

**Arlington Works,
Twickenham, LB
Richmond-upon-
Thames**

**Archaeology Desk-
Based Assessment**

Client: Sharpe Refinery Service Ltd

AB Heritage Project No:60407

Date:04/07/2018

GLHER Data Licence Number: 14099

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LB Richmond-upon-Thames
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GLHER Data Licence Number 14099

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1. INTRODUCTION

1.1 Project Background

AB Heritage Limited (hereinafter AB Heritage) has been commissioned by Sharpe Refinery Service Ltd to produce an Archaeology Desk-Based Assessment covering proposed development at Arlington Works, Twickenham (Fig. 1).

- 1.1.1 This report includes a description of the baseline conditions; an examination of readily available documentary, cartographic and known archaeological evidence; and identifies any known and potential archaeology within the application site. It proposes a suitable mitigation strategy for archaeology, where such works are deemed appropriate.
- 1.1.2 The focus of this desk-based assessment is purely on below-ground archaeological remains, and therefore will not cover built heritage assets within the study area.

1.2 Site Location & Description

- 1.2.1 The site is located at Arlington Works, Arlington Road, Twickenham, TW1 2AZ, in the London Borough of Richmond; approximate NGR: TQ 16967, 74386 (Fig. 1).
- 1.2.2 The site is an irregular plot of land measuring c. 0.3ha. The site is currently occupied by industrial and commercial buildings comprising, offices, garages, workshops and storage. These house multiple small businesses as well as the Sharpe's Recycle Oil works.
- 1.2.3 The site is accessed from Arlington Road and is primarily bounded by industrial and residential plots. The north-western site boundary is formed by a railway line, with St Margarets train station located c. 145m to the south-west of site.

1.3 Geology & Topography

- 1.3.1 The site is located in the Thames Valley, where the landscape is generally flat with isolated occurrences of higher ground, such as at Richmond Hill, c. 1.5km to the south-east of the site. The ground level across the site is recorded at c. 6.5m above Ordnance Datum (aOD).
- 1.3.2 The underlying solid geology on site derives from the London Clay Formation, comprising clays and silts, with overlying deposits of sand and gravel belonging to the Kempton Park Gravel Member (BGS 2018).

1.4 Proposed Development

- 1.4.1 The current proposal is for the change of use of the site from primarily commercial and industrial, to commercial and residential, comprising a mixed-use scheme with employment space and 24 new residential units. This will entail:
 - Removing the oil tank farm in the northern part of site;
 - Removing the corrugated iron workshops at the eastern side of site;
 - Removing the toilet block and telephone mast at the southern end of site;

- Construction of two new residential buildings: the main building (in the north) comprising 20 residential dwellings and the smaller block (in the east) comprising 4 residential dwellings; and
- The laying out of associated on-site routeways and parking (Indigo 2016).

1.4.2 The extent of any below-ground works for foundations and services is currently unknown.

1.4.3 A geotechnical report by Leap Environmental Ltd. (Leap 2015) found a range of contamination below the concrete hard-standing. The report concluded that any redevelopment of the site would likely have to include some provision for:

- Stripping hydrocarbon residues within made ground directly beneath the hardstanding in the area of the oil storage tanks and loading/unloading bay, plus if found in previously un-investigated areas;
- Excavation and disposal of any asbestos impacted made ground;
- Provision of a suitable clean cover layer in garden areas over heavy metal impacted made ground or in areas of residual hydrocarbon hotspots (*ibid*).

2. AIMS & METHODOLOGY

2.1.1 Early consultation on the results of cultural heritage research and consideration of the implications of proposed development is the key to informing reasonable planning decisions.

2.1.2 The aim of this report is to facilitate such a process by understanding the historical development of the application site and the likely impact upon any surviving archaeological resource or historic building resulting from the proposed development, devising appropriate mitigation responses where necessary.

2.2 Aims of Works

2.2.1 The assessment has been carried out, in regard to the collation of baseline information, in line with the Chartered Institute for Archaeologists' Standard and Guidance for Historic Environment Desk-based Assessment (January 2017).

2.2.2 This assessment includes relevant information contained in various statutory requirements, national, regional and local planning policies and professional good practice guidance, including:

- Ancient Monuments and Archaeological Areas Act, 1979
- Planning (Listed Buildings and Conservation Areas) Act, 1990
- The National Planning Policy Framework, 2012

2.2.3 The Greater London Historic Environment Record (GLHER) is the primary source of information concerning the current state of archaeological and architectural knowledge in this area. The GLHER Commercial dataset search reference number for this project is 14099. For reporting purposes, the HER information has been re-numbered with AB numbers, which can be viewed in the Cultural Heritage Gazetteer (Appendix 1). The information contained within this database was supported by examination of data from a wide range of other sources, principally:

- The Heritage Gateway (www.heritagegateway.org.uk) for information from Historic England National Monuments Record, Pastscape and other research resources, including the National Archives;
- The Historic England website professional pages, including the National Heritage List for England;
- A site-walk over, which was undertaken on the 6th June 2018;
- A visit to the Richmond upon Thames Local Studies Library and Archive on 6th June 2018; and
- Additional relevant documentary and online historic sources such as the National Library of Scotland (hereafter NLS).

2.2.4 Information from these sources was used to understand:

- Information on statutory and non-statutory designated sites;
- Information on heritage assets recorded on the HER;
- Readily accessible information on the site's history from readily available historic maps and photographs held at the Richmond upon Thames Local Studies Library and Archive (hereafter Richmond Archives);
- Any information on the site contained in published and unpublished archaeological and historical sources, including any previous investigations undertaken within the study area;
- A greater understanding of key cultural heritage issues of the site and surrounding area, developed through the onsite walkover, including information on areas of past truncation within the site boundary;
- The impact of proposed development on the known and potential archaeological resource, resulting in the formulation of a mitigation strategy, where required, which appropriately targets any future works to those required to gain planning consent.

2.3 Consultation & Study Area

- 2.3.1 It was agreed during consultation between Paul Cooke (Assistant Heritage Consultant, AB Heritage) and Diane Abrams (Greater London Archaeological Advisor for Richmond-upon-Thames, Historic England) that a 500m search radius was appropriate for this assessment.

