

ARCHAEOLOGICAL DESK BASED ASSESSMENT

Stag Brewery Mortlake Richmond upon Thames

March 2020

Local Planning Authority: London Borough of Richmond upon Thames

Site centred at: TQ20371 76022

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EXECUTIVE SUMMARY

The Site of the Stag Brewery, Mortlake, Richmond-upon-Thames (hereafter the 'Site') has been reviewed for its below ground archaeological potential.

In terms of relevant nationally designated heritage assets, no World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck Sites lie within or in immediate proximity to the Site.

In terms of relevant local designations the Site lies within the Mortlake and Barnes Archaeological Priority Area, as defined by the London Borough of Richmond upon Thames and their archaeological planning advisors.

The Site is considered to have an archaeological potential for the Medieval, Post Medieval and Modern periods. The eastern part of the Site is known to contain the site of the Medieval palace of the Archbishops of Canterbury, together with the site of the fourteenth century parish church, while the western part of the Site is known to contain the site of the Renaissance mansion of Thomas Cromwell, Earl of Essex.

Past post-depositional impacts are considered likely to have been severe and cumulative across the Site as a result of previous and existing phases of development, principally relating to the Brewery complex which currently occupies the Site.

Programmes of archaeological fieldwork undertaken across the Site have revealed evidence of Medieval and Post Medieval deposits, together with substantial modern horizontal truncation.

The Site is proposed for comprehensive mixed use, residential-led redevelopment, including areas of basement beneath the Site.

Redevelopment of the Site as a whole can be considered likely to have a potential adverse impact on below ground archaeological deposits of potential national significance.

Relevant archaeological measures are therefore proposed in order to mitigate the impact of redevelopment upon the Site's archaeological potential, which have been discussed and approved by the planning authorities' archaeological advisor. Such work will be secured by appropriate condition(s) attached to the granting of planning consent for redevelopment.

1.0 INTRODUCTION AND SCOPE OF STUDY

- 1.1 This archaeological desk-based assessment has been prepared by CgMs Heritage (Part of RPS Group), on behalf of Reselton Properties Limited.
- The subject of this Assessment comprises the site of the Stag Brewery, Mortlake, also referred to as the Site. The Site is centred at TQ20371 76022 within the London Borough of Richmond upon Thames (see Figures 1, 2 and 18).
- 1.3 Figure 2 summarises relevant cultural heritage designations and archaeological findspot references relevant to the study site.
- 1.4 In terms of relevant designated heritage assets, as defined below in Section 2 and as shown on Figure 2, no World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck Sites have been identified within the Site or its immediate vicinity.
- 1.5 In terms of relevant local designations, the Site lies within the Mortlake and Barnes Archaeological Priority Area (APA), as defined by the London Borough of Richmond upon Thames and their archaeological advisors at the Greater London Archaeological Advisory Service (GLAAS).
- 1.6 Reselton Properties Limited have therefore commissioned CgMs Heritage (Part of RPS Group) to establish the archaeological potential of the Site, to accompany a planning application for redevelopment, and to provide guidance on ways to accommodate any archaeological constraints identified.
- 1.7 In accordance with relevant government policy and guidance on archaeology and planning, and in accordance with the 'Standard and Guidance for Historic Environment Desk-Based Assessments' (Chartered Institute for Archaeologists, January 2017), this assessment draws together the available archaeological, topographic and land-use information in order to clarify the archaeological potential of the Site.
- The assessment comprises an examination of evidence on the Greater London Historic Environment Record (GLHER) and other sources, including Richmond Local Studies and Archives Centre. The report reviews existing site investigation/geotechnical data, together with the results of archaeological interventions within the Site undertaken in 1995, 1996, 1999 and 2016.

1.9	he Assessment thus enables relevant parties to understand the archaeological
	otential of various parts of the Site and to consider the need for design, civil
	engineering, and archaeological solutions to the archaeological potential identified.

2.0 <u>DEVELOPMENT PLAN FRAMEWORK</u>

- 2.1 National legislation regarding archaeology, including scheduled monuments, is contained in the Ancient Monuments and Archaeological Areas Act 1979, amended by the National Heritage Act 1983 and 2002, updated in April 2014.
- 2.2 In March 2012, the government published the National Planning Policy Framework (NPPF), which was later revised in July 2018 and again in February 2019. The NPPF is supported by the National Planning Practice Guidance (NPPG), which was published online 6th March 2014 and is periodically updated (http://planning.guidance.planningportal.gov.uk).
- 2.3 The NPPF and NPPG are additionally supported by three Good Practice Advice (GPA) documents published by Historic England: GPA 1: The Historic Environment in Local Plans; GPA 2: Managing Significance in Decision-Taking in the Historic Environment (both published March 2015). The second edition of GPA3: The Setting of Heritage Assets was published in December 2017.

National Planning Policy

- 2.4 Section 16 of the NPPF, entitled Conserving and enhancing the historic environment provides guidance for planning authorities, property owners, developers and others on the conservation and investigation of heritage assets. Overall, the objectives of Section 16 of the NPPF can be summarised as seeking the:
 - Delivery of sustainable development;
 - Understanding the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment;
 - Conservation of England's heritage assets in a manner appropriate to their significance; and
 - Recognition that heritage makes to our knowledge and understanding of the past.
- 2.5 Section 16 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. Paragraph 189 states that planning decisions should be based on the significance of the heritage asset and that level of detail supplied by an applicant should be proportionate to the

- importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.
- 2.6 Heritage Assets are defined in Annex 2 of the NPPF as: a building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. They include designated heritage assets (as defined in the NPPF) and assets identified by the local planning authority during the process of decision-making or through the plan-making process.
- 2.7 Annex 2 also defines *Archaeological Interest* as a heritage asset which holds or potentially could hold evidence of past human activity worthy of expert investigation at some point.
- A Nationally Important Designated Heritage Asset comprises a: World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area.
- 2.9 Significance is defined as: The value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.
- 2.10 Setting is defined as: The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
- 2.11 In short, government policy provides a framework which:
 - Protects nationally important designated Heritage Assets;
 - Protects the settings of such designations;
 - In appropriate circumstances seeks adequate information (from desk based assessment and field evaluation where necessary) to enable informed decisions;
 - Provides for the excavation and investigation of sites not significant enough to merit *in-situ* preservation.

- The NPPG reiterates that the conservation of heritage assets in a manner appropriate 2.12 to their significance is a core planning principle, requiring a flexible and thoughtful approach. Furthermore, it highlights that neglect and decay of heritage assets is best addressed through ensuring they remain in active use that is consistent with their conservation. Importantly, the guidance states that if complete, or partial loss of a heritage asset is justified, the aim should then be to capture and record the evidence of the as**set's significance** and make the interpretation publicly available. Key elements of the guidance relate to assessing harm. An important consideration should be whether the proposed works adversely affect a key element of the heritage asset's special architectural or historic interest. Additionally, it is the degree of harm, rather than the scale of development, that is to be assessed. The level of 'substantial harm' is considered to be a high bar that may not arise in many cases. Essentially, whether a proposal causes substantial harm will be a judgment for the decision taker, having regard to the circumstances of the case and the NPPF. Importantly, harm may arise from works to the asset or from development within its setting. Setting is defined as the surroundings in which an asset is experienced, and may be more extensive than the curtilage. A thorough assessment of the impact of proposals upon setting needs to take into account, and be proportionate to, the significance of the heritage asset and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it.
- 2.13 In considering any planning application for development, the planning authority will be mindful of the framework set by government policy, in this instance the NPPF, by current Development Plan Policy and by other material considerations.

Strategic Planning Policy

2.14 The relevant Strategic Development Plan framework is provided by the 2016 London Plan Consolidated with Alterations Since 2011. Policy relevant to archaeology in this document includes the following:

POLICY 7.8 HERITAGE ASSETS AND ARCHAEOLOGY

STRATEGIC

A. LONDON'S HERITAGE ASSETS AND HISTORIC ENVIRONMENT, INCLUDING LISTED BUILDINGS, REGISTERED HISTORIC PARKS AND GARDENS AND OTHER NATURAL AND HISTORIC LANDSCAPES, CONSERVATION AREAS, WORLD HERITAGE SITES, REGISTERED BATTLEFIELDS, SCHEDULED MONUMENTS, ARCHAEOLOGICAL REMAINS AND MEMORIALS SHOULD BE IDENTIFIED, SO THAT THE DESIRABILITY

- OF SUSTAINING AND ENHANCING THEIR SIGNIFICANCE AND OF UTILISING THEIR POSITIVE ROLE IN PLACE SHAPING CAN BE TAKEN INTO ACCOUNT.
- B. DEVELOPMENT SHOULD INCORPORATE MEASURES THAT IDENTIFY, RECORD, INTERPRET, PROTECT AND, WHERE APPROPRIATE, PRESENT THE SITE'S ARCHAEOLOGY.

PLANNING DECISIONS

- C. DEVELOPMENT SHOULD IDENTIFY, VALUE, CONSERVE, RESTORE, RE-USE AND INCORPORATE HERITAGE ASSETS, WHERE APPROPRIATE.
- D. DEVELOPMENT AFFECTING HERITAGE ASSETS AND THEIR SETTINGS SHOULD CONSERVE THEIR SIGNIFICANCE, BY BEING SYMPATHETIC TO THEIR FORM, SCALE, MATERIALS AND ARCHITECTURAL DETAIL.
- E. NEW DEVELOPMENT SHOULD MAKE PROVISION FOR THE PROTECTION OF ARCHAEOLOGICAL RESOURCES, LANDSCAPES AND SIGNIFICANT MEMORIALS. THE PHYSICAL ASSETS SHOULD, WHERE POSSIBLE, BE MADE AVAILABLE TO THE PUBLIC ON-SITE. WHERE THE ARCHAEOLOGICAL ASSET OR MEMORIAL CANNOT BE PRESERVED OR MANAGED ON-SITE, PROVISION MUST BE MADE FOR THE INVESTIGATION, UNDERSTANDING, RECORDING, DISSEMINATION AND ARCHIVING OF THAT ASSET.

LDF PREPARATION

- F. BOROUGHS SHOULD, IN LDF POLICIES, SEEK TO MAINTAIN AND ENHANCE THE CONTRIBUTION OF BUILT, LANDSCAPED AND BURIED HERITAGE TO LONDON'S ENVIRONMENTAL QUALITY, CULTURAL IDENTITY AND ECONOMY AS PART OF MANAGING LONDON'S ABILITY TO ACCOMMODATE CHANGE AND REGENERATION.
- G. BOROUGHS, IN CONSULTATION WITH ENGLISH HERITAGE, NATURAL ENGLAND AND OTHER RELEVANT STATUTORY ORGANISATIONS, SHOULD INCLUDE APPROPRIATE POLICIES IN THEIR LDFS FOR IDENTIFYING, PROTECTING, ENHANCING AND IMPROVING ACCESS TO THE HISTORIC ENVIRONMENT AND HERITAGE ASSETS AND THEIR SETTINGS WHERE APPROPRIATE, AND TO ARCHAEOLOGICAL ASSETS, MEMORIALS AND HISTORIC AND NATURAL LANDSCAPE CHARACTER WITHIN THEIR AREA.
- 2.15 A new London Plan has been prepared in draft and is due for adoption during 2020. Within the December 2019 Intend to Publish version, Chapter 7 'Heritage and Culture' contains draft policies HC1 to HC7. Of particular relevance to sites containing non-designated heritage assets is draft policy HC1:

Policy HC1 Heritage conservation and growth

A Boroughs should, in consultation with Historic England, local communities and other statutory and relevant organisations, develop evidence that demonstrates a clear **understanding of London's historic environment. This evidence should be used for** identifying, understanding, conserving, and enhancing the historic environment and heritage assets, and improving access to, and interpretation of, the heritage assets, landscapes and archaeology within their area.

B Development Plans and strategies should demonstrate a clear understanding of the historic environment and the heritage values of sites or areas and their relationship

with their surroundings. This knowledge should be used to inform the effective integration of London's heritage in regenerative change by:

- 1) setting out a clear vision that recognises and embeds the role of heritage in placemaking
- 2) utilising the heritage significance of a site or area in the planning and design process
- 3) integrating the conservation and enhancement of heritage assets and their settings with innovative and creative contextual architectural responses that contribute to their significance and sense of place
- 4) delivering positive benefits that conserve and enhance the historic environment, as well as contributing to the economic viability, accessibility and environmental quality of a place, and to social wellbeing.
- C Development proposals affecting heritage assets, and their settings, should conserve their significance, by being sympathetic to the assets' significance and appreciation within their surroundings. The cumulative impacts of incremental change from development on heritage assets and their settings should also be actively managed. Development proposals should avoid harm and identify enhancement opportunities by integrating heritage considerations early on in the design process

D Development proposals should identify assets of archaeological significance and use this information to avoid harm or minimise it through design and appropriate mitigation. Where applicable, development should make provision for the protection of significant archaeological assets and landscapes. The protection of undesignated heritage assets of archaeological interest equivalent to a scheduled monument should be given equivalent weight to designated heritage assets.

E Where heritage assets have been identified as being At Risk, boroughs should identify specific opportunities for them to contribute to regeneration and placemaking, and they should set out strategies for their repair and re-use.

2.16 Policies relevant to below ground archaeology at the Site contained within the London Borough of Richmond upon Thames Local Plan (adopted July 2018) include the following:

Policy LP 4

Non-Designated Heritage Assets

The Council will seek to preserve, and where possible enhance, the significance, character and setting of non-designated heritage assets, including Buildings of Townscape Merit, memorials, particularly war memorials, and other local historic features.

There will be a presumption against the demolition of Buildings of Townscape Merit.

Policy LP 7

Archaeology

The Council will seek to protect, enhance and promote its archaeological heritage (both above and below ground), and will encourage its interpretation and presentation to the public. It will take the necessary measures required to safeguard the archaeological remains found, and refuse planning permission where proposals would adversely affect archaeological remains or their setting.

