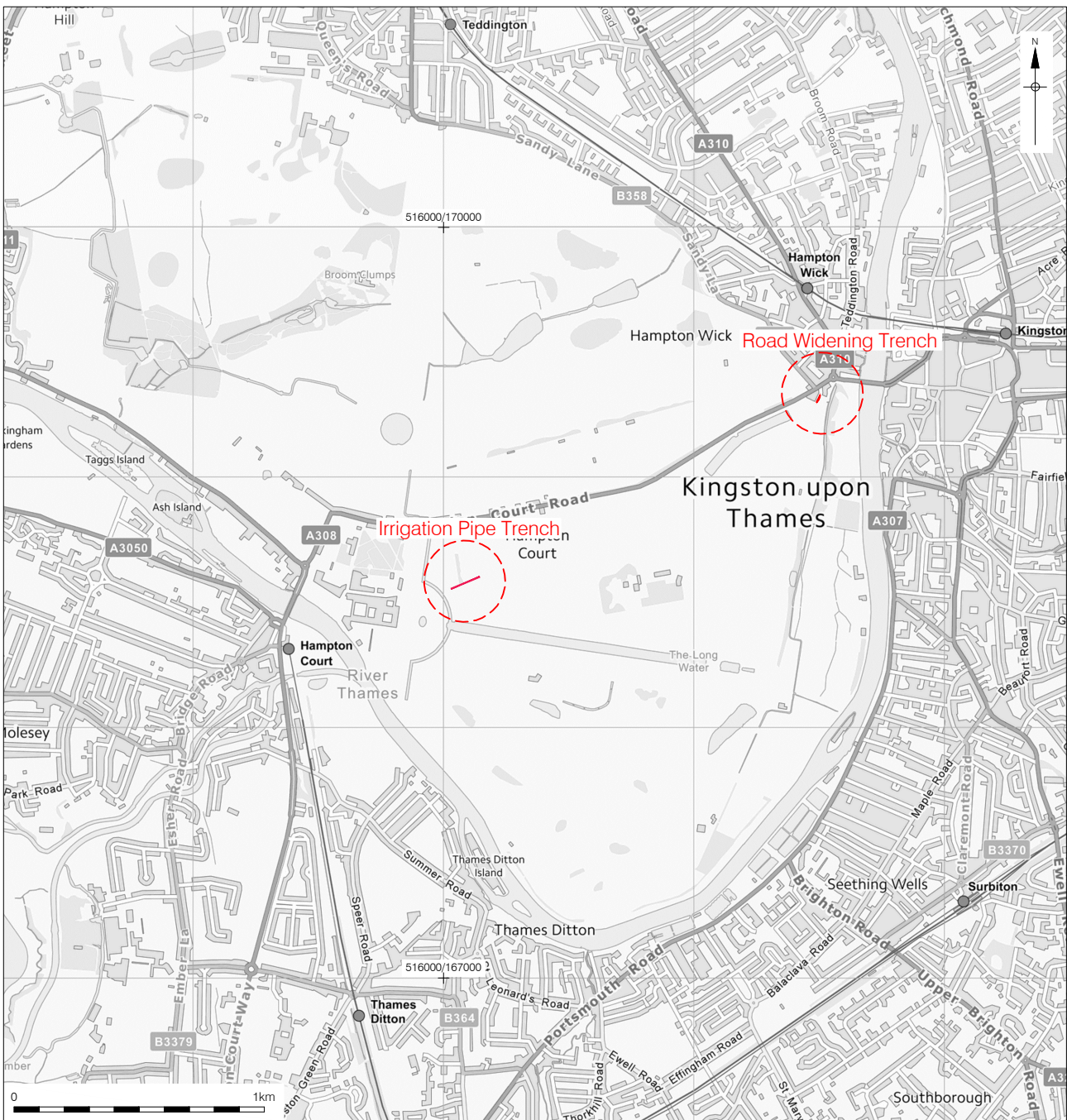
Plate 3: SE Facing Section 1 in Irrigation Trench, 0.3m scale

