

TFL_PSF_9131 SITE INVESTIGATIONS: SMALL SITES INITIATIVE LAND AT CHISWICK HIGH ROAD, CHISWICK, W4 3AY

Summary Report

FEBRUARY 2019

Incorporating

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Land at Chiswick High Road, Chiswick, W4 3AY

Summary Report

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1 Introduction

Arcadis Consulting (UK) Limited (Arcadis) has been commissioned by Transport for London (TfL) to undertake a number of technical surveys for a site referred to as Chiswick High Road, Chiswick ('the Site').

TfL is aiming to divest a number of small sites to enable prospective regeneration. The objective of the Small Sites Initiative is to provide robust and pragmatic advice that sensibly de-risks each of the sites such that unreasonable "abnormal" development costs are not incurred by developers.

This report provides a summary of the technical surveys commissioned for the Site and reference should be made to the individual reports for further detailed information.

The Site is located south-east of Chiswick Roundabout on the corner of Clarence Road and Chiswick High Road, in the urban area of Chiswick, surrounded by residential, commercial and industrial buildings.

The Site covers 0.09 hectares, centred at National Grid reference (NGR) 19310 78293. Land use consists of undeveloped grass and trees. The Site is bound by Chiswick High Road to the north and east, 1 Clarence Road to the south and Clarence Road to the west. The site is currently occupied by an open grassed area, with several trees and concrete footpaths.

The surveys carried out for Chiswick High Road, Chiswick comprise the following;

- Topographical and Buried Services Survey (Ref 1);
- Archaeological Desktop Review (Ref 2);
- Ecology Assessment (Ref 3);
- Arboricultural Survey (Ref 4); and
- Geotechnical and Geo-Environmental Desk Study Report (Ref 5).

A summary of the findings of these surveys are detailed in the following sections.

2 Topographical and Buried Services Survey

The topographical survey indicates that the Site is generally flat with measured levels ranging from 10.06m and 10.70m. Trees are indicated across the Site and a path / pavement running north west to north east.

There are several services associated with the traffic light system along the northern boundary. Electricity and CATV cables are also indicated in the northern section of the Site with several control cabinets (CC) shown in the pavement in this area. Along the western boundary there are CATV, BT, water and electricity cables indicated.

Electricity cables and water pipes are indicated crossing the northern part of the Site from south west to north east.

3 Archaeology Desktop Review

An archaeological desk-top review for the Site has been carried out. This involved a rapid information-gathering and review of the Site and a 500m study area using information from publicly held sources. A brief assessment of potential heritage/archaeological constraints and opportunities at the Site has been made.

This review has assessed that there is potential for buried archaeological remains to survive at the Site. Part of the Site was once occupied by several 19th century terraced houses, although these were demolished in the mid-20th century. Therefore, archaeological potential is greatest for the Post Medieval period. These relate to the below ground remains of 19th century housing. The construction of the housing might have disturbed any in-situ pre-19th century remains which survived. However, there still is potential for remains from the Modern and Medieval periods, and limited potential for all other periods.

There are no Scheduled Monuments within the Site or within the 500m study area. There are no Listed Buildings within the Site, however there are ten within the study area, the nearest of which to the Site is Kew Bridge Station 350m to the southwest.

There is one World Heritage Site buffer zone which extends into the study area, the Royal Botanic Gardens at Kew, located 388m to the southwest.

There is one Registered Park and Garden within the study area, Gunnersbury Park, located 477m to the northwest.

The Site is located within the Wellesley Road Conservation Area. A further 5 Conservation Areas are located within the study area.

The Site is located within two Archaeological Priority Areas, the 'Isleworth, Syon Park and Brentford' Area and the 'Staines Road/London Road – Line of Roman Road' Area. There are two further Archaeological Priority Areas within the study area.

For any future planning application, the potential for below ground remains need to be fully evaluated. The Greater London Archaeological Advisory Service (GLAAS), who advise the local planning authority, are likely to recommend a full archaeological desk-based assessment (DBA) for the site as well as an evaluation to be undertaken prior to planning permission being determined. Consultation with local authorities and GLAAS, at the earliest opportunity is recommended, in order to clarify if any field investigations such as trial trenching are required.

4 Ecology Assessment

The ecological assessment comprised a desk-based study using publicly available information and an ecological constraints survey to identify potential constraints present on Site.

Based on the assessment undertaken to date, there are no likely significant ecological constraints with regards to the development of this Site.

No Statutory or non-statutory designated sites (including ancient woodlands or woodlands listed on the Ancient Woodland Inventory (AWI)) were identified within the vicinity of the Site have the potential to be significantly impacted by development on the Site.

Constraints are listed below:

- The Site was dominated by heavily managed amenity grassland and scattered broadleaved trees. The habitats on Site were generally un-diverse due to management for amenity value. However, these habitats have value in terms of green infrastructure, likely performing important ecosystem services (such as water quality and volume attenuation and air quality attenuation etc.).
- Three London planes in the east of the Site supported 2-3 potential cavities each, between approximately 5 and 15m off the ground. Each tree was assessed as having a low potential to support roosting/hibernating bats. Should these trees be removed, section felling under precautionary method of works would be required. The section containing the cavity will be left in situ for a minimum of 24 hours before being removed from the Site.
- There is potential for nesting birds to be utilising the trees on Site, including species listed on London BAP and Priority Species S41 such as house sparrow. Removal of any suitable vegetation on Site will need to be conducted outside of the bird nesting season (March – August inclusive) or under an ecological watching brief.
- The tree marked by Target Note 3 is a commemorative tree planted in 1995 for the Ministry of Transport for London. Transport for London should be liaised with regarding its removal, should it be required.
- Trees and other vegetation should be replaced within any proposed soft landscaping and these designs should be evolved in liaison with an ecologist and arboriculturist. In addition, rain gardens, biodiversity roofs and other green infrastructure should be considered within any development.
- There are also opportunities for enhancements for London BAP species. Bird boxes for sparrows would be a valuable enhancement, along with bat roosting boxes. The implementation of permeable fencing would be of benefit to small mammals, such as hedgehog, which is a priority species currently in decline.

