

Introduction

Arbtech Consulting Limited (Arbtech) received written instruction on 25th March 2020 from Hampton Hick Ltd. to attend 1 St. James' Road, Hampton Hill, Hampton, Richmond-Upon-Thames, TW12 1DH; grid reference, TQ 13827 71216 (site) to undertake an arboricultural survey a to BS5837:2012 guidance to assess trees, hedges and major shrub groups growing on and within influencing distance of the site and to produce a Schedule of trees, Tree Constraints Plan, Arboricultural Impact Assessment, Arboricultural Method Statement and Tree Protection Plan.

I am Matthew Middle, an arboricultural consultant at Arbtech Consulting Ltd. I undertook the tree survey on 2nd April 2020 and subsequently have produced this summary of my findings.

I hold a National Diploma in arboriculture, I also hold the LANTRA Professional Tree Inspector certification and have professional experience in contracting and in arboricultural consultancy spanning more than twenty years.

The advice below and appended is underwritten by our Professional Indemnity insurance for the business practice of Arboricultural Consultancy in the sum of one million Pounds Sterling in each and every claim.

Tree Survey

Survey: An arboricultural survey to BS5837 of all trees within impacting distance of the site was undertaken by Matthew Middle on 2nd April 2020.

During the survey I categorised the trees using "Table 1 - Cascade chart for tree quality assessment" of the BS5837:2012.

A total of seventeen (17) individual trees and two (2) groups of trees were surveyed. Details for each of the trees surveyed are provided in the Tree Survey Schedule.

Limitations: The survey was made at ground level using visual observation only. Detailed examinations, such as climbing inspections and decay detection equipment were not employed, though may form part of the survey's management recommendations. Measurements were taken using specialist tapes, laser and GPS devices. Where this was not possible, measurements are estimated.

Scope: Pre-development tree surveys make arboricultural management recommendations based exclusively upon the individual tree or group of trees condition relative to their present context (i.e. not in relation to the proposed development).

Legal Status: No statutory protection check has been performed. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order ("TPO"), and those trees without. This is principally because a detailed planning consent overrides any TPO protection. Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

It is likely that arboricultural impacts can be addressed with arboricultural methodology or minor amendments to the proposal.

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BS5837:2012 Scope

This standard recognises that there can be problems for development close to existing trees which are to be retained, and of planting trees close to existing structures. This standard sets out to assist those concerned with trees in relation to construction to form balanced judgements. It does not set out to put arguments for or against development, or for the removal or retention of trees. Where development, including demolition, is to occur, the standard provides guidance on how to decide which trees are appropriate for retention, on the means of protecting these trees during development, including demolition and construction work, and on the means of incorporating trees into the developed landscape.

Methodology

The methodology used to assess the trees was the British Standard 5837:2012 'Trees in Relation to Construction' tree survey method. The aim of the survey is to establish which trees are moderate and good quality, suitable for retention and justifying protection. And, which trees are low or poor quality, either undesirable or unsuitable to retain and protect.

The tree survey includes all trees included in the land survey red line boundary plan, as well as any that may have been missed, and it should categorize trees or groups of trees, including woodlands for their quality and value within the existing context, in a transparent, understandable and systematic way. Where the arboriculturist has deemed it appropriate, the trees have been tagged with small metal or plastic tags, placed as high as is convenient on the stem of each tree.

Whilst master plan proposals for the development of the site might be available, the trees have been surveyed without taking these into consideration. All detailed design work on site layout should take into consideration the results of the tree survey (and the TCP).

Trees forming groups and areas of woodland (including orchards, wood pasture and historic parkland) are identified and considered as groups where the arboriculturist has determined that this is appropriate, particularly where they contain a variety of species and age classes that could aid long-term management. It is often expedient to assess the quality and value of such groups of trees as a whole, rather than as individuals. However, an assessment of individuals within any group has been undertaken if they are open-grown or if there is a need to differentiate between them.

The quality and value of each tree or group of trees has been recorded by allocating it to one of the four categories; A, B, C, or U (highest to lowest quality respectively). The categories are differentiated on the tree survey plan by colour, or by suffixing the category adjacent to the tree identification number on the TCP.

We make the following recommendation to ensure that no conditions relating to arboriculture are attached to any planning consent secured: obtain and arboricultural report to include:

- a) An arboricultural impact assessment (AIA);
- b) An arboricultural method statement (AMS); and
- c) A tree protection plan (TPP).

