



ARBORICULTURAL PLANNING CONSULTANTS

THE OLD POST OFFICE
DORKING ROAD
TADWORTH
SURREY KT20 5SA

Tel: (01737) 813058
E-mail: sja@sjatrees.co.uk

Directors: Simon R. M. Jones Dip. Arb. (RFS), FArborA.,
RCArborA. (Managing)
Frank P. S. Spooner BSc (Hons), MArborA, TechCert
(ArborA), RCArborA. (Operations)

Arboricultural Implications Report

Proposed re-development at

Moat House

Buttenshaw Avenue

Arborfield Green

Reading



August 2024

Ref. SJA air 24234-01a

SUMMARY

S1. On the basis of our assessment, we conclude that the arboricultural impact of this scheme is of negligible magnitude, as defined according to the categories set out in **Table 1** of this report.

S2. Our assessment of the impacts of the proposals on the existing trees concludes that no existing trees are to be removed, including those that are mature, veteran, notable, category 'A' or 'B, or those of high landscape or biodiversity value. Accordingly, there will be no alteration to the main arboricultural features of the site or to the arboricultural character and appearance of the local landscape.

S3. The proposed pruning is minor in extent, will not detract from the health or appearance of these trees, and complies with current British Standards.

S4. The incursions into the Root Protection Areas of trees to be retained are minor, and subject to implementation of the measures recommended on the Tree Protection Plan and set out at **Appendix 1**, no significant or long-term damage to their root systems or rooting environments will occur.

S5. None of the proposed apartments or amenity space are likely to be shaded by retained trees to the extent that this will interfere with their reasonable use or enjoyment by incoming occupiers, which might otherwise lead to pressure on the Local Planning Authority to permit felling or severe pruning that it could not reasonably resist.

S6. As the proposed development retains and protects the veteran oak no. 185, all existing trees, green corridors and maintains the arboricultural features that contribute to the landscape, it complies with Policies CP7 and CC03 and TB21 of the adopted Wokingham Borough Core Strategy (2010) and the Managing Development Delivery Plan (2014).

CONTENTS

1. INTRODUCTION AND BACKGROUND INFORMATION	4
2. PLANNING CONTEXT	9
3. THE TREES	14
4. TREES TO BE REMOVED	17
5. TREES TO BE PRUNED	18
6. ROOT PROTECTION AREA INCURSIONS.....	21
7. RELATIONSHIP OF RETAINED TREES TO NEW DWELLINGS.....	25
8. CONCLUSIONS.....	28

APPENDICES

1. Methodology
2. Outline arboricultural method statement
3. Tree survey schedule (SJA tss 24234-01)
4. Tree protection plan (SJA TPP 24234-041)

© Simon Jones Associates Ltd. 2024

All rights in this document are reserved. No part of it may be amended or altered, reproduced or transmitted, in any form or by any means, or stored in any retrieval system of any nature, without our written permission. Its content and format are for the exclusive use of Crest Nicholson Operations Ltd and Defence Infrastructure Organisation in dealing with this site. It may not be sold, lent, hired out or divulged to any third party not directly involved with this site without the written consent of Simon Jones Associates Ltd. However, it may be reproduced, without amendment, by the Local Planning Authority (LPA), and be posted on the LPA website, to assist in consideration of an application for the proposed development referred to in Section 1.

1. INTRODUCTION AND BACKGROUND INFORMATION

1.1. Instructions

1.1.1. SJAtrees has been instructed by Crest Nicholson Operations Ltd. and Defence Infrastructure Organisation to visit the Moat House, Buttenshaw Avenue, Arborfield Green, to survey the trees growing on, or immediately adjacent to the site.

1.1.2. We are further asked to identify which trees are worthy of retention within a proposed re-development of the site; to assess the implications of the development proposals on these specimens, and to advise how they should be protected from unacceptable damage during construction.

1.2. Scope of report

1.2.1. This report and its appendices reflect the scope of our instructions, as set out above. It is intended to accompany a Full Planning Application and Listed Building Consent to be submitted to Wokingham Borough Council (the LPA), and complies with local validation requirements, and with the recommendations of British Standard BS 5837:2012, *Trees in relation to design, demolition and construction – Recommendations* ('BS 5837').

1.2.2. The proposed development comprises the **“Change of Use of the Moat House from office (Use Class E) to residential (Use Class C3) to provide 4 residential dwellings and associated internal roads, parking, landscaping, drainage, plant, bin and cycle storage.”**

1.2.3. This report summarises and sets out the main conclusions of the baseline data collected during the tree survey and identifies those trees or groups of trees whose removal could result in a significant adverse impact on the character or appearance of the local area (Section 2.3.1). It then details and assesses the impacts of the proposals on trees, including any to be removed (Section 4), or pruned (Section 5) and those which might incur root damage that might threaten their viability (Section 6). A summary and conclusion, with regard to local planning policy, are presented in Section 8.

1.3. Site inspection

1.3.1. A site visit and tree inspection were undertaken by Rebecca Gawthorpe, Tom Wawman and Frank Spooner of Simon Jones Associates Ltd., between Friday the 10th January and Friday 25th April 2014. Weather conditions at these times ranged from clear, dry and bright to overcast with heavy rain. In January to March deciduous trees were not in leaf but in April deciduous trees were in partial leaf. A second site visit was carried out by Rebecca Gawthorpe, Tom Wawman and Ben Jameson on the 24th and 25th July 2014. Weather conditions were clear, dry and bright and deciduous trees were in full leaf. A further site visit was carried out by Edward Janes of SJAtrees on the 6th of June 2024. Deciduous trees were in full leaf and weather conditions were clear, dry and bright.

1.4. Site description

1.4.1. The site is approximately 0.53ha in size and is located on the east side of Buttenshaw Avenue, as shown at **Figure 1** below. The west boundary abuts Buttenshaw Avenue with an expansive area of open space and recent residential development beyond. The south and east boundaries adjoin existing homes and groups of trees associated with the wider grounds of Moat House. The north boundary adjoins Princess Marina Drive.



Figure 1: Site location shown on satellite image

1.4.2. The site is on relatively level ground and currently comprises the Moat House, which is a two and a half storey building previously used as an office, a tarmac carpark and associated access roads and a grassed area of land bordered by trees.

1.5. Soil type

1.5.1. The British Geological Survey Solid and Drift Geology map of the area indicates the site lies on London Clay; this suggests that the soil is likely to be susceptible to compaction.

1.5.2. The class of soil in this area is recorded on the Soilscape (England) maps on the Department for Environment, Food & Rural Affairs ('Defra') Magic website as a slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soil.

1.5.3. We are not aware of a site investigation or soil analysis having been undertaken; but the class of soil and the indications of the British Geological Survey map suggest that trees may be shallow-rooted and that the soil is likely to be highly susceptible to compaction.

1.6. Statutory controls

1.6.1. Thirteen of the trees are covered by a tree preservation order (TPO). This is TPO no. 1445 of 2012 made by the LPA, Wokingham Borough Council that protects 12 individual trees and one area of trees on and immediately adjoining the site. The map in the TPO is reproduced at **Figure 2** below and the trees protected by it are identified within the tree survey schedule at **Appendix 3** and on the accompanying tree protection plan.

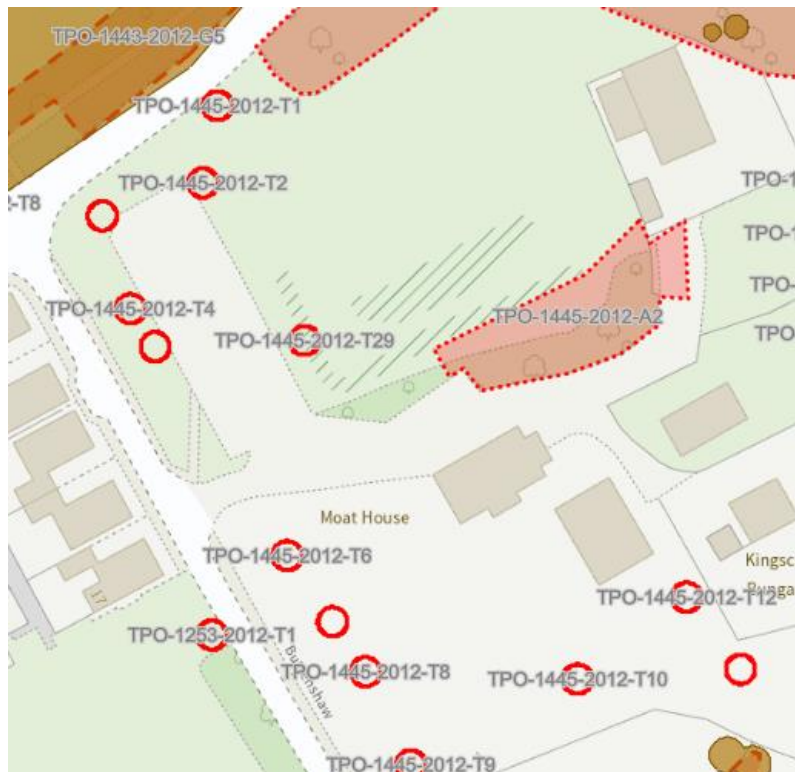


Figure 2: Extract from the TPO map, showing area of trees and individual trees covered by the Order

1.6.2. The site is not within a conservation area, and therefore there are no constraints relating to existing trees in this regard.

1.6.3. There are no hedgerows on site that could meet the criteria to be deemed “Important” in the context of the landscape and wildlife criteria of the Hedgerows Regulations, 1997¹.

1.7. Non-statutory designations

1.7.1. There are no woodlands within or abutting the site that are classified as ‘Ancient’. Ancient woodland is defined as “any area that’s been wooded continuously since at least 1600 AD” and is considered an important and irreplaceable habitat.

1.7.2. There is one English oak tree adjacent to the south boundary (no. 185 in the tree survey schedule) that is included in the Wokingham Veteran Tree Association

¹ The Hedgerows Regulations 1997; STATUTORY INSTRUMENTS 1997 No. 1160.

database and Woodland Trust Ancient Tree Inventory², and displays attributes consistent with it being 'Veteran'. Ancient and veteran trees are also considered to be irreplaceable habitats, and contribute to a site's biodiversity, cultural and heritage value, and the National Planning Policy Framework (see below) states that development resulting in the loss or deterioration of ancient or veteran trees should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists. Current government guidance states that ancient or veteran trees should be protected from root damage by inclusion of a buffer zone at least 15 times larger than the diameter of the trunk, or 5m from the edge of the tree's canopy if that area is larger.

² <https://ati.woodlandtrust.org.uk/>

2. PLANNING CONTEXT

2.1. Planning History

2.1.1. The site is located within the former Arborfield Garrison, which has outline planning permission (Ref: O/2014/2280) granted approval by the Wokingham Borough Council in April 2015 for up to 2,000 dwellings. The decision notice for the outline planning permission contains a comprehensive set of conditions; however, as this application is a separate full application, our understanding is that this application is outside of the scope of the outline application.

2.2. Planning policy - national

2.2.1. Under Section 197 of the Town and Country Planning Act 1990, local authorities have a statutory duty to consider the protection and planting of trees when considering planning applications. The effects of proposed development on trees are therefore a material consideration, and this is normally reflected in local planning policies.

2.2.2. The National Planning Policy Framework ('NPPF')³ sets out the Government's planning policies for England and how these should be applied in both plan and decision-making. Paragraph 2 makes it clear that the NPPF is itself a material consideration in the determination of planning application. Paragraph 11 states that **"Plans and decisions should apply a presumption in favour of sustainable development."**

2.2.3. In paragraph 135, within Section 12 "Achieving well-designed and beautiful places" the NPPF states: **"Planning policies and decisions should ensure that developments:**

a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;

b) are visually attractive as a result of good architecture, layout and appropriate and

³ The National Planning Policy Framework (NPPF) (December 2023). Department for Levelling Up, Housing & Communities

effective landscaping;

c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);

d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;

e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and

f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.”

2.2.4. Paragraph 136 in this section states: **“Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.”**

2.2.5. The section titled “Meeting the challenge of climate change, flooding and coastal change” states at paragraph 158: **“Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. Policies should support appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.”**

2.2.6. In paragraph 180, within Section 15 “Conserving and enhancing the natural environment” the NPPF states: **“Planning policies and decisions should contribute to and enhance the natural and local environment by:**

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

[...] d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;

2.2.7. In paragraph 186, under the ‘Habitats and biodiversity’ section, the NPPF states: **“When determining planning applications, local planning authorities should apply the following principles:**

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists....”

2.3. Local planning policy

2.3.1. Local planning policies are contained in the adopted Wokingham Borough Core Strategy (2010) and the Managing Development Delivery Plan (2014).

2.3.2. Core Strategy Policy CP7 – Biodiversity states:

“Sites designated as of importance for nature conservation at an international or national level will be conserved and enhanced and inappropriate development will be

resisted. The degree of protection given will be appropriate to the status of the site in terms of its international or national importance.

Development:

A) Which may harm county designated sites (Local Wildlife Sites in Berkshire), whether directly or indirectly, or

B) Which may harm habitats or, species of principle importance in England for nature conservation, veteran trees or features of the landscape that are of major importance for wild flora and fauna (including wildlife and river corridors), whether directly or indirectly, or

C) That compromises the implementation of the national, regional, county and local biodiversity action plans will be only permitted if it has been clearly demonstrated that the need for the proposal outweighs the need to safeguard the nature conservation importance, that no alternative site that would result in less or no harm is available which will meet the need, and:

i) Mitigation measures can be put in place to prevent damaging impacts; or

ii) Appropriate compensation measures to offset the scale and kind of losses are provided.”

2.3.3. Policy CC03 – Green Infrastructure, Trees and Landscaping of the Managing Development Delivery Plan includes the following section that is relevant to existing trees:

“2. Development proposals should demonstrate how they have considered and achieved the following criteria within scheme proposals:

a) Provide new or protect and enhance the Borough’s Green Infrastructure networks, including the need to mitigate potential impacts of new development

b) Promote accessibility, linkages and permeability between and within existing green corridors including public rights of way such as footpaths, cycleways and bridleways

c) Promote the integration of the scheme with any adjoining public open space or countryside

d) Protect and retain existing trees, hedges and other landscape features

e) Incorporate high quality, ideally, native planting and landscaping as an integral part of the scheme.

3. Development proposals which would result in the loss, fragmentation or isolation of areas of green infrastructure will not be acceptable.”

2.3.4. **Policy TB21 - Landscape Character** of the Managing Development Delivery Plan, which is relevant to trees and woodlands that contribute to the landscape, states:

“1. Proposals must demonstrate how they have addressed the requirements of the Council’s Landscape Character Assessment, including the landscape quality; landscape strategy; landscape sensitivity and key issues.

2. Proposals shall retain or enhance the condition, character and features that contribute to the landscape.”

3. THE TREES

3.1. Survey findings

3.1.1. We surveyed 25 individual trees and two groups of trees growing within or immediately adjacent to the site. Their details can be found in the tree survey schedule at **Appendix 2**.

3.1.2. The trees are comprised of native or naturalised mature broadleaf specimens of species of large ultimate size, e.g. English oak, Turkey oak, sweet chestnut, sycamore and beech growing around the site boundaries. These established trees have an understorey of smaller trees and shrubs such as cherry laurel, goat willow, flowering cherry and silver birch.

3.1.3. Most specimens on site are planted specimens which have reached maturity, with exception given to some young self-seeded sycamore and some semi-mature common lime trees growing adjacent to Buttenshaw Avenue. There is a relatively even distribution of species across the site. However, the most dominant species are Turkey oak, English oak and sweet chestnut, which also make up the main arboricultural features of the site (notably Turkey oak no. 36, and English oak no. 50), along with one veteran English oak (no. 185), which is situated 32m south of the existing Moat House.

3.2. Assessment of suitability for retention

3.2.1. As noted above in Section 2.2, local planning policies require the retention of trees that are “**landscape features**.” The individuals and groups of trees within or adjacent to the site, whose attributes we consider meet these criteria, are as follows:

- The Turkey oak no. 36 and the English oak no. 50, both abutting the access drive;
- the small group of mixed species (nos. 49-58) growing on the northern side of the access road opposite Moat House;
- the veteran English oak no. 185 to the south of Moat House.

3.2.2. Two individual trees (nos. 38 and 57) are unsuitable for retention, irrespective

of the proposals, in that they are in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. However, as can be seen below, these trees are not necessarily shown to be removed as part of the proposals; some may be outside the development footprint or may be outside the red line boundary and in third-party ownership. These trees have been assessed as category 'U' and are indicated on the accompanying tree protection plan by **bracketed red** numbers.

3.2.3. There are 12 mature trees growing on or immediately adjacent to the site; but five of these (nos. 38, 52, 54, 55 and 107) are of species that are of small ultimate size; and all of these five are of only short-lived species, and which thereby are of only short-term potential. Of the remaining seven mature trees of large ultimate size and long-term potential, some of these are readily visible in views from public viewpoints and so make a significant contribution to the landscape; others do not.

3.2.4. There is one category 'A' tree (English oak no. 185) and 14 category 'B' specimens. The remaining ten trees are assessed as category 'C' trees, being either of low quality, very limited merit, only low landscape benefits, no material cultural or conservation value, or only limited or short-term potential; or a combination of these.

3.2.5. Of the groups of trees, none have been assessed as category 'A' or category 'B', both have been assessed as category 'C'.

3.3. Assessment of arboricultural impacts

3.3.1. The arboricultural impacts of the proposed site layout by Ascot Design, drawing no. 24-J4633-100 have been assessed by overlaying this onto the TCP and are discussed in the following sections of this report and are shown on the tree protection plan (TPP) presented at **Appendix 4**.

3.3.2. The TPP identifies the trees to be removed to accommodate the proposed development, either because they are situated within the footprints of proposed structures or surfaces, or because in our judgment they are too close to these structures or surfaces to enable them to be retained. These are shown by means of **red crosses** on the TPP.

3.3.3. The TPP also shows how trees to be retained will be protected from damage

during construction, and the measures identified are set out and described in the outline arboricultural method statement at **Appendix 2** of this report. The implementation of, and adherence to, these measures can readily be secured by the imposition of appropriate planning conditions.

3.3.4. Details of the impacts identified within these categories, and our assessment of their respective significance, are analysed in Sections 4 to 7 below.

3.3.5. Based on these findings, we have assessed the magnitude of the overall arboricultural impact of the proposals according to the categories defined in **Table 1** below.

Impact	Description
High	Total loss of or major alteration to main elements/ features/ characteristics of the baseline, post-development situation fundamentally different
Medium	Partial loss of or alteration to main elements/ features/ characteristics of the baseline, post-development situation will be partially changed
Low	Minor loss of or alteration to main elements/ features/ characteristics of the baseline, post-development changes will be discernible but the underlying situation will remain similar to the baseline
Negligible	Very minor loss of or alteration to main elements/ features/ characteristics of the baseline, post-development changes will be barely discernible, approximating to the 'no change' situation

Table 1: Magnitude of impacts⁴

⁴ Determination of magnitude based on DETR (2000) Guidance on the Methodology for Multi-Modal Studies, as modified and extended.

4. TREES TO BE REMOVED

4.1. Details

4.1.1. The veteran oak no. 185 in the southern section of the site is to be retained and protected, with no development within or adjacent to the veteran buffer zone.

4.1.2. None of the existing trees are to be removed to accommodate the proposed layout.

4.2. Assessment

4.2.1. All those trees and groups of trees that constitute the main arboricultural features of the site and which make the greatest contribution to the character and appearance of the local landscape, to amenity or to biodiversity (see paragraph 3.2.1), will be retained.

4.2.2. As mentioned above, the veteran oak no. 185 is to be retained and protected. In addition, none of the trees covered by TPO are to be removed (see 1.6.1 above).

4.2.3. The proposals incorporate space for additional tree planting, which will provide an increase in tree numbers on the site, improve the age class balance of the trees on site, enhance the local landscape, and strengthen the existing arboricultural features benefitting the long-term character of the site.

4.2.4. In the light of the fact no trees are to be removed, and the landscaping proposals include additional tree planting, there will be no adverse impact on the main arboricultural features of the site, or to the wider arboricultural character of the area.

5. TREES TO BE PRUNED

5.1. Details

5.1.1. Eleven trees to be retained are to be pruned to facilitate implementation of the proposals. These are shown at **Table 2** below.

Tree no.	Species	Age class	Proposed works
36	Turkey oak	Mature	Crown lift north canopy over access to 4.5m above ground level
37	Common lime	Semi-mature	Crown lift canopy to 3m above ground level
40	Common lime	Semi-mature	Crown lift canopy to 3m above ground level
42	Common lime	Semi-mature	Crown lift canopy to 3m above ground level
44	English oak	Mature	Crown lift canopy to 2.5m above ground level
50	English oak	Mature	Crown lift S canopy to 4.5m above ground level
56	Sweet chestnut	Mature	Crown lift S canopy to 4.5m above ground level
103	Common lime	Semi-mature	Crown lift canopy to 3m above ground level
104	Flowering cherry	Semi-mature	Crown lift canopy to 3m above ground level
105	Turkey oak	Mature	Crown lift canopy to 3m above ground level
107	Goat willow	Mature	Reduce west canopy to boundary

Table 2: Trees to be pruned to facilitate development

5.2. Assessment

5.2.1. The proposed pruning strategy aims to satisfy three objectives, which are as follows:

- Selective crown lift of the canopies of trees nos. 36, 50 and 56 extending over the site access and parking areas to provide sufficient space for access, construction and subsequent use of the site;
- Crown lift the lower canopies of trees (nos. 37, 40, 42, 44, 103, 104 and 105) along the N and W boundary that will open up views to the surrounding areas

(Princess Marina Drive, Buttershaw Avenue and the grassed open spaces beyond); and

- c) mitigate the risk of the goat willow no. 107 collapsing at the base.

5.2.2. None of the trees to be pruned are of species that are intolerant of pruning because they are poor at compartmentalising wounds or because their wood decays quickly; so pruning is unlikely to lead to significant dieback or the formation of columns of decay.

5.2.3. Whilst six of the trees to be pruned are mature, the pruning specification has been reduced in extent to mitigate the potential for an adverse impact on the physiological health of these specimens. It should be noted that all mature trees to be pruned are early mature specimens, that retain much of the vitality as semi-mature and young trees, pruning has been avoided to the trees of more advanced age for example oaks nos. 102 and 185. Our assessment of these trees also highlights that they are of average physiological condition. Accordingly, they should all be able to tolerate the number and sizes of the proposed pruning wounds, and to compartmentalise these effectively.

5.2.4. The extent of pruning proposed to the trees listed in **Table 3** is minor. In no cases will the diameter of the final cut need to exceed one-third of that of the parent stem or branch; and in no cases will the total cross-sectional area of all the cuts that need to be made exceed one-third of that of the main trunk, measured at 1.5m above ground. Branches to be removed from these trees are mostly few in number and small in size and will result in a maximum wound size no greater than 70mm in diameter; this will have an insignificant effect on the health and physiological condition of these trees and complies with the recommendations at paragraph 7.2.4 and at Table 1 of British Standard BS 3998:2010, *Tree work – Recommendations*.

5.2.5. The proposed crown lifting will comprise the removal and the shortening of only secondary branches and will not require the removal back to the trunk of any primary branches, which will avoid making pruning wounds to the trunk, and will minimise any impact on the ‘damping’ of trunk movement that the lower branches provide. Moreover, this will mean that less than 15% of live crown height will be removed and that the remaining live crown will continue to form at least two thirds of

the height of the tree and the pruning will comply with the recommendations at paragraph 7.6 of British Standard BS 3998:2010, Tree work – Recommendations.

5.2.6. The pruning back to the boundary of goat willow no. 107 is consistent with the common law legal right to cut un-protected off-site trees back to one's boundary. Consequently, these works are not required just because of the proposed development: they could legally be undertaken irrespective of this scheme and could be repeated whatever the future use of the site. It should be noted that this pruning is specifically to avoid the collapse of the multi-stemmed specimen whose unions display cracking and stem separation on the western union indicating stem failure is potentially imminent.

5.2.7. In terms of impact upon the landscape, the proposed pruning is minor in extent, and will be largely screened in views by either the remainder of the trees' canopies, or by other trees growing within or adjacent to the site. It will have little effect on the appearance of the trees when viewed from outside the site itself, and accordingly will not detract from the character or appearance of the local area. Moreover, the proposed pruning to open up sub-canopy views between the site and the surrounding area is landscape led, so the aim is to enhance the amenity of the site through the pruning in this instance.

5.2.8. Following the pruning specified, there will be unobstructed accesses and at least 3.9m between the Moat House and the canopies of retained trees, which will, thereby provide adequate working space for construction, and a reasonable margin of clearance for future growth.

6. ROOT PROTECTION AREA INCURSIONS

6.1. Details

6.1.1. The proposed removal of the existing car parking area and the introduction of parking bays to the north of the Moat House will cause incursions within the RPAs of three of the trees to be retained. These are shown in **Table 3** below.

Tree no.	Species	Incursion	Extent of incursion	% of RPA
49	Flowering cherry	Proposed removal of hard surface	n/a	n/a
50	English oak	Proposed replacement kerbing	n/a	n/a
51	Flowering cherry	Proposed replacement kerbing	n/a	n/a
53	Flowering cherry	Proposed replacement kerbing	n/a	n/a
54	Flowering cherry	Proposed replacement kerbing	n/a	n/a
55	Goat willow	Proposed replacement kerbing and parking bay no. 8	4.5m ²	1.8%
56	Sweet chestnut	Proposed replacement kerbing and parking bay no. 8	4.5m ²	0.9%
101	Common lime	Proposed removal of hard surface	n/a	n/a
102	English oak	Proposed removal of hard surface	n/a	n/a
103	Common lime	Proposed removal of hard surface	n/a	n/a
104	Flowering cherry	Proposed removal of hard surface	n/a	n/a
105	Turkey oak	Proposed removal of hard surface	n/a	n/a
106	Common lime	Proposed removal of hard surface	n/a	n/a
107	Goat willow	Proposed removal of hard surface	n/a	n/a
		Proposed removal of hard surface and parking bay no. 3	1.3m ²	0.3%

Table 3: Proposed incursions within RPAs

6.2. Assessment

6.2.1. There are no incursions into, or adjacent to, the buffer zone or RPA of the veteran English oak no. 185.

6.2.2. The encroachment into the RPAs of the retained trees listed in **Table 3** above fall into one of three categories:

- a) the demolition/removal of existing hard surfaces with the reinstatement of soft landscape within the RPAs of trees nos. 49, 101, 102, 103, 104, 105, 106 and 107, shown in purple in **Table 3** above and in purple hatch on the TPP at **Appendix 4**.
- b) the replacement of existing kerbs and hard surfaces with new kerbing and hard surfaces for parking bays within the RPAs of trees nos. 50, 51, 53, 54, 56, 57 and 107, highlighted in yellow in **Table 3** above and in yellow hatch on the TPP at **Appendix 4**; and
- c) the introduction of new hard surface and kerbing within currently unsurfaced ground into the RPAs of trees nos. 55, 56 and 107.

6.2.3. The incursions into the RPAs of trees nos. 55, 56 and 107 are by proposed parking bays that extend into currently unsurfaced areas, and as the new surfaces will need to tie in to the existing hard surface levels, some degree of excavation will be required. To minimise impacts on these specimens, excavation within these RPAs will be undertaken manually, under the direct control and supervision of an appointed arboricultural consultant, so that any over dig into the RPAs is avoided, and any roots encountered can be treated appropriately.

6.2.4. In addition, where existing hard surfaces and kerbs are to be replaced within the RPAs of nos. 50, 51, 53, 54 and 55, taking account of existing ground levels and likely proposed levels of these areas, these will allow for design and construction of the replacement surfaces to be no deeper than the sub-base of the existing surface, and accordingly no excavation will be required. As the new surfaces are entirely within the footprint of the existing hard surface, the incursions do not exceed the 20% maximum incursion into currently unsurfaced ground recommended in BS 5837⁵.

6.2.5. Furthermore, where appropriate, replacement surfaces could incorporate an appropriate cellular confinement system, filled and finished with suitable porous materials, to minimise soil compaction. To ensure no damage occurs to the roots or rooting environments of the relevant trees, installation will be undertaken under the

⁵ BS 5837, paragraph 7.4.2.3.

control and supervision of the arboricultural consultant.

6.2.6. The existing car park and hard surfaces to be reinstated as soft landscape within the RPAs of adjacent trees nos. 49, 101, 102, 103, 104, 105, 106 and 107 shall be removed either by hand (kerbs and the sub-base shall be broken up using a hand-held breaker, and be lifted by hand or excavated using hand tools), or by an excavator fitted with a toothless bucket standing either on the existing surface or outside the RPAs in order not to disturb tree roots that may be present beneath it. This exercise will be undertaken under the control of the arboricultural consultant to ensure that the soil beneath the hard surface is not disturbed in any way.

6.2.7. The tree species impacted by incursions into their RPAs have been identified as good to moderate at tolerating root pruning and disturbance⁶, as shown in **Table 4**. As these specimens are of average physiological condition, there is no reason to suggest that they will not be able to tolerate the proposed construction activities within their RPAs.

Species	Tolerance
Common lime	Moderate-good
Flowering cherry	Moderate-poor (in our experience)
Goat willow	Moderate-good
Lime	Good to moderate
English oak	Moderate-good
Turkey oak	Good

Table 4: Species tolerance to root pruning and disturbance

6.2.8. Implementation of measures to prevent other incursions into the RPAs of retained trees and to protect them during demolition and construction can be assured by the erection of appropriate protective fencing, as shown on the TPP at **Appendix 4**.

6.2.9. Accordingly, subject to implementation of the above measures, and considering the ages, current physiological condition and tolerance of disturbance of

⁶ MATHENY, N. P. and CLARK, J. R. (1998). Trees and Development. International Society of Arboriculture.

these retained trees, no significant or long-term damage to their root systems or environments will occur as a result of the proposed development.

7. RELATIONSHIP OF RETAINED TREES TO NEW DWELLINGS

7.1. Shading

7.1.1. In none of the proposed apartments does the fenestration of their main habitable rooms (living rooms, kitchens) exclusively and directly face trees within the shadow patterns⁷ of which they are situated; that is, where proposed dwellings or apartments sited in an arc between the north-west and the east of retained trees are closer to them than the current heights of these specimens.

7.1.2. As no windows of the main habitable rooms of the proposed apartments lie within the shadow patterns of any retained trees, they will not be shaded by retained trees to the extent that this will interfere with their reasonable use or enjoyment by incoming occupiers; which might otherwise lead to pressure to permit felling or severe pruning that the LPA could not reasonably resist.

7.2. Apprehension

7.2.1. Apprehension in relation to trees occurs normally with residents or occupiers who live beneath or close to the crowns of large trees, and become fearful that branches, stems or even a whole tree could fail and harm them or their property. Consequently, this is most likely to occur if trees are large, particularly in relation to the size or height of the apartment in which the resident lives, if properties are located close to or even beneath their crowns, and if there has been a history of recent failures nearby. Other factors might include the wind exposure of the tree concerned, the orientation of the property in relation to the tree and the prevailing winds, and the noise made by the tree as the wind passes through the crown (there can be significant differences in the type and volume of noise made by wind as it passes through trees).

7.2.2. In this case apprehension is most unlikely to be common, or to be of a degree that might force the LPA to accede to requests to fell any of these trees as a result. This is because the closest trees are further from the proposed dwellings (25m) than

⁷ BS 5837:2012, 5.2.2, Note 1: "An indication of potential direct obstruction of sunlight can be illustrated by plotting a segment, with a radius from the centre of the stem equal to the height of the tree, drawn from due north-west to due east, indicating the shadow pattern through the main part of the day."

their current heights (up to 18m); and so if they were to fail, it would be reasonably foreseeable that they wouldn't reach these buildings.

7.3. Future requests for consent to fell

7.3.1. Former government advice, contained in the DETR "Blue Book"⁸, stated at paragraph 5.11 (1) (ii) that "incoming occupiers of properties will want trees to be in harmony with their surroundings without casting excessive shade or otherwise unreasonably interfering with their prospects of reasonably enjoying their property. Layouts may require careful adjustment to prevent trees from causing unreasonable inconvenience, leading inevitably to requests for consents to fell."⁹

7.3.2. Whilst this document was superseded in March 2014 by online government guidance on 'Tree Preservation Orders and trees in conservation areas' (www.gov.uk), this is sound advice. This suggests that for there to be requests for removal, all the following elements should be capable of being demonstrated:

- That the proximity of retained trees to the proposed development is unreasonable, taking account of their size, species, orientation, growth and other relevant factors;
- That requests for consent to fell or unacceptably or repeatedly prune retained trees will inevitably be forthcoming from future occupiers, rather than merely being possible;
- That such future pressure will be for the felling or heavy pruning of the trees concerned, rather than for minor pruning or tree surgery work; and finally
- That such requests to fell or prune could not reasonably be refused by the LPA.

7.3.3. The large established trees are covered by the Tree Preservation Order and so the LPA would have to give consent to any application of any intention to prune or remove. Then if the extent of the pruning proposed appears to the LPA to be excessive or harmful to the health, appearance or long-term potential of the trees, it could prevent

⁸ (2000) Department of the Environment, Transport and the Regions (2000). Tree Preservation Orders – A guide to the Law and Good Practice. *Building Research Establishment*

⁹ British Standard BS 8206: Part 2 (1992). *British Standards Institute*.

this by refusing consent. Alternatively, the LPA could make a TPO prior to occupation so that any intention to prune would require a Regulation 14 tree work application¹⁰ to be submitted. Whichever approach is taken, the LPA will have control over the extent of pruning.

7.3.4. The existing trees will continue to grow in the future; and in time, in common with all trees in urban and suburban areas, it is possible that some pruning will be required to keep them clear of the Moat House. However, any future pruning can be controlled by the LPA as the trees closest specimen (oak no. 50) is covered by a TPO, as an application to prune would have to be made and consented to; and if the LPA considers the proposed works are likely to be harmful to the health or appearance of these specimens, it would be able to make a TPO to prevent this. In this way, the LPA would control both the extent and quality of pruning required.

7.3.5. Accordingly, the proposals comply with British Standard guidance on the probable impact of the existing trees on the proposed development, as set out at paragraph 5.3.4.¹¹

¹⁰ The Town and Country Planning (Tree Preservation)(England) Regulations 2012. Statutory Instrument 2012 No. 605.

¹¹ BS 5837:2012, 5.3.4.

8. CONCLUSIONS

8.1. Summary

8.1.1. Our assessment of the impacts of the proposals on the existing trees concludes that no existing trees are to be removed, including those that are mature, veteran, notable, category 'A' or 'B, or those of high landscape or biodiversity value. Accordingly, there will be no alteration to the main arboricultural features of the site or to the arboricultural character and appearance of the local landscape.

8.1.2. The proposed pruning is minor in extent, will not detract from the health or appearance of these trees, and complies with current British Standards.

8.1.3. The incursions into the Root Protection Areas of trees to be retained are minor, and subject to implementation of the measures recommended on the Tree Protection Plan and set out at **Appendix 1**, no significant or long-term damage to their root systems or rooting environments will occur.

8.1.4. None of the proposed apartments or amenity space are likely to be shaded by retained trees to the extent that this will interfere with their reasonable use or enjoyment by incoming occupiers, which might otherwise lead to pressure on the Local Planning Authority to permit felling or severe pruning that it could not reasonably resist.

8.2. Compliance with national planning policy

8.2.1. As the proposals will retain all the main arboricultural features of the site, its arboricultural attractiveness, history and landscape character and setting will be maintained, thereby complying with Paragraph 130 of the National Planning Policy Framework.

8.2.2. The proposals do not necessitate the removal of any mature trees of large ultimate size, which make the greatest contribution to carbon sequestration and storage, surface water run-off, biodiversity and landscape and air temperature and cleanliness; for all of which, appropriate space for their retention is provided. Accordingly, insofar as this relates to existing trees, the scheme can be seen to have

taken a proactive approach to mitigating climate change and thereby complies with Paragraph 153 of the National Planning Policy Framework.

8.2.3. As the proposals will not result in the loss or deterioration of any ancient woodland or any ancient or veteran trees, they comply with paragraph 180 (c) of the NPPF.

8.3. Compliance with local planning policy

8.3.1. As the proposed development retains and protects the veteran oak no. 185, all existing trees, green corridors and maintains the arboricultural features that contribute to the landscape, it complies with Policies CP7 and CC03 and TB21 of the adopted Wokingham Borough Core Strategy (2010) and the Managing Development Delivery Plan (2014).

8.4. Conclusion

8.4.1. On the basis of our assessment, we conclude that the arboricultural impact of this scheme is of negligible magnitude, as defined according to the categories set out in **Table 1** of this report.

APPENDIX 1

Methodology

A1.1. Tree survey and baseline information

- A1.1.1. We surveyed individual trees with trunk diameters of 75mm and above¹², trees with trunk diameters of 150mm and above growing in groups or woodlands, and shrub masses, hedges and hedgerows¹³ growing within or immediately adjacent to the site; and recorded their locations, species, dimensions, ages, condition, and visual importance in accordance with BS 5837 recommendations.
- A1.1.2. The baseline information collected during the site survey was recorded on site using a hand-held digital device. This information was then imported into an Excel spreadsheet and used to produce the tree survey schedule at **Appendix 3**. The numbers assigned to the trees in the tree survey schedule correspond with those shown on the appended tree protection plan.
- A1.1.3. We surveyed trees as groups where they have grown together to form cohesive arboricultural features, either aerodynamically (trees that provide companion shelter), visually (e.g., avenues or screens) or culturally¹⁴. However, where it might be necessary to differentiate between specific trees within these groups, we also surveyed these individually.
- A1.1.4. We inspected the trees from the ground only, aided by binoculars as appropriate, but did not climb them. We took no samples of wood, roots or fungi. We did not undertake a full hazard or risk assessment of the trees, and therefore can give no guarantee, either expressed or implied, of their safety or stability.
- A1.1.5. Whilst we categorised the trees in accordance with BS 5837 (details of the criteria used for this process can be found in the notes that accompany the tree survey schedule), we assessed the trees' suitability for retention against national, regional and local planning policies. We applied this methodology in line with the NPPF's presumption in favour of sustainable development, giving greater weighting to the contribution of a tree to the character and appearance of the local landscape, to amenity, or to biodiversity, where its removal might have a significant adverse impact on these factors.
- A1.1.6. For the trees shown to be retained, all measurements for pruning specifications, percentage estimates of RPA incursions and shading issues have been calculated using AutoCAD software.

A1.2. Tree constraints

- A1.2.1. In line with the NPPF's presumption in favour of sustainable development, we assessed whether any trees should be retained in the context of the proposed re-development. Our assessment of which trees might have to be retained, and which can be removed, is based on:

12 BS 5837, paragraph 4.2.4 b), recommends that all trees over 75mm stem diameter should be included in a pre-planning land and tree survey.

13 Ibid., 4.4.2.7

14 Ibid., 4.4.2.3

- whether any trees are classed as ‘ancient’ or ‘veteran’, and thereby are designated as ‘irreplaceable habitats’;¹⁵
 - which trees contribute to local character and history, including to the surrounding landscape setting; which trees contribute to biodiversity; and which trees help mitigate and adapt to climate change; and whose removal would thereby be unlikely to comply with national planning policy guidance;
 - which trees contribute to the local landscape, such that their removal would be contrary to local planning policies: specifically, Policy TB1 of adopted Local Plan; and
 - our assessment of the tree’s’ quality, value and remaining life expectancy, in accordance with BS5837:2012, as summarised in the notes that accompany the tree survey schedule.
- A1.2.2. As trees growing outside the boundaries of the site are in the control of others, we have assumed they will be retained, irrespective of their size, age or condition.
- A1.2.3. Whilst we have categorised trees in accordance with BS 5837, we have not used these categorisations as the main criterion of whether specimens might be removed or should be retained. Trees in categories ‘A’, ‘B’ and ‘C’ are all a material consideration in the development process; but the retention of category ‘C’ trees, being of low quality or of only limited or short-term potential, will not normally be considered necessary should they impose a significant constraint on development.
- A1.2.4. Furthermore, BS 5837 makes it clear that young trees, even those of good form and vitality, which have the potential to develop into quality specimens when mature **“need not necessarily be a significant constraint on the site’s potential”**¹⁶.
- A1.2.5. Moreover, BS 5837 states that **“.... care should be taken to avoid misplaced tree retention; attempts to retain too many or unsuitable trees on a site can result in excessive pressure on the trees during demolition or construction work, or post-completion demands for their removal”**¹⁷.
- A1.2.6. The ‘Root Protection Areas’ (RPAs)¹⁸ of the trees identified for retention were calculated in accordance with Section 4.6 of BS 5837; and were assessed taking account of factors such as the likely tolerance of a tree to root disturbance or damage, the morphology and disposition of roots as influenced by existing site conditions (including the presence of existing roads or structures), as well as soil type, topography and drainage. Where considered appropriate, the shapes of the RPAs (although not their areas)

¹⁵ The National Planning Policy Framework (NPPF) (July 2021). Paragraph 180 (c).

¹⁶ BS 5837, 4.5.10.

¹⁷ Ibid., 5.1.1.

¹⁸ Ibid., paragraph 3.7. “The minimum area around a retained tree “deemed to contain sufficient roots and rooting volume to maintain the tree’s viability, and where the protection of the roots and soil structure is treated as a priority.”

were modified based on these considerations, so that they reflect more accurately the likely root distribution of the relevant trees.

- A1.2.7. To assess whether the trees identified for retention would be in a sustainable relationship with the proposed development (without casting excessive shade or otherwise unreasonably interfering with incoming residents' prospects of enjoying their properties, and thereby leading inevitably to requests for consents to fell), we plotted a segment or "shading arc" from each trunk, with a radius equal to the current height of the tree concerned, from due north-west to due east. This gave an indication of potential direct obstruction of sunlight and the shadow pattern cast through the main part of the day¹⁹.
- A1.2.8. Based on these principles and recommendations, the tree survey and assessment of suitability for retention informed the production of a tree constraints plan (TCP) which indicates the most suitable trees for retention, and their associated below-ground and above-ground constraints.
- A1.2.9. As a design tool, the TCP also indicates how close to those trees selected for retention the proposed development could be positioned, in terms of three key criteria:
- a). avoidance of unacceptable root damage;
 - b). avoidance of the necessity for unacceptable pruning works; and
 - c). avoidance of future felling or pruning works to prevent unacceptable shading or apprehension on behalf of the occupants.

¹⁹ Ibid., paragraph 5.2.2 Note 1.

APPENDIX 2

Outline Arboricultural Method Statement

A2.1. Tree Protection Plan

- A2.1.1. The TPP at Appendix 4 shows the general and specific provisions to be taken during construction of the proposed development, to ensure that no unacceptable damage is caused to the root systems, trunks or crowns of the trees identified for retention. These measures are indicated by coloured notations in areas where construction activities are to occur either within, or in proximity to, retained trees, as described in the relevant panels on the drawing.

A2.2. Pre-start meeting

- A2.2.1. Prior to the commencement of any site clearance, ground preparation, demolition or construction works the developer will convene a pre-start site meeting. This shall be attended by the developer's contract manager or site manager, the demolition contractor, the fencing/boarding contractor, the groundwork contractor(s) and the arboricultural consultant. At that meeting contact numbers will be exchanged, and the methods of tree protection shall be fully discussed, so that all aspects of their implementation and sequencing are made clear to all parties. Any clarifications or modifications to the TPP required as a result of the meeting shall be circulated to all attendees.

A2.3. Site clearance

- A2.3.1. No clearance of trees or other vegetation shall be undertaken until after the pre-start meeting and after the erection of the tree protection fencing (see below). If any vegetation clearance is required behind the line of the protection fencing this will be made clear at the pre-start meeting and arrangements will be made to do this prior to the fencing's erection, under the supervision of the arboricultural consultant, who will ensure it doesn't cause any soil compaction or damage to the roots of trees to be retained.
- A2.3.2. Except where within the RPAs of trees to be retained, all trees and other vegetation to be removed may be cut down or grubbed out as appropriate; but within the RPAs of trees to be retained, trees and vegetation will be cut by hand to ground level and stumps will be either left in place or ground out with a lightweight self-powered stump grinding machine. No excavators, tractors or other vehicles will enter the RPAs.

A2.4. Ground preparation and demolition

- A2.4.1. No ground preparation or excavation of any kind, including topsoil stripping or ground levelling, shall be undertaken until after the pre-start meeting and after the erection of the tree protection fencing (see below).
- A2.4.2. Demolition of existing buildings and removal of existing areas of hard surfacing that abut or overlie RPAs will be undertaken with care, under the control and supervision of an appointed arboricultural consultant, to ensure that the adjacent soil is not unacceptably excavated, disturbed or compacted.

A2.5. Tree protection fencing

- A2.5.1. Construction exclusion zones (CEZs) will be formed by erecting protective fencing around the RPAs of all on-site trees to the specification

recommended in BS 5837, Section 6.2, prior to the commencement of construction. This will consist of a scaffold framework comprising a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at maximum intervals of 3.5m. Onto this, welded mesh panels should be securely fixed with wire or scaffold clamps, as shown in **Figure 2** of that document. "**TREE PROTECTION ZONE - KEEP OUT**" or similar notices will be attached with cable ties to every third panel.

- A2.5.2. The RPAs of the off-site trees will also be enforced by the erection of protective fencing to the same specification, prior to the commencement of construction, thereby safeguarding them from incursions by plant or machinery, storage and mixing of materials, or other construction-related activities which could have a detrimental effect on their root systems.
- A2.5.3. The recommended positions of the protective fencing are shown by **bold blue lines** on the TPP. The precise positioning of the fencing around the trees will be considered in conjunction with any other protective hoarding/fencing which may be required around the site boundary.
- A2.5.4. Within the CEZs safeguarded by the protective fencing, there will be no changes in ground levels, **no soil stripping**, and no plant, equipment, or materials will be stored. Oil, bitumen, diesel, and cement will not be stored or discharged within 10m of any trees. Areas for the storage or mixing of such materials will be agreed in advance and be clearly marked. No notice boards, or power or telephone cables, will be attached to any of the trees. No fires will be lit within 10m of any part of any tree.

A2.6. Manual excavation within RPAs

- A2.6.1. The first 750mm depth of excavations required within the RPAs of the trees to be retained (as shown by **bold orange lines** on the TPP) will be dug by hand, using a compressed air soil pick if appropriate, and under on-site arboricultural supervision, to safeguard against the possibility of unacceptable root damage being caused to these specimens. Any roots encountered of over 25mm diameter will be cut back cleanly to the face of the dig nearest to the tree, using a sharp hand saw or secateurs, and their cut ends covered with hessian to prevent desiccation.

APPENDIX 3

Tree Survey Schedule



ARBORICULTURAL PLANNING CONSULTANTS

17 CROSS ROAD
TADWORTH
SURREY KT20 5ST

Tel: (01737) 813058
E-mail: sja@sjatrees.co.uk

Principal: Simon R. M. Jones Dip. Arb. (RFS), F. Arbor. A.,
Arboricultural Association Registered Consultant

Tree survey schedule

**Arborfield, Moat House - Parcel S, Wokingham,
Berkshire**

SJA tss 24234-01

June 2024

Tree Survey Schedule: Explanatory Notes

Arborfield Parcel S, Wokingham, Berkshire

This schedule is based on a tree inspection undertaken by Rebecca Gawthorpe, Tom Wawman and Frank Spooner of Simon Jones Associates Ltd., between Friday the 10th January and Friday 25th April 2014. Weather conditions at these times ranged from clear, dry and bright to overcast with heavy rain. In January to March deciduous trees were not in leaf but in April deciduous trees were in partial leaf. A second site visit was carried out by Rebecca Gawthorpe, Tom Wawman and Ben Jameson on the 24th and 25th July 2014. Weather conditions were clear, dry and bright and deciduous trees were in full leaf. A further site visit was carried out by Edward Janes on the 6th of June 2024. Deciduous trees were in full leaf and weather conditions were clear, dry and bright.

The information contained in this schedule covers only those trees that were examined, and reflects the condition of these specimens at the time of inspection. We did not have access to the trees from any adjacent properties; observations are thus confined to what was visible from within the site and from surrounding public areas.

The trees were inspected from the ground only and were not climbed, and no samples of wood, roots or fungi were taken. A full hazard or risk assessment of the trees was not undertaken, and therefore no guarantee, either expressed or implied, of their safety or stability can be given. The dimensions and assessments presented in this schedule should not be relied upon in relation to any development of the site for more than twelve months from the survey date.

1. Tree no.

Given in sequential order, commencing at "44".

2. T.P.O. no.

Number assigned to tree in the Wokingham Borough Council Tree Preservation Orders, as shown in the T.P.O. schedule and plan. A T.P.O. identified with an asterisk (*) indicates those trees that have been misidentified within the T.P.O. schedule.

3. Species.

'Common names' are given, taken from MITCHELL, A. (1978) A Field Guide to the Trees of Britain and Northern Europe.

4. Height.

Estimated with the aid of a hypsometer, given in metres.

5. Trunk diameter.

Trunk diameter measured at approx. 1.5m above ground level; or where the trunk forks into separate stems between ground level and 1.5m, measured at the narrowest point beneath the fork. Given in millimetres.

6. Radial crown spread.

The linear extent of branches from the base of the trunk to the main cardinal points, rounded up to the closest half metre, unless shown otherwise. In the cases of small trees with reasonably symmetrical crowns, a single averaged figure is quoted.

7. Crown break.

Height above ground and direction of growth of first significant live branch.

8. Crown clearance.

Distance from adjacent ground level to lowest part of lowest branch, in metres.

9. Age class.

Young: Age less than 1/3 life expectancy

Semi-mature: 1/3 to 2/3 life expectancy

Mature: Over 2/3 life expectancy

Over-mature: Mature, and in a state of decline

Veteran: Mature, with a large trunk diameter for the species; but showing signs of ancientness, irrespective of actual age, with decay or hollowing, and a crown that has undergone some retrenchment and has a structure characteristic of the latter stages of life.

Ancient: Beyond the typical age range for species; with a very large trunk diameter for species; with extensive decay or hollowing; and a crown that has undergone retrenchment and has a structure characteristic of the latter stages of life.

10. Physiology.

Health, condition and function of the tree, in comparison to a normal specimen of its species and age.

11. Structure.

Structural condition of the tree – based on both the structure of its roots, trunk and major stems and branches, and on the presence of any structural defects or decay.

Very good: No significant physiological or structural defects, an upright and reasonably symmetrical structure; a particularly good example of its species.

Good: No significant physiological or structural defects, and an upright and reasonably symmetrical structure.

Moderate: No significant pathological defects, but a slightly impaired physiological structure; however, not to the extent that the tree is at immediate or early risk of collapse.

Indifferent: Significant physiological or pathological defects; but these are either remediable or do not put the tree at immediate or early risk of collapse.

Poor: Significant and irremediable physiological or pathological defects, such that there may be a risk of early or premature collapse.

Hazardous: Significant and irremediable physiological or pathological defects, such that there is a risk of imminent collapse.

12. Comments.

Where appropriate comments have been made relating to:

-Health and condition

-Safety, particularly close to areas of public access

-Structure and form

-Estimated life expectancy or potential

13. Category.

Based on the British Standard "Trees in relation to design, demolition and construction - Recommendations", BS 5837: 2012, Table 1, adjusted to give a greater weighting to trees that contribute to the character and appearance of the local landscape, to amenity, or to biodiversity.

Category U: Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category 'U' trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning).

- Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.

- Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality.

Category A: Trees of high quality with an estimated remaining life expectancy of at least 40 years.

(1) Trees that are particularly good examples of their species, especially if rare or unusual.

(2) Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.

(3) Trees, groups or woodlands of significant conservation, historical, commemorative or other value.

Category B: Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

(1) Trees that might be included in category 'A', but are downgraded because of impaired condition (e.g. presence of significant though remediable defects including unsympathetic past management and minor storm damage) such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category 'A' designation.

(2) Trees present in numbers, usually growing as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals; or trees present in numbers but situated so as to make little visual contribution to the wider locality.

(3) Trees with material conservation or other cultural value.

Category C: Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

(1) Unremarkable trees of very limited merit or of such impaired condition that they do not qualify in higher categories.

(2) Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary landscape benefits.

(3) Trees with no material limited conservation or other cultural value.

TREE SURVEY SCHEDULE
Arborfield Parcel S, Wokingham, Berkshire

No.	TPO no.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
36		Turkey oak	22.5m	755mm	8.6m N 8.9m E 7m S 8.4m W	2m	2.5m	Mature	Average	Moderate	Single trunk; specimen of good form; bud density appears normal; growing in a prominent location; of high quality and moderate landscape value; of long-term potential.	B (1)
37	T6 1445/2 012	Common lime	8.2m	370mm (over ivy)	4m	1.9m	1.7m	Semi-mature	Average	Moderate	Single trunk; ivy-covered; bud density appears normal; of moderate quality and of medium-term potential; of moderate landscape value.	B (2)
38		Apple	2.3m	310mm (over ivy)	0m	0m	0m	Mature	Dead	Dead	Tree no longer present; 2.3m stump remains.	U
40	T7 1445/2 012	Common lime	10.5m	440mm (over ivy)	5.5m N 5.5m E 6m S 5m W	2.5m S	2.5m	Semi-mature	Average	Moderate	Single trunk; ivy-covered; bud density appears normal; of moderate quality and landscape value; of long-term potential.	B (12)
41		English oak	8.5m	230mm	3m N 1m E 4.5m S 4m W	2m N	1.5m N	Semi-mature	Average	Indifferent	Commemorative plaque at base which reads "presented to Hazebrouck Officers Mess by Coronel J E Le Quesne Commandant School of Electronic Engineering, November 1985 to December 1987" Slightly leaning trunk; asymmetrical crown; of moderate quality and cultural value; but of low landscape value; of long-term potential.	C (13)
42	T8 1445/2 012	Common lime	10.5m	est. 350mm	5.5m N 6m NE 5m E 5.5m S 6m W	3m NE	2m	Semi-mature	Average	Moderate	Single trunk; enveloped in basal shoot growth; bud density appears normal; of moderate quality and landscape value; of long-term potential.	B (12)
49		Flowering cherry	6.5m	255mm	5m N 3m E 5m SE 4m S 3m W	1.5m SW	2m S	Semi-mature	Average	Moderate	Small ornamental tree; specimen of good form; of moderate quality and of medium-term potential; but of low landscape value.	C (1)

No.	TPO no.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
50	T29 1445/2 012	English oak	18.4m	560mm	5.9m N 7.8m E 7m S 6.2m W	3m	1m	Mature	Average	Moderate	Single trunk; bud density appears normal; shoot extension growth appears normal; growing in a prominent location; of moderate quality and landscape value; of long-term potential.	B (12)
51		Flowering cherry	13m	170mm	3m N 5m E 2m S 2m W	4.5m E	3m S	Young	Average	Poor	Drawn-up specimen with height/diameter ratio greater than 50: at risk of failure if companion shelter removed; specimen of poor form; of low quality, of low landscape value, but of medium-term potential.	C (123)
52		Silver birch	19m	370mm (over ivy)	4.7m N 4.6m E 1.9m S 2.5m W	3m	2m	Mature	Average	Indifferent	Drawn-up specimen with height/diameter ratio greater than 50: at risk of failure if companion shelter removed; bud density appears normal; shoot extension growth appears normal; of low quality; of moderate landscape value; of medium-term potential.	C (1)
53		Flowering cherry	6.5m	290mm	5.5m N 2m E 6.5m S 4m W	2m E	3m S	Semi-mature	Average	Indifferent	Ornamental tree; crown has been heavily reduced or "topped" in past; of moderate quality and of medium-term potential; but of low landscape value.	C (1)
54		Flowering cherry	5.5m	305mm (over ivy)	2.8m N 6.2m E 3.9m S 2.9m W	1.8m	1.5m	Mature	Average	Indifferent	Crown has been heavily reduced or "topped" in past; asymmetrical crown as suppressed by adjacent specimens; of moderate quality and of medium-term potential; but of low landscape value.	C (1)
55		Goat willow	14m	610mm 420mm	8m N 4.7m E 5.9m S 4.6m W	1.5m	0.5m	Mature	Average	Indifferent	Twin stemmed from 0.5m with dominant stem dividing further at 1m with tight compression fork and evidence of included bark; cankerous growths noted throughout entire crown; specimen growing adjacent to the car park in front of the HQ of the Arborfield Garrison (Moat House); of low quality; of moderate landscape value; of medium-term potential.	C (2)
56	A2 1445/2 012	Sweet chestnut	21.1m	695mm 770mm	3.9m N 7.1m E 6.8m S 3.8m W	3m	0.5m	Mature	Average	indifferent	Twin-stemmed from 1m showing acute union with evidence of incipient included bark but no bark to bark contact; mechanical wounding on trunk occluding well; above average dead wood in crown; asymmetrical crown as suppressed by adjacent specimens; growing in a prominent location; of moderate quality and landscape value; of long-term potential.	B (12)

No.	TPO no.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
57	A2 1445/2 012	Sycamore	8m	370mm	5m N 1.5m E 2m S 5m W	3m W	3m W	Semi-mature	Below average	Poor	Specimen has lost its top at 8m above ground level with significant die back and wood degradation; crown heavily suppressed by adjacent tree; should be removed for sound arboricultural management reasons; of low quality, of low landscape value, and of little potential.	U
58	A2 1445/2 012	Sycamore	22.6m	1175mm	8.9m N 6.2m E 8.7m S 6.7m W	4m	2m	Mature	Average	indifferent	Large specimen; cavity at base on NW side; area of standing water in between buttresses and cavity; small cavity opening measuring 150mm across by 470mm in height; can be probed to 180mm inwards with obvious signs of wood decay and wood degradation, cavity can be probed upwards to beyond reach; no distinct differences in tone; localised decay; single large girthed trunk to 2.5m dividing into three co-dominant stems of equal size; tight compression forks and a significant amount of included bark extending from the union downwards to up to 1m on the W side and from the union downwards for 2m; relatively small crown for a tree of this age and size with some evidence of pruning works; shoot extension growth appears slightly below average; of low quality; of moderate landscape value; of medium-term potential.	B (2)
101	T5 1445/2 012	Common lime	8m	220mm	3.5m N 3.5m E 3m S 2m W	3m N	3m	Semi-mature	Average	Indifferent	Single trunk; small branch over car park on N side at 2.5m with weak fork with included bark; of moderate quality and landscape value; of long-term potential.	B (12)
102	T4 1445/2 012	English oak	22.3m	1175mm	6.7m N 6.1m E 7.9m S 5.3m W	3m	1.5m	Mature	Average	Moderate	Twin stemmed at 4m; <i>Ganoderma sp.</i> brackets noted near base in 2015 survey, bracket no longer present, however, fungal hyphae likely colonise internal wood; slight variation in tone when sounded with acoustic hammer noted, but not considered to be detrimental to the overall structure of tree; woodpecker hole on main scaffold branch on E side of tree at 9m; of moderate quality and high landscape value; of long-term potential.	B (2)
103	T3 1445/2 012	Common lime	9.3m	345mm	4.2m N 4.7m E 3.6m S 4m W	2m	1.7m	Semi-mature	Average	Moderate	Single trunk; located at road junction; visible from road; of moderate quality and landscape value; of long-term potential.	B (12)

No.	TPO no.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
104		Flowering cherry	9m	340mm (over ivy)	3.5m N 4m E 3.5m S 4m W	2m NE	2.5m	Semi-mature	Average	Indifferent	Moderate ivy cover; twin stemmed at 2.5m; visible from road; of moderate quality and landscape value; of medium-term potential.	B (12)
105	T2 1445/2 012	Turkey oak	17.4m	525mm (over ivy estimate)	4m N 7.1m E 8.4m S 8.5m W	2.5m	2m	Mature	Average	Moderate	Single trunk; visible from road; heavy ivy coverage; of moderate quality and landscape value; of long-term potential.	B (12)
106		Common lime	10m	305mm	4m N 4m E 4.5m S 4m W	1.5m W	1m	Semi-mature	Average	Moderate	Single trunk; visible from road; of moderate quality and landscape value; of long-term potential.	B (12)
107		Goat willow	13.8m	2 stems @ 550mm 540mm 440mm 570mm (all over ivy)	5.8m N 9m E 8.6m S 8.3m W	1.5m	1m	Mature	Average	Poor	Multi stemmed at base with tight compression forks; evidence of included bark; cracking/separation between unions at base of W co-dominant leader at crown break, failure likely and could be imminent; visible from road; of low quality; of moderate landscape value; of medium-term potential.	C (2)
184	T12 1445/2 012	Copper beech	24m	910mm	7m N 6m E 5.5m S 7m W	6m S	6m	Mature	Average	Indifferent	Twin stemmed from approx. 3m however union obscured with ivy, a tight compression fork, unable to identify if included bark is present; specimen growing to S of Moat House restricted in some views from surrounding public places, however readily visible in views from S from adjacent residential properties; of moderate quality and landscape value; of long-term potential.	B (12)

No.	TPO no.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
185	T10 1445/2 012	English oak	25.1m	1710mm	12.4m N 10.8m NE 12.8m E 11.6m SE 10.5m S 12.3m SW 8.1m W 11.8m NW	4	0.2	Veteran	Average	Moderate	Prominent buttressing with cavities noted at buttress clefts, decay pattern consistent with 'Eiffel Tower fungus' (<i>Inonotus dryadeus</i>) but no fruiting bodies present at time of survey; significant animal burrowing between buttresses with burrows coalesced in centre; heartwood internally exposed with evidence of extensive hollowing, however, remaining sound wood is substantial and hollowing is of no major significance to structure of tree; single trunk with severed ivy up to 2m, rest of crown dead ivy covered; well formed tensile main unions and tensile unions throughout rest of crown; established epicormic growth on lower and mid trunk; some dieback in upper crown showing signs of retrenchment, storm damage and crown reduction works noted throughout; a significant arboricultural feature in this section of the site being readily visible from the surrounding public places and residential properties that lie to SW and N; of moderate quality and cultural value; of high landscape value and of long-term potential.	A (2)
G007		Goat willow	5m	Up to 350mm	10m	0.5m	0m	Mature	Low	Poor	Failed and laying on ground with other specimens damaged significantly by failure.	C (1)
G008	A2 1445/2 012	Various	Up to 5m	Up to 300mm (over ivy estimate)	5.1m	1m	0.1m	Mature	Average	Indifferent	Species include cherry laurel, sycamore, silver birch and English oak; 10 individuals; mass of cherry laurel backed by young self seeded birch oak and sycamore; crossing and rubbing branches throughout structures; no significant defects observed; visible from Princess Marina Drive and Buttenshaw Avenue; contributes to boundary screening; inessential component of the landscape.	C (12)

Root Protection Areas (RPAs)

Root Protection Areas have been calculated in accordance with paragraph 4.6.1 of the British Standard 'Trees in relation to design, demolition and construction – Recommendations', BS 5837: 2012. This is the minimum area which should be left undisturbed around each retained tree. RPAs are portrayed initially as a circle of a fixed radius from the centre of the trunk; but where there appear to be restrictions to root growth the circle is modified to reflect more accurately the likely distribution of roots.

<i>Tree No.</i>	<i>Species</i>	<i>RPA</i>	<i>RPA Radius</i>
36	Turkey oak	257.9m ²	9.1m
37	Common lime	61.9m ²	4.4m
38	Apple	43.5m ²	3.72m
40	Common lime	87.6m ²	5.28m
41	English oak	23.9m ²	2.76m
42	Common lime	55.4m ²	4.2m
49	Flowering cherry	29.4m ²	3.06m
50	English oak	141.9m ²	6.7m
51	Flowering cherry	13.1m ²	2.04m
52	Silver birch	61.9m ²	4.4m
53	Flowering cherry	38.0m ²	3.48m
54	Flowering cherry	42.1m ²	3.7m
55	Goat willow	248.1m ²	8.9m
56	Sweet chestnut	486.7m ²	12.4m
57	Sycamore	61.9m ²	4.44m
58	Sycamore	593.1m ²	13.7m
101	Common lime	21.9m ²	2.64m
102	English oak	624.6m ²	14.1m
103	Common lime	53.8m ²	4.1m
104	Flowering cherry	52.3m ²	4.08m
105	Turkey oak	124.7m ²	6.3m
106	Common lime	42.1m ²	3.66m
107	Goat willow	640.2m ²	14.3m
184	Copper beech	374.6m ²	10.92m
185	English oak	706.9m ²	15.0m
G007	Goat willow	55.4m ²	4.2m
G008	Various	40.7m ²	3.6m

APPENDIX 4

Tree Protection Plan

Impact	No. of Trees
Trees to be removed	0
Groups of trees to be removed	0
TPO trees to be removed	0
Trees to be pruned	3
Trees where manual excavation needed within RPAs	0
Trees where above soil surfacing needed within RPAs	0
Trees with proposed underground services within RPAs	0