2.4 Methodology of Works

- 2.4.1 This desk-based assessment contains a record of the known heritage resource of the area. It also assesses the potential cultural heritage resource of the site, using the following scale:
- No Potential - Clear evidence of past impacts / site sterilisation
 - Low - Very unlikely to be encountered on site
 - Medium - Features may occur / be encountered on site
 - High - Remains almost certain to survive on site
- 2.4.2 In relation to buried archaeological remains, where a site is known, or there is a medium or above potential for archaeology to survive, full impact assessment will be undertaken.
- 2.4.3 There is currently no standard adopted statutory or government guidance for assessing the importance of an archaeological feature and this is instead judged upon factors such as statutory and non-statutory designations, architectural, archaeological or historical significance, and the contribution to local research agendas. Considering these criteria each identified feature can be assigned to a level of importance in accordance with a five-point scale (Table 1, below).

Table 1: Assessing the Importance of a Cultural Heritage Site

SCALE OF SITE IMPORTANCE	
NATIONAL	The highest status of site, e.g. Scheduled Monuments (or undesignated assets of schedulable quality and importance). Grade I and Grade II* Listed Buildings. Other listed buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in the listing grade. Conservation Areas containing very important buildings. Undesignated structures of clear national importance. Extremely well preserved historic landscape, whether inscribed or not, with exceptional coherence, time depth, or other critical factor(s).
REGIONAL	Grade II Listed Buildings or other designated or undesignated archaeological sites (in addition to those listed above), or assets of a reasonably defined extent and significance, or reasonable evidence of occupation / settlement, ritual, industrial activity etc. Examples may include areas containing buildings that contribute significantly to its historic character, burial sites, deserted medieval villages, Roman roads and dense scatter of finds.
LOCAL	Evidence of human activity more limited in historic value than the examples above, or compromised by poor preservation and/or survival of context associations, though which still have the potential to contribute to local research objectives. Examples include sites such as 'locally designated' buildings or undesignated structures / buildings of limited historic merit, out-of-situ archaeological findspots / ephemeral archaeological evidence and historic field systems and boundaries etc.
NEGLIGIBLE	Assets with very little or no surviving archaeological interest. Examples include destroyed antiquities, structures of almost no architectural / historic merit, buildings of an intrusive character or relatively modern / common landscape features such as quarries, drains and ponds etc.
UNKNOWN	Insufficient information exists to assess the importance of a feature (e.g. unidentified features on aerial photographs).

2.4.4 The importance of already identified cultural heritage resources is determined by reference to existing designations. Where classification of a receptor's value covered a range of the above possibilities or for previously unidentified features where no designation has been assigned, the value of the receptor was based on professional knowledge and judgement.

2.4.5 For some types of finds or remains there is no consistent value and the importance may vary, for example Grade II Listed Buildings and Conservation Areas. For this reason, adjustments are occasionally made, where appropriate, based on professional judgement.

2.5 Impact Assessment Criteria

2.5.1 The magnitude of impact upon the archaeological and heritage resource, which can be considered in terms of direct and indirect impacts, is determined by identifying the level of effect from the proposed development upon the baseline conditions of the site and the cultural heritage resource identified. The criteria for assessing the magnitude of impact are set out in Table 2 (below).

2.5.2 In certain cases, it is not possible to confirm the magnitude of impact upon a cultural heritage resource, especially where anticipated buried deposits exist. Where possible a professional judgement as to the scale of such impacts is applied to enable the likely 'Significance of

Effects' to be established; however, a magnitude level of 'uncertain' is included for situations where it is simply not appropriate to make such a judgement at this stage of works.

Table 2: Criteria for Determining Magnitude of Impact

IMPACT LEVEL	DEFINITION
HIGH	Changes to most or all of the key archaeological or key heritage baseline elements, or comprehensive changes to the setting of such key features that lead to total or almost complete alteration of a features physical structure, dramatic visual alteration to the setting of a heritage asset, or almost comprehensive variation to aspects such as noise, access, or visual amenity of the historic landscape.
MEDIUM	Changes to many key archaeological materials/historic elements, or their setting, such that the baseline resource is clearly modified. This includes considerable visual change to many key aspects of the historic landscape, noticeable differences in noise or sound quality, and considerable changes to use or access changes to key historic landscape elements
LOW	Detectable impacts which alter the baseline condition of an archaeological or heritage receptor to a slight degree – e.g. a small proportion of the surviving heritage resource is altered; slight alterations to the setting or structure, or limited changes to aspects such as noise levels, use or access that results in limited changes to historic landscape character.
NEGLIGIBLE	Barely distinguishable change from baseline conditions, where there would be very little appreciable effect on a known site, possibly because of distance from the development, method of construction or landscape or ecological planting, that are thought to have no long-term effect on the historic value of a resource.
UNCERTAIN	Extent / nature of the resource is unknown and the magnitude of change cannot be ascertained.

2.5.3 The overall Significance of Effects from the proposed development upon the Cultural Heritage Resource is determined by correlating the magnitude of Impact against value of the Cultural Heritage resource. Table 3 highlights the criteria for assessing the overall Significance of Effects. Where effects are moderate or above these are classified as significant.

Table 3: Significance of Effects

IMPORTANCE	MAGNITUDE			
	HIGH	MED	LOW	NEG
NATIONAL	Severe	Major	Mod	Minor
REGIONAL	Major	Mod	Minor	Not Sig.
LOCAL	Mod	Minor	Minor	Not Sig.
NEGLIGIBLE	Minor	Not Sig.	Not Sig.	Nt.