Desk based assessments and, where necessary, archaeological field evaluation will be required before development proposals are determined, where development is proposed on sites of archaeological significance or potential significance.

2.17 Within the July 2018 Adopted Local Plan, the Council has identified key sites that are considered to assist with the delivery of the Spatial Strategy contained within the Plan. Site S24 comprises the Stag Brewery site, which includes the below policy (it also notes that the Site lies within an Archaeological Priority Area).

The Council will support the comprehensive redevelopment of this site. An appropriate mix of uses, particularly at ground floor levels, should deliver a new village heart and centre for Mortlake. The provision of an on-site new 6-form entry secondary school, plus sixth form, will be required. Appropriate uses, in addition to educational, include residential (including affordable housing), employment (B uses), commercial such as retail and other employment generating uses, health facilities, community and social infrastructure facilities (such as a museum), river-related uses as well as sport and leisure uses, including the retention and/or reprovision and upgrading of the playing field. The Council will expect the provision of high quality open spaces and public realm, including links through the site to integrate the development into the surrounding area as well as a new publicly accessible green space link to the riverside.

- 2.18 In terms of relevant designated heritage assets as defined above in the NPPF, and as shown on Figure 2, no World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck designations lie within, or in immediate proximity, to the Site.
- 2.19 In terms of relevant local designations, the Site is located within an Archaeological Priority Area as designated by the London Borough of Richmond-upon-Thames and GLAAS.
- 2.20 This desk based assessment therefore aims to meet relevant policy and guidance as set out above, in order to clarify the archaeological potential of the Site, together with the likely potential of that significance; the need or otherwise for further mitigation measures, together with the likely scope of such measures.

3.0 <u>GEOLOGY AND TOPOGRAPHY</u>

Mapped Geology

- 3.1 The solid geology of the Site is shown by the Institute of Geological Sciences (IGS 1979) as London Clay deposits forming the London Basin. Overlying the London Clay is a series of gravel terraces deposited during periods of glacial and inter-glacial conditions (Bridgland 1996).
- 3.2 The underlying geology of the Site is summarised by British Geological Survey Sheet 270 (South London: 1998) to comprise Kempton Park floodplain Gravels, defined as 'Post-diversionary Thames River Terrace Deposits: gravel, sandy and clayey in part'. A thin strip of alluvium (defined as 'mainly sand, silt and clay') is shown running along the northern boundary of the Site, adjacent to the River Thames.

Site Investigation Data

3.3 Boreholes undertaken across the Site in the mid 1990s encountered river terrace gravels at 1.95m-3.1m AOD, overlying the London Clay, below made ground (MoLAS 1995a: 11). Site investigations undertaken in 1995, 2003 and 2015 indicate quantities of made ground up c.0.4-3.0m thick, above naturally occurring sands and gravels. The intervention logs and their location plan are reproduced at Appendix 1.

Archaeological Data

- 3.4 Archaeological evaluation and monitoring of the eastern part of the Site in 1995, 1996 and 1999 revealed substantial quantities of overburden dated to the Medieval, Post Medieval and Modern periods, above the gravels and alluvium, which had been truncated by concrete basement slabs and walls, brick and concrete footings and foundations, hogging, and service trenches. The top of the alluvial deposits was observed at 3.3-3.92m AOD, with the top of the sands and gravels noted at 2.6-3.6m AOD (MoLA 1995, 1996, 1999; see also Figure 21).
- Archaeological evaluation undertaken within the eastern part of the Site in August 2016 revealed quantities of made ground indicating substantial horizontal truncation of the natural sequence. Naturally occurring river gravels were found at c.2.25-4.40m AOD within this part of the Site, with subsoil identified in the western and central

areas. Archaeological monitoring of SI works within the eastern part of the Site identified primarily deposits of made ground, with natural deposits identified at c.2.12-4.77m AOD, confirming the increase in the depth of made ground towards the east (PCA 2016).

- Archaeological evaluation undertaken within the western part of the Site in August 2016 revealed made ground above natural geological horizons. In the evaluation trenching within this part of the Site, natural gravels were observed at c.5.04-5.06m AOD, with intact subsoil above. Within the test pits, natural gravels were observed at c.4.68-4.76m AOD, with no subsoil, indicating truncation of natural horizons (PCA 2016).
- 3.7 It is important to note that in all of the geotechnical and archaeological interventions undertaken at the Site to date, no deposits of peat were identified.

Deposit Model

3.8 The results of the Site investigation logs and the 2016 archaeological evaluation are shown in deposit model format at Figures 21-22, providing a vertical profile of the site's underlying make up and geology. The east-west transect through the Site demonstrates the varying thickness of the made ground and the varying heights of the naturally occurring deposits. As a general trend, the heights of the natural geology drop from west to east, and the thickness of the made ground increases, to the east, however the thickness of the made ground and the height of the made ground does vary across the Site. The short north-south transect also shows varying thicknesses of made ground. The presence of varying thicknesses of made ground beneath the Site represents the varying levels of impact through previous and existing development.

Topography

- 3.9 The modern topography of the Site is generally level, with a slight drop from south to north, and west to east. The Site to the west of Ship Lane is generally level at c.4.99-6.40m AOD; the Site to the east of Ship Lane is generally level at c.4.5-6.0m AOD.
- 3.10 However it is believed that the natural topography prior to development included a steeper drop towards the river than is present today, suggesting that substantial landforming and river revetment has been carried out across the northern parts of the

Site. This was borne out by the results of an archaeological watching brief carried out in 1996 (MoLA 1996). There may also have been a natural, gradual drop in height from west to east (PCA 2016).

3.11 Mortlake lies on the southwestern side of the arc of a bend in the River Thames. The river flows from northwest to northeast beyond the northwestern boundary of the Site, and abuts the northeastern boundary.

4.0 <u>ARCHAEOLOGICAL AND HISTORICAL BACKGROUND, WITH ASSESSMENT OF SIGNIFICANCE</u>

(Including Historic Map Regression exercise)

4.1 Timescales used in this report:

Preh	icto	ric
PICI	11.510) (.

Palaeolithic	450,000 -	12,000 BC
Mesolithic	12,000 -	4,000 BC
Neolithic	4,000 -	1,800 BC
Bronze Age	1,800 -	600 BC
Iron Age	600 -	AD 43

Historic

Roman	AD 43 -	410
Anglo-Saxon/Early Medieval	AD 410 -	1066
Medieval	AD 1066 -	1485
Post Medieval	AD 1486 -	1749
Modern	AD 1750 -	Present

Introduction

- What follows is a consideration of archaeological finds and features from within a 750m radius of the Site, also referred to as the study area, held on the Greater London Historic Environment Record (GLHER), together with a map regression charting the history of the Site from the eighteenth century until the present day.
- 4.3 In terms of relevant nationally significant designated heritage assets, as defined above in Section 2 and as shown on Figure 2, no World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck Sites have been identified within the Site or its immediate vicinity.
- 4.4 In terms of relevant local designations, the Site lies within the Mortlake and Barnes Archaeological Priority Area (APA), as defined by the London Borough of Richmond upon Thames and GLAAS (GLHER ref DLO33477, TQ2125 7615). The northern boundary of the Site abuts the Thames Foreshore and Bank APA, related to

- archaeology from all past periods of human activity, particularly the prehistoric (DLO33481, TQ1815 7383).
- 4.5 Many of the finds of prehistoric material have been given a generic grid reference (TQ2050 7600) which places their location within the Site. However, it is probable that in fact these discoveries have been made in the general Mortlake area, possibly from the River Thames, and have therefore been 'rounded up' on the designated grid point. Unfortunately, this lessens the effectiveness of these findspots when reviewing potential.
- 4.6 The GLHER indicates that several known archaeological Sites and findspots occur within the Site, most notably the Medieval Archbishop's Palace on the eastern part of the Site, together with the early Post Medieval palace of the Earl of Essex, Thomas Cromwell, on the western part of the Site (see relevant sections below).

Previous Archaeological Work

Four phases of investigative archaeological works have been undertaken within the Site. Evaluation and two phases of watching brief have been undertaken on the eastern part of the Site in 1995, 1996 and 1999. This work revealed ploughsoils/garden soils dating from the Medieval period onwards, together with Medieval, Post Medieval and Modern walls and foundations. Most recently, archaeological evaluation within both the western and eastern sides of the Site has revealed extensive horizontal truncation, however with intact subsoil above natural sands and gravels in places, together with traces of nineteenth century buildings, a large piece of decorated masonry which may relate to Medieval/Post Medieval activity, albeit discovered in a modern context, and a cut feature (see paragraphs 4.7.23-4 below; Figure 20; MoLAS 1995, 1996 and 1999; PCA 2016; ELO4480, TQ2046 7606).

Prehistoric - Palaeolithic and Mesolithic

4.8 Kempton Park Gravels, which underlie the study Site, have been categorised as part of the Devensian Stage, the last glacial stage of the British Pleistocene epoch. Organic material within the Kempton Park Gravels has been dated to c.45,000-30,000 BP, within the Middle Devensian Stage. While vertebrate remains have been identified within the Kempton Park Gravels, the identification of archaeological artefacts to date has not been common (Gibbard 1994: 90).

- 4.9 Within the study area, a small Palaeolithic flint flake has been identified southeast of the Site, at a depth of c.4.5 metres in sand, c.275 metres from the River Thames (MLO20853, TQ205 755). A small handaxe was also identified in 1903-4, the grid reference places the location of this find within the eastern part of the Site (MLO13286, TQ2050 7600).
- 4.10 Finds of Mesolithic date have included three tranchet axes and Thames Picks, two within the northwestern part of the Site (MLO18147, TQ2030 7610) and another from the general Mortlake area (MLO18370 TQ2050 7600).
- 4.11 In view of the finds identified within the study area the potential of the Site for the Palaeolithic and Mesolithic can be categorised as moderate. It is interesting to note an absence of peat deposits within the site investigation data and from the archaeological fieldwork undertaken to date at the Site; alluvial deposits were recorded in the 1995 archaeological fieldwork (see paragraph 4.2.5 above; also Section 3 above and Appendix 1).

Neolithic, Bronze Age and Iron Age

- 4.12 Quantities of Prehistoric finds from the general Mortlake area include Neolithic axeheads (MLO18921) Neolithic pottery (MLO19094) Bronze Age horn hammerheads (MLO18979, MLO19105), Bronze axeheads (MLO18980, MLO23453), and Bronze ingots (MLO14382).
- 4.13 Undiagnostic prehistoric finds and features have been identified to the east of the Site along Mortlake High Street, at Nos 61-69 (MLO71683, ELO4056, TQ2070 7600), at Nos 71-75 (ELO10575,TQ20734 75997); Nos 77-91 (ELO161, MLO75689, TQ2071 7599; MLO75660, MLO77301, TQ2077 7601), No 105 (MLO71386, ELO4094, TQ2084 7599), and No 107 (ELO4090, TQ2085 7600).
- 4.14 Quantities of Neolithic and Bronze Age artefacts, including pottery, metalwork and flintwork, have been identified in the vicinity of Townmead Road, northwest of the Site (ELO956, MLO76430, TQ19790 76410). Shallow pits, gullies and well abraded pottery dated to the Bronze Age and Iron Age have been identified at 107 Mortlake High Street, east of the Site (ELO4090, MLO67490-91, TQ2085 7600).
- 4.15 In view of the finds of Neolithic, Bronze Age and Iron Age date within the study area, the potential of the Site itself for these periods can be identified as moderate.

Evidence for land division and agricultural activity may be represented. It is interesting to note an absence of peat deposits within the Site investigation data and from the archaeological fieldwork undertaken to date at the Site; alluvial deposits were recorded in the 1995 archaeological fieldwork (see paragraph 4.2.5 above; also Section 3 above and Appendix 1).

Roman

- 4.16 No archaeological finds or features of Roman date have been identified on the GLHER within a 750m radius of the Site.
- 4.17 A correspondingly low archaeological potential can be identified for the Roman period at the Site itself.

Anglo-Saxon

4.18 The manor and settlement at Mortlake were evidently an extensive and prosperous one in the Late Saxon period, in the ownership of the Archbishops of Canterbury, as indicated by its entry in Domesday Book (1086):

The Archbishop holds Mortlake himself, in lordship. Before 1066 it answered for 80 hides. The Canons of St Paul's hold 8 of these hides, which paid and pay tax with these. Now they pay tax together for 25 hides. Land for 35 ploughs. In lordship 5 ploughs;

80 villagers and 14 smallholders with 28 ploughs.

A church; 16 slaves

2 mills at 100s; meadow, 20 acres; from the woodland, 55 pigs from pasturage.

In London there were 17 dwellings which paid 52d; in Southwark 4 dwellings at 27d; from the village of Putney 20s from tolls.

1 fishery without dues. Before 1066 Earl Harold had this fishery in Mortlake. Archbishop Stigand had it for a while after 1066. However [the jurors] state that Harold established it by force before 1066 on Kingston land, and on St Paul's land.

Value of the whole manor before 1066 £32; later £10; now £38.

4.19 Mortlake is recorded in Domesday Book as *Mortelage*, which is thought to derive from a stream with young salmon, and perhaps refers to the fishery mentioned in the entry, probably situated on a now vanished tributary of the Thames (VCH Surrey 1912: 69-74; Weinreb, Hibbert & Keay 2008: 561).

4.20 No finds of Anglo-Saxon date have been identified within a 750m radius of the Site. In view of this the potential for this period at the Site can be categorised as generally low, although evidence of agricultural activity and land division could conceivably be present.

