# THAMES WATER TRIAL WORKS IN LONDON ZOO (ZSL), GLOUCESTER SLIPS CAR PARK, REGENT'S PARK, NW1 4RY

## LONDON BOROUGH OF CAMDEN

## An Archaeological Watching Brief

COMPASS ARCHAEOLOGY

**April 2017**

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An Archaeological Watching Brief

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## *Abstract*

*Between the 21st and 28th February 2017 Compass Archaeology conducted an Archaeological Watching Brief located in London Zoo (ZSL) Gloucester Slips Car Park, London Borough of Camden NW1 4RY, monitoring the undertaking of two trial pits, excavated to establish the practicalities of re-routing the mains water supply ahead of the construction of the HS2 rail line. The watching brief was commissioned by Thames Water following advice from the Greater London Archaeological Advisor to Camden, due to the site being located over the former Cumberland Arm of the Regent's Canal.*

*The programme of archaeological works entailed the monitoring of 2 pits, TP29 and TP30, located at the eastern end of the car park. The first trench, TP30, was rectangular in plan, aligned northeast-southwest, measuring 3.5m in length x 2.0m in width x 1.2m in depth (34.4mOD). The second trench, located to the north, was cruciform in plan, with each arm measuring 8.0m in length x 0.7m in width x 1.2m in depth (34.26-34.32mOD).*

*The stratigraphy recorded in both trenches was consistent with the known archaeological sequence of the area; in TP30, a large deposit of post-Second World War bomb debris (4) was recorded, overlying darker, siltier layers. The brick rubble was taken to be the result of a large scale infilling event which took place between 1941 and 1943, after the canal fell out of use. The second trench undertaken, TP29, recorded a less well defined layer of rubble cutting into natural London Clay. No features consistent with the cutting of the canal were observed, implying the trial pit was situated north of the feature, with only marginal disturbance, however, some post-war backfilling had still occurred.*

*A very small quantity of glass, ceramic building material and animal bone was recovered from TP29, dated to the Post-medieval period, and is most likely attributed to domestic waste. No indication of earlier activity, such as pre-canal construction, was recorded in this instance. Natural London Clay was recorded in TP29 only at a depth of 0.7m (34.76mOD) sloping southwards to 1.1m (34.36mOD).*

*The watching brief formed a preparatory stage of investigation, ahead of the main excavation to be undertaken by Thames Water. As further archaeological mitigation may be required, a new / updated Written Scheme of Investigation and / or Watching Brief Report shall be completed as required and in consultation with the relevant parties.*

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# 1 INTRODUCTION

**1.1** This document forms a summary of the results of an archaeological watching brief conducted at the London Zoo (ZSL) Gloucester Slips Car Park, London Borough of Camden NW1 4RY by Compass Archaeology between the 21st and 28th February 2017 (fig.1).

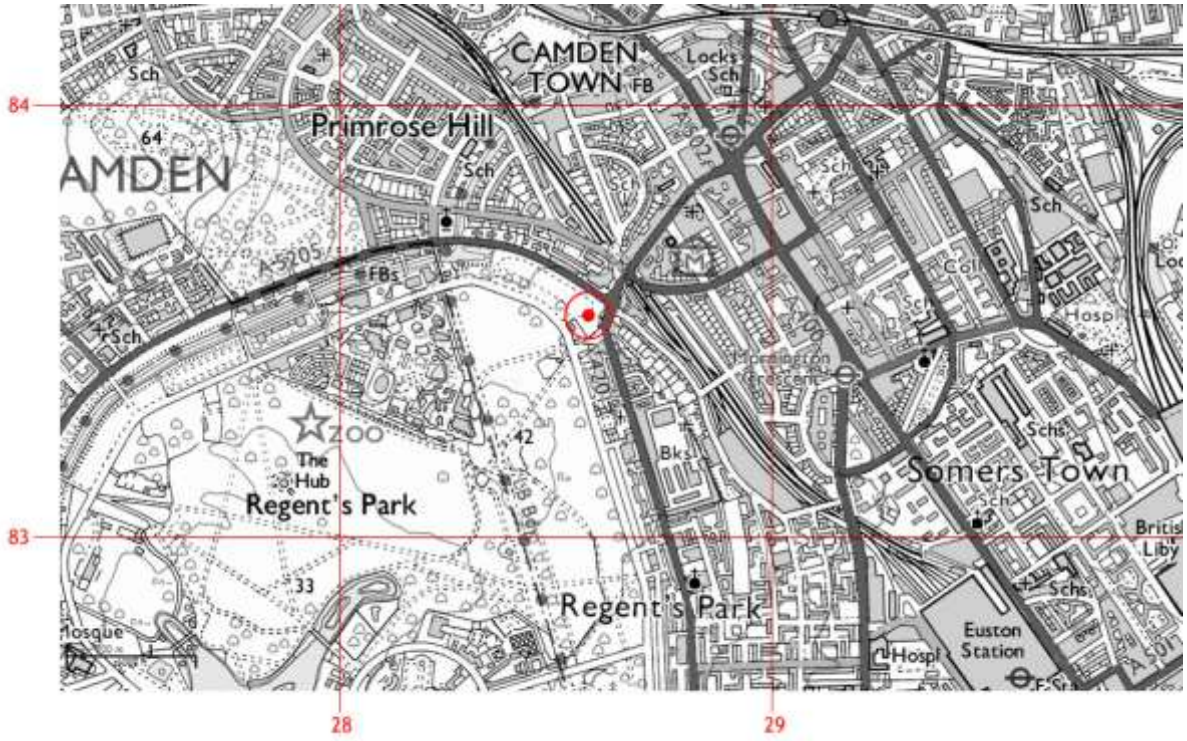


*Figure 1: Site location, marked in red.*

**1.2** The watching brief was commissioned by Thames Water, following advice from the Greater London Archaeological Advisor to Camden, due to the site's location along the line of the former Cumberland Arm of the Regent's Canal.

**1.3** The site also fell within the boundary of The Regent's Park, a nationally listed Park and Garden of Special Historic Interest (Entry Number: 1000246), and within a locally designated conservation area, also referred to as Regent's Park (fig.2).