Not Sig. = Not Significant; Nt. = Neutral; Mod = Moderate

2.6 Limitations

- 2.6.1 It should be noted that the report has been prepared under the express instruction and solely for the use of Sharpe Refinery Service Ltd, and any associated parties they elect to share this information with. Measurements and distances referred to in the report should be taken as approximations only and should not be used for detailed design purposes.
- 2.6.2 All the work carried out in this report is based upon the professional knowledge and understanding of AB Heritage on current (June 2018) and relevant United Kingdom standards and codes, technology and legislation. Changes in these areas may occur in the future and cause changes to the conclusions, advice, recommendations or design given. AB Heritage does not accept responsibility for advising the client's or associated parties of the facts or implications of any such changes in the future.
- 2.6.3 This report has been prepared utilising factual information obtained from third party sources. AB Heritage takes no responsibility for the accuracy of such information. It should also be noted that this report represents an early stage of a phased approach to assessing the archaeological and cultural heritage resource of the application site to allow the development of an appropriate mitigation strategy, should this be required. It does not comprise mitigation of impacts in itself.

3. PLANNING & LEGISLATIVE FRAMEWORK

3.1 Introduction

- 3.1.1 The following section highlights the key planning and legislative framework relevant to this project, including legislative framework, national planning policy and relevant sector guidance.

3.2 Statutory Protection for Heritage Assets

- 3.2.1 Current legislation, in the form of the Ancient Monuments and Archaeological Areas Act 1979, provides for the legal protection of important and well-preserved archaeological sites and monuments through their addition to a list, or 'schedule' of archaeological monuments by the Secretary of State for Digital, Culture, Media and Sport. This necessitates the granting of formal Scheduled Monument Consent for any work undertaken within the designated area of a Scheduled Monument.
- 3.2.2 Likewise, structures are afforded legal protection in the form of their addition to 'lists' of buildings of special architectural or historical interest. The listing of buildings is carried out by the Department of Digital, Culture, Media and Sport under the Planning (Listed Buildings and Conservation Areas) Act, 1990. The main purpose of the legislation is to protect buildings and their surroundings from changes that would materially alter the special historic or architectural value of the building or its setting. This necessitates the granting of formal Listed Building Consent for all works undertaken to or within the designated curtilage of a Listed Building. This legislation also allows for the creation and protection of Conservation Areas by local planning authorities to protect areas and groupings of historical significance.
- 3.2.3 The categories of assets with some form of legal protection have been extended in recent years, and now include Registered Parks and Gardens, and Historic Battlefields. While designation as a UNESCO World Heritage Site is not a statutory designation under English planning law, such a designation is regarded as a material consideration in planning decisions, and World Heritage Sites are in practice protected from development that could affect any aspect of their significance including settings within the Site and a buffer zone around it.

3.3 National Planning Policy

- 3.3.1 The NPPF sets out government policy on the historic environment, which covers all elements, whether designated or not, that are identified as 'having a degree of significance meriting consideration in planning decisions, because of its heritage interest'.
- 3.3.2 One of the over-arching aims is to 'Conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations'. To achieve this, local planning authorities can request that the applicant describe 'the significance of any heritage assets affected, including any contribution made by their setting'. The level of detail required in the assessment should be 'proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance'. It goes on to say that 'where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest,

local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.'

- 3.3.3 A key policy within the NPPF is that when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be.
- 3.3.4 With regard to non-designated heritage assets specific policy is provided in that a balanced judgement will be required having due regard to the scale of any harm or loss and the significance of the heritage asset affected.
- 3.3.5 Paragraph 132 states that 'Significance can be harmed or lost through alteration or destruction of a heritage asset or development within its setting. Substantial harm to or loss of a Grade II listed building, park or garden should be exceptional, while substantial harm to or loss of designated heritage assets of the highest significance, should be wholly exceptional'.
- 3.3.6 Paragraphs 133 & 134 explain that 'where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss'.
- 3.3.7 It also advises that where a proposal involve less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

3.4 Local Planning Policy

The London Plan 2011: Historic Environment and Landscapes

Policy 7.8: Heritage Assets and Archaeology

- 3.4.1 This policy states that development should incorporate measures that identify, record, interpret, protect, and where possible, present the site's heritage assets, whether designated or non-designated.
- 3.4.2 Based on this policy, planning decisions involving heritage assets will be assessed on the level of identification, value, conservation, restoration, re-use and incorporation of the asset in the proposed plans. The significance of heritage assets and their settings should be conserved by proposals which are sympathetic to the form, scale, materials and architectural detail of the asset.
- 3.4.3 Any development which will cause substantial harm or loss of a designated heritage asset will only be accepted in exceptional circumstances. The importance of the development will be assessed proportionately in terms of public benefit against the impact on, and the importance of the asset.

London Borough of Richmond Upon Thames Local Plan

- 3.4.4 London Borough of Richmond Upon Thames is currently preparing a new Local Plan for the borough, which will replace the existing policies within the Core Strategy and Development

Management Plan. This was due for adoption in 'Spring 2018' but as it is still in the consultation period, the current policy remains the Development Management Plan (see sections 3.4.6 below). The proposed new policy which is expected to come into place with the adoption of the new Local Plan is as follows:

New Policy LP 7: Archaeology

- 3.4.5 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

London Borough of Richmond Upon Thames Development Management Plan

Policy DM HD 4: Archaeological Sites

- 3.4.6 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.

4. CULTURAL HERITAGE RESOURCE BASELINE

4.1 Known Cultural Heritage Assets

Within the Proposed Development Site

- 4.1.1 The eastern end of the site access road lies partially within the Richmond Archaeological Priority Area (APA) [AB 1], which relates primarily to the Medieval settlement of the Manor of *Sceanes* (Sheen) but also to the potential for the survival of prehistoric finds along the Thames foreshore.
- 4.1.2 There are two Buildings of Townscape Merit within the site boundary, comprising 19th century stables which currently serve as the premises for multiple tenants. However, as the focus of this desk-based assessment is purely on below-ground archaeological remains, these will not be considered further.

4.2 Previous Works in the Study Area

- 4.2.1 Leap Environmental Ltd produced a geotechnical appraisal of the site (Leap, 2015). This recorded 'made ground' at depths of between 0.55m and 1.10m below ground level across the site. Made ground was described in the report as a:

'sub-base type material of sandy gravel made ground with bricks, concrete, flints and ash over predominantly more sandy or clayey made ground with similarly composed gravel' (ibid.).