5 Arboricultural Survey

An arboricultural constraints walkover and assessment was conducted to describe the general arboricultural features and potential constraints with regards to trees on Site.

A total of nine arboricultural items were recorded within the study area as follows:

- Nine individual trees on-Site;

Within the Site one individual tree was graded as Category A (trees of high quality). Seven individual trees were graded as Category B (trees of moderate quality). One individual tree was graded as Category U (trees of poor quality unsuitable for retention) as part of this survey due to poor structural and physiological condition.

There is currently no proposed design layout and therefore it is not possible to say whether the trees would need to be removed and if there is space for any new trees to be re-provisioned on the Site. This can be determined once designs are developed.

The dominant tree species within the Site is London plane (*Platanus x hispanica*), including one commemorative tree (T8) planted in 1995 by the Ministry of Transport for London. Although this commemorative tree is not protected, there may be a cultural heritage value to be considered.

None of these trees are covered by Tree Preservation Orders or are within a Conservation Area.

While unlikely to prevent development, tree protection for trees to be retained and tree re-provisioning for any trees lost due to development are a material consideration for planning determination. If trees cannot be replaced on-Site due to development, off-Site options for tree re-provisioning to ensure no net loss should be considered. Individual Local Planning Authorities may ask for re-provisioning in excess of 1 to 1 for trees of Category B grade.

The main development considerations for the trees are:

- Over-hanging crowns;
- The planting location, height, width and density of the crowns will cast shade on to the Site;
- The Root Protection Area (RPA) of the trees within the Site.

Should any future proposed development require tree removals or RPA incursions within RPAs of the retained trees an Arboricultural Impact Assessment (AIA) will be required by the LPA in support of a planning application.

A bespoke Arboricultural Method Statement may be required post planning and when the construction details are known to protect the retained trees within and adjoining the Site.

All new tree planting should be in accordance with British Standard 8545: Trees: From Nursery to Independence in the Landscape – Recommendations, 2014 and all tree works must be carried out by a qualified contractor in accordance with BS3998:2010: Tree Work – Recommendations.

6 Geotechnical and Geo-Environmental Desk Study

The geo-environmental and geotechnical desk study comprises a review of existing historical and current information on the Site. No intrusive site investigations have taken place.

The historical review revealed previous development on the Site to be residential buildings, which were demolished between 1948 and 1960. Several potential off-site sources of contamination have been identified including a petrol filling station, a garage, a Motorworks and an industrial area (including electricity works, factories, mills and engineering works). All potential off-site contamination sources are up hydraulic gradient and therefore may have impacted the Site.

Potential risks to human health and the built environment have been identified associated with potential on-site sources of Made Ground. Potential risks to human health and the built environment from potential off-site sources have also been identified. It is recommended that an intrusive site investigation is carried out prior to redevelopment to quantify these risks. This should include the contamination testing of soils and leachates, groundwater monitoring and gas monitoring in accordance with best practices and current guidance.

Potential founding solutions will be dependent on the encountered thickness of Made Ground and the geotechnical properties of the natural deposits. Made Ground is generally considered unsuitable for foundations due to its variable composition and its potential for high total and differential settlement. Deeper trench fill may be possible although the maximum practical extent of this type of foundation is in the region of 2-2.5m. In areas of deeper Made Ground, or where deeper soft / loose bands are recorded either piling or ground treatment e.g. vibro-stone columns should provide a suitable foundation solution. The advice of a specialist ground improvement contractor should be sought to verify the suitability of the ground for treatment. The presence of existing and future trees should be considered, as well as the risks associated with London Clay.

The Site is located in an area where there is a 'moderate' risk of encountering unexploded ordnance. Further assessment of the potential for encountering UXO is recommended for the Site.

7 References

- 1) 40Seven (2019) TfL Sites Phase 2 Small Sites Chiswick High Road Pas128 M4p Underground Utility Mapping Survey (1670_P_Chiswick_High_Road)
- 2) Arcadis Consulting (UK) Limited (2019) TfL Phase 2 Site Investigations: Small Sites Initiative Chiswick High Road, 10024781-ARC-06-XX-RP-YY-0001-01-Archaeology Desktop Review
- 3) Arcadis Consulting (UK) Limited (2019) Chiswick High Road, Ecology Assessment (Report Number 10024781-ARC-06-XX-RP-YY-0001-01-Ecological Assessment)
- 4) Arcadis Consulting (UK) Limited (2019) Chiswick High Road, Preliminary BS5837:2012 Tree Survey Report (Report Number 10024781-ARC-06-XX-RP-YY-0001-01-Arboricultural Report)
- 5) Arcadis Consulting (UK) Limited ((2019) Chiswick High Road, Geotechnical and Geo Environmental Desk Study (Report Number 10024781-ARC-06-XX-RP-YY-0001-01-Geo Report)

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