



Tree Survey and Arboricultural Integration Report for

**Land adj. to
1 Russet Close
Brunel
Uxbridge
UB10 0NL**

5 December 2022



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TREE SURVEY AND ARBORICULTURAL INTEGRATION REPORT

LOCATION	Land adj. to 1 Russet Close, Brunel, Uxbridge, UB10 0NL	REF: AR-3931-TSAIR-221205
PROPOSAL	To erect a pair of semi-detached dwellings.	DATE OF TREE SURVEY 18 September 2019 and updated on 5 December 2022
CLIENT	Crayford Investment Ltd. Barking Enterprise Centres, 50 Cambridge Road, Barking, IG11 8FG	DATE OF REPORT 5 December 2022
SURVEY AND REPORT BY	Ben Oates TechArborA	SHEET No. 1 of 6

LOCAL AUTHORITY	
CONTACT	Arboricultural Officer

INSTRUCTIONS

Issued by – Kamal Panesar of Akaal Architecture Ltd.

TERMS OF REFERENCE

Survey the subject trees to assess their general condition and provide a planning integration statement for the proposed development that sustainably safeguards the retained trees' long-term well-being.

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Summary

The proposal is to erect a pair of semi-detached dwellings with associated car parking and external soft-landscaped gardens.

The only trees on the site are a linear group of low arboricultural quality, unmanaged, category 'C' hazels, and the proposal comprises their removal.

The typical management of hazel trees is coppice, periodically cutting them down close to ground level. Such management means that the contribution the on-site hazels make to the character of the immediate area is only transitory, so their removal to facilitate the development would not be intrinsically out of character with the site's appearance during their routine maintenance. As such, the removal of the hazels will not significantly impact the character and appearance of the area.

The proposed gardens will be planted to complement the site, improve the overall quality, and enhance amenities and the character and appearance of the area for the long term.

Four off-site trees grow within the neighbouring gardens that adjoin the site. All but one of the root protection areas of the off-site trees are outside the site boundary. The exception is a self-seeded, multi-stemmed, category 'C' sycamore sapling to the south. The root protection area of the sapling extends into a narrow corner of the far southern corner of the site, so it is sufficiently clear of construction-related activity so as not to be harmed by the proposal. As the sycamore is young, any disturbance within its root protection area during the proposed landscape works is likely to be tolerated without detriment to its health.

One off-site category 'C' hazel, is to be pruned back to the boundary. The pruning is minor and will not have a detrimental impact on the health or appearance of the tree.

As the trees surrounding the site are sufficiently clear of potential disturbance or soil contamination during construction and landscaping operations, no specific tree protection measures are required.

In arboricultural terms, the proposal will enhance the character and appearance of the area without detriment to surrounding trees. Therefore, there are no arboricultural reasons to refuse planning permission.

The statements made in this report do not consider the effects of climate extremes, vandalism or accident, whether physical, chemical or fire. Quaife Woodlands cannot accept any liability in connection with these factors, nor where prescribed work is carried out correctly and professionally following current good practice. The authority of this report ceases at any stated time limit within it, or if none declared after two years from the date of the survey or when any site conditions change, or pruning or other works unspecified in the report are carried out to, or affecting, the subject trees, whichever is the sooner.

1. Supplied plans

- Icelabz Solutions Ltd. – Topographical Survey, drawing no. MB-SURV_RC_TS_001, revision 01, dated 21 August 2017;
- Akaal Architecture Ltd. – Proposed Ground Floor Plan, drawing no. AA.2022.005 / 03.01, dated November 2022.

2. Scope of report

- 2.1 The purpose of my report is to provide the London Borough of Hillingdon with the arboricultural information necessary to approve the planning application to which this report and appendices relate.
- 2.2 My report summarises the data I gathered during my tree survey. With the appendices, my report demonstrates that the arboricultural implications of the proposal have been taken into complete account.
- 2.3 Compliance with my recommendations will ensure the trees outside of the site are adequately safeguarded during construction to preserve the character and appearance of the area.

3. Survey method

- 3.1 My tree survey was undertaken following British Standard BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* (BS 5837). The details of the trees can be found in Appendix A.
- 3.2 I inspected the trees based on the visual tree assessment method expounded by Mattheck and Breloer (*The body language of trees, DoE booklet Research for Amenity Trees* No. 4, 1994).
- 3.3 The stem diameters of trees were measured in millimetres at 1.5 metres above ground level with a rounded-down diameter tape or estimated where access was restricted or otherwise in accordance with Annex C of BS 5837.
- 3.4 The height of each tree was estimated with a laser hypsometer where line of sight was attainable or estimated where observation was restricted and rounded up to the nearest metre.
- 3.5 A single crown spread radii were measured in the direction of the broadest radius, either with a laser rangefinder or estimated by pacing or visually where access was restricted and rounded up to the nearest half metre.
- 3.6 I categorised the trees according to their size, age, physiological and structural condition, relationship with the surrounding landscape and built form, overall arboricultural quality, landscape value, and future potential following the cascade chart for tree quality assessment (Table 1) of BS 5837. The details of the trees I surveyed are in Appendix A.

- 3.7 The appendices to my report set out the trees' root protection areas (RPA), described by their RPA radius derived from section 4.6 of BS 5837.
- 3.8 In Appendix B, I show the tree crowns and trunks in colours similar to those as proscribed by BS 5837.
- 3.9 Appendix C shows the proposed layout and the necessary tree works.
- 3.10 I conducted my tree survey from ground level with the aid of a monocular.
- 3.11 I did not take any tissue samples or conduct an internal investigation of the subject trees.
- 3.12 I did not take any soil samples.
- 3.13 The positions of the subject trees are shown in Appendix B and C. The locations were derived from the supplied plans and my measurements taken during my survey. Please note that the plans are for indicative purposes only.

4. Ecology informative

- 4.1 Bats are protected under the Wildlife & Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (as amended). It is an offence to deliberately or recklessly disturb or damage their roosts. Trees should be inspected before any works commence, and if the presence of bats is suspected, advice will need to be sought from the Natural England Bat Line on 0845 1300228. Further guidance on bats is available from The Bat Conservation Trust (020 7627 2629).
- 4.2 As far as possible, tree work should avoid the bird nesting season, which officially (Natural England) is from February until August. However, the busiest time is from 1 March until 31 July.
- 4.3 Please also be aware that ecology is governed principally by;
- the Wildlife and Countryside Act 1981 (as amended by the CROW Act 2000);
 - the Conservation of Habitats and Species Regulations 2017 (as amended);
 - the Wild Mammals (Protection) Act 1996, and;
 - the Natural Environment and Rural Communities (NERC) Act 2006.

5. The site

- 5.1 The site comprises a triangular plot of land east of 1 Russet Close. The land is disused with a dilapidated shed near the eastern boundary. At the time of my survey, the ground had been recently cleared of surface weeds and brambles, revealing an undulant surface.
- 5.2 The only trees on-site comprise a row of coppice hazels (G1) adjacent to the eastern elevation of 1 Russet Close. All other trees are off-site.

- 5.3 Concerning the British Geological Survey Geology of Britain viewer, the indicated soil parent material is London Clay Formation - clay and silt. Clay is shrinkable and susceptible to compaction, which is harmful to tree roots. The qualities of clay present a potential for tree-related subsidence damage to buildings constructed on it. Where clay becomes compacted, it compromises the soil's structure to the detriment of tree roots. I could see no features about the growth characteristics of the existing trees that suggests that the soil type has caused them an impediment to natural growth. Generally, this soil type is a good medium for tree root growth, and one would expect a normal root distribution where not impeded by the soil characteristics and underground obstructions.

6. The trees

- 6.1 I surveyed four individual off-site trees (T1 magnolia, T2 sycamore, T3 hazel and T4 ash) and one on-site group of hazels (G1). The details of the trees are listed in the tree survey schedule in Appendix A.

7. Arboricultural integration

- 7.1 The proposal is to construct a pair of semi-detached dwellings with associated car parking and soft-landscaped gardens.
- 7.2 The proposal will require the removal of a category 'C' group of hazel trees (G1). The group of hazels to be removed have no obvious sign of past management and are multi-stemmed from ground level, which is typical for the species. Hazels tend to grow dense clusters of stems; if unmanaged, dominant stems tend to outcompete subordinate stems. The increasing thickness of the tightly packed stems leads to compressing stems. The compressing stems can rub against each other in the wind, causing wounding and preventing normal thickening. The rubbing of the constricted stems can cause the bark to die, which exposes the underlying wood to decay-causing organisms. As a species, hazel is susceptible to basal decay if left unmanaged. The most common form of managing hazel is to cut them down to ground level, known as coppicing. If these on-site hazels were to be appropriately managed, their screening would be periodically removed. Therefore, the landscape value of the hazel is only transitory.
- 7.3 As the landscape value of the hazels (G1) is only short-lived, they are not a perpetual feature of the character of the immediate area. As ordinarily, they would be cut down regularly, removing the trees from the landscape is not out of the ordinary in visual terms. Therefore, the hazels are not a perpetual feature in the landscape, and as such, they are not a constraint on the site's potential.
- 7.4 One off-site hazel (T3) growing close to the eastern boundary will require pruning back to the boundary line, partly for general tree maintenance but also to provide working space during construction. The proposed pruning is something that would ordinarily be carried out in the interests of general maintenance, and so the proposed pruning is not solely necessary for construction purposes. The pruning will involve cutting back branches with diameters no greater than 75 millimetres.

- 7.5 As hazel trees generally endure regular coppicing, they are tolerant of pruning, and minor pruning will not negatively impact the tree's health or appearance. Furthermore, as discussed in paragraph 7.2 above, to appropriately manage the hazel, it should be cut down periodically, which would render the proposed pruning obsolete.
- 7.6 None of the other trees requires pruning work to implement the proposal.
- 7.7 All but one of the RPA of the four off-site trees growing within the neighbouring gardens that adjoin extend into the site. The exception is a self-seeded, multi-stemmed, category 'C' sycamore sapling to the south. The root protection area of the sapling extends into a narrow corner of the far southern corner of the site, so it is sufficiently clear of construction-related activity so as not to be harmed by the proposal. As the sycamore is young, any disturbance within its root protection area during the proposed landscape works is likely to be tolerated without detriment to its health.
- 7.8 As the trees surrounding the site are sufficiently clear of potential disturbance or soil contamination during construction and landscaping operations, no specific tree protection measures are required.
- 7.9 Based on the above, the integration of the proposal is sustainable in arboricultural terms.

8. Conclusions

- 8.1 The removal of the category 'C' hazel trees (G1) will not have a significant impact on the character and appearance of the area.
- 8.2 The proposed landscaping will enhance the quality and amenity of the site for the long-term
- 8.3 The proposed pruning of one hazel (T3) is minor and will not negatively impact the health or appearance of the tree
- 8.4 The off-site trees are sufficiently clear of the proposal not to be harmed during construction or landscaping.
- 8.5 The proposal is, therefore, sustainable in arboricultural terms.

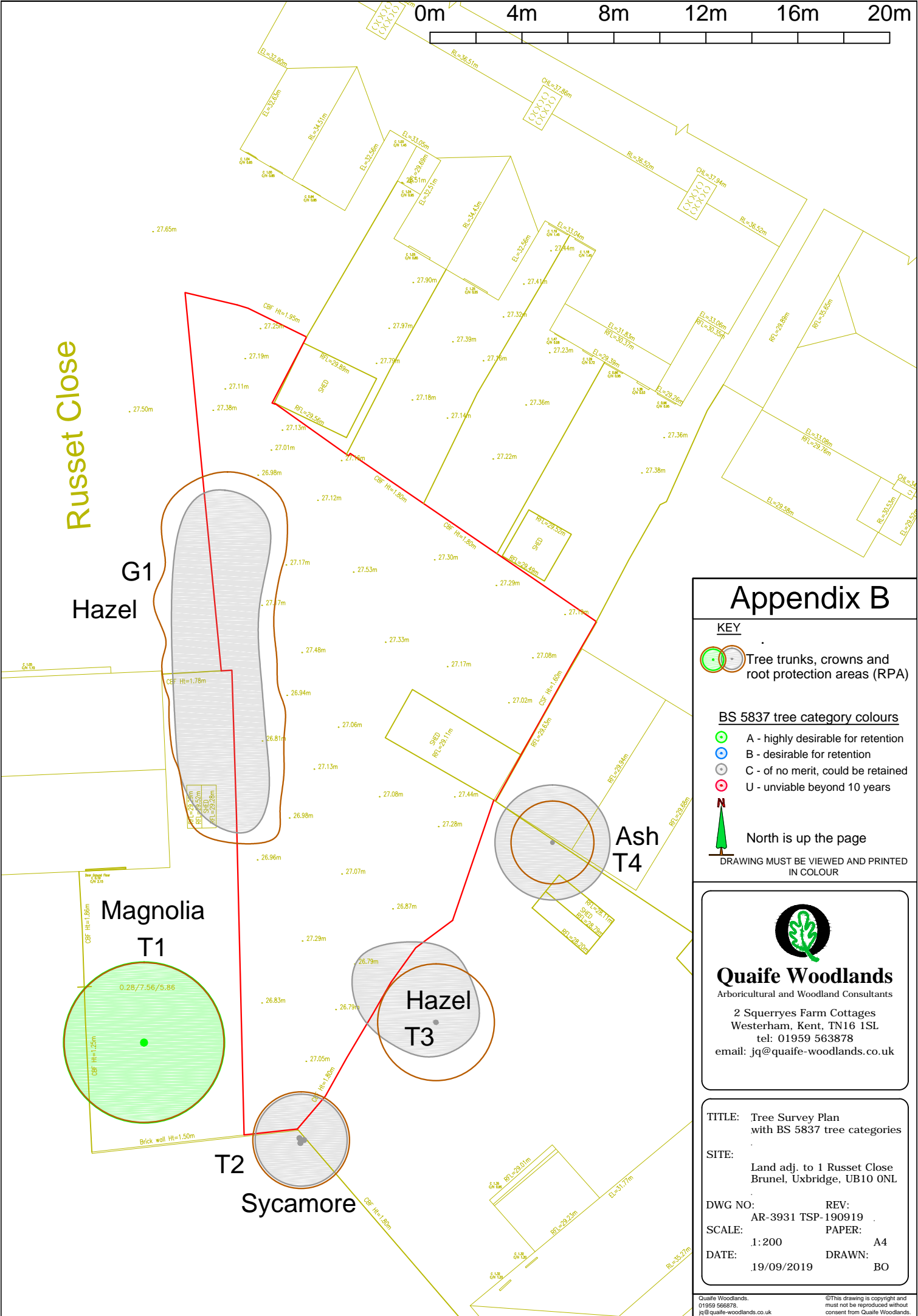
TREE SURVEY SCHEDULE KEY

Tree No.	Tree reference number with a prefix of G for Group, H for Hedge and W for Woodland				
Species	Common name.				
Height	Estimated tree height from ground level to highest foliage/buds measured with a laser hypsometer where line of sight was attainable or estimated visually where laser observation was restricted and rounded up to the nearest metre.				
Stem diameter	Measured in millimetres at 1.5 metres above ground level or estimated visually where access was restricted or otherwise in accordance with Annex C of BS 5837:2012 <i>Trees in relation to design demolition and construction - Recommendations</i> .				
Radial crown spread	Branch spread measured in the direction of the cardinal compass points, either with a laser rangefinder or estimated by pacing or visually where access was restricted and rounded up to the nearest half metre.				
Crown clearance	Height of lowest foliage/buds measured above ground level and rounded up to the nearest half metre.				
Lowest branch	Height of lowest significant branch measured above ground level and rounded up to the nearest half metre.				
Age class	Sapling/newly planted	Young	Semi-mature	Mature	Ancient
Physiological condition	Normal	Below average	Low	Dying/dead	
Structural condition	Good	Remediable	Irremediable	Hazardous	
Arb. quality	A combination of physiological and structural condition and graded as either high, moderate or low.				
Landscape value	A combination of a visual assessment of a tree's prominence and its harmonious relationship with the immediate landscape within which it stands and graded as either high, moderate or low. It is not an assessment of public visual amenity value.				
Potential	Estimated life expectancy and stated as follows: Less than 10 years, no more than 20 years, no more than 40 years or greater than 40 years.				
Observations	Tree specific comments made by the surveyor at the time the survey was being undertaken.				
Category	<p>British Standard BS 5837:2012 categorisation system:</p> <p>A – High quality and value (Greater than 40 years). 1) Mainly arboricultural values 2) Mainly landscape values 3) Mainly cultural values including conservation.</p> <p>B - Moderate quality and value (Greater than 20 years). 1) Mainly arboricultural values 2) Mainly landscape values 3) Mainly cultural values including conservation.</p> <p>C – Low quality and value (Greater than 10 years). Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation.</p> <p>U – Existing condition is such that any existing value would be lost within 10 years and should therefore be removed for reasons of sound arboricultural management.</p>				
RPA	Root protection area in metres squared and radius in metres.				
Recommendations	Proposed tree work if recommended.				

AR-3931 App A TSS-190918 (221205) BS 5837:2012 Tree Survey Schedule
Land adj. to 1 Russet Close, Brunel, Uxbridge, UB10 0NL

Appendix A

Tree No.	Species	Height (m)	Stem diameter (mm)	Radial crown spread (m)	Crown clearance (m)	Lowest branch (m)	Age class	Physio-logical condition	Structural condition	Arb. Quality	Land-scape value	Potential	Observations	Cate-gory	RPA (radius m and m sq.)	Recommendations
T1	Saucer magnolia (<i>Magnolia x soulangeana</i>)	7	290 estimate	3.5	2	1.2	Semi-mature	Normal	Good	High	High	Greater than 40 years	Off-site tree. Ornamental specimen occupying much of the rear garden of the neighbouring property within which it stands.	A (1,2)	3.48 38	None.
T2	Sycamore (<i>Acer pseudoplatanus</i>)	8	100 x 3 stems, estimate	2	2	1.5	Sapling	Normal	Irremediable	Low	Low	No more than 20 years	Off-site self-seeded tree. Tight compression forks between stems.	C (1,2,3)	2.1 13.6	None.
T3	Hazel (<i>Corylus avellana</i>)	6	75 x 21 stems, estimate	3	1.8	2	Semi-mature	Normal	Remediable	Moderate	Moderate	Greater than 40 years	Off-site coppice. Multi-stemmed from base.	B (1,2,3)	4.1 53.4	Prune back to boundary line.
T4	Ash <i>Fraxinus excelsior</i>)	6	150 estimate	2.5	3.5	3	Sapling	Normal	Irremediable	Low	Low	No more than 20 years	Off-site self-seeded tree. Growing too close to a neighbouring building. Likely to be removed in the foreseeable future due to unsustainable growing location.	C (1,2,3)	1.8 10.2	None.
G1	Hazel (<i>Corylus avellana</i>)	5.5	75 x 10 estimate	2	0	1	Semi-mature	Normal	Remediable	Low	Moderate	Greater than 40 years	On-site coppice row. Unmanaged hedge.	C (1,2,3)	2.8 25.4	Fell and remove stumps.



Appendix B

KEY

Tree trunks, crowns and root protection areas (RPA)

BS 5837 tree category colours

- A - highly desirable for retention
- B - desirable for retention
- C - of no merit, could be retained
- U - unviable beyond 10 years



North is up the page

DRAWING MUST BE VIEWED AND PRINTED IN COLOUR



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TITLE: Tree Survey Plan
with BS 5837 tree categories

SITE: Land adj. to 1 Russet Close
Brunel, Uxbridge, UB10 0NL

DWG NO: AR-3931 TSP REV: 190919
SCALE: 1:200 PAPER: A4
DATE: 19/09/2019 DRAWN: BO