**1.4** The programme of archaeological works entailed the monitoring of the completion of 2 trenches located at the east end of the car park, undertaken in order to establish the practicalities or re-routing the mains water supply ahead of the construction of the HS2 rail line.

# 2 ACKNOWLEDGEMENTS

**2.1** Compass Archaeology would like to thank Thames Water for commissioning Compass to undertake the archaeological watching brief and also to Barhale for ensuring accessibility and support on site during their groundworks.

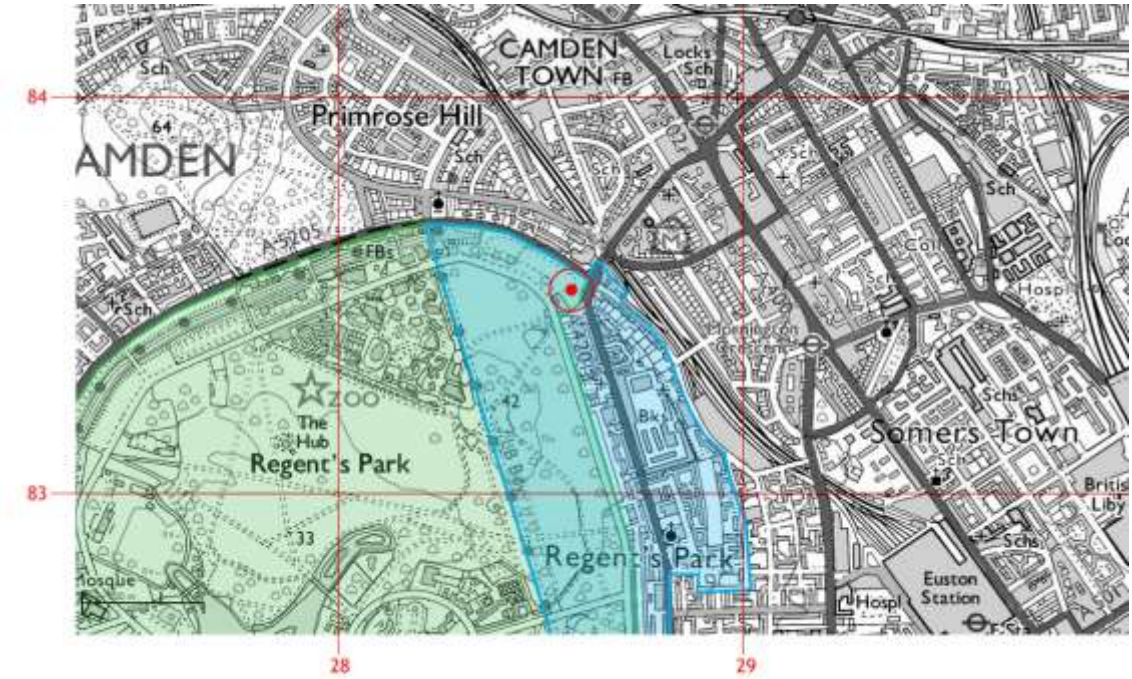


*Figure 2: Site location (red) in relation to the Regent's Park Conservation Area (blue), as designated by Camden Borough Council and the extent of The Regent's Park Registered Park and Garden of Special Historic Interest (green).*

## 3 SITE LOCATION, GEOLOGY AND TOPOGRAPHY

**3.1.1** The site lies at the east end of the car and coach park attached to London Zoo, south of Prince Albert Road, and 35m west of Gloucester Gate Bridge. The Outer Circle of Regent's Park lies to the south and the Zoo itself 300m to the southwest.

**3.1.2** The car and coach park is a long thin space aligned northwest-southeast and measuring approximately 275m long by up to 75m wide. The watching brief area is confined to the far eastern end of the site. The area is currently laid to a mixture of tarmac with a border of grass and trees screening it from the main roads.

**3.1.3** The British Geological Survey, (Sheet 256: North London), indicates that the site lies over a large expanse of London Clay, with several areas of worked ground to the south and east, (fig.3). Riverine silts and gravels prevail at the very southern edge of Regents Park along the line of Marylebone Road, 1.2km south of the watching brief area. The former course of the River Tyburn is demarked by a corridor of alluvium 2km to the southwest.

**3.1.4** The main site is relatively level at approximately 36mOD. There is a slight remnant of a bank along the northern boundary and the grassed area drops into a bowl towards the far eastern end, adjacent to Gloucester Gate Bridge. These features reflect the historic line of the infilled Cumberland Arm of the Regent's Canal, (see section 4.5). However, the actual cutting of the canal itself would have lain at a considerable depth below modern ground levels, at least 2.5m, to allow for pedestrian and river traffic to pass below the bridge. This is evident from the surviving bridge crossings and cuts to the west along the Paddington Arm of the Canal.