Medieval

- 4.21 The site of the Medieval Archbishops Palace at Mortlake has been identified on the eastern side of Ship Lane, within the Brewery complex at the Site. It is known to have been a residency of the See of Canterbury from 1099 and remained in the ownership of the Archbishops until the sixteenth century. Brickwork dated to 'the time of the Plantagenets' (1154-1485 AD) was identified here in 1817 (MLO19136, TQ2046 7606; Phillips 1817). Also in 1817, a walled up gateway interpreted as part of the Archbishops Palace was noted within the eastern part of the Site (MLO48473, TQ2046 7606); a Chapel was also present within the palace precinct, present since at least 1095 (MLO48474, TQ207 763; MoLAS 1995a: 16), with associated human remains (MLO48488, TQ207 763) and a summerhouse fronting the river (MLO48487, TQ207 763; see paragraph 4.7.7). Figure 5, which reproduces a section of Samuel Leigh's Panorama of the Thames from London to Richmond undertaken in 1829, shows a section of wall east of Ship Lane fronting the river on the northern boundary of the Site, which has been interpreted as part of the Medieval palace precinct wall.
- 4.22 Analysis of documentary sources has identified probable areas of Medieval land use on the eastern side of the Site. The results are reproduced on plan at Figure 19, and demonstrate three principal zones: the site of the Archbishops Palace to the west, the church and cemetery to the east, and residential occupation along both sides of Thames Street to the southeast. It is believed that the western side of the Site, west of Ship Lane, comprised open agricultural and horticultural land during the Medieval period.
- 4.23 The church referred to in Domesday in the Manor of Mortlake is believed to have existed at Wimbledon, c.5 miles to the south of the Site (Manning & Bray 1814: 306; VCH 1912: 69-74; MoLAS 1995a: 14). However, a church was licensed in 1349 and constructed west of the present building in Mortlake, to save the villagers the trip to Wimbledon (VCH 1912: 69-74). This church has been sited within the eastern end of the Site, within the curtilage of the manor house, on the opposite side of the high street from the existing church (MoLAS 1995a: 20-23). It was demolished and moved

- to its present site, to the southeast of the Site by Henry VIII in 1543 (MLO19129, TQ2084 7599).
- 4.24 Archaeological fieldwork undertaken within the eastern part of the Site, between Ship Lane and Bulls Alley, revealed alluvial deposits containing tile and pottery dating to the Medieval period onwards (MoLAS 1995b) together with ploughsoils of possible Medieval date, truncated by Medieval walls and foundations (MoLAS 1996; MLO67935, TQ2046 7606). Recent evaluation on the western part of the Site revealed a large piece of decorated masonry which may relate to the documented Medieval/Post Medieval activity, albeit discovered in a modern context (PCA 2016).
- 4.25 Beyond the eastern end of the Site, evidence for dumping thought to demonstrate enwharfment during the Medieval period was identified at 105 Mortlake High Street to the east (MLO71387, TQ2084 7599). Alluvial silts dated to the Medieval period, together with building material, refuse and pottery dated to the 13th-15th Centuries has been identified at 107 Mortlake High Street (MLO67492, TQ2085 7600). Two lines of stake and postholes were revealed at 77-91 Mortlake High Street, with remains indicating that from the fifteenth century two burgage plots were developed with buildings (ELO162, MLO77303, MLO77304, TQ2077 7601), and a well, ditches and pits were identified at Tapestry Court (ELO148, MLO75647, MLO77281, TQ2077 7600).
- 4.26 A wharf dated by documentary references to the fifteenth century existed at the northern end of Ship Lane, adjacent to the Site's northern boundary (MLO72098, TQ2040 7610). A sherd of Surrey Hampshire Coarse Borderware pottery was found at 10 Thames Bank, northwest of the Site (MLO72157, TQ2037 7611).
- 4.27 The potential of the eastern part of the Site for the Medieval period can therefore be categorised as high. Figure 19 summarises the Medieval landuse in this area, which potentially includes remains of the Bishops Palace, chapel and manorial centre, the fourteenth century church and associated cemetery, together with residential occupation and activity associated with Mortlake village to the southeast.
- 4.28 The western part of the Site, west of Ship Lane, is most likely to have comprised open land during the Medieval period, used for agriculture and/or horticulture. Archaeological evaluation immediately west of the study site on the west side of Williams Lane revealed residual Medieval pottery together with later evidence (ELO11610, TQ201 760). Evidence of such activity together with land division is most

- likely to be present on this side of the Site. The archaeological potential of this part of the Site is therefore categorised as generally low.
- 4.29 In spite of the generally negative results of intrusive archaeological fieldwork within the Site, it is considered likely that archaeological remains of Medieval date may remain at depth below the Site, through the identification of fragmentary remains of possible Medieval date, together with intact subsoils above natural sands and gravels.

 Post Medieval and Modern (including map regression exercise)
- 4.30 It is thought that brewing was taking place in Mortlake by the very early Post-Medieval period, established by John Morgan c.1487 to supply the household of Henry VII. The site of the brewery is thought to have lain within the eastern part of the Site, adjacent to the Archbishops Palace (Watneys London n/d; Port of London 1984). This brewery is likely to be simply a facility within a palace, rather like a bakery or a blacksmith, instead of a commercial enterprise.
- 4.31 A large house was recorded as being constructed on the east side of Williams Lane, within the western boundary of the Site, after 1493 by a brewer named John Williams. This house is subsequently thought to have been occupied by Sir Thomas Cromwell, Earl of Essex (information from Barnes & Mortlake History Society website), and it became known as Cromwell House (MLO1753, TQ2020 7605).
- 4.32 The Archbishop of Canterbury exchanged the manor of Mortlake with Henry VIII for other lands in 1535-6 (VCH 1912: 69-74). The king granted the Manors of Mortlake and Wimbledon to Cromwell in 1536, who is believed to have undertaken much building work there. Cromwell was an English lawyer and statesman, who served as Henry VIII's chief minister 1532-1540. He rose to power as an advocate of the Church of England and presided over the Dissolution of the monasteries (Leithead 2004/2009). A letter from Richard Tomyow to Henry VIII in 1536 references 'Mortlake, where Cromwell's servants are in health and his building ariseth fair' (VCH 1912: 69-74; Barnes & Mortlake History Society website). It can therefore be conjectured that Cromwell rebuilt or significantly added to the existing house built by John Williams, perhaps utilising materials from the former Archbishops Palace to the east.
- 4.33 The Site of a manor house has been established close to the Thames on the eastern side of Ship Lane, within the central part of the study Site towards the northern boundary, possibly associated with the former Archbishops Palace (VCH 1912: 69-74; Barnes & Mortlake History Society website). Cromwell appears to have sold the

- manors of Mortlake and Wimbledon back to Henry VIII in 1540, prior to his execution in July of that year.
- The king may have utilised Mortlake as a residence after Cromwell's execution; in 1543 he ordered the demolition of the existing church and its reconstruction beyond the Site boundary (MLO19129, TQ2084 7599; VCH 1912: 69-74). In 1543-4 Henry VIII granted the manors of Mortlake and Wimbledon to Katherine Parr and she held the manor until her death in 1548. The manor of Mortlake subsequently became merged with that of Wimbledon, which had become the head manor at the beginning of the 1540s. A succession of owners subsequently possessed the manors (VCH 1912: 69-74).
- At least part of the former Bishops Palace is thought to have still been extant in 1663, and by the late seventeenth century the gatehouse and associated buildings were in use as an inn. The Palace is recorded as having been largely demolished after 1700, but garden walls were apparently extant in 1812 (Manning & Bray 1814: 306; MoLAS 1995a). The earliest available map which shows the Site in any detail, John Rocque's Survey of London (Fig 3: 1745) shows the former palace site devoid of buildings, and occupied by market gardens. The site of Cromwell House, towards the centre of the western boundary, is shown occupied a range of buildings fronting a lane running east-west towards the centre of the Site. The southeastern part of the Site and much of the southern boundary has been developed with houses, with a meadow in the southwestern corner, and further areas of market garden present towards the centre of the Site.
- 4.36 Cromwell House, within the western boundary of the Site, remained in occupation throughout the seventeenth, eighteenth and nineteenth centuries. Upon the death of Valentina Aynscombe in 1841 however, the house fell into disrepair, and it was finally demolished in 1857. Another house named Cromwell House was built to the northwest of the study Site, fronting the river (Barnes & Mortlake History Society website).
- 4.37 Archaeological fieldwork undertaken within the eastern side of the Site, between Ship Lane and Bulls Alley, revealed Post Medieval ploughsoils, walls and foundations, including a wall of probable eighteenth century date (MoLAS 1995b, 1996). Recent evaluation on the western part of the Site revealed a large piece of decorated masonry which may relate to the documented Medieval/Post Medieval activity, albeit discovered in a modern context (PCA 2016).

- 4.38 Documentary references to commercial brewing at Mortlake date to 1765, when court rolls mention two small breweries adjacent to each other on either side of Thames Street, within the southeastern part of the study Site (Brown 1997: 34). It is this brewery, rather than the fifteenth century establishment, which is the most likely origin of the existing brewing facility.
- 4.39 The Lindley & Crossley Map of Surrey (Fig 4: 1793) shows little change within the Site from Rocque's survey. In 1807, James Weatherstone and his partner extended their brewery fronting Thames Street northwards to the river (Brown 1997: 34).
- Observations made in 1817 referred to upstanding masonry dated 'to the time of the Plantagenets' on the site of the Medieval Archbishops Palace east of Ship Lane fronting the river (see paragraph 4.6.1 above). A painting of the river at Mortlake by WH Harriot, dated 1824, together with Samuel Leigh's *Panorama of the Thames from London to Richmond* undertaken in 1829 (Figure 5), both appear to show survival of the precinct wall around the former Medieval palace, including buttresses and the feature identified as a summer house, fronting the river on the Site's northern boundary.
- 4.41 The Mortlake Tithe Map (Fig 6: 1839) and the associated Award shows the Site occupied by brewery buildings at the eastern end, with buildings fronting the west side of Ship Lane which runs through the centre of the Site, Mortlake High Street on the southern boundary, and the road running east-west through the centre of the Site. The bulk of the remainder of the Site comprises horticultural land and meadow. The parcel of land in the southeastern corner, between Thames Street and the High Street, is shown fully developed.
- In 1852, the Mortlake brewery was bought by Charles John Phillips, who expanded the facility significantly (Brown 1997: 35).).
- 4.43 The First Edition Ordnance Survey (Fig 7: 1865) shows the expansion of the brewery towards the river from the road to the south. A large house named *The Cedars* is shown adjacent, which is known to have been basemented (information from Richmond Local Studies Library). A riding school is shown to the east of Ship Lane, where an L-shaped lane has been laid out. Further residential development is shown along the southern boundary. The site of Cromwell House is indicated within the western boundary of the Site, while the extent of the Bishops Palace is shown on the eastern part of the Site, fronting the river. The land between Thames Street and

- Mortlake High Street to the southeast is shown partially cleared to the west, with intact brewery buildings to the east.
- 4.44 The line of Thames Street, within the southeastern part of the Site, was absorbed into the brewery complex in 1865. Figure 8 comprises a plan showing the extent of what became part of the Site. Phillips acquired the freehold of substantial areas of land along the riverside in 1865, after which buildings including a tithe barn (probably of Late Medieval origin) docking house, shop and stable, slaughterhouse, lofts and blacksmiths workshop were demolished. The new brewery included the brick wall still present along the north side of Mortlake High Street (Brown 1997: 36; Cherry & Pevsner 1999: 514-5.)
- 4.45 The Second Edition Ordnance Survey (Fig 9: 1896) shows the absorption of Thames Street within the Site, and the brewery's dominance east of Ship Lane. Further development is shown along Cromwell Road, which runs east of Ship Lane. West of Ship Lane, a building labelled *Fairfax*, probably a large house, has been built towards the centre of the Site, with buildings formerly fronting the west side of Ship Lane now demolished.
- 4.46 The brewery at Mortlake was taken over by Watneys in 1898. In 1903, an eight storey maltings was constructed on the river frontage (Brown 1997: 36; Port of London 1984). This was constructed on the Site of the riding school, on the east side of Ship Lane fronting the river.
- The 1907 GOAD Insurance Plan (Fig 10) shows the eastern part of the Site, between Ship Lane and Bulls Alley, occupied by the *Watney Coombe Reid & Co Limited Mortlake Brewery*. The functions of various buildings within the brewery complex are shown, which at this time included beer stores, engine rooms, tun rooms, bottling and sugar stores, cask washing areas, wheelwrights, smithy, stables and paint shops, with the 1903 malthouse shown in the northwestern corner. Basements are shown beneath "E" *Beer Store No 4* towards the eastern end, and beneath the tun rooms fronting the river, with buildings varying in height from one to eight storeys. Residential houses are shown fronting Guildford Place (formerly Cromwell Road) within the centre of the Site.
- 4.48 The Third Edition Ordnance Survey (Fig 11: 1913) shows little change across the eastern part of the Site from the earlier GOAD plan. Through the middle of the Site, between Aynscombe Lane and Ship Lane, West Street has been laid out, with houses

- either side and allotment gardens to the north. The western part of the Site remains primarily open land.
- 4.49 The Revised Ordnance Survey (Fig 12: 1940) shows alterations within the main brewery complex, together with the replacement of the allotment gardens north of West Road, in the centre of the Site, with a single large building. Buildings have also been constructed on the northern edge of the cricket ground, including a pavilion on the western boundary. The site of the brewery is thought to have received only minor damage during World War Two (James 1963: 168; Barnes & Mortlake Historical Society 2004).
- 4.50 The 1952-1961 composite Ordnance Survey (Fig 13) shows redevelopment of the northwestern part of the brewery, east of Ship Lane between 1953 and 1961, and additions to the pavilion in the northwestern corner of the sports ground. Figure 14 reproduces an aerial photo of 1962 which shows in the foreground two large pavilions occupying the northwestern and northeastern corners of the sports ground.
- 4.51 The bulk of the mid nineteenth century and later brewery buildings were demolished in the 1970s and replaced by the modern industrial brewing facility occupying the Site today. Several alleys, streets and paddocks were removed in the process, which extended the brewery west of Ship Lane (Brown 1997: 36; Cherry & Pevsner 1999: 515). There were several significant fires at the Brewery complex during the later twentieth century, which resulted in significant reconstruction (information from Richmond Local Studies Library).
- 4.52 The 1965-1968 composite Ordnance Survey (Fig 15) shows the repositioning of the pavilion within the northeast corner of the cricket ground, the demolition of buildings along the southern boundary and the construction of a circular building at the main entrance. The buildings fronting Mortlake High Street on the southeastern boundary have been modified, and a new building constructed at the eastern end.
- 4.53 Three phases of fieldwork were carried out by the Museum of London Archaeology Service (MoLAS) including an evaluation in 1995, followed by monitoring programmes during 1996 and 1999. The reports indicate that *in-situ* river terrace gravels were observed, together with ploughsoils, garden soils, walls and foundations dating from the Medieval period to the eighteenth century (MoLAS 1995b, 1996, 1999).
- 4.54 The above work was carried out prior to the construction of the lager bottling plant currently occupying the centre of the eastern part of the Site. The plant comprises an