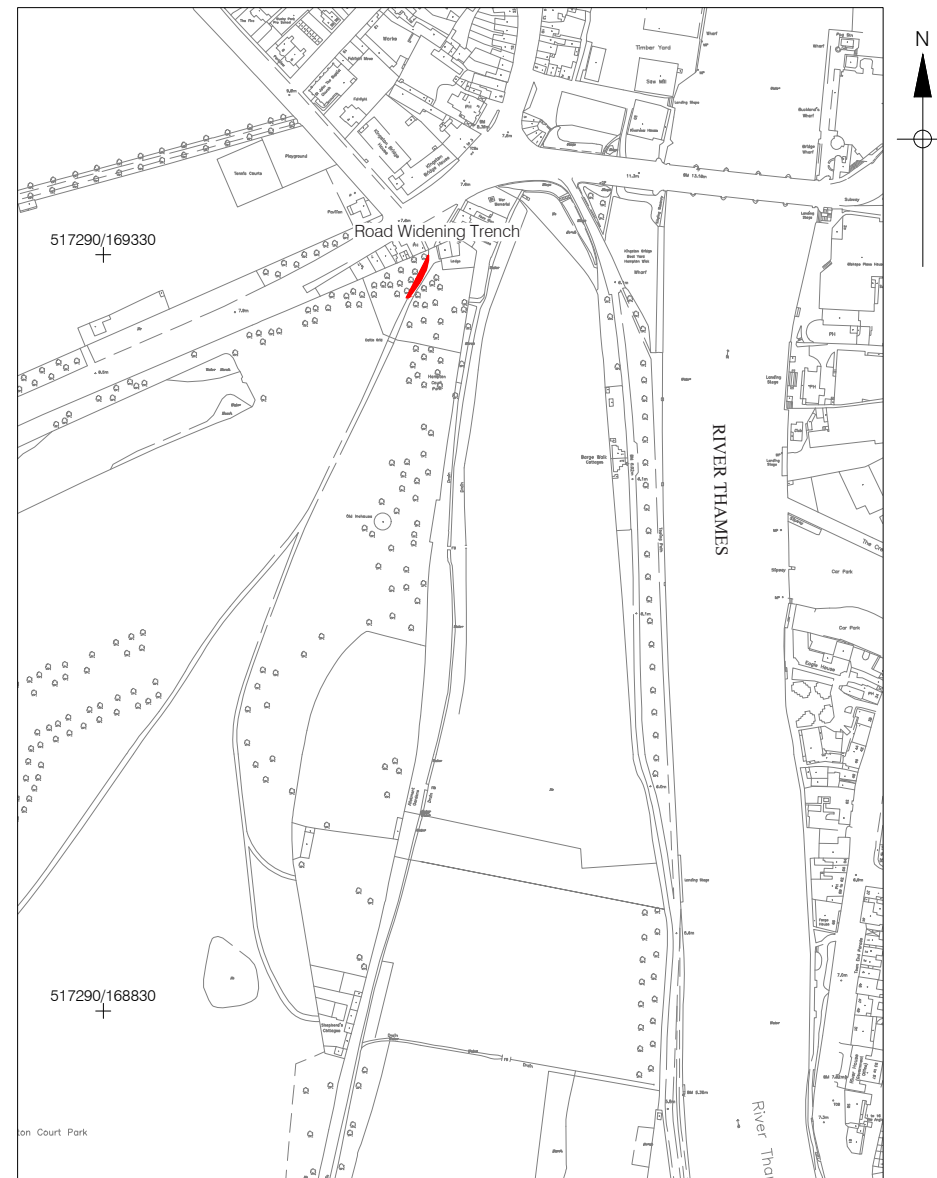