- 4.2.2 The presence of concrete and brick suggests that this is modern disturbed ground rather than archaeological horizons, probably relating to construction of the stables and the later development of the site into Arlington Works.
- 4.2.3 One borehole recorded a layer of silty sand soils with some fine fragments of brick between 1.10 and 1.80m below ground level. This suggests some areas of deeper soils below the modern hard standing, however the presence of brick fragments suggests an amount of disturbance.
- 4.2.4 Archaeological works comprising excavations at Heathcote Road [AB 6], Sandycombe Road [AB 12] and trial pits at Richmond Road [AB 4] have been conducted within the study area. Only Heathcote Road revealed archaeology of note, exposing traces of Roman settlement activity c. 285m north-east of site. Investigations at the other sites located only modern features or unstratified finds some distance away, at c. 365m east and c. 275m south-east of site, respectively.

4.3 Palaeoenvironmental Evidence

- 4.3.1 Borehole data within the study area showed no indication of any deposits which might yield palaeoenvironmental evidence (BGS 2018). This is supported by the aforementioned geotechnical appraisal described in Section 4.2, which saw boreholes sunk to a depth of c. 20m+ (Leap 2015).

4.4 Archaeology & History Background

The Prehistoric Period (c .500, 000 BC – AD 43)

- 4.4.1 There is no known prehistoric archaeology recorded within the proposed development site.
- 4.4.2 Both the Richmond APA, which encompasses a small section of the site access, and the nearby River Thames APA [**AB 1 & 2**] do include evidence of prehistoric activity; however, the focus of this activity appears to be more focused along the Thames foreshore, some 400m from site. There are also isolated find-spots of Mesolithic and Neolithic worked flint objects within the study area [**AB 3 – 5**].
- 4.4.3 Beyond the study area Mesolithic and Neolithic evidence is more frequent, such as the scatter of find-spots and sites present along the north shore of the Thames, but as with the evidence from the APA this is some distance from the site, situated over 1km away from the area of proposed development (MoLAS 2000).
- 4.4.4 Bronze and Iron Age evidence is absent from the study area.

The Roman Period (c. AD 43 – AD 410)

- 4.4.5 There is no known Roman activity recorded within the proposed development site. Within the surrounding study area a single site, containing features related to settlement activity dating to the 1st – 2nd century AD, was excavated at Heathcote Road, c. 285m north-east of site [**AB 6**]. Apart from this, Roman evidence within the wider area around the proposed development site is largely absent.

The Medieval Period (AD 410 – AD 1536)

- 4.4.6 Early Medieval occupation of the wider area surrounding the site is indicated through the mention of 'Tuicanham' (Twickenham) in a charter from 704AD (Urwin 1965), but there is a general paucity of Early Medieval archaeology recorded in the wider area (MoLAS 2000).
- 4.4.7 The nearest known settlement to the site during the Medieval period was that of *Shene* (Sheen) [**AB 1**], which had a manor from c. 1125 AD (*ibid*). This settlement lay on the north side of the Thames, c. 900m from the site.
- 4.4.8 In 1227 King Henry III granted his younger brother Richard (Earl of Cornwall) the manor of Isleworth, which then included Twickenham (Urwin 1965). This led to the creation of a deer park [**AB 9**], the area of which the current site is now located in. The park appears to have held a manor with associated farm buildings, a windmill and a watermill and, from 1375 - 77, a cob and timber lodge (*ibid*); however, the location of these structures is not known, and they are not documented to have been constructed within the limits of the proposed development site.
- 4.4.9 In 1414, King Henry V commissioned the rebuilding of Shene Manor into Sheen Palace, which lies c. 900m west of site (Cloake 2018). As part of this work he also commissioned the construction of three monasteries, one of which was Syon Monastery [**AB 7**], which was located a few hundred meters to the north-east of site, before being relocated to the parish of Isleworth in 1431 (Aungier 1840; Cloake 2001).

The Post-Medieval Period (AD 1537 – AD 1800)

- 4.4.10 Most of the activity during the early post-Medieval period in the study area of the site relates to Twickenham Park [AB 9], the grounds of which saw large-scale redesign throughout this period.



Plate 1: 1607 Map of Twickenham Park

- 4.4.11 Twickenham Park changed from a Royal to a private estate in the late 16th century (Urwin 1965). The earliest known depiction of the area showing the proposed development site is an extract from a 1607 map by R. Treswell showing 'A Plott of the whole Mannor of Sion...' (Plate 1, from Urwin 1965). The rough location of the site has been marked on this plan showing that the site is not known to be within a built-up area at this time.
- 4.4.12 The manor depicted for 'Twicknam Park' [AB 10], is located a short distance to the north of site. The thin black line leading to the manor appears to correspond with the modern-day location of The Avenue, c. 155m north-west of site.
- 4.4.13 An extract from a 1635 map of 'Istelworth Hunderd' by Moses Glover (Plate 2, from Urwin 1965), shows changes to the wider area, including within the limits of the site, resulting from the creation of a new manor and landscaped gardens for Lady Bedford from 1608 onwards. At this time the location of proposed development appears to be within an area of former woodland and across a tree-lined approach to the house on the line of Arlington Road. The rest of the park appears to be recorded as mixed 'parke' and 'meade' (meadows).



Plate 2: Extract from 1635 map of 'Istelworth Hunderd'

4.4.14 In 1702 Twickenham Park [AB 9] was taken over by a merchant and its grounds were re-designed (Urwin 1965). The redesign is shown on an extract from a 1741-5 map of Richmond-upon-Thames by J. Roque (Plate 3) (Richmond Archives, 2018). In this depiction, what is now the approximate location of the site appears to occupy part of an apparent meadow and part of the tree-lined drive. The manor [AB 10] and its formal gardens can be seen to be restricted to the northern half of the park, leading to the River Thames, with much of the surrounding parkland depicted as formal (enclosed) meadows.