Limitations

Trees were inspected from using visual observation from ground level only. Trees were not climbed or inspected below ground level. Inaccessible trees will have best estimates made about the location, physical dimensions and characteristics. Trees have been grouped where BS5837 guides us that it is expedient to do so. Trees have been excluded from the survey if they are found by us to be sufficiently far away from the proposed developable area or if they are outside of the red line boundary plan showing the expectations of our Client for the extent of the survey. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order ("TPO"), and those trees without. This is principally because a detailed planning consent overrides any TPO protection. Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

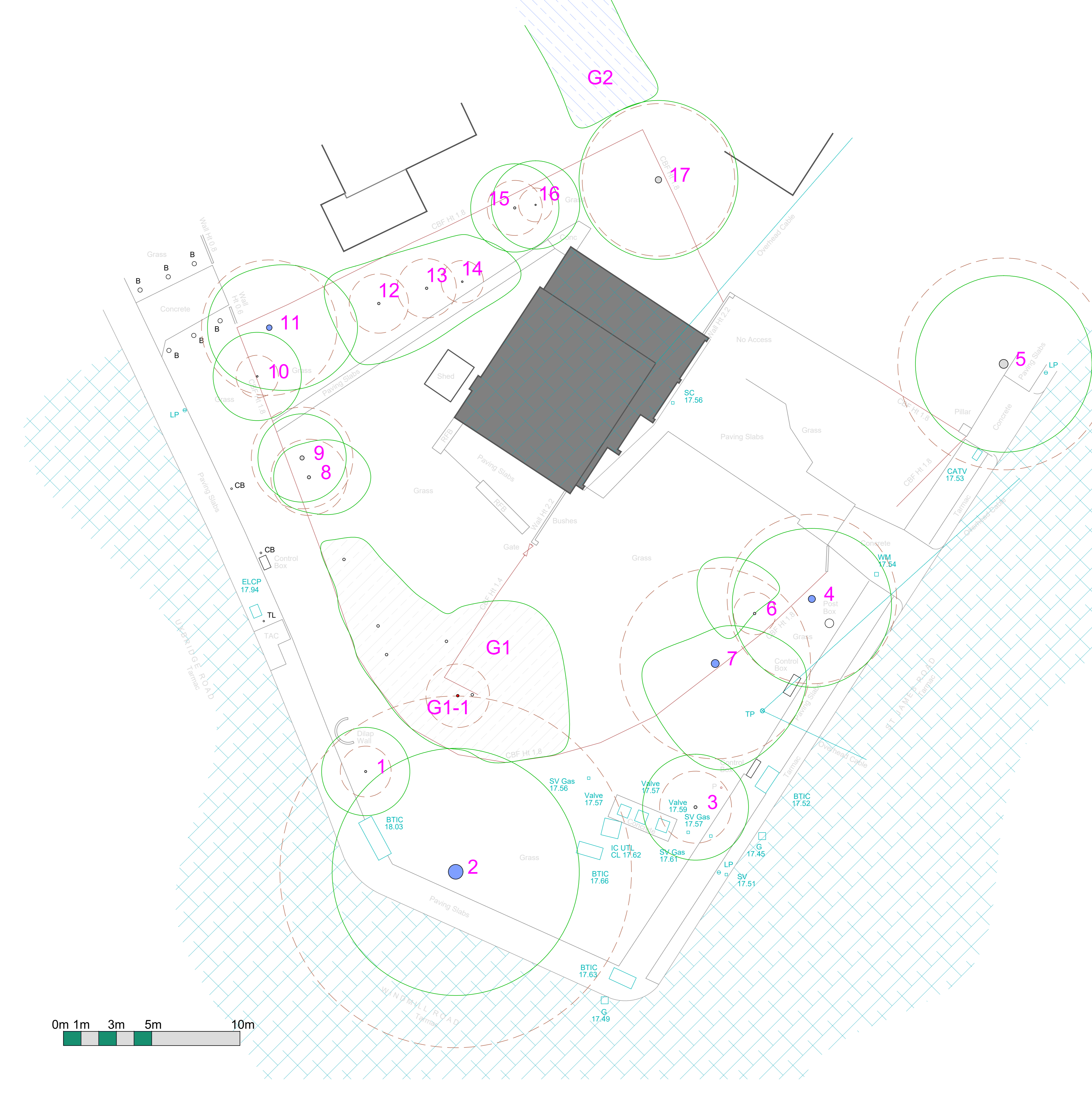
Tree Survey Schedule

Survey Date: 2nd April 2020
 Weather Conditions: Overcast, but dry
 Surveyor: Matthew Middle

Key:

- Tree Number:** A unique number or reference to identify trees or groups as shown on associated plans. Common and or taxonomic names.
- Species:** The height of the tree in meters (m).
- Height:** The stem diameter in millimetres (mm) taken at 1.5m above ground level unless otherwise specified.
- Trunk Diameter:** The extent of the canopy taken in meters (m) to the principle points of the compass, North (N), East (E), South (S) and West (W).
- Canopy Spread:** The height of canopy clearance above ground level to the lowest point of the canopy, taken in meters (m).
- Crown Clearance:** Age classification: Young (Y), Middle Aged (MA), Mature (M), Late Mature (LM), Veteran (V).
- Age Class:** The general physiological condition of the tree: Average, Below average, Low, Dead.
- Physiological Condition:** The general structural condition of the tree: Good, Moderate, Indifferent, Poor, Hazardous.
- Structural Condition:** Notes and general comments on the structural condition of the tree, its environment and it estimated remaining contribution.
- Comments:** The retention category referring to the quality and useful contribution in years; U = <10yrs; A = >40yrs; B = >20yrs; C = >10yrs. The retention sub category referring to the type of amenity: 1 = Arboricultural; 2 = Landscape; 3 = Cultural including conservation.
- Category:**

Tree No.	Species	Height (m)	Trunk Diameter (mm)	Canopy Spread (m)	Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	Comments	Category
1	Chestnut-leaved oak	5m	120mm	2.5m	1.5m	Young	Average	Moderate	Offsite tree, street tree.	C (12)
2	Horse chestnut	12m	830mm	7m	3m	Mature	Average	Moderate	Offsite street tree, dominant canopy.	B (12)
3	Chestnut-leaved oak	5.5m	170mm	3m	2m	Young	Average	Good	Offsite street tree.	C (12)
4	Holly	8m	400mm #	N4m E4.5m S5m W4.5m	1m	Middle aged	Average	Moderate	Offsite tree; low level spreading canopy.	B (12)
5	False acacia	12m	500mm Over ivy #	5m	3.5m	Middle aged	Below average	Indifferent	Offsite tree; heavily ivy covered to almost full height; ivy restricts view of all unions; all dimensions estimated.	C (12)
6	Hazel	6m	20 stems @ 100mm 5 stems @ 60mm	NE2m SE2m SW2m NW4m	3m	Young	Average	Moderate	Multi-stemmed coppice; one-sided crown as suppressed by adjacent trees.	C (1)
7	Yew	8m	450mm	N2m E5m S5m W4.5m NW2m	E1m S2m W2m NW3m	Young	Average	Moderate	Recent crown lift on W side; max. wound @ 200mm; twin-stemmed from 2.5m.	B (12)
8	Common walnut	5m	180mm Over ivy	N2m E3.5m S2m W2m	N2m E1m W3m	Young	Average	Indifferent	Boundary tree; ivy covered to almost full height; trunk leans slightly to north.	C (12)
9	Lawson cypress	8m	240mm Over ivy #	2.5m	1m	Young	Below average	Moderate	Ivy covered to over 3/4 height; slightly sparsely foliated.	C (1)
10	Hawthorn	5m	100mm	2.5m	1m	Young	Below average	Moderate	Boundary tree; one-sided crown as suppressed by adjacent tree.	C (1)
11	Yew	6m	320mm # @ 750mm	N3.5m E5m S3.5m W3.5m	0m	Young	Average	Moderate	Boundary tree.	B (12)
12	Yew	2.5m	140mm # @ 100mm	140mm # @ 100mm	0m	Young	Average	Moderate	Single intermeshing aerodynamic canopy, topped @ 2.5m.	C (12)
13	Apple	3m	130mm	2.5m	0m	Young	Average	Moderate	Domestic fruit trees.	C (1)
14	Goat willow	6m	360mm @ 250mm	4.5m	2m	Middle aged	Average	Moderate	Boundary tree; four stemmed by 1.25m; w canopy crown filled to 2.5m; max. wound @ 75mm.	C (1)
G1	Various	7m	Max 150mm	N7m E4m S4m W4m	0m	Young	Average	Indifferent	Group of trees growing on boundary; species include: Hawthorn, Holly, False acacia, Ash, Yew, Lawson cypress and Hazel.	C (12)
G1-1	Ash	7m	150mm	N5m NE7m E5m	2m	Young	Average	Poor	Tree appears to have fallen & is propped up by a stack of old fencing materials; stem is leaning @ a 45° angle.	U
G2	Lawson cypress	5m	Avg 250mm #	2.5m	3m	Middle aged	Average	Moderate	Offsite linear group; maintained as a high hedge.	B (12)



BS5837:2012 Trees in relation to design, demolition and construction – Recommendations

Category and definition	Criteria including subcategories when appropriate	Identification on plan
Trees unsuitable for retention (see Note)		
Category V	1. Trees that have serious, irreversible, structural defect, such that their early loss is expected due to collapse, including those that will become unstable after removal of other category U trees (e.g. where, or whenever, decay, the loss of canopy, or other collapse is likely to occur).	Dark red
Trees to be considered for retention		
Category A	Trees that are particularly good examples of their species, especially if rare or unusual, or those that are essential components of groups or formal or semi-formal structures (e.g. tree groups, or other structures) that are of high amenity or other special value.	Light green
Category B	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial defects, including any significant management and storm damage), such that they are unlikely to be suitable for retention of beyond 40 years; or trees lacking the special quality necessary to meet the category A designation.	Mid blue
Category C	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Grey