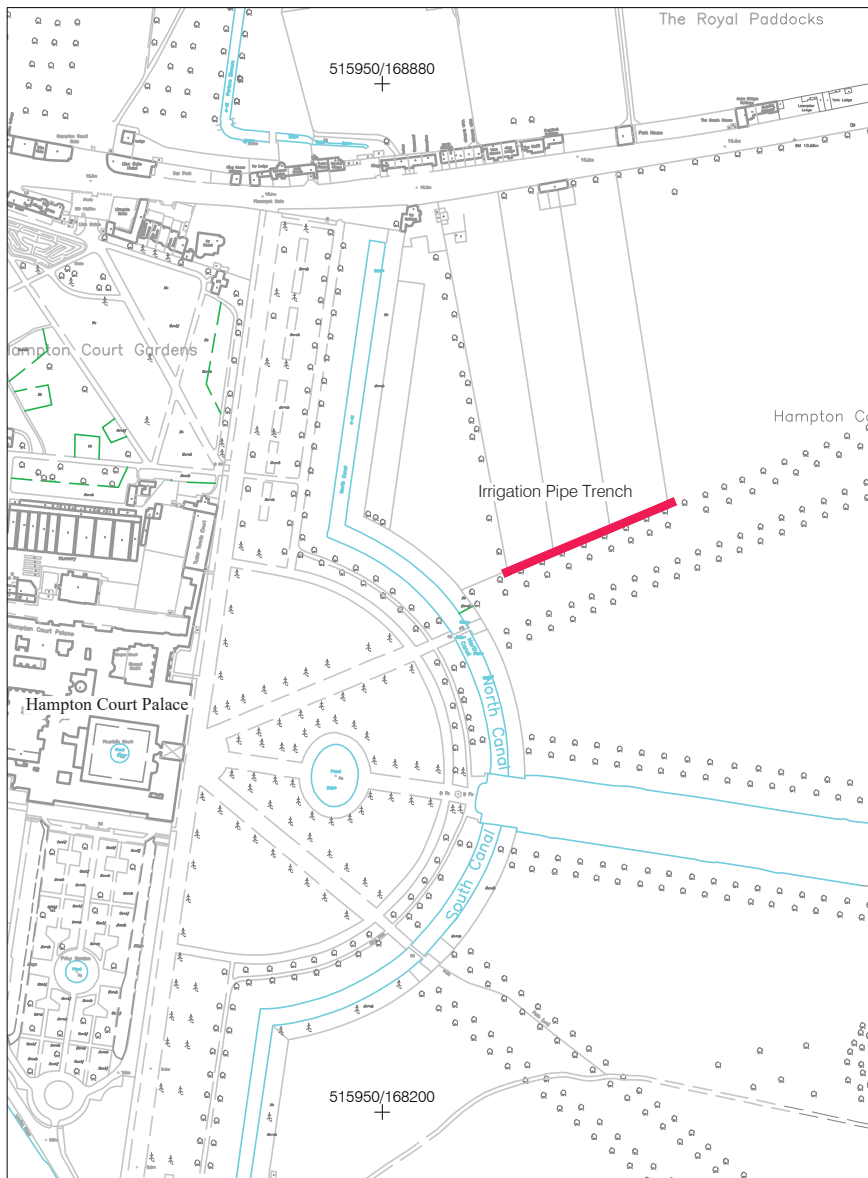