- open plan warehouse with a raft base and piled foundations, and required the reduction of the ground level by 1.2m within its footprint (MoLAS 1995a).
- 4.55 Archaeological evaluation undertaken across the Site in 2016 revealed traces of nineteenth century buildings together with Post Medieval and Modern truncation (PCA 2016).
- 4.56 The 1992-1998 composite Ordnance Survey (Fig 16) shows the redevelopment of the eastern side of the Site in progress. Substantial detached brewery buildings have been constructed through the centre of the Site, replacing West Street and its associated structures. Additional buildings have also been constructed in the northwestern corner, and a new club house has been constructed on the eastern boundary of the sports ground. The building formerly known as Fairfax on the northern boundary west of Ship Lane has been demolished.
- 4.57 The 2009 Ordnance Survey (Fig 17) shows the Site as it remains today, occupied by the buildings of the brewery, with the sports ground and pavilion to the southwest. In comparison with the 1992-1998 survey the scale of recent redevelopment on the eastern side of the Site is clearly evident.
- 4.58 The current Site survey (Fig 18) shows no substantial changes within the Site.
- 4.59 The potential of the Site for the Post Medieval and Modern periods can be categorised as high. Remains of Cromwell House (c.1491-1857) may survive within the northwestern boundary of the Site; remains associated with the former Archbishops Palace may survive east of Ship Lane (apparently extant until the early/mid nineteenth century) together with village activity and occupation in the southeastern corner, prior to absorption into the brewery complex in 1865. Across the whole of the Site, remains associated with previous phases of the brewery dating from the eighteenth century are likely to survive below the existing facility.
- 4.60 In spite of the generally negative results of intrusive archaeological fieldwork within the Site, it is considered likely that archaeological remains of Post Medieval date may remain at depth below the Site, through the identification of fragmentary remains of possible Post Medieval date, together with intact subsoils above natural sands and gravels.

Assessment of Significance (Designated Heritage Assets)

- 4.61 Existing national policy guidance for archaeology (the NPPF as referenced in section 2) enshrines the concept of the 'significance' of heritage assets. Significance as defined in the NPPF centres on the value of an archaeological or historic asset for its 'heritage interest' to this or future generations.
- 4.62 No archaeological designated heritage assets as defined in the NPPF are recorded on or in close proximity to the Site.
- 4.63 In view of the above it is concluded that the redevelopment proposals will have no direct archaeological impact upon relevant designated heritage assets.

<u>Assessment of Significance (non-designated Heritage Assets)</u>

- 4.64 In terms of local designations, the Site lies within an Archaeological Priority Area as defined by the London Borough of Richmond upon Thames and GLAAS.
- 4.65 Overall, it is possible that archaeological remains of national significance may be present within the Site boundary, relating to the known presence of the Site of the Medieval palace and parish church, together with village settlement, within the eastern part of the Site, and the Renaissance mansion within the western boundary.
- 4.66 As identified by desk-based work, including a synthesis of previous fieldwork, archaeological potential by period and the likely significance of any archaeological remains which may be present is summarised in table form below:

Period	Identified Archaeological	I dentified Archaeological
	Potential	Significance
Palaeolithic	Low	Low (local)
Mesolithic	Low to moderate	Local (low)
Neolithic	Low to moderate	Low (local)
Bronze Age	Low to moderate	Low (local)
Iron Age	Low to moderate	Low (local)
Roman	Low	Low (local)
Anglo-Saxon	Low	Low (local)
Medieval	Low (west of Ship Lane)	Low (local)/ moderate (regional)/ high
	High (east of Ship Lane)	(national)
Post Medieval	High	Low (local)/ moderate (regional)/ high
		(national)
Modern	High	Low (local)

5.0 <u>SITE CONDITIONS AND THE PROPOSED DEVELOPMENT</u>

(Review of potential impact upon Heritage Assets)

Site Conditions

- 5.1 The Site is currently occupied by the buildings of the former Mortlake Brewery complex, dating to the nineteenth and twentieth centuries, with a sports ground and pavilion occupying the southwestern corner (Fig 18).
- 5.2 The construction of the existing brewing facility is considered likely to have had a cumulative, severe destructive impact on underlying archaeological deposits.
- 5.3 The construction and demolition of buildings formerly occupying the Site can be considered likely to have had a severe negative impact on any underlying archaeological deposits through the cutting of foundations and services, and in particular any basements or cellars formerly present. This will include previous phases of the brewery (see paragraph 4.8.17 above) together with domestic buildings (see paragraph 4.8.10 above).
- The negative impact of previous and existing development is demonstrated by the results of archaeological works undertaken within the Site to date (see paragraph 4.2.5 above). Figures 21-22 reproduce the deposit model which demonstrates the extent of made ground across the Site, while Figure 27 identifies areas of existing and previous basements.
- 5.5 Phases of landforming across the Site, including revetment along the Thames frontage of the Site and levelling of the natural topography, are thought to have been carried out from the Medieval period into the eighteenth century. These are considered likely to have buried the original land surface of the northern part of the Site below several metres of made ground (see paragraph 3.4.2 above). This process has the potential to have preserved archaeological remains at depth.
- 5.6 The bulk of the sports ground occupying the southwestern corner of the Site appears to have remained undeveloped within its documented history. The insertion of drainage and any floodlighting measures can be considered to have had a severe but localised archaeological impact through the cutting of services.

- 5.7 Any agricultural and/or horticultural use of the Site prior to development can be considered to have had a moderate, widespread negative archaeological impact.

 Proposed Development
- Redevelopment proposals include the mixed use, residentially led redevelopment of the Site, to include areas of basement to the west and east of Ship Lane (see Figures 23-27).

Review of Potential Impact

- 5.9 In view of the Site's known archaeological potential, combining the Medieval palace, church and part of Mortlake village to the east, with the early Post Medieval mansion of Cromwell House to the west, together with related activity, any redevelopment of the Site could potentially have a detrimental archaeological impact upon remains deemed to be of national significance.
- 5.10 Previous archaeological work within the Site has indicated significant truncation as a result of successive phases of the brewery which has occupied the Site since the eighteenth century (see section 3 above and Figs 21-22). However, surviving Medieval and Post Medieval deposits have been noted below modern development, together with intact subsoil and natural sands and gravels, where archaeological remains may be present.
- Brewery component of the Site (east of Ship Lane) would be set at 0.76m OD, save for the proposed cinema in the southwestern corner, which has a proposed double basement. This area of the Site recorded natural terrace gravels at between 4.4m and 2.68m OD, so the proposed basement would likely impact on any archaeological structures or deposits present (see Figure 22). The proposed foundation design for all buildings founded at ground level within the detailed element of the Stag Brewery component of the Site, east of Ship Lane) would comprise a 1 m deep piled raft. The proposed cinema building which has a two-level basement and large column grid, would also be founded on a 1 m deep piled raft. Below the foundations, these buildings would have an expanse of piles (3 to 5 per column) that would be 600mm in diameter and extending down approximately 25m in length.

- 5.12 The maximum extent for the proposed basement within the west part of the Stag Brewery component of the Site (west of Ship Lane), would be set at 2.45m OD. The natural gravel in this area of the Site was recorded at between 5.6 and 4.68m OD, so the proposed basement would also likely impact on any archaeological structures or deposits present in this area of the Site (see also Figure 22).
- 5.13 In addition to the above, the new river wall would be formed of a sheet pile wall with an *in-situ* reinforced concrete capping beam. The toe level of the sheet pile wall would be set at -1m AOD.
- 5.14 It is considered that the archaeological fieldwork and desk based assessment undertaken to date has sufficiently characterised the Site. Site restrictions due to the presence of existing buildings together with associated internal and external plant also preclude the application of additional targeted exploratory archaeological fieldwork, prior to demolition.
- 5.15 Given the absence to date of identified appropriate geological horizons, it is not proposed to progress geoarchaeological/palaeoenvironmental work at the Site.
- 5.16 Given the likely archaeological potential, further archaeological works are proposed in the form of a phased evaluation programme, following demolition, with further works dependant upon the results of the evaluation. Additionally it is anticipated that a programme of historic building recording for the extant Brewery buildings will also be required. Such work can follow the granting of planning consent, secured by condition.
- 5.17 The above approach to archaeological mitigation has been discussed and approved by the Greater London Archaeological Advisory Service (GLAAS) officer for the London Borough of Richmond upon Thames, Laura O'Gorman (see Appendix 2).

6.0 <u>SUMMARY AND CONCLUSIONS</u>

- 6.1 The Site of the Stag Brewery, Mortlake, has been reviewed for its below ground archaeological potential.
- 6.2 In accordance with relevant government planning policy and guidance, a desk based assessment has been undertaken to clarify the archaeological potential of the study area.
- 6.3 In terms of relevant nationally designated heritage assets, no World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck Sites lie within or in immediate proximity to the Site.
- 6.4 In terms of relevant local designations the Site lies within the Mortlake and Barnes Archaeological Priority Area, as defined by the London Borough of Richmond upon Thames and GLAAS.
- The Site is considered likely to have a moderate potential for the Prehistoric periods.

 Original land surfaces within the Site are thought to be buried beneath made ground and later structures, where not truncated by subsequent development.
- 6.6 The Site is considered likely to have a generally low potential for the Roman and Anglo-Saxon periods.
- 6.7 The eastern side of the Site is considered likely to have a high potential for the Medieval period. The eastern part of the Site is known to contain the site of an Archbishops Palace, together with a chapel or church, with part of the Medieval village to the southeast. The western part of the Site is understood to have comprised principally open fields during the Medieval period, with a correspondingly generally low archaeological potential.
- The Site is considered likely to have a high potential for the Post Medieval and Modern periods. The Renaissance mansion of Sir Thomas Cromwell is known to lie on the western part of the Site, while the brewery developed on the eastern part from the eighteenth century onwards.

- 6.9 Past post-depositional impacts within the Site are considered to have been severe and cumulative as a result of previous and existing phases of development, particularly the construction and demolition of phases of the Mortlake Brewery across the Site during the nineteenth and twentieth centuries.
- 6.10 Programmes of archaeological fieldwork undertaken across the Site have revealed Medieval and Post Medieval deposits, together with substantial modern deposits and post depositional impacts.
- 6.11 Redevelopment of the Site can be considered likely to have an adverse archaeological impact.
- 6.12 On the basis of the available information it is proposed to progress archaeological mitigation measures in the form of a phased archaeological evaluation programme, following demolition and Site clearance, with further excavation work dependant upon the results of evaluation. Additionally, a programme of historic building recording on the extant Brewery buildings is also anticipated.
- 6.13 The above mitigation strategy has been discussed and approved by the planning authorities' archaeological advisor.
- 6.14 Such work would necessarily follow the granting of planning consent, secured by relevant condition(s).

SOURCES CONSULTED

1. <u>General</u>

Barnes & Mortlake History Society (website)

British Library

Greater London Historic Environment Record

London Archaeological Archive and Research Centre

Richmond Local Studies Library

Society of Antiquaries Library

2. <u>Internet</u>

http://archaeologydataservice.ac.uk

http://www.barnes-history.org.uk/BandMmap/Cromwell.html

http://www.britainfromabove.org.uk/

http://www.british-history.ac.uk/

https://finds.org.uk/database/

https://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html

https://www.historicengland.org.uk/listing/the-list

https://opendomesday.org.uk

http://www.pastscape.org.uk

http://planningguidance.planningportal.gov.uk

3. Bibliographic

Anderson A History of Mortlake 1886

Barnes & Mortlake History Society Watneys at War unpublished talk April 2004

Bridgland Quaternary River terrace deposits as a framework for the Lower Palaeolithic record in Gamble & Lawson (eds.) The *English Palaeolithic Reviewed* 1996

Brown Barnes and Mortlake Past with East Sheen 1997

British Geological Survey British Regional Geology *London and the Thames Valley* Fourth Edition 1996

CgMs Consulting Written Scheme of Investigation for Archaeological Evaluation Stag Brewery Mortlake June 2016 unpublished document

Chartered Institute for Archaeologists Standard & Guidance for historic environment desk based assessment 2017 unpublished document

Cherry, Nairn & Pevsner Buildings of England Surrey 2nd Edition 1971

Cherry & Pevsner Buildings of England London 2: South 1999

Department of Communities and Local Government *National Planning Policy Framework* 2012

Domesday Book Surrey 1975 Phillimore Edition

Gibbard The Pleistocene History of the Lower Thames Valley 1994

Greater London Archaeological Advisory Service *Guidelines for Archaeological Projects in Greater London* April 2015 unpublished document

Hedgecock Hand in Hand Watneys Mortlake World 2007

Historic England (formerly English Heritage) Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment 2008

Historic England *Historic Environment Good Practice Advice in Planning: 1 The Historic Environment in Local Plans* July 2015 unpublished document

Historic England Historic Environment Good Practice Advice in Planning: 2 Managing Significance in Decision-Taking in the Historic Environment July 2015 unpublished document

Historic England *Historic Environment Good Practice Advice in Planning: 3 The Setting of Heritage Assets* July 2015 unpublished document

James The Red Barrel A History of Watney Mann 1963

Leigh The Panorama of the Thames from London to Richmond 1829

Leithead *Cromwell, Thomas, earl of Essex* in Dictionary of National Biography 2004/2009