Figure 1: Tree number 1

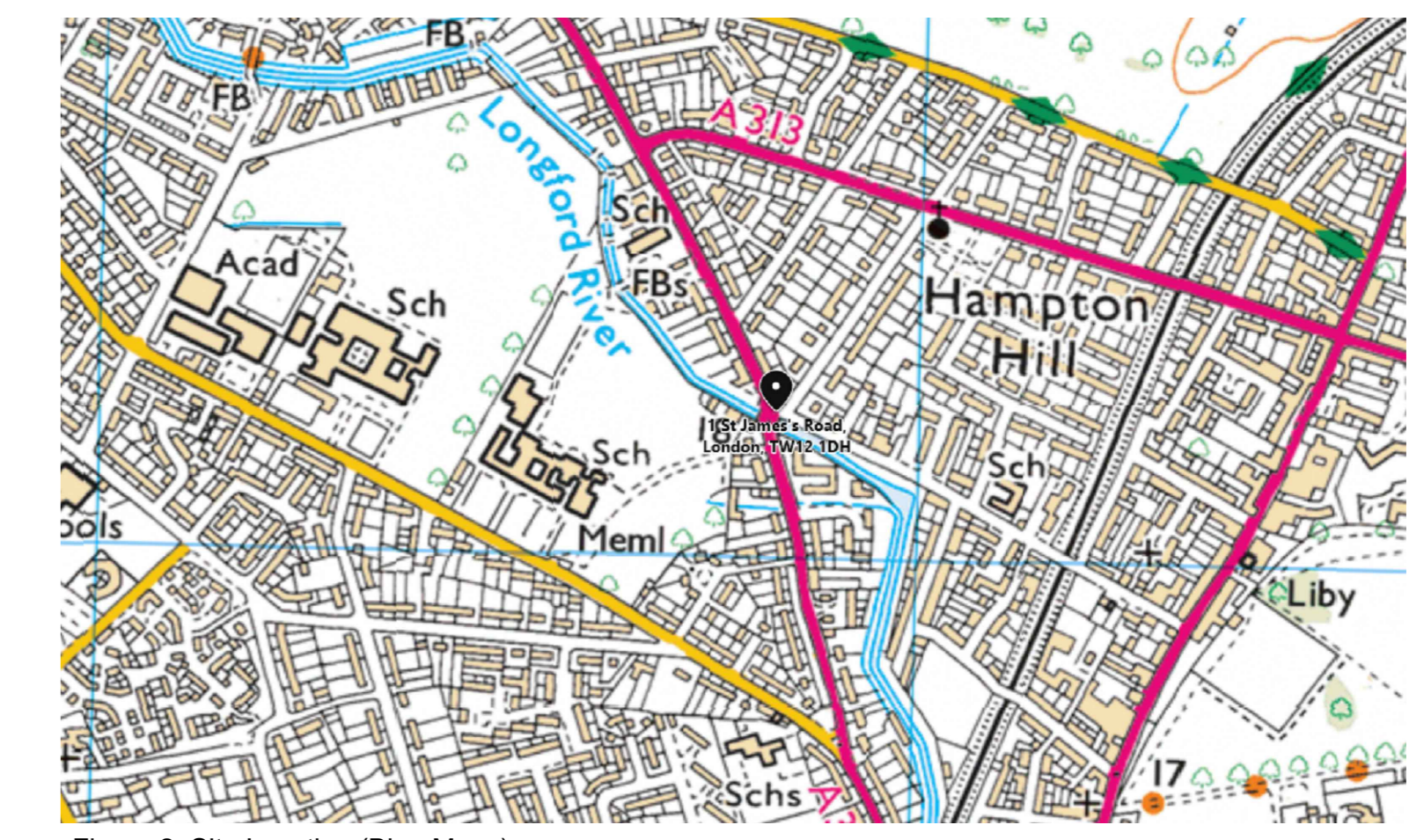


Figure 2: Site Location (Bing Maps)

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 https://arbtech.co.uk, 01244 661170

Project: 1 St James' Road, Hampton Hill, Richmond-Upon-Thames, TW12 1DH.

Client: Hampton Hick Ltd.

Drawing: Tree Constraints Plan

Based on: DTS260719-75A

Drawing No: Arbtech TCP 01

Date: March 2020 Scale: 1:100 @ A1 Drawn: MGM

Key:

- Tree No.: 1
- Tree Canopies: Trunks
- Category A trees: Category B trees
- Category C trees: Category U trees
- Potential tree locations: Potential tree locations

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