Plate 4: Road widening area facing southwest



Plate 5: Road widening area facing northeast





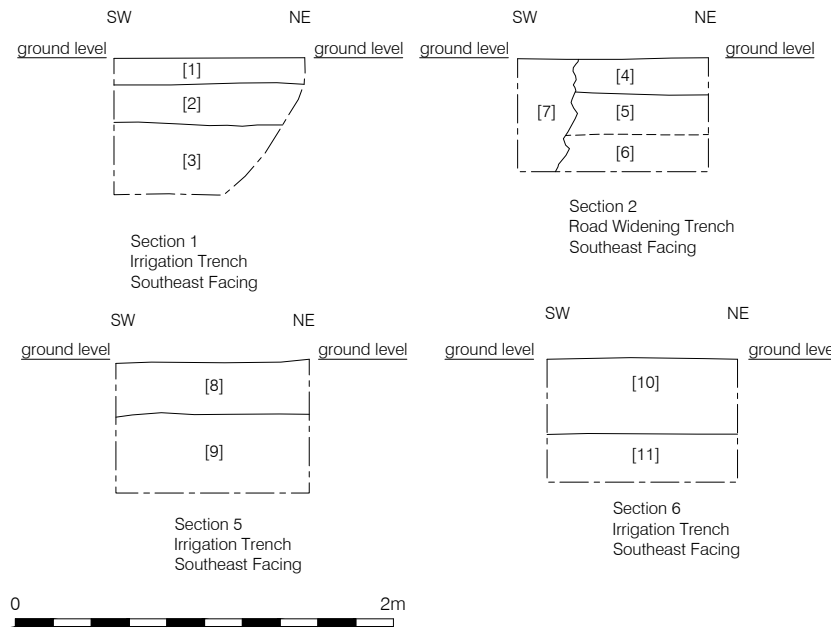