London County Council Names and Streets and Places in the Administrative County of London 1955

London Topographical Society/London & Metropolitan Archives *The London County Council Bomb Damage Maps* 1939-1945, 2005

Loobey Britain in Old Photographs Barnes, Mortlake and Sheen 1995

Manning & Bray The History and Antiquities of Surrey Volume 3 1814

MoLAS/English Heritage *The Archaeology of Greater London: An Assessment of archaeological evidence for human presence in the area now covered by Greater London* 2000

Museum of London Archaeology Service *The Stag Brewery High Street Mortlake An Archaeological Impact Assessment* unpublished document 1995

Museum of London Archaeology Service *The Stag Brewery High Street Mortlake An Archaeological Evaluation* unpublished document March 1995

Museum of London Archaeology Service *The Stag Brewery High Street Mortlake An Archaeological Watching Brief* unpublished document March 1996

Museum of London Archaeology Service *The Stag Brewery High Street Mortlake An Archaeological Watching Brief* unpublished document July 1999

Museum of London A research framework for London archaeology 2002 Phillips Walk from London to Kew 1817

Port of London Mortlake Brewery 1984

Pre-Construct Archaeology An Archaeological Evaluation at the Stag Brewery, Lower Richmond Road, Mortlake, London Borough of Richmond upon Thames SW14 7ET November 2016 unpublished document

Richmond & Twickenham Times 1 October 1982

Richmond & Twickenham Times 8 December 1995

Serocold (ed.) The Story of Watneys 1949

Victoria County History Surrey Volume 4 1912

Watneys London - Mortlake Brewery n/d

Weinreb, Hibbert & Keay (eds.) The London Encyclopaedia 2008

Wymer The Lower Palaeolithic Occupation of Britain 2 volumes 1999

3. <u>Cartographic</u>

1745 John Rocque's Map of London

1768 John Rocque's Map of Surrey

1793 Lindley & Crossley's Map of Surrey

1823 Charles & John Greenwood's Map of Surrey

1839 Mortlake Tithe Map

1865 Ordnance Survey

1865 Plan of Thames Street Mortlake

1894-6 Ordnance Survey

1907 GOAD Insurance Plan

1913 Ordnance Survey

1940 Ordnance Survey

1948 Ordnance Survey

1952 Ordnance Survey

1953 Ordnance Survey

1958 Ordnance Survey

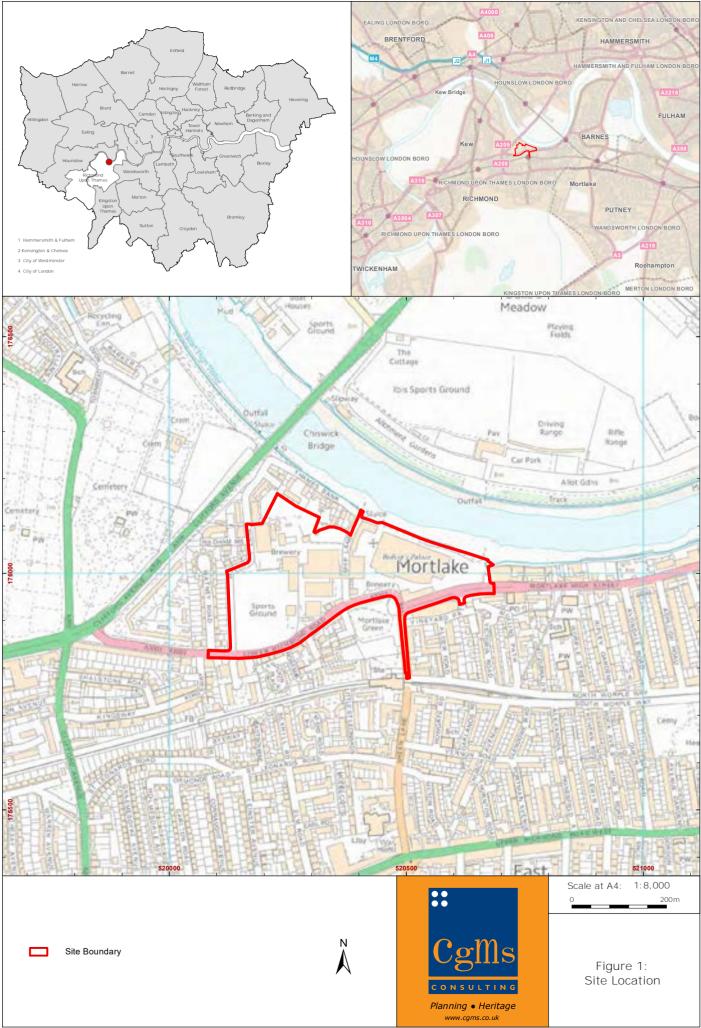
1961 Ordnance Survey

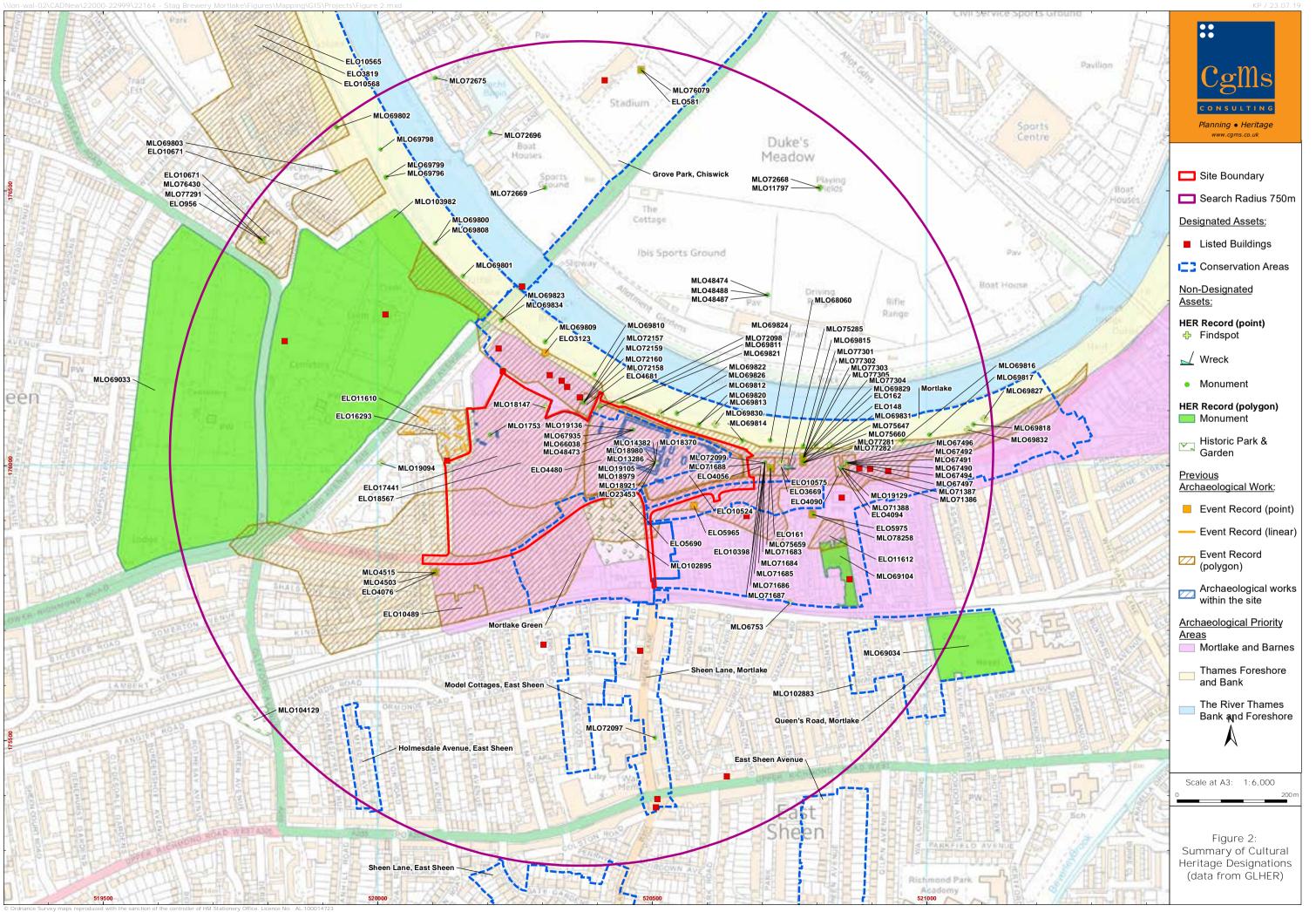
1965 Ordnance Survey

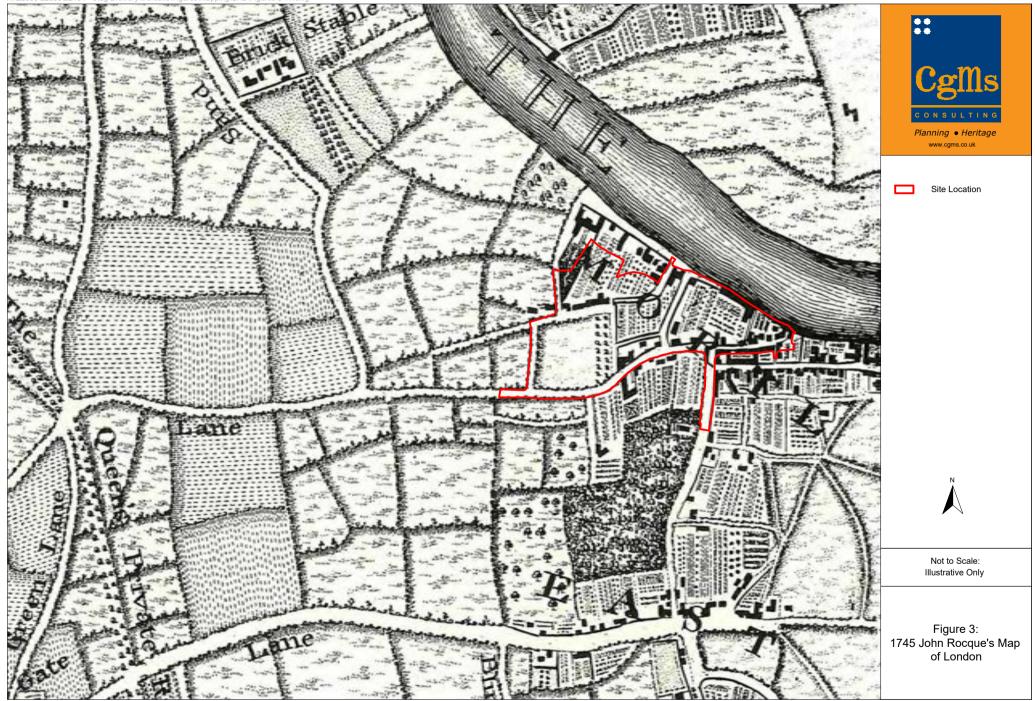
1967 Ordnance Survey

1968 Ordnance Survey

- 1973 Ordnance Survey
- 1976 Ordnance Survey
- 1977 Ordnance Survey
- 1982 Ordnance Survey
- 1987 Ordnance Survey
- 1988 Ordnance Survey
- 1991 Ordnance Survey
- 1992 Ordnance Survey
- 1993 Ordnance Survey
- 1998 British Geological Survey Sheet 270 (South London)
- 2009 Ordnance Survey
- 2016 Site survey





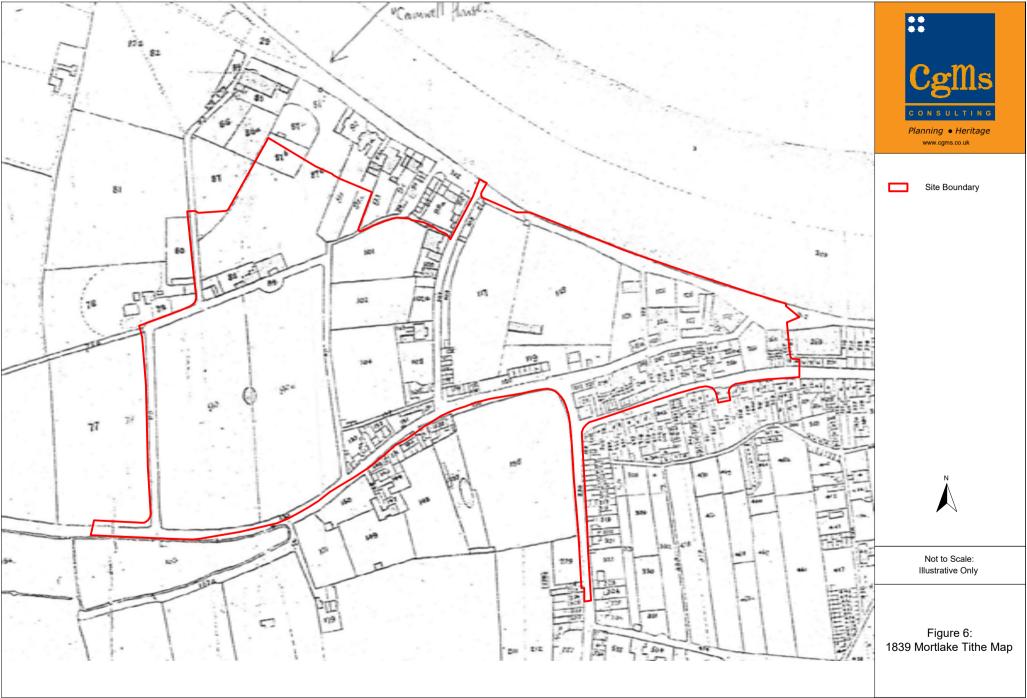




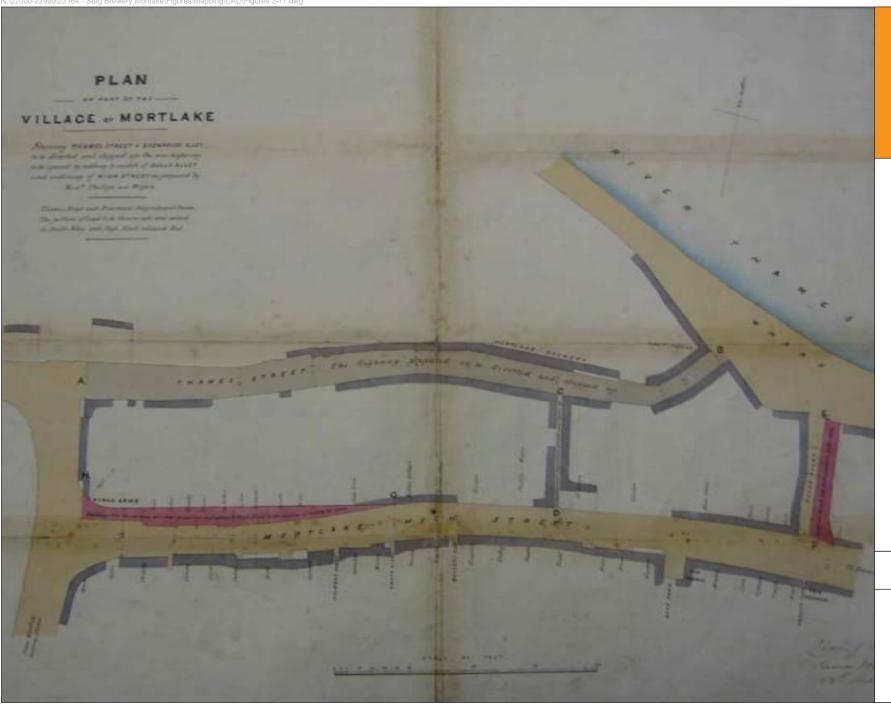


Not to Scale: Illustrative Only

Figure 5: 1829 View of Mortlake (including the northern site frontage) from the River Thames