Plate 3: 1741-5 Roque map of Richmond-upon-Thames

The Modern Period (AD 1801 – present)

- 4.4.15 In 1805, Twickenham Park [AB 9] was broken up following the death of its owner, Lord Cavendish (Urwin 1965). Furthermore, over the course of the late 19th and early 20th centuries, the ensuing urbanisation of the area that is now St Margarets can be seen to lead to the formation of the current site (Plates 6 & 7).
- 4.4.16 Plate 4 shows the altered 1844 tithe apportionment map with the proposed railway line from Richmond through Staines to Datchet, which was opened in 1848 (Richmond Archives, 2018). It also appears to show that the formal approach to the old manor [AB 10] from the south has been removed, although a lane (presumably Arlington Road) remains, leading to a pair of buildings and a small triangular plot. The proposed development site sits to the north-west of these buildings, occupying a plot described in the apportionment as 'part of park – meadow'.



Plate 4: Altered 1844 Tithe Apportionments Map

- 4.4.17 Plate 5 shows the proposed development site to still be located in a field with its south-eastern edge corresponding with the original field boundary, which survives as a current plot boundary (Richmond Archives, 2018).
- 4.4.18 Residential expansion within the local area is shown, although there is no indication of any construction within the proposed development site.



Plate 5: 1863 25-inch OS map

4.4.19 The 1:1056 scale OS London map of 1894 is the first to show the proposed development site with the still extant pair of Victorian buildings (Plate 6) (NLS, 2018). This pair of buildings are shown as stables on an 1883 map of 'Twickenham Park Sewer Connections' (not depicted) but are not present on the 1871 6-inch OS map (surveyed in 1867-8, not depicted), giving a construction date between c. 1867 to 1883. The sewer connection map shows that the connections for the stables run from Arlington Road down the middle of the access road.



Plate 6: 1:1056 scale OS London map of 1894

4.4.20 Urbanisation in the wider area is clear on the 1894 map (Plate 6), doubtless fuelled by the establishment of St Margarets station in 1876 (Mitchell & Smith, 1988). No changes are

shown within the site boundary on the 1913 25-inch OS map (not depicted), and it is not until the 1936 25-inch OS map (Plate 7) that the proposed development site can be seen to take on some of its current form, with the long corrugated iron building present today shown along its eastern edge (NLS, 2018). The plot is labelled as “Arlington Works”.



Plate 7: 1936 25-inch OS map

4.4.21 The 1960 National Grid OS map (Plate 8) shows the proposed development site with what appear to be minor changes from Plate 7 (NLS, 2018). A small building is visible at the very eastern edge of site, while two apparent enclosures/sub-divisions in the northern part of site (one adjacent to the corrugated iron building) may represent bunds for oil tanks.



Plate 8: 1960 National Grid OS map

4.5 Site Visit

- 4.5.1 A site visit was undertaken by Paul Cooke on the 6th June 2018. The purpose of this visit was to gain a greater understanding of the existing land use and past impacts within the current site limits, along with an appreciation for the potential survival of below ground archaeological deposits.
- 4.5.2 The site is accessed via an un-named road, which leads east off Arlington Road (Photo 1).



Photo 1: Approach to site from Arlington Road (view from south-west)

- 4.5.3 The north-west corner of site is currently occupied by oil tanks in a raised bund and hard-standing (Photo 2). This is intended as one location of the proposed residential development.



Photo 2: North-west corner of site, view from east

- 4.5.4 The north-eastern edge of site still contains corrugated iron buildings, housing various small commercial premises (Photo 3).



Photo 3: North-east side of site, view from north

- 4.5.5 The south-western half of site is primarily occupied by the Victorian stables and a central cobbled surface (Photo 4), although the south-east corner also contains a corrugated iron building functioning as a small garage (Photo 5), as well as an area currently used as parking for the film studio (Photo 6). The south-eastern corner is intended as the second location for residential development.



Photo 4: Victorian buildings and cobbled surface, view from north-east



Photo 5: Car workshop in south-east corner, view from south-west

- 4.5.6 The southern end of site contains a toilet block; this is adjacent to a telephone-mast in the south-western corner of site (Photo 7).
- 4.5.7 Apart from the cobbled surface, the rest of the site is covered in hard-standing of varying quality, with patches of resurfacing visible in most areas. Some of this resurfacing is clearly a result of modern service trenches (as in Photos 5 & 6), while drains and manhole covers were visible across the entire site, including the cobbled surface.



Photo 6: South-east corner of site, view from north-east



Photo 7: Telephone mast in south-west corner of site, view from east

5. CULTURAL HERITAGE POTENTIAL & MITIGATION

5.1 Known Cultural Heritage Resource

- 5.1.1 The site was located within Twickenham Park [AB 9], established initially as a medieval deer park with associated manor and estate, before becoming a landscaped park in from the 17th century.
- 5.1.2 The east end of the access road for the proposed development also lies marginally within the Richmond APA [AB 1], which covers the Medieval settlement of Sheen along with the potential for prehistoric archaeology from the Thames foreshore.

5.2 Past Impact Within the Site Boundary

- 5.2.1 The site is currently largely occupied by extant buildings and oil tanks, the construction of which will have had an impact of unknown extent on any archaeological deposits.
- 5.2.2 Borehole data discussed in Section 4.2 indicates that the soil below the modern ground surface has seen some degree of prior disturbance.
- 5.2.3 The site has combined surface water and sewerage drains running from the toilet block at the south of the site, through the cobbled area to the northern end of the tank farm and along the driveway to Arlington Road (Leap 2015). The 1883 sewer map showed a below-ground pipe leading from the cobbled areas, down the man access from Arlington Road. Where such groundworks extend below the level of made ground this may have impacted any surviving archaeological deposits in the affected areas.
- 5.2.4 The client provided information to Leap Environmental Ltd (Leap 2015) that historically a second area of above-ground tanks was present at the southern end of the Victorian coach houses, (where the current telephone mast is located), and that an underground pipe connected this with the existing tank farm. The amount of truncation resulting from the current mast, original tanks and associated pipeline are unknown, but if any groundworks extended below the level of made ground this may have impacted any surviving below ground deposits.
- 5.2.5 The extent of truncation resulting from construction of the current buildings present on-site is unknown.
- 5.2.6 The proposed development site sits within the historic extent of Twickenham Park, which has seen use as both farmland and a landscaped park. The site appears to have been de-forested, used as a meadow and to have lain partly across part of an historic avenue to the house. All of these may have had impacts to any below-ground deposits.