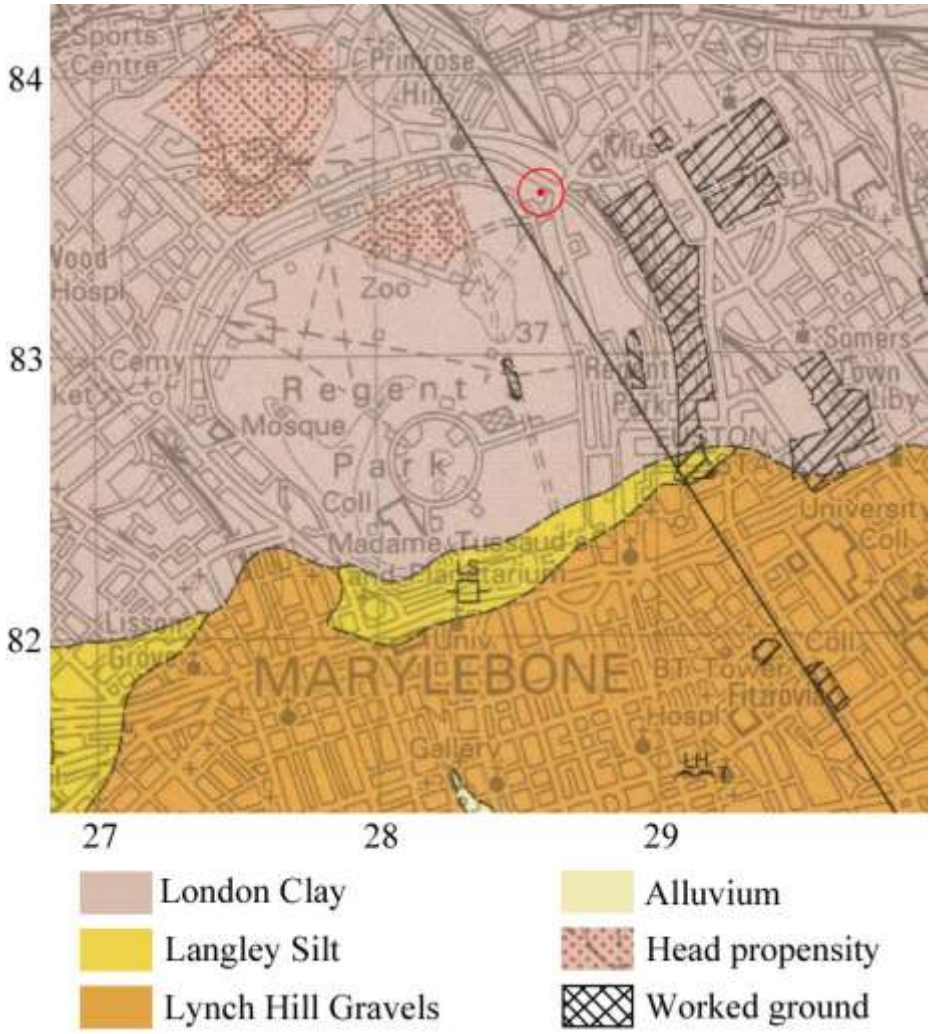


*Figure 3: Extract from the British Geological Survey sheet 256: North London, with site location marked in red.*

## 4 ARCHAEOLOGICAL AND HISTORIC BACKGROUND

**4.1** Included here is a summary of the archaeological and historical background of the site, with specific reference to the Greater London Historic Environment Record (GLHER) and relevant cartographic sources. A more detailed historical and archaeological account of the site can be found in the preceding Written Scheme of Investigation (Compass Archaeology January 2017).

### 4.2 *Prehistoric*

**4.2.1** The soils on which the site lies, (London Clay), are inappropriate for exploitation as agricultural land and therefore unfavourable to early communities. A search of the GLHER produced only a few isolated findspots of Palaeolithic handaxes nearer to Oxford Street over 2km south. This in turn reflects the higher gravels in the areas to the south which would have been more suitable for habitation, but can be interpreted as background noise rather than evidence of an *in situ*, prolonged or permanent human presence.

## 4.3 *Roman*

**4.3.1** The Roman settlement of *Londinium* was established around the crossing point of London Bridge in the 1st century AD, comprising a main playing card shaped fortress centred over Noble Street, and defensive walls spanning from Ludgate Hill in the west to Aldgate / Tower Hill in the east. The settlement was further protected by a number of bastions and a large v-shaped ditch.

**4.3.2** The site lies c4km northwest of the main settlement, with the nearest roads being the Silchester Road, 2.3km to the south, and the St Alban's Road, 2.3km to the west. As such, the site is firmly within the hinterland, and whilst may have been subject to cultivation, there is limited evidence of prolonged or significant activity.

## 4.4 *Saxon / medieval*

**4.4.1** No GLHER entries for this period were returned. During much of its early history the site must have lain within the ancient Forest of Middlesex which lay to the north of the City. This forest would have provided game, and grazing grounds for pigs and the like, during the early medieval period – as is attested in Domesday Survey entries.

**4.4.2** After the Norman Conquest in 1066 the Forest of Middlesex became a royal forest, owned exclusively by the King. As such management of the forest was strictly controlled. Meanwhile, at the time of Domesday in 1086 the Manor of Tyburn was still held of Barking Abbey and contained pasture, arable land and woodland for 50 pigs. By the middle of the 12th century the whole of the Manor had been parcelled out to be farmed by tenants.

**4.4.3** This led to much of the forest being cleared and the landscape becoming one of open field systems and pastureland. The site remained open land until the early-19th century and little development or noticeably intrusive human activity took place on the site, beyond cultivation and the development of field boundaries.

## 4.5 *Post-Medieval*

**4.5.1** Upon the dissolution of the monasteries Henry VIII appropriated the Manor and its holdings for the Crown and emparked the grounds of modern day Regent's Park, then known as Marylebone Park. It was not until the early-19th century that the Prince Regent, (later George IV), commissioned John Nash to design a new living and recreational space. In 1811 work commenced on elements of Nash's masterplan such as the terraced properties around the boundaries, the Outer Circle and the Regent's Canal.

**4.5.2** The Regent's Canal branch of the Grand Junction Canal, built between 1812 and 1820, was designed to provide markets easier access to the north of London. The main canal ran from the Grand Junction Canal's Paddington Arm to the River Thames at Limehouse. A second, eastern, branch was commissioned in 1813 which ran around the northeastern corner of the park before turning south to the Cumberland Market. This arm served as a quick transport route for both import and export of hay and straw from the market. The branch was therefore named the Cumberland Arm, and formally opened in 1820, (see fig.4). It was spanned by Gloucester Gate Bridge immediately east of the

watching brief area, the current bridge being a replacement, built in 1877. The cutting for the canal lay several metres below the bridge base.