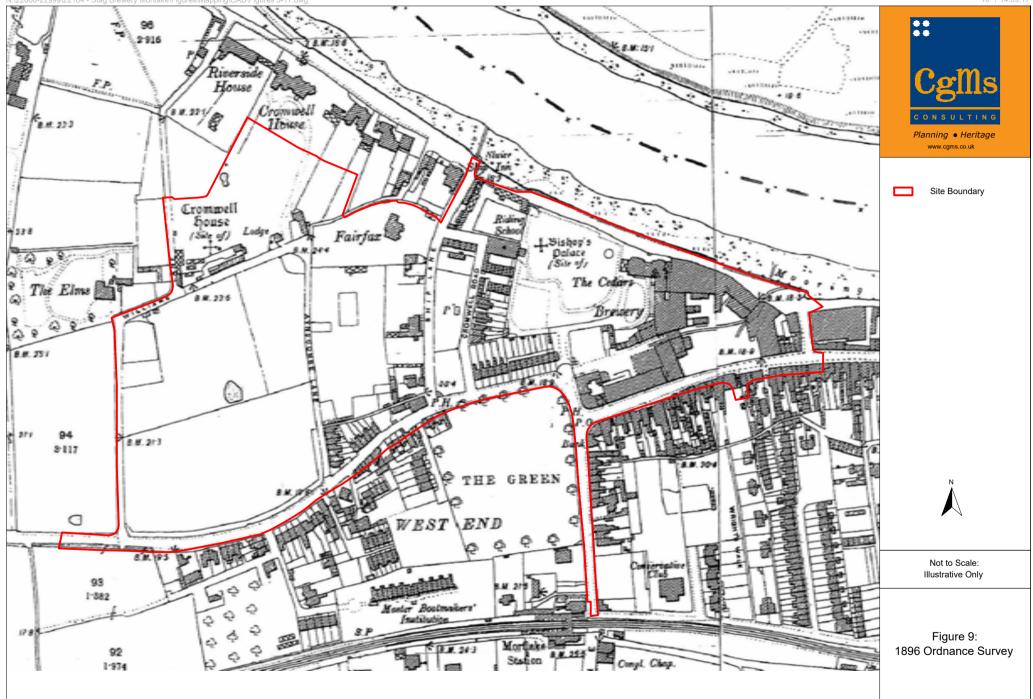


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Figure 8: 1865 Plan of Thames Street





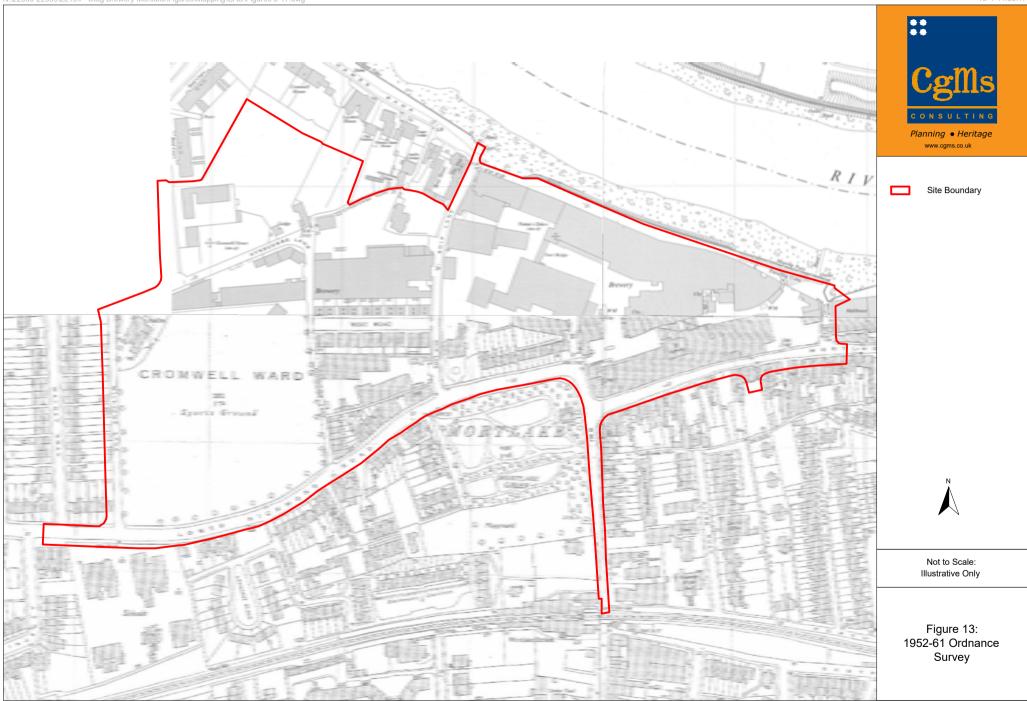




Not to Scale: Illustrative Only

Figure 10: 1907 GOAD Insurance Plan





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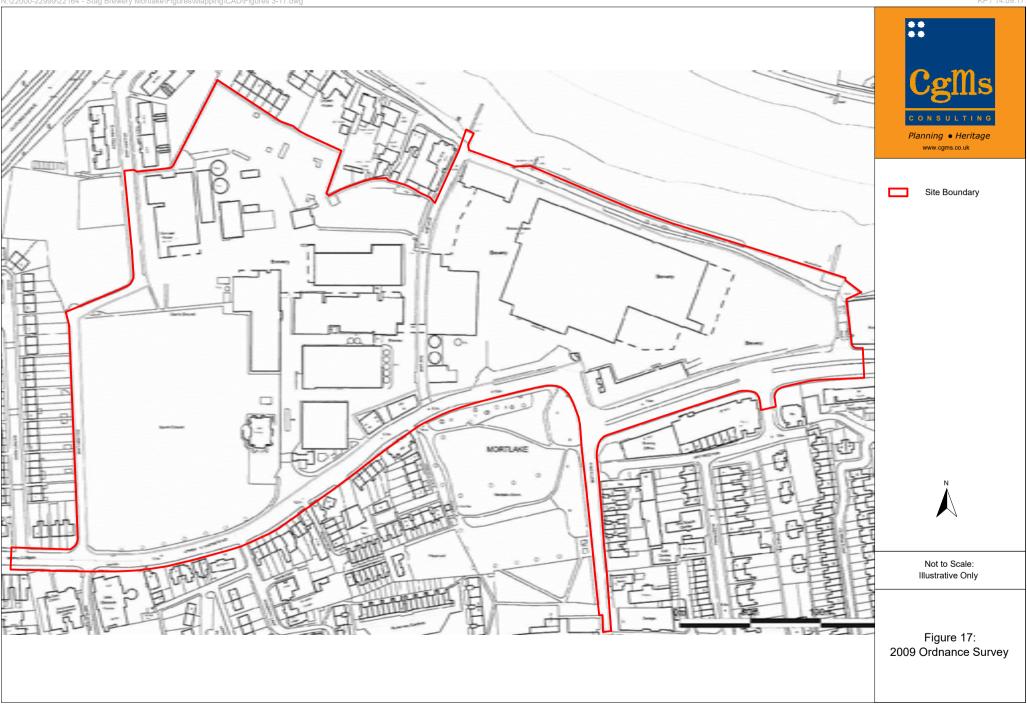


Site Boundary



Not to Scale: Illustrative Only

Figure 14: 1962 Aerial Photograph



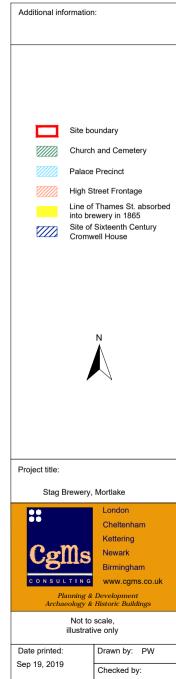


Figure 19: Probable extent of Medieval land use zones across the eastern part of the site