5.3 Potential Archaeological Resource

- 5.3.1 Given the relative lack of archaeological remains within the study area and the complete lack of any from within the proposed development site itself, coupled with the below-ground disturbance anticipated resulting from modern site use, the potential archaeological resource for all periods is considered to be Low, in line with section 2.4.1.

- 5.3.2 Although the site was located within the Medieval deer park of Twickenham Park, [AB 9] it is unlikely, based on the archaeological and documentary evidence discussed throughout section 4.4, that any significant archaeology (such as structures) related to the park were located within the immediate vicinity of the site.
- 5.3.3 The site access road is also partially included within the Richmond APA [AB 1] and while an APA is a key indicator of archaeological potential, the site is far removed from the main foci of this APA, which are based in Sheen and along the Thames foreshore. Furthermore, the main construction works would be outside of the APA.
- 5.3.4 Due to the low overall potential for any archaeological resource to survive within the site, no impact assessment is provided.

5.4 Conclusion

- 5.4.1 The current proposal is for the change of use of the site from primarily commercial and industrial to commercial and residential, comprising a mixed-use scheme with employment space and 24 new residential units.
- 5.4.2 The geotechnical appraisal (Leap 2015) has demonstrated that the soil sealed below modern levels shows evidence of modern disturbance, containing brick and concrete. This is likely to result from construction of the current buildings, and installation of the existing drainage system, as well as the historic pipeline between the existing oil tanks in the north of site to the location of the telephone mast.
- 5.4.3 Despite the access road for the proposed development site lying partially within the Richmond APA [AB 1], it is considered that there is an overall low potential of any archaeological resource being present on-site. Due to this, as well as the limited extent of the new development and the likelihood of some amount of prior truncation in both locations, no further work is recommended.
- 5.4.4 All recommendations are, however, subject to the approval of the Local Planning Archaeologist.

6. REFERENCES

- Ancient Monuments and Archaeological Areas Act 1979
<http://www.legislation.gov.uk/ukpga/1979/46/contents>
- Aungier, 1840. History of Syon Monastery. From https://en.wikipedia.org/wiki/Syon_Abbey
- BGS (British Geological Society) 2018. Geology of Britain viewer
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>
- Chartered Institute for Archaeologists Standard and Guidance for Historic Environment Desk-Based Assessment http://www.archaeologists.net/sites/default/files/node-files/CIfAS&GDBA_2.pdf
- Cloake, J. 2001. Richmond Palace, its History and its Plan. From https://en.wikipedia.org/wiki/Syon_Abbey
- Cloake, J. 2018. Local History Notes – Richmond Palace.
http://www.richmond.gov.uk/local_history_notes
- Davison, A. 2012. The Lost Palace of Richmond.
<https://englishhistoryauthors.blogspot.com/2012/07/lost-palace-of-richmond.html>
- Elevation Finder, 2018, <https://www.freemaptools.com/elevation-finder.htm>
- Greater London Historic Environment Record (GLHER), 2018, GLHER Report no. 14099.
- Heritage Gateway <http://www.heritagegateway.org.uk/Gateway/Results.aspx>
- Indigo Planning Ltd, 2016. Arlington Works, Arlington Road, Twickenham: Pre-Application Planning Statement. Unpublished client report
- Leap Environmental Ltd, 2015. Phase I Desk Study, Site Reconnaissance & Phase II Site Investigation Report at Sharpe's Recycle Oil Ltd, Arlington Road, Twickenham, TW1 2BB. Unpublished report for client
- London Borough of Richmond Upon Thames Development Management Plan, 2011
https://www.richmond.gov.uk/development_management_plan
- London Borough of Richmond Upon Thames Local Plan, 2018
https://www.richmond.gov.uk/local_plan
- London Borough of Richmond Upon Thames, 2001, St Margaret's Estate Conservation Area Study, <https://www.richmond.gov.uk/media/4083/stmargaretestatestudy19.pdf>
- London Borough of Richmond Upon Thames, 1997, Crown Road & Twickenham Park Conservation Area Study,
https://www.richmond.gov.uk/media/4088/crownroad_twickpk_study24_49-3.pdf
- Mitchell, V., & Smith, K. 1988. Waterloo to Windsor. From [https://en.wikipedia.org/wiki/St_Margarets_railway_station_\(London\)](https://en.wikipedia.org/wiki/St_Margarets_railway_station_(London))
- MoLAS, 2000. The archaeology of Greater London
- National Library of Scotland, 2018. <https://maps.nls.uk/>

National Planning Policy Framework, 2012

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60777/2116950.pdf

Planning (Listed Buildings and Conservation Areas) Act, 1990

http://www.legislation.gov.uk/ukpga/1990/9/pdfs/ukpga_19900009_en.pdf

The London Plan 2011 (with March 2016 alterations) <https://www.london.gov.uk/what-we-do/planning/london-plan/current-london-plan/london-plan-2016-pdf>

Richmond upon Thames Local Studies Library and Archive, 2018Twickenham Museum, 2018. <http://www.twickenham-museum.org.uk/index.php>

Twickenham Park, 2018. <http://www.twickenhampark.co.uk/a%20brief%20history.html>

Urwin, A. 1965. Twickenham Parke. An outline history of Twickenham Park and the St. Margarets Estate from Domesday to the present day.

Appendices

Appendix 1 Cultural Heritage Gazetteer

This gazetteer incorporates all archaeological and historical sites identified on the Greater London HER, and other sources within the 500m study area.