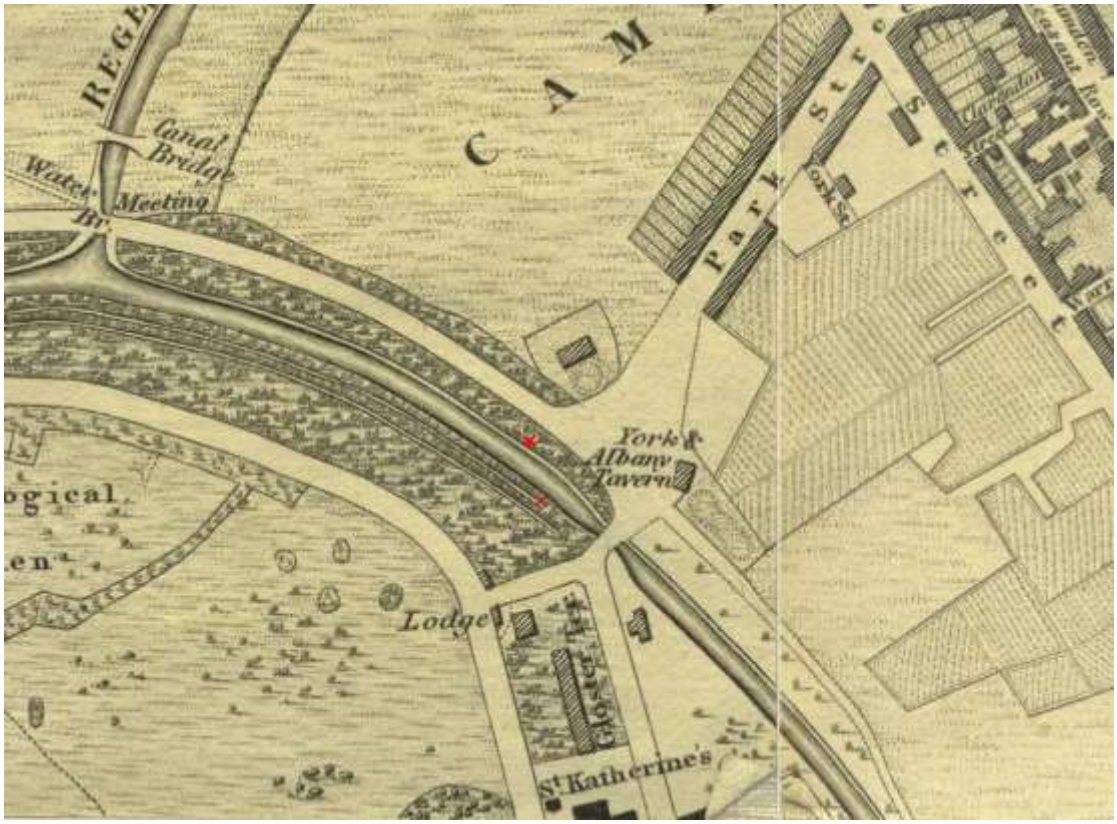


*Figure 4: Extract from Greenwood's map of 1827, with trenches marked in red.*

**4.5.3** In 1828 the Royal Zoological Society established the first Zoological Gardens in 8ha of land, which they extended in 1905 and 1908.

**4.5.4** During the Second World War the surrounding area was badly damaged by bombing raids and the canal and Cumberland Basin used to provide water for fire crews. The resulting debris was used to fill in the Cumberland Arm of the Regent's Canal in 1942 / 1943 which had ceased to serve its purpose since the closing down of Cumberland Market in the 1920s. The canal cutting was infilled to near enough existing road level, bar a shallow bowl on the western side of the bridge, which now accommodates an electricity substation, (see fig.5).

*Figure 5: Extract from the 1952 OS Plan TQ2883.*

## 5 PLANNING AND OBJECTIVES

**5.1** The groundworks entailed the completion of 2 trenches located at the eastern end of the car park. The first trench (TP30) was rectangular in plan, measuring 3.5m in length x 2.0m in width x 1.2m in depth, and aligned northeast-southwest. The second trench (TP29), located to the north within the grass border of the car park was cruciform in plan, in total measuring 16m in length (northeast-southwest and northwest-southeast) x 0.7m in width x 1.2m in depth (fig.6).

**5.2** The works in TP30 were undertaken via a mechanical excavator fitted with a breaker to remove the asphalt car park surface and concrete bedding layer, and completed through hand excavation. TP29 was entirely hand excavated.

**5.3** The fieldwork presented the opportunity to answer the following general and more specific research questions:

- What evidence of the former Cumberland Arm of the Regent's Canal survives in this section?
- What was the nature of the materials used to backfill the canal in 1941-3?
- Is there evidence of any earlier activity on the site prior to construction of the canal?
- At what level does archaeology survive across the site?
- At what levels is natural geology present and what form does this take?