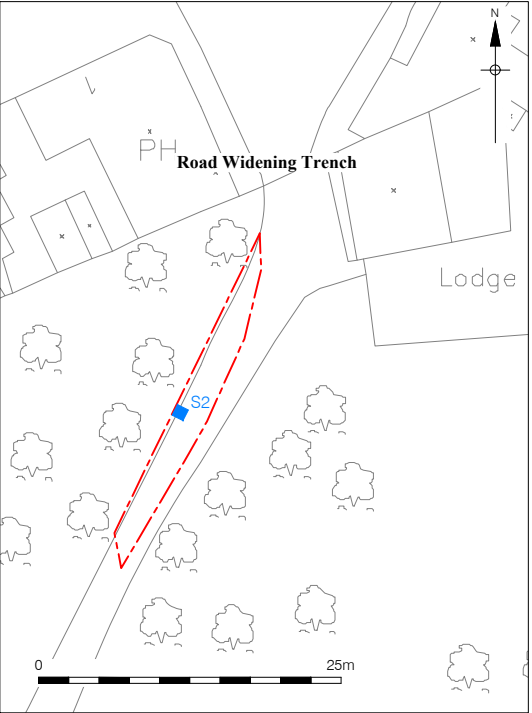
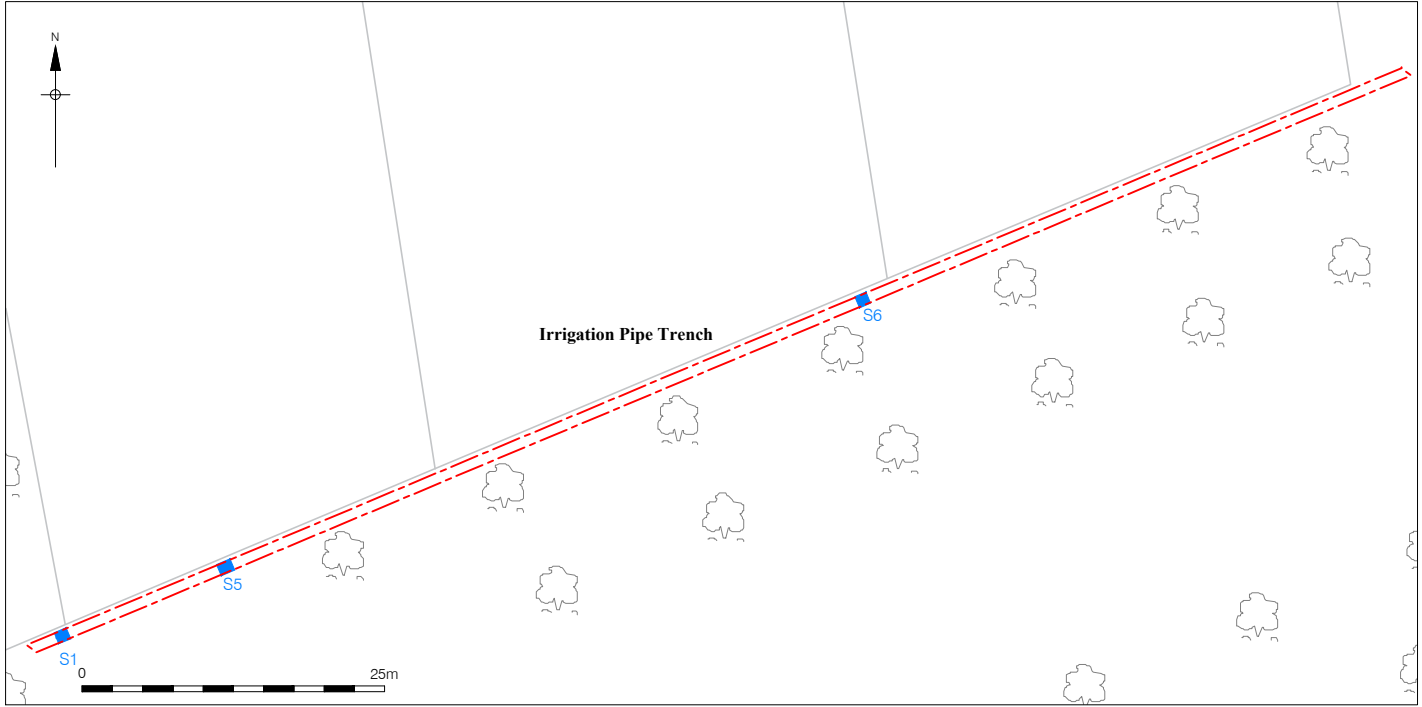
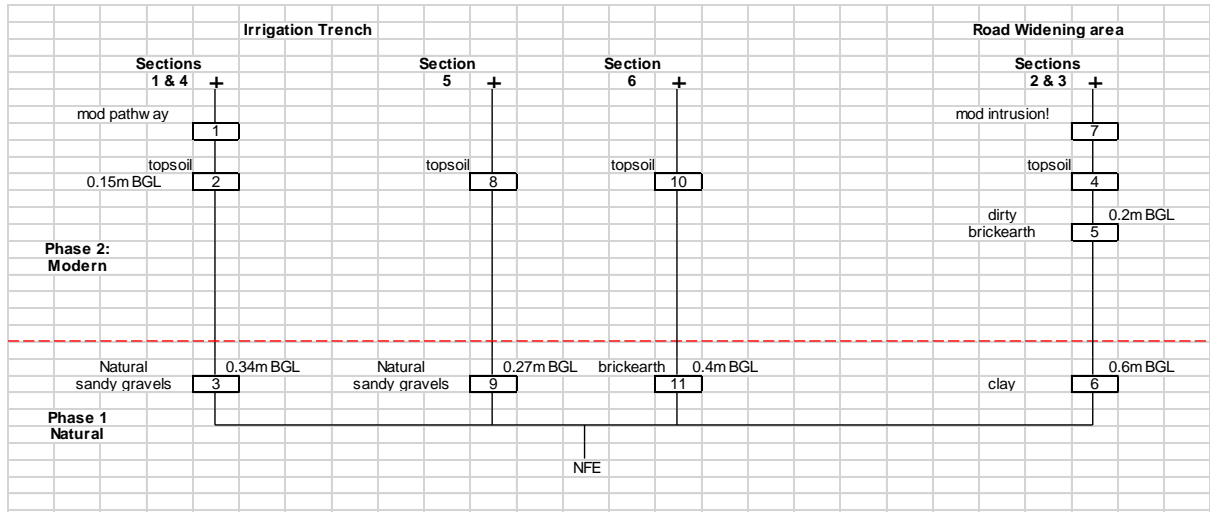