Abbreviations

NGR - National Grid Reference

HLC - Historic Landscape Character Area

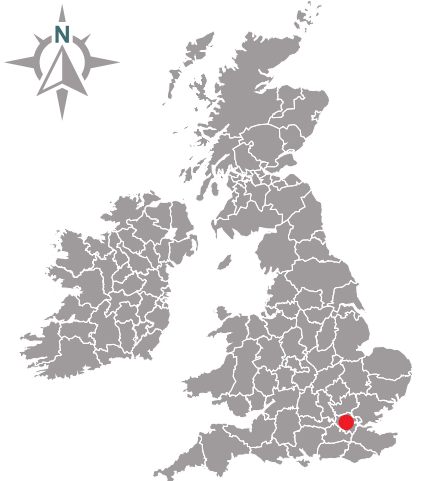
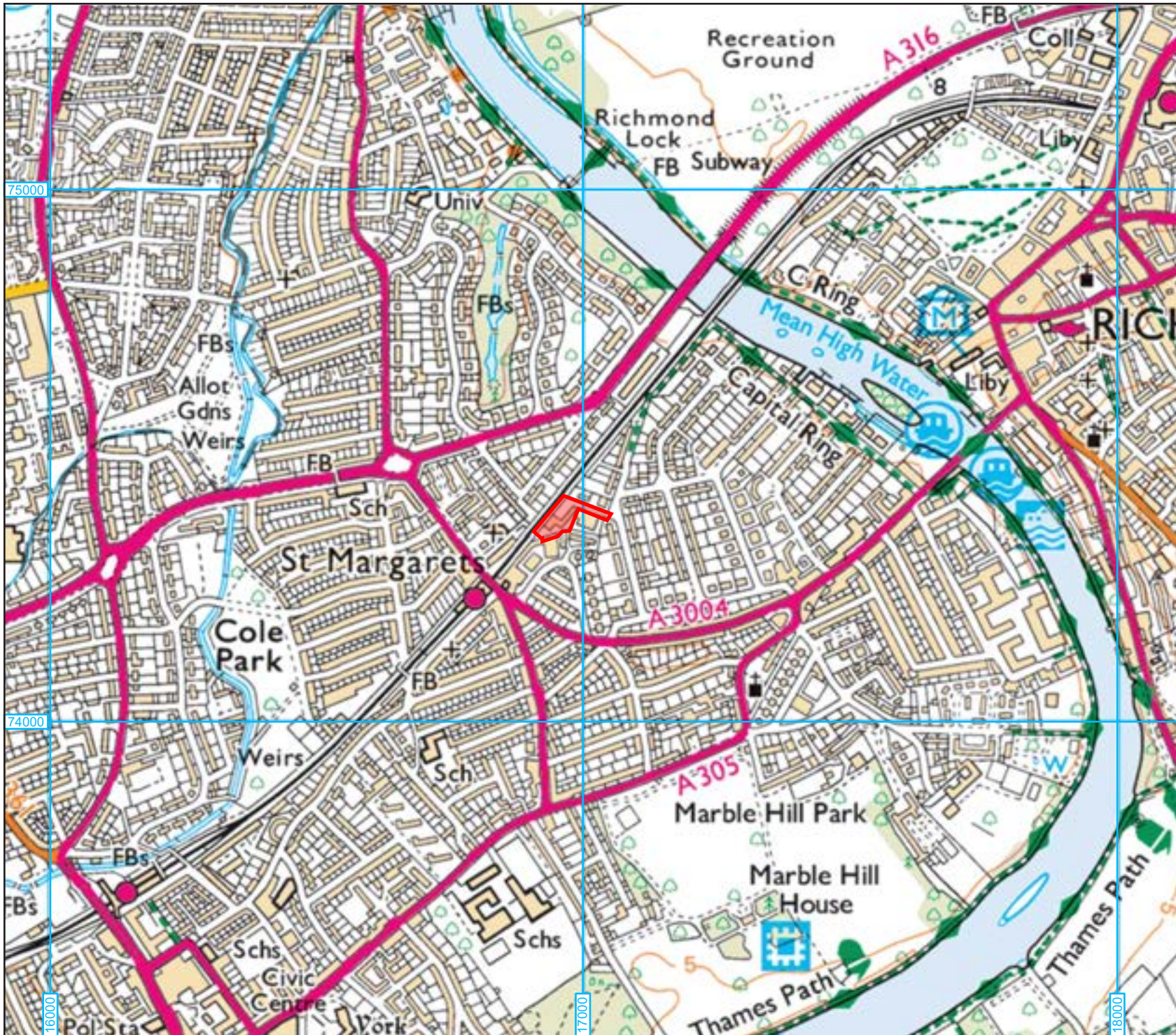
MLO – GLHER monument prefix

ELO – GLHER event prefix

APA - Archaeological Priority Area

AB NO.	PERIOD	DESCRIPTION	STATUS	NGR	REFERENCE NO.
1	PREHISTORIC TO MODERN	MEDIEVAL SETTLEMENT OF 'SHENE' (SHEEN) AND WORKED FLINT ALONG THE THAMES RIVERBANKS	APA	CENTRED TQ 1771 7476	
2	PREHISTORIC TO MODERN	THAMES FORESHORE; FINDS AND STRUCTURES FROM PREHISTORY TO 1900S	APA	CENTRED TQ 1806 7268	
3	MESOLITHIC	TRANCHET AXE/ADZE FOUND DURING EXCAVATION FOR A WATER MAIN		TQ 1700 7400	020895/00/00 - MLO18337
4	MESOLITHIC TO POST-MEDIEVAL	POSSIBLE MESOLITHIC FLINT FLAKE AND LATER POST-MEDIEVAL CERAMIC BUILDING MATERIAL FROM TRIAL PITS		TQ 1738 7426	ELO15979
5	NEOLITHIC	FIND SPOT OF A FLINT ADZE		TQ 1700 7400	020967/00/00 - MLO18945
6	ROMAN	ARCHAEOLOGICAL WORK UNCOVERED DITCHES, POST-HOLES AND PITS OF 1ST/2ND CENTURY SETTLEMENT		TQ 1715 7465	MLO58984
7	MEDIEVAL	SITE OF MONASTERY OF SYON IN 1414, MOVED TO THE PARISH OF ISLEWORTH IN 1431		TQ 1718 7458	021122/00/00 - MLO19041
8	MEDIEVAL	C.1420S DRAINAGE LAKE, STILL EXTANT		CENTRED TQ 16796 74778	MLO104545
9	MEDIEVAL TO POST-MEDIEVAL	TWICKENHAM PARK, SITE OF C.13TH TO 16TH CENTURY DEER PARK		TQ 1718 7454	021121/00/00 - MLO25004