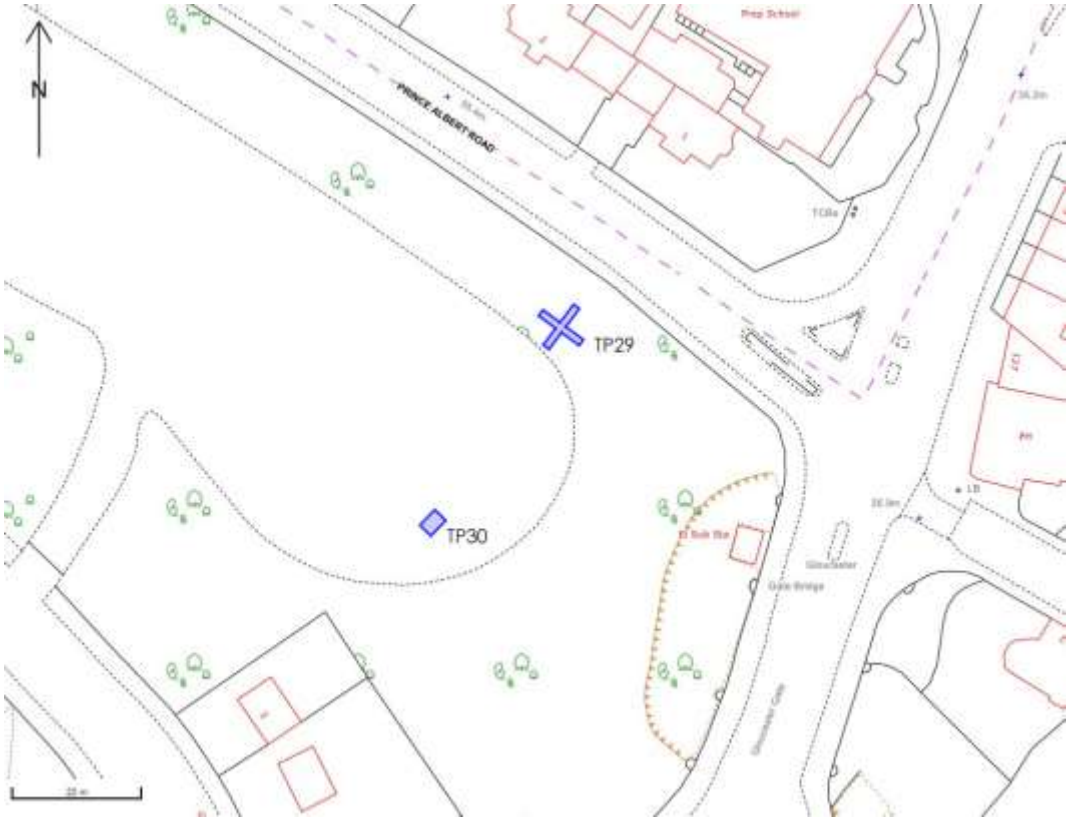


*Figure 6: Locations of Trial pits 29 and 30 marked in blue.*

# 6 METHODOLOGY

## 6.1 Standards

**6.1.1** The field and post-excavation work was carried out in accordance with Historic England guidelines (*Greater London Archaeology Advisory Service: Standards for Archaeological Work, 2015*). Works also conformed to the standards of the Chartered Institute for Archaeologists (*Standard and guidance for an archaeological watching brief 2015)*. Overall management of the project was undertaken by a full member of the Chartered Institute.

**6.1.2** Fieldwork was carried out in accordance with the Construction (Health, Safety & Welfare) Regulations. All members of the fieldwork team held valid CSCS (Construction Skills Certificate Scheme) cards, and wore hi-vis jackets, hard-hats, steel-toe-capped boots, etc., as required. All members of the fieldwork team also followed the contractors' health and safety guidelines.

**6.1.3** The Client and Historic England were kept informed of the progress of fieldwork and any finds recovered.

## 6.2 Fieldwork

**6.2.1** The archaeological watching brief took place during Thames Water trial holes undertaken to establish the practicalities of re-routing the mains water supply ahead of the construction of the HS2 rail line. Two trenches, TP29 and TP30 were undertaken between the 21st and 28th February 2017.

**6.2.2** TP30 was undertaken first, followed by TP29, both under archaeological supervision. The main objective of the watching brief was to define the character, extent and significance of any observable remains, and to recover dating and environmental evidence.

**6.2.3** Archaeological contexts were recorded as appropriate on *pro-forma* sheets by written and measured description, and drawn in plan or section, generally at scales of 1:10 or 1:20. The investigations were recorded on a general site plan and related to the Ordnance Survey grid. Levels were taken on archaeological features or deposits, transferred from the nearest Ordnance Datum Benchmark, a spot height noted on Ordnance Survey Plans *Fords Park Road*, at 1.1mOD. The fieldwork record was supplemented by digital photography, in.jpeg and RAW formats.

**6.2.4** The recording system followed the procedures set out in the Museum of London recording manual. By agreement the recording and drawing sheets used are directly compatible with those developed by the Museum.

## 6.3 Post-excavation

The fieldwork was followed by off-site assessment and compilation of a report, and by ordering and deposition of the site archive.

### 6.3.1 Finds and samples

Assessment of finds was undertaken by appropriately qualified staff, (see Appendix III). Finds and samples were treated in accordance with the appropriate guidelines, including the Museum of London's 'Standards for the Preparation of Finds to be permanently retained by the Museum of London'. All identified finds and artefacts have been retained and bagged with unique numbers related to the context record, although certain classes of building material and modern finds will be discarded once an appropriate record has been made.

## 6.4 Report procedure

**6.4.1** This report contains a description of the fieldwork plus details of any archaeological remains or finds, and an interpretation of the associated deposits. Illustrations have been included as appropriate, including a site plan located to the OS grid. A short summary of the project has been appended using the OASIS Data Collection Form.

**6.4.2** Copies of this report will be supplied to the Client and Historic England.

**6.4.3** There is no provision for further analysis or publication of significant findings. Should these be made the requirements would need to be discussed and agreed with the Client.

## 6.5 The site archive

Once the next phase of excavation has been completed, an ordered indexed and internally consistent archive of the evaluation will be compiled in line with MoL Guidelines for the Preparation of Archaeological Archives, and will be deposited in the Museum of London Archaeological Archive under site code ZSL17. The integrity of the site archive should be maintained, and the landowner will be urged to donate any archaeological finds to the Museum.

## 7 RESULTS

**7.1** The following forms a written description of observations made during the watching brief. Deposits are shown in as (x), cuts and structures as [x]. The text is supplemented with illustrative photographs. For a full context list refer to Appendix I.

### 7.2 TP30

**7.2.1** The first trench was located along the eastern boundary of the car park, adjacent to a sparsely wooded area leading towards the artificial bowl below Gloucester Gate Bridge. The trench was rectangular in plan, aligned northeast-southwest, measuring 3.5m in length x 2.0m in width x 1.2m in depth (34.4mOD) (fig.7).

*Figure 7: Completed trench, showing backfill below modern car park surface. Facing NE. Scale 1m.*

**7.2.2** The stratigraphy comprised 80mm of asphalt car park surface (1) overlying 210mm of well compacted sandy concrete, abundant with rounded gravels (2). This sealed a large sequence of at least one backfilling event, continuing below the level of excavation. The uppermost layer consisted of a very well compacted metalled rubble abundant with black ash and charcoal (3) measuring 80mm in thickness, the base of which was encountered at 35.23mOD (fig.8).

*Figure 8: Context (3), partially removed, seen below a thicker layer of sandy concrete (2). Facing NW. Scale 1m.*

**7.2.3** This compact surface sealed a large deposit of bricks, with very few other inclusions observed – with the exception of occasional ceramic roof tiles, within a whitish grey powdery mortar matrix (4). The deposit spanned the entirety of the trench, measuring a 320mm at the south-eastern end, increasing to c370mm at the north-west, with a noticeable slope from north to south On the north-eastern side of the trench the base was encountered at 34.91mOD (fig.9).

*Figure 9: Stratigraphy of TP30: Asphalt car park (1) and concrete bedding layer (2) above a series of post-Second World War backfills. Facing SE. Scale 1m.*

**7.2.4** This brick demolition rubble overlay a contrasting layer of grey-black silt containing frequent smaller fragments of brick, stone and tile (5). The layer measured c290mm in thickness and was observed across the entirety of the trench. A possible variation was noted towards the base of the context, with the lowest 50mm being comprised of a darker, finer silt, however, it was taken to be contemporary with the more rubble abundant upper part of the layer.

**7.2.5** Below the silt was a more compact layer predominantly consisting of a whitish, wet lime mortar, with moderately frequent small red brick inclusions (6). The material was observed across the entire trench, however, was most visible in the east section where it measured 130mm in thickness. Similarly to context (5) a slight variation in colour was noted, with the upper section being lighter.

**7.2.6** The final context recorded in this trench was a thick layer of well compacted stiff grey-brown clay, abundantly mottled with small charcoal fragments and stones (7), encountered at a depth of 1.11m (34.49mOD) (fig.10). The deposit was brittle in texture and relatively homogenous, with the occasional very bright yellowish or bluish patches, possibly a result of contamination. The context measured a minimum of 90mm in depth, with an additional sondage dug through the centre of the trench in a southwest-northeast direction, showing the clay continuing below the new level of excavation of 1.5m (34.10mOD).

*Figure 10: Extended and completed trench, showing the northeast and northwest facing sections. Facing approximately S. Scale 1m.*

**7.2.7** No finds were recovered from the trench and with the exception of ceramic building tiles there was a complete absence of other building material, such as window glass, slate or wood. Additionally, the majority of the bricks within context (4) were complete, suggesting the material was at least partially sorted before being deposited.

**7.2.8** Once recorded TP30 was backfilled using MOT Type 1 compacted with a Wacker Neuson compacter plate.

## 7.3 TP29

**7.3.1** The second trench, TP29 was located to the north of TP30, situated wholly within the grassed area bordering the car park. The trench was cruciform in plan, aligned northeast-southwest, with each of the two sections measuring 16m in length x 0.7m in width x 1.2m in depth (34.26-34.32mOD) (fig.11). Due to the northeast-southwest arm of the trench having the most potential for encountering features associated with the proposed archaeological research questions – the cutting and slope for the canal in particular, this section was completed under archaeological supervision.

*Figure 11: Northeast-southwest arm of TP29, showing natural clay beneath root abundant topsoil and subsoil. Facing NE towards Prince Albert Road. Scale 1m.*

**7.3.2** The stratigraphy encountered in TP29 was simple and relatively shallow. The upper part comprised a layer of moderately compacted dark brown soil abundant with tree roots (8) (the trees were removed prior to the groundworks commencing), measuring 0.7m in thickness at the northern end of the trench, narrowing to 0.25-0.30m at the southern end, where it overlay a layer of rubble (10).

**7.3.3** The southernmost 5.50m of the topsoil was cut by a large rubble dump [9]. The cut had a steep sloping side at the northern end, terminating in a horizontal base, with a total depth of 0.6m. The cut was observed running the length of the trench, and taken to continue further south beyond the limit of excavation. The cut was filled by a large deposit of loosely compacted light brown soil abundant with stones, tree roots and brick fragments (10). The rubble measured between 0.6 and 1m, in thickness, becoming wider towards the south, and recorded in both the northwest and southeast facing sections of the trench (fig.12).

*Figure 12: View of the trench from the northern end, showing topsoil (8) overlying natural clay (11) to the right of the scale, and the beginning of the rubble (10) to the left, with the natural clay sloping downwards towards the canal. Facing approximately SW. Scale 1m.*

**7.3.4** This rubble deposit cut into natural clay, which was observed across the entirety of the trench at a depth of 0.7m at the northern end (34.76mOD). The clay consisted of a well compacted, stiff, light brown-orange clay, containing fairly infrequent gravel inclusions (11). At the northern end of the trench the clay measured 0.5m in thickness, continuing below the level of excavation, and despite being truncated by [9] a slight slope was still visible, with the clay at the southern end narrowing to 0.1m in thickness (fig.13).

*Figure 13: Slope of the natural London Clay (11) in the southeast facing section, seen beneath a modern tree bowl and topsoil. Facing NE. Scale 1m.*

**7.3.5** A very small quantity of post-medieval finds were recovered from TP29, consisting of two small fragments of ceramic building material, a single fragment of bottle glass and two fragments of animal bone. A full analysis of these finds can be found in Appendix III.

**7.3.6** The second arm of the cruciform trench displayed the same stratigraphy as described above, consisting of topsoil overlying rubble, above natural London Clay. This section held less potential for identifying archaeological features as it cuts across the sloping topography created by the canal. No further finds or features of archaeological interest were recorded in the trench and it was subsequently backfilled once being appropriately recorded.

## 8 DISCUSSION

**8.1** The stratigraphy observed across both trenches is consistent with the post-medieval creation of the area and post-war alterations, with additional exposure of the underlying geology. The limited stratigraphy and high level at which the natural London Clay was encountered in TP29 indicates the trench was located outside of the canal cutting, lying on higher ground, much as it is in the present day. This is further highlighted by the shallow slope of the clay, which showed no indication of a sudden or steep truncation which would indicate an edge. However, the presence of the brick rubble towards the southern end of the trench shows the excavation was part of a wider area of levelling and backfilling.