Figure 3
Sections
Location Plans 1:625 and Sections 1:40 at A4

APPENDIX 1: CONTEXT INDEX

Context	CTX_Type	Trench	Section No.	CTX Interpretation	CTX_Thickness (m)	CTX_level below ground (m)	Height (m OD)	Phase
1	Layer	Irrigation	1, 4	Modern path	0.15	0		2
2	Layer	Irrigation	1, 5	Modern topsoil	0.19	0.15		2
3	Layer	Irrigation	1, 6	Natural gravel	NFE	0.34		1
4	Layer	Road widening	2, 3	Modern topsoil	0.2	0	6.5	2
5	Layer	Road widening	2, 4	Modern made ground	0.4	0.2	6.3	2
6	Layer	Road widening	2, 5	Natural brickearth	NFE	0.6	5.9	1
7	Layer	Road widening	2, 6	Modern intrusion	0.6	0	6.5	2
8	Layer	Irrigation	5	Modern topsoil	0.27	0		2
9	Layer	Irrigation	5	Natural gravel	NFE	0.27		1
10	Layer	Irrigation	6	Modern topsoil	0.4	0		2
11	Layer	Irrigation	6	Natural brickearth	NFE	0.4		1

APPENDIX 2: MATRIX



APPENDIX 3: POST-ROMAN POTTERY

Post-Roman pottery assessment (HCP 177)

Chris Jarrett

Introduction

A small assemblage of pottery was recovered from the excavation (four sherds/four estimated number of vessels (ENV)/154g, of which one sherds/1 ENV/17g was unstratified). The pottery dates solely to the post-medieval period. The assemblage is in a largely good condition, although it is recorded as mostly sherd material, except for one intact vessel. Most of the sherds could be assigned to a form. The stratified pottery appears to have been deposited under secondary conditions. The material was found in one context and as a small sized group (under 30 sherds). The classification of the pottery types is according to the Museum of London Archaeology (2014). The assemblage is discussed as an index.

Index

Unstratified

London tin-glazed ware with blue- or polychrome-painted decoration and external lead glaze (TGW D), 1630–1680, 1 sherd, 1 ENV, 17g, form: charger. Rim sherd with an internal Wanli type panel decoration with only a 'daisy'-type flower surviving. The exterior is abraded.

Context [4], spot date: late 19th-early 20th century

Creamware (CREA), 1740–1830, 1 sherd, 1 ENV, 6g, form: unidentified. Body sherd decorated with an external horizontal band of combed/incised lines. ?Chamber pot or bowl

Miscellaneous unsourced post-medieval pottery (MISC), 1480–1900, 1 sherd, 1 ENV, 36g, form: flower pot. Collared rim from a large flower pot made in a high-fired silty redware/terracotta. ?19th century

Refined white earthenware (REFW), 1805–1900, 1 sherd, 1 ENV, 94g, form: lid. Intact, bears grease-type pot lid (82 mm in diameter)

Significance, potential and recommendations for further work

The assemblage is of little significance as the pottery occurs as mostly fragmentary material and with little meaning. The main potential of the pottery is to date the context it was recovered from. There are no recommendations for further work on the pottery.

Reference

Museum of London Archaeology, 2014. Medieval and post-medieval pottery codes.
<http://www.mola.org.uk/resources/medieval-and-post-medieval-pottery-codes>.

APPENDIX 4: BUILDING MATERIAL ASSESSMENT

Review of Ceramic Building Material, Home Park Irrigation Works and Kingston Gate Access Road, Hampton Court Palace, Archaeological Watching Brief London Borough of Richmond-Upon-Thames (HCP177)

Amparo Valcarcel, April 2019

BUILDING MATERIALS SPOT DATES

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date	Spot date with mortar
4	2276	Post-medieval peg tile	1	1480	1900	1480	1900	1700-1900	No mortar
5	3042;2276	Post-medieval sandy brick and peg tile	2	1400	1900	1480	1900	1700-1900	No mortar
7	3042;2850L; 3064W	Post-medieval sandy brick; Flemish floor tile; cream encaustic wall tile	3	1400	1950	1700	1950	1870-1950	No mortar

Review

A small assemblage of ceramic building material was collected from the archaeological watching brief. The assemblage (6 fragments, 436 g) consists of pieces of fragmentary late post-medieval ceramic building material.

Bricks are made of red sandy fabric 3042 and no dimensions were preserved. Flat rectangular peg tiles, made of fabric 2276, are the only roofing material recovered from the site. The fine moulded sand indicates a late post-medieval date. A Flemish unglazed floor tile and an encaustic wall tile were collected from context [7]. The wall tile is dated 1870-1950, indicating a modern date for this context.

The presence of these bricks, peg, floor and wall tiles examples show a phase of construction in the mid of 18th and late 19th century. No further work is recommended.

Bibliography

Hawkins, N. 2019: *Home Park Irrigation Works and Kingston Gate Access Road Widening Scheme, Hampton Court Palace: An Archaeological Watching Brief*, PCA unpublished report.

APPENDIX 5: GLASS ASSESSMENT

Glass assessment (HCP 177)

Chris Jarrett

Introduction

The glass recovered from the archaeological investigation consists of four fragments, representing four estimated number of vessels (ENV) and weighing 679g, of which one fragment, 1 ENV, 226g is unstratified. The glass dates solely to the post-medieval period and more so the 20th century. The condition of the material is good and consists of fragmentary material and one intact bottle and appears to have been subjected to secondary depositional processes. The glass was recovered from two contexts and it is discussed as an index.

Index

Unstratified

English wine bottle, shaft and globe-type: olive-green glass, 1 fragment, 1 ENV, 226g. Rounded wall/base with a low rounded kick. Weathered surfaces. c. 1640–1680.

Context [2], spot date: 1920–2000

Bottle: pale green-tint, 1 fragment, 1 ENV, 83g. Straight-sided collar with an internal thread, conical neck with mould seams. The rim type was common place during the period c. 1880–1920.

Bottle, soda-type: clear glass, 1 fragment, 1 ENV, 53g. 'Prief'-type rim, above a bulge, conical neck with mould seams. C. 1920+

Context [4], spot date: 1920–2000

Bottle, soda-type: clear glass, 1 fragment, 1 ENV, 317g. Intact champagne shaped profile bottle. 'Prief'-type rim, above an asymmetrical bulge, conical neck with two opposed small stars. Embossed twice horizontally around the base is the name 'SCHWEPPE'S' and on the underside of the base is embossed in a square pattern 'A 129/8 11/UGB'. Schweppes is a long-lived company founded in 1783 and operates to the present day as a brand of the Coca-Cola GB company. 1920 onwards

Significance, potential and recommendations for further work

The glass has no significance at a local level as it consists of mostly fragmentary material without much meaning. The main potential of the glass is to broadly date the contexts it was recovered from. There are no recommendations for further work on the glass assemblage.

APPENDIX 6: OASIS FORM

OASIS ID: preconst1-348181

Project details

Project name	An Archaeological Watching Brief at Home Park Irrigation Works and Kingston Gate Access Road Widening, Hampton Court Pal
Short description of the project	An Archaeological Watching Brief at Home Park Irrigation Works and Kingston Gate Access Road Widening, Hampton Court Palace. A watching brief for an irrigation trench and the widening of an access road recorded natural gravel and brickearth overlain by modern made ground and topsoil.
Project dates	Start: 18-03-2019 End: 21-03-2019
Previous/future work	No / No
Any associated project reference codes	HCP177 - Sitecode
Type of project	Field evaluation
Site status	Scheduled Monument (SM)
Current Land use	Other 5 - Garden

Project location

Country	England
Site location	GREATER LONDON RICHMOND UPON THAMES TEDDINGTON AND HAMPTON Home Park Irrigation Works and Kingston Gate Access Road Widening, Hampton Court Palace
Postcode	KT8 9AU
Site coordinates	TQ 16067 68571 51.40377225904 -0.331170423697 51 24 13 N 000 19 52 W Point
Site coordinates	TQ 17494 69336 51.410354298987 -0.310408838448 51 24 37 N 000 18 37 W Point
Height OD / Depth	Min: 5.9m Max: 5.9m

Project creators

Name of Organisation	Pre-Construct Archaeology Ltd.
Project brief originator	Historic Royal Palaces
Project design originator	Historic Royal Palaces
Project director/manager	Helen Hawkins
Project supervisor	Patric Cavanagh
Name of sponsor/funding body	Historic Royal Palaces

Project archives

Physical Archive recipient	Historic Royal Palaces
Physical Contents	"Ceramics", "Glass"
Digital Archive recipient	Historic Royal Palaces
Digital Contents	"Ceramics", "Glass"
Digital Media available	"Database", "Text"
Paper Archive recipient	Historic Royal Palaces
Paper Media available	"Context sheet", "Diary", "Plan", "Section"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Watching Brief at Home Park Irrigation Works and Kingston Gate Access Road Widening, Hampton Court Pal
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