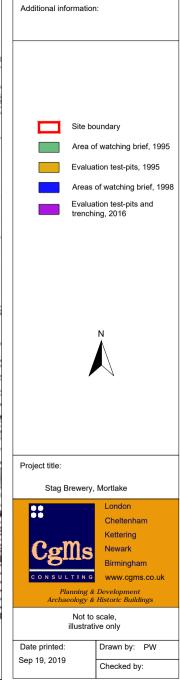
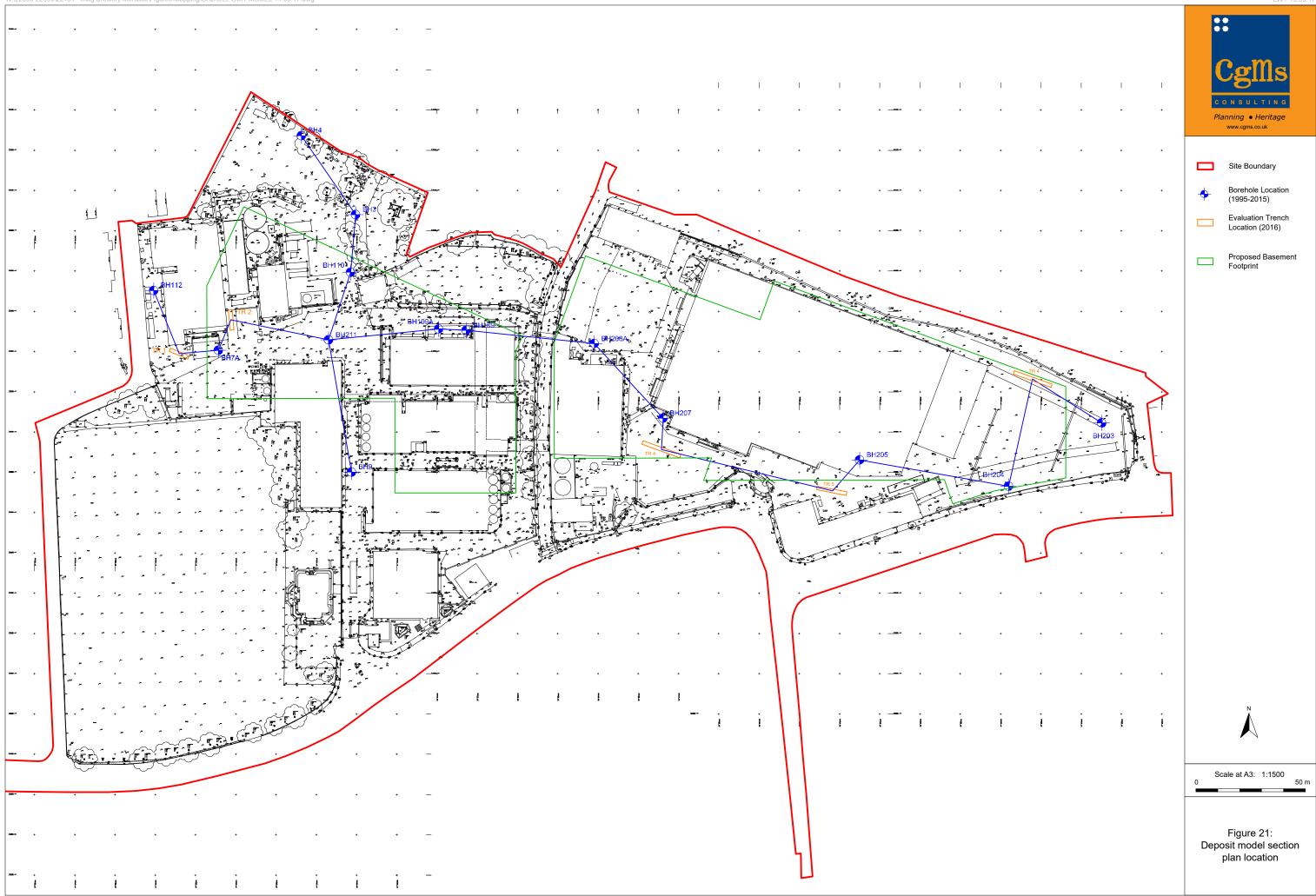
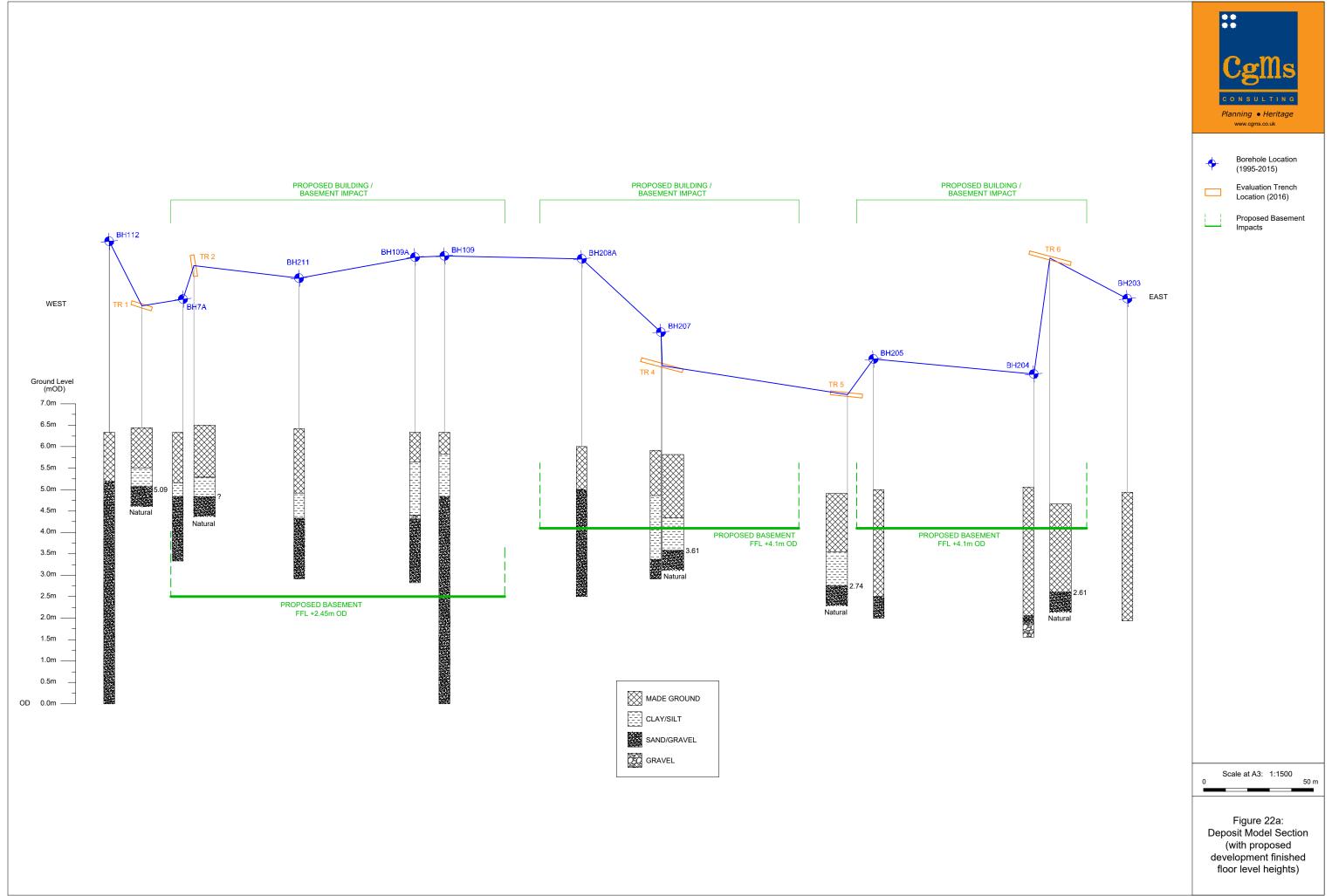
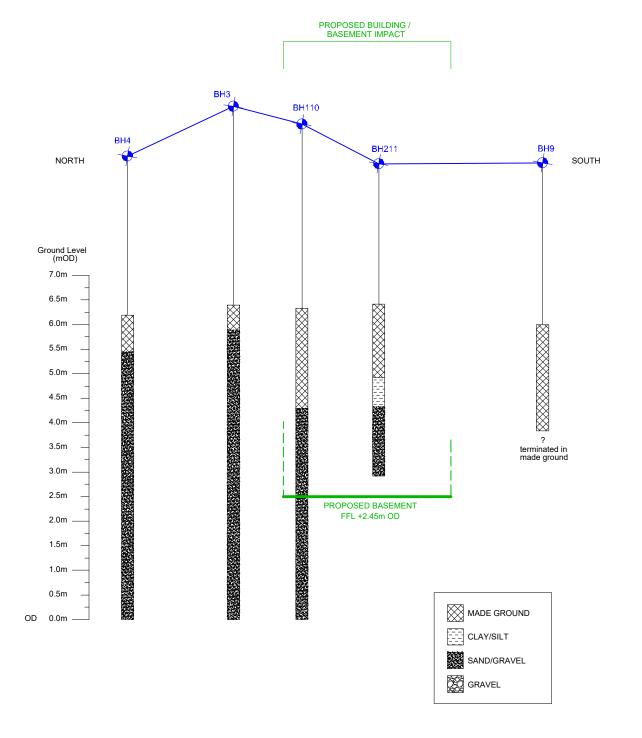


Figure 20: Location of archaeological works undertaken within the Site to date





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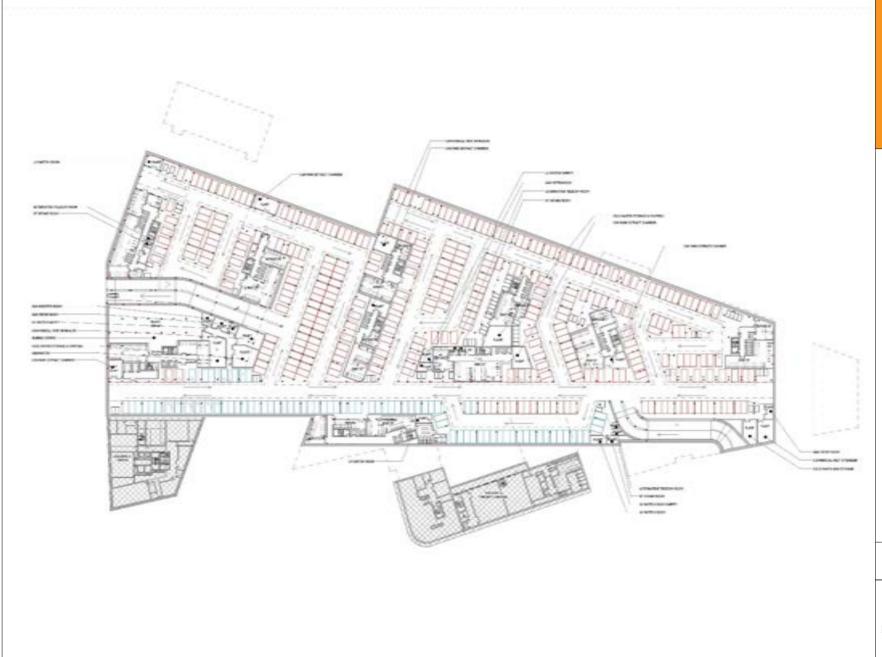
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Borehole Location (1995-2015)

Evaluation Trench Location (2016)

Scale at A3: 1:1500 50 m

Figure 22b:
Deposit Model Section
(with proposed
development finished
floor level heights)



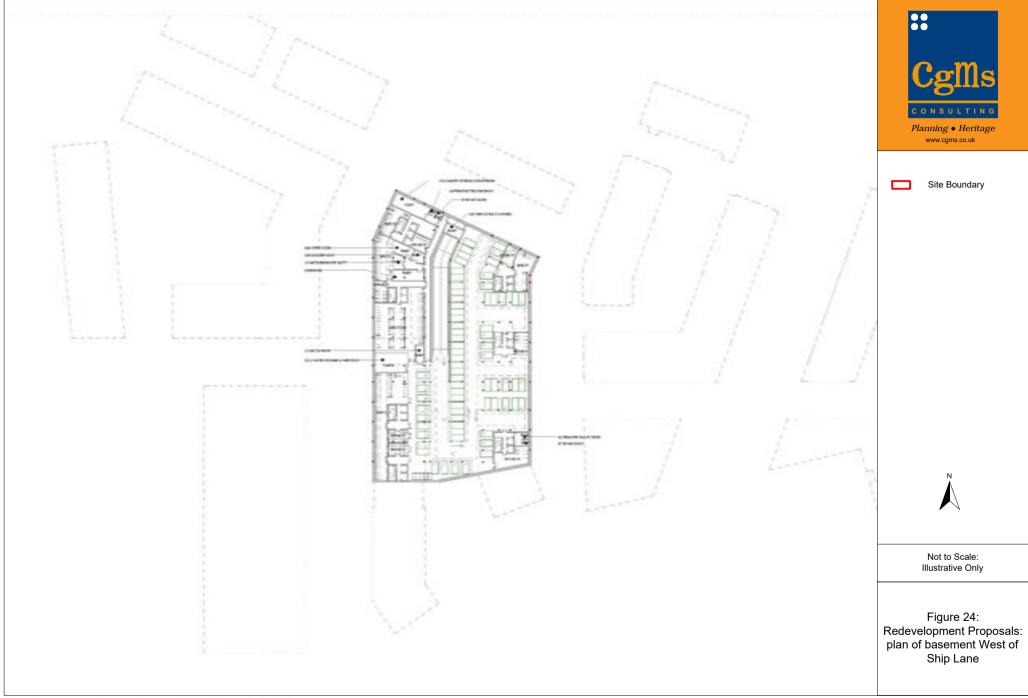


Site Boundary



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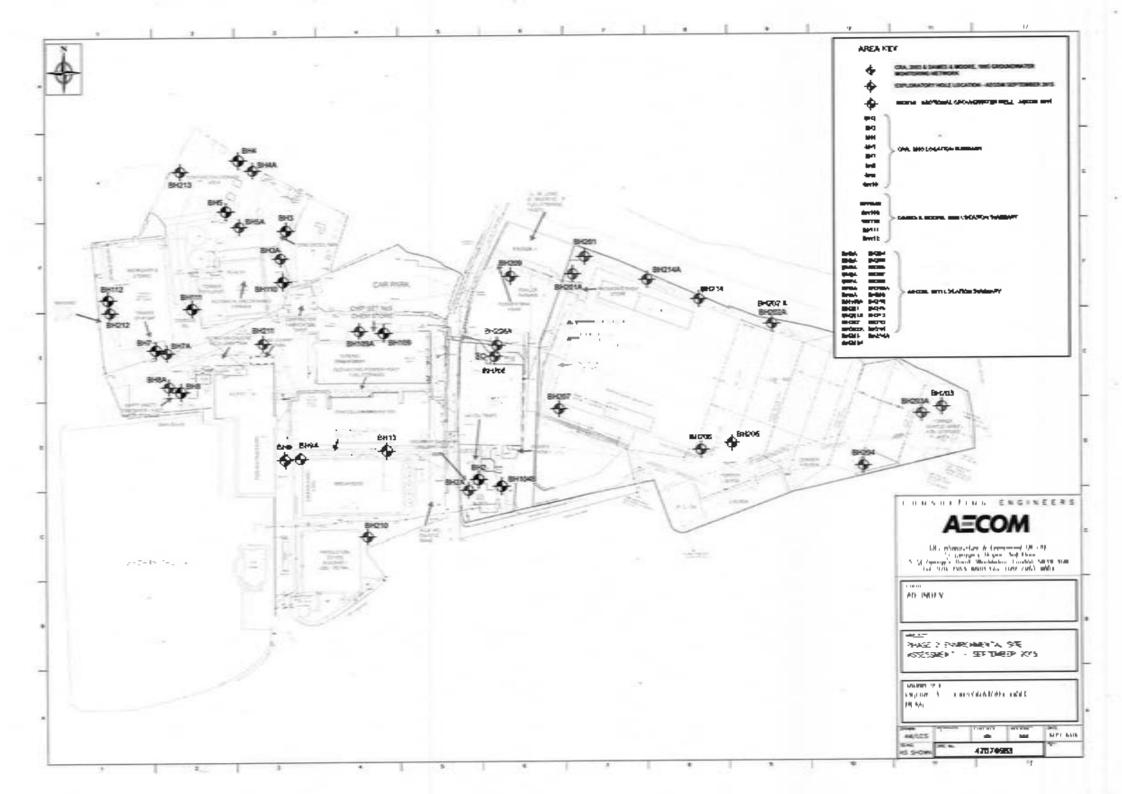
Figure 23: Redevelopment Proposals: plan of basement east of Ship Lane