AB NO.	PERIOD	DESCRIPTION	STATUS	NGR	REFERENCE NO.
10	MEDIEVAL TO POST-MEDIEVAL	TWICKENHAM PARK, SITE OF 16TH CENTURY MANOR HOUSE; ALSO, POSSIBLE SITE OF A MEDIEVAL MANOR HOUSE		TQ 1718 7458	021123/00/00 - MLO19042
11	POST-MEDIEVAL	(SITE OF) SUBSTANTIAL EARLY TIMBER AND BRICK POST-MEDIEVAL BUILDING WITHIN PARK		TQ 1710 7450	023266/00/00 - MLO72121
12	POST-MEDIEVAL TO MODERN	PRE 19TH CENTURY ACTIVITY (MOST BEING DUMPS FROM 1812 CONSTRUCTION) FROM EXCAVATIONS AT 40 SANDYCOOMBE ROAD		TQ 1708 7411	ELO13728
13	MODERN	GREATER LONDON HLC DESCRIBES ST MARGARETS AS VICTORIAN TERRACES, WITH LATE VICTORIAN/EDWARDIAN TERRACES & SEMIS AND FORMERLY MIXED LAND-USE (OS EPOCH 2)	HLC	N/A	430



KEY

 Site Boundary

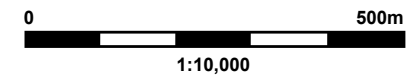
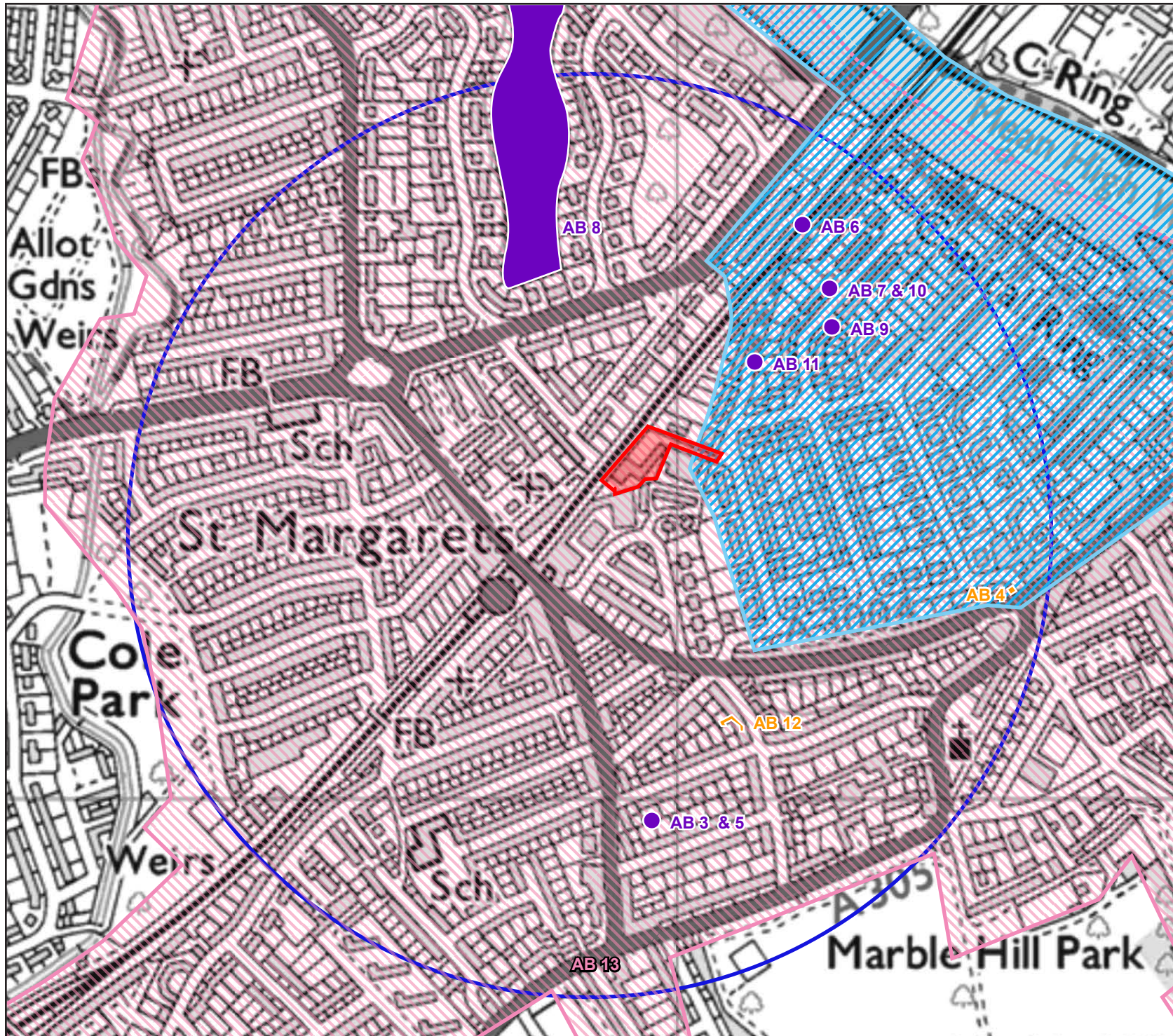


Figure 1: Site Location

Project: Arlington Works

Date: 05/06/18

Job No: 60407



KEY

- Site Boundary
- Search Area (1000m)
- Monument (Poly)
- Monument
- Archaeological Event (Poly)
- Archaeological Priority Areas AB 1 & 2
- Historic Landscape Characterisation

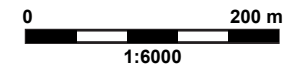


Figure 2: Map of Cultural Heritage Assets

Project: Arlington Works

Date: 05/06/18

Job No: 60407



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