**8.2** The brick rubble observed in significant quantities across both trenches can be attributed to the infilling of the Cumberland Arm and of the Regent's Canal in the post-Second World War period, using brick from bomb damaged properties in the vicinity. A number of the bricks (see fig.14 below) were stamped 'ELLISTOWN', a brickworks located near Coalville, Leicester, notable producers of Ibstock bricks. The Ellistown Colliery, Brick, Pipe and Fireclay Works opened in 1874 by Joseph Joel Ellis, originally to manufacture bricks which would make the houses for the miners of the Ellistown Colliery. The Brickworks and Colliery operated as one company until their division in 1936, finally closing prior to the start of the Second World War (Penmorfa Online 2017).


*Figure 14: Example of an Ellistown brick recovered from TP30. Scale 0.2m.*

The presence of these bricks demonstrates firstly, that materials were being imported from elsewhere in the country to construct the buildings surrounding Regent's Park, possibly a result of the high demand for materials in such a large city, and secondly, that the buildings themselves were relatively short lived – being constructed after 1874 and only surviving until the Second World War.

**8.3** The stratigraphic sequence recorded in TP30 is consistent with the history of the area, in so far as the canal was known to have been infilled with bomb debris, and was therefore expected to be exposed during the groundworks. It is likely the sequence was created over a short period of time and context (3), the compacted black rubble, laid down to make a level, metalled surface.

In contrast, the absence of any significant features or changes in levels in TP29, in this instance, indicates that the trench was located outside the canal. No evidence of a cutting was observed and the limited depth of excavation did not reach the base of the original canal.

## 9 CONCLUSION

The following section provides a summary of the work undertaken with reference to the original research questions set out above.

### 9.1 *What evidence of the former Cumberland Arm of the Regent's Canal survives in this section?*

The archaeological stratigraphy and finds recovered from the watching brief relate wholly to the infilling of the canal. Whilst this infill survives to a significant degree, there was no evidence of actual canal features, such as the base, cutting, or slope observed during these particular groundworks.

### 9.2 *What was the nature of the materials used to backfill the canal in 1941?*

The main material used to backfill the canal is brick, with a loose mortar matrix, and infrequent ceramic building tiles. The stratigraphy below this is comprised predominantly of a wetter, siltier material, much of which is taken to be residual material and natural infilling from when the canal first fell out of use.

### 9.3 *Is there evidence of any earlier activity on the site prior to construction of the canal?*

No evidence of earlier activity was recorded during the watching brief. The stratigraphy observed is dated to the post-medieval / modern period.

### 9.4 *At what level does archaeology survive across the site?*

In TP30 archaeology was encountered at a depth of 0.29m below the present ground level (35.31mOD) and continued below the level of excavation. The rubble layer (10) in TP29 was recorded at a depth of 0.4m (35.09mOD) below the present ground level.

### 9.5 *At what levels is natural geology present and what form does this take?*

Natural geology was encountered in TP29, consisting of clean, homogenous orange-brown London Clay. At the northern end of the trench it was recorded at a depth of 0.7m (34.76mOD) sloping southwards to 1.1m (34.36mOD). Natural geology was not observed in TP30.

# 10 SOURCES

## 10.1 Digital Sources

Bombsight Online (2017). http://bombsight.org/#15/51.5050/-0.0900

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London Archaeological Archive & Resource Centre (LAARC) database. http://archive.museumoflondon.org.uk/laarc/caralogue/

Penmorfa (2017). Old bricks – history at your feet. Retrieved April 2017 from http://www.penmorfa.com/bricks/england7.html.

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Hibbert, B. & Weinreb, C. (1983). *The London Encyclopaedia.*

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Smith, T (1833). *A Topographical & Historical Account of the Parish of St. Mary-Le-Bone.*

## 10.3 Cartographic Sources

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Ordnance Survey (1952). *TQ 2883 1:1250 scale.*

British Geological Survey (1998). *England & Wales, Sheet 256: North London. Solid and Drift Geology 1:50 000 scale.*

## APPENDIX I: LIST OF CONTEXTS

| Number | Trench | Description |
|---|---|---|
| (1) | TP30 | Asphalt car park surface |
| (2) | | Concrete bedding layer below (1) |
| (3) | | Compacted black 'metalled' rubble |
| (4) | | Brick rubble backfill |
| (5) | | Rubble and dark silty layer below (4) |
| (6) | | Compact mortar / rubble below (5) |
| (7) | | Grey-brown clay below (6) |
| (8) | TP29 | Topsoil |
| [9] | | Cut for rubble dump |
| (10) | | Rubble fill of [9] |
| (11) | | Natural London Clay |

## APPENDIX II: ARCHAEOLOGICAL SECTIONS

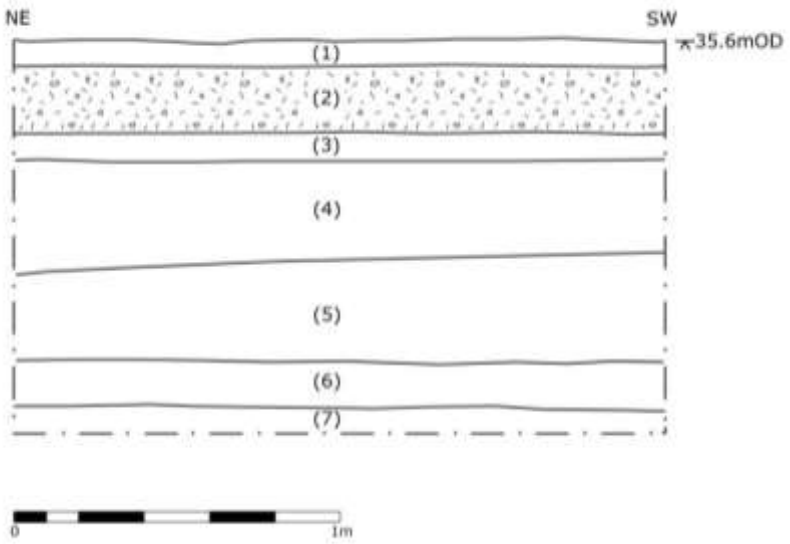


*Figure 15: Northwest facing section of TP30. Original drawn at 1:10.*

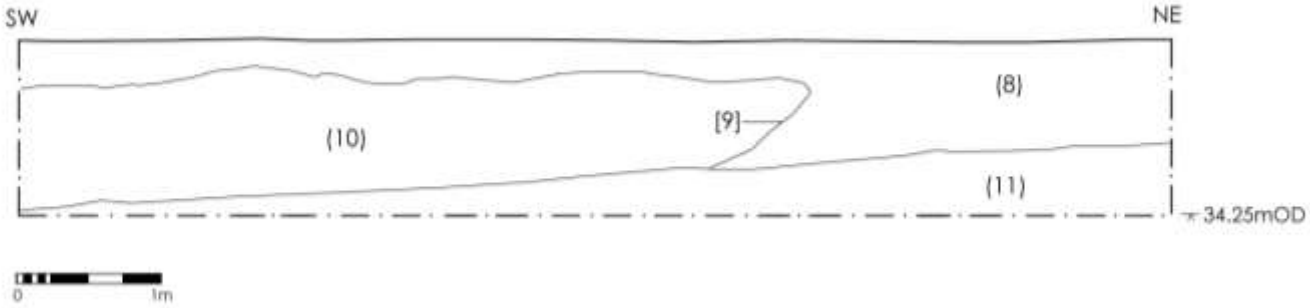


*Figure 16: Southeast facing section ofTP29. Original drawn at 1:50.*

## APPENDIX III: THE FINDS

### TP29

Context (10)

#### CERAMIC BUILDING MATERIAL

Two fragments were recovered from the rubble deposit within TP29. The first is a fragment of plain tile in an orange fabric with highly micaceous surfaces and brushed interior. The second is taken to be a fragment of ridge tile, in an orange fabric with a reduced core. The exterior surface is blackened.

Both are of later post-medieval date.

#### GLASS

A single large fragment of vessel glass was recovered from the watching brief. Basal fragment from a heavy bottle. Dark in appearance, however the actual colour is unknown due to the presence of an all over patina.

Post-medieval.

#### ANIMAL BONE

Two fragments:

1) Fragment of long bone from a medium to large sized mammal.

2) Right mandible, partially broken, of a sheep (*ovis aries*).

Date unknown, most likely post-medieval domestic waste.

## APPENDIX IV: OASIS RECORDING FORM

### OASIS ID: compassa1-282011

#### Project details

| | |
|---|---|
| Project name | Thames Water Trial Works in London Zoo (ZSL) Car Park: An Archaeological Watching Brief |
| Short description of the project | Watching brief conducted in Gloucester Slips Car Park, NW1 4RY between the 21st and 28th February 2017 by Compass Archaeology. Commissioned by Thames Water, the programme of archaeological works entailed the monitoring of the completion of 2 trenches located at the east end of the car park, undertaken in order to establish the practicalities or re-routing the mains water supply ahead of the construction of the HS2 rail line. The first trial hole, TP30, recorded at least 1m of post-Second World War backfill below the modern car park surface. This was taken to be bomb debris used to backfill the Cumberland Arm of the Regent's Canal over which the site was situated. The second trial hole, TP29 recorded a shallower rubble deposit over natural London Clay. A very small quantity of post-medieval finds were recovered. Natural geology was encountered at 34.76-34.36mOD. |
| Project dates | Start: 21-02-2017 End: 28-02-2017 |
| Previous/future work | No / Yes |
| Any associated project reference codes | ZSL17 - Sitecode |
| Type of project | Research project |
| Site status | Conservation Area |
| Site status (other) | Registered Park and Garden of Special Historic Interest |
| Current Land use | Transport and Utilities 2 - Other transport infrastructure |
| Monument type | CANAL Post Medieval |
| Significant Finds | TILE Post Medieval |
| Significant Finds | GLASS Post Medieval |
| Significant Finds | ANIMAL BONE Post Medieval |
| Investigation type | "Watching Brief" |
| Prompt | Proximity of works to known archaeological feature |

#### Project location

| | |
|---|---|
| Country | England |
| Site location | GREATER LONDON CAMDEN CAMDEN London Zoo (ZSL) Gloucester Slips Car Park |
| Postcode | NW1 4RY |
| Study area | 20 Square metres |
| Site coordinates | TQ 528584 183503 50.943726366823 0.176100671758 50 56 37 N 000 10 33 E Point |
| Height OD / Depth | Min: 34.36m Max: 34.76m |

## Project creators

| | |
|---|---|
| Name of Organisation | Compass Archaeology |
| Project brief originator | Thames Water Utilities Ltd |
| Project design originator | Compass Archaeology |
| Project director/manager | Geoff Potter |
| Project supervisor | Heidi Archer |
| Type of sponsor/funding body | Thames Water Utilities |

## Project archives

| | |
|---|---|
| Physical Archive recipient | Museum of London archaeological archive |
| Physical Archive ID | ZSL17 |
| Physical Contents | "Animal Bones","Glass","other" |
| Digital Archive recipient | Museum of London Archaeological Archive |
| Digital Archive ID | ZSL17 |
| Digital Contents | "other" |
| Digital Media available | "Images raster / digital photography" |
| Paper Archive recipient | Museum of London Archaeological Archive |
| Paper Archive ID | ZSL17 |
| Paper Contents | "Animal Bones","Glass","other" |
| Paper Media available | "Context sheet","Map","Notebook - Excavation',' Research',' General Notes","Report","Section" |

## Project bibliography 1

| | |
|---|---|
| Publication type | Grey literature (unpublished document/manuscript) |
| Title | Thames Water Trial Works in London Zoo (ZSL), Gloucester Slips Car Park, Regent's Park, NW1 4RY. London Borough of Camden: An Archaeological Watching Brief. |
| Author(s)/Editor(s) | Archer, H. |
| Date | 2017 |
| Issuer or publisher | Compass Archaeology |
| Place of issue or publication | 250 York Road, London, Sw11 3SJ |
| Description | A comprehensive report summarising the results of a watching brief. Report comprises background information, including local geology, |

historical and archaeological background, and details pertaining to the requirement for archaeological investigation. The second part comprises results of both trenches containing photographs, with an analysis and concluding remarks. Finally, a series of specialists reports are appended outlining the major artefact groups.