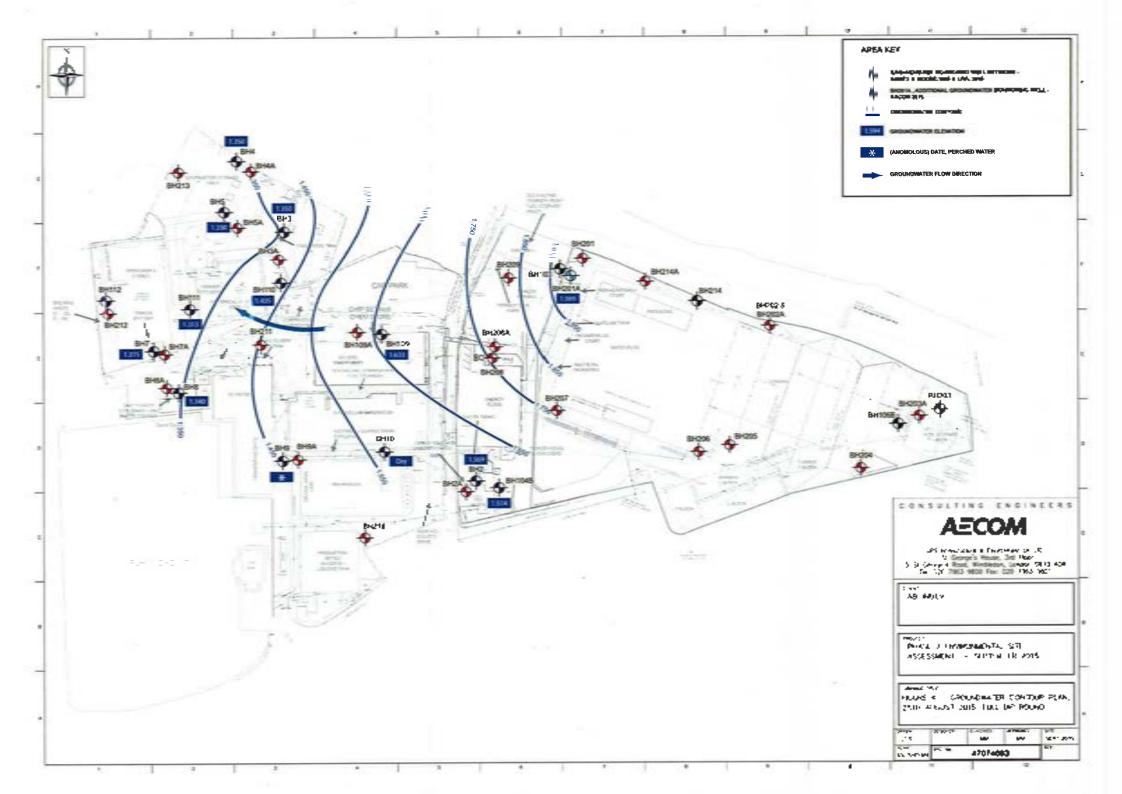


Plan showing previous and existing development impacts

Appendix 1

Geotechnical information 1995, 2003, 2015





AECOM

Borehole Log

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	ng and Sale g Hagway			ke. Lon	don SV	V14	Cixut	Al	B Tabey			BOREHOLE	
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egah Sans SGI [ple : Test Jetails	PID (pp	Willege	Lagend	Depth (Thick- ness)		m-scri	PHON		co	MMPN	18	Installation
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Projec	of Martin and Seta Street Becomes			Sa Lac	don ev	V1Z	Chest	51	3 Inbev			BOREHOLE	No
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		ŧ	П					STRAI	Λ				
Верії\ ВСL	Sample / Test Deixils	PID (pphi)	Water		Depth (Thick- ness)		an-sust			COA	aments		Section in
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=	1		_					dens : Tehn	2 ≈	oundwater Softe	Αρριον	rd By MM	_

Poje	et Name and Site			1	.l.s.= 177	3/14	Clicat	20	Inbev			BOREHOLE	No
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		<u>E</u>	5		Depth	_		STRATA	١				1
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-2.5	Marchael State	191			2.00	ties tines	gracelly, time to to medium to sub ingrease gravelly	regentyd of this	Gravel II	Day NV(1			
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- R	Backfill Concessor Recognité					ample D				an Browns Swig Sand		GENERA REMARK South Southern Conference of the South Southern Conference of the Southern Conference of	38
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_	Name and Site Stag Browers			ke Luci	dua SV	V14	Clent.	AB	Inbev			HOREHOLE	
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	= = = N	Ę						STRATZ	١				
Хро́в BGL	Sample / Test Data:%	(madu) cied	Water	Legend	Depth (Thick- ness)		pjacka	PHON		LON	MMIN	PS	Seculation
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~3 46	acrigo	-01			(1.27)	natural:	GROUND: Brow subangular to rou stone, wood and age ayey with de	anded gravid of occasional base	ľ	Dry SV0		5\$	
76		61		- e -	90240 2.10	Gravel Lagadar	noon, grey, sandy is fine to meshura and subneciaded or (pessubly rewo	r, subtangodar k o Sirat Soud i	٥	Dry NVO			
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		·c:			(, 40)								
				0	3.30		de tenangled at 4						
	Tsack()III	_	_	_	S.	ample D	Details	Legend				GENERA	L
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		_	_					god Hy	- 2°		Аруч	medly MM	_

Рупус	a Name and Site Stag Browers			ke, Lon	don SV	V 4	Cies	AB Inbe	٧		BH212
Job N	5 47075502		And South	e 27-0 27-0	8-15 8-15	Chora	nd Level (ch)	Co Ordinates ()			BHZIZ
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	FSL.						Chapters Cons	er and Promier Rig.			Lofi
		2						STRATA			
epch (G)	Sample (Test Details	PLD (ppm)	Water	i egend	Depth (Thick- ness)		Discid		r'c	MAIRN	TS
						CONC	REITT.				~
() ()	≥≤ hit2:5_3,1	-94 -94			(140)	Imposits	erkand. Gravel is Ib eccusional gra	Ared, gurvelly, fine fine to medium of rye back and crushed	Dry SV0		
74 74	6480_1433 1/ /	10 V			- 10	1 f Payel	is situato meditare	ling to gozese SA STD realbergade to e gravelty with depth			
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ob No				-,	dosi SV	_			3 Inbev			BH213
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_	747	4						STRAT				
legeli BKiL	Sample (Text Details	Plity (pyrm)	Water	Lingari	Depth (Thick acts)		DESCRI			CON	NEW!	rs
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E E	X 8:001_0102	-6:		6 6 7 8	(0.50) (2.0	Demo. I	on pley slightly ly reworked clay lances, goverly, is fine to inches aled of flint. Oca	file of orașe cunzidar (c	SAND.	Demop NVD		
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9		ent				Burdse	ke (epominio) at 1	s Car. lagli				
	Backfill					mple D		Legend				GENERAL REMARKS
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							¥ 0×	ndwster [*] arte	÷ 0	vyruteo svr trede		ored Dy MM

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	Name and Sac Stag Browers			c. Lon	don St	V]4	Chent	AB	lnbev			BOREHOLI	
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Contrac		- :	r-5 :)a.	c 2,1-04	041.7	Meth	ed / Plant Used					Sheet	
	ESL —						Concrete flore	r and Solid Star	я Авухії			Loft	
\neg		1						STRATA					11.02
eath s Kill	iample / Test Details	PJD (ppm)	Weer	Legend	Depth (Thick- sess)		DESCRI			cos	имтех	15	T
\top	1	_		22.52	net	FARM.							-3
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		Ê			- 100			STRAT	Λ				
Deyah Skiil	Sample / Test Deants	PID (ppm)	Water	Legest	Depth (Thick- ness)		DEWIN	PHOS		CO	ммі-х	rs	SUL
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	i Name and Site						Client		5 to 1 . k			BOREHOLI	No
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ias N.		- 15	Date Kunts	25-09	8-15	Citon	and Davel (10)	0.0	Hidinales ()				
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	Name and Sec Stag Brower			ko Lans	don SV	vaa.	Circut	A)	3 Inbev			BOREHOLI	
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kpth luid.	Sample: Tost Eletails	PID (ppm)	Water	Leggod	Dapib (Black- poss)		DESERI	P190N		CON	IMPSTS		Installatio
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		,		000		and langu	hrower sandy, fis also-substanted t tine coarse.	e enedium. GRAVLL of 1	C.61.	Dry NVO			
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Appendix 2

Correspondence with GLAAS re archaeological mitigation

From: O"Gorman, Laura

To: Richard von Kalinowski-Meager
Subject: [EXT] RE: Stag Brewery, Mortlake
Date: 16 August 2017 15:26:28

Hi Richard,

I have finally managed to get around to reviewing the current draft, and I'm pleased to say that the additional assessment, including the new past impact plan and transects are really useful. The assessment helps to give us a clearer steer and the next phase of archaeological investigation. Your client will need to submit this along with the evaluation report as part of their application. When consulted by the borough I will then recommend a 2 stage condition, with the first stage comprising further evaluation in order to refine the mitigation strategy. It would be good for us to sit down in due course to work out the best evaluation scope in light of the most recent assessment.

Please get in touch if you have questions.

Regards, Laura

Laura O'Gorman

Assistant Archaeology Advisor

Planning Group: London

Historic England | 1 Waterhouse Square, 138-142 Holborn, London EC1N 2ST

Direct Dial: 0207 973 3242 Mobile: 07789 928 817

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From: Richard von Kalinowski-Meager [mailto:Richard.von-Kalinowski-Meager@cgms.co.uk]

Sent: 16 August 2017 11:19

To: O'Gorman, Laura

Subject: RE: Stag Brewery, Mortlake

Hi Laura,

I was wondering how your deliberations were progressing re the Stag Brewery site, and whether you needed any further information?

Regards,

Richard

Richard von Kalinowski-Meager BA MA PG Cert FSA MCIfA

Director Archaeology

Direct Dial: 020 7832 1487

Email Address: richard.meager@cgms.co.uk

Mobile: 07764 830956

Please note that I will be on annual leave from the end of Wednesday 23 August until the morning of Monday 4 September 2017.

CgMs Consulting

Part of RPS Group plc

Planning, Archaeology & Historic Buildings Consultants

11th Floor, 140 London Wall, London EC2Y 5DN

Tel: 020 7583 6767 Fax: 020 7583 2231 Co. Reg No. 3303376 www.cgms.co.uk



From: Richard von Kalinowski-Meager

Sent: 09 August 2017 11:16 **To:** 'O'Gorman, Laura'

Subject: RE: Stag Brewery, Mortlake

Laura,

I attach the updated DBA for the Stag Brewery site, for your review and comment (the full report size is nearly 30MB and you will shortly receive a weblink from my secretary Karen to download

this from).

I would draw your attention to the 1962 aerial photograph, reproduced at Figure 14, which shows the full extent of development within the northwestern and northeastern corners of the playing field to the southwest, which has not previously been identified.

Figures 21-22 comprise the deposit model, crossing the whole site, which now also show the current proposed basement depths – it is clear from this that large parts of the site have undergone substantial impacts.

In addition, Figure 29 indicates the known previous and existing areas of basement, together with the quantities of services which run across the whole of the site, and which were an important deciding factor in placing the 2016 evaluation trenches. Unfortunately we have not been able to ascertain the foundation details for the buildings within the western part of the site.

I have been notified that while some soft strip of the buildings across the site is ongoing, the majority of strip out and demolition work will not be undertaken prior to planning submission.

The proposed basement and ground floor redevelopment plans are now included, at Figures 23-28, with Figure 28 overlaying the proposed basement and ground floor plans to clarify proposed locations. Proposed basements west of Ship Lane are focussed in two areas and are not as extensive as the area of proposed basement to the east of Ship Lane.

I would be grateful for your comment re the above and attached, at your earliest convenience – I trust that you are now able to confirm that further works can be conditioned to the granting of planning consent.

Please do not hesitate to contact me should you require any further information or clarification.

Many thanks,

Regards,

Richard

Richard von Kalinowski-Meager BA MA PG Cert FSA MCIfA Director Archaeology

Direct Dial: 020 7832 1487

Email Address: richard.meager@cgms.co.uk

Mobile: 07764 830956

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11th Floor, 140 London Wall, London EC2Y 5DN

Tel: 020 7583 6767 Fax: 020 7583 2231 Co. Reg No. 3303376 www.cgms.co.uk



From: O'Gorman, Laura [mailto:Laura.O'Gorman@HistoricEngland.org.uk]

Sent: 29 June 2017 11:59

To: Christopher Clarke (London Wall); Abrams, Diane

Cc: Richard Meager

Subject: [EXT] RE: Stag Brewery, Mortlake

Richard/Chris,

Thank you for sending through the updated DBA. I welcome the additional information however I still feel there needs to be a little bit more done to help draw out the conclusions and reasoning for condition led mitigation.

What would be really useful for me and also to help formulate an archaeological fieldwork strategy as we go forward, is for the assessment to include a plan which highlights areas of archaeological survival. This should include:

- 1. Areas where we believe there is no archaeological, owing to past/existing basements. Figure 3 with the old 1995 MOLAS assessment provides some useful information on the basements that were then known to be present. The Goad map also provides useful information on which buildings had basement.
- 2. Areas where there is some/moderate survival for example below the 1996 warehouse building where there could be fragmentary survival between piled foundations. Also buildings shown on historic maps where we are uncertain if they had basement and so could also have survival between their foundations.
- 3. Areas where there is likely to be good archaeological survival e.g. areas which have not been developed.

I would still also like to see information regarding the foundations on which the building in the location of Cromwell's house was constructed, in order to provide further indication on the likely level of survival at this location.

I welcome the inclusion of the proposed basement plans however as it stands it is impossible to identify where these will be located within the site. At the moment they are just floating in space!

Last of all could you also include the ground floor proposal plans so that it is clear where there would be impacts outside the proposed basement footprints?

Once I have the above additional information I should hopefully be in a better position in which to make a comfortable decision.

Please let me know if you have any questions regarding the above.

Regards, Laura

Laura O'Gorman

Assistant Archaeology Advisor

Planning Group: London

Historic England | 1 Waterhouse Square, 138-142 Holborn, London EC1N 2ST

Direct Dial: 0207 973 3242 Mobile: 07789 928 817

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From: Christopher Clarke (London Wall) [mailto:chris.clarke@cgms.co.uk]

Sent: 21 June 2017 10:19

To: Abrams, Diane; O'Gorman, Laura

Cc: Richard Meager

Subject: Stag Brewery, Mortlake

Morning Diane/Laura,

Further to previous discussions relating to the site at the Stag Brewery, Mortlake, and on behalf of my colleague Richard who is on annual leave, please find attached an updated version of the DBA for review. The DBA has yet to be finalised with the full final proposed design details, but hopefully this should facilitated further discussions.

Please note that the proposed basement designs have now been included. Plus QUEST have undertaken a review of the available data and have established that there is limited Palaeolithic potential within the site.

If you are able to review and provide further comment to Richard, that would be appreciated.

Regards, Chris

Chris Clarke BSc (Hons) MA MCIfA Senior Associate Director Direct Dial: 020 7832 0253

Mobile: 07881 020428

Email Address: chris.clarke@cgms.co.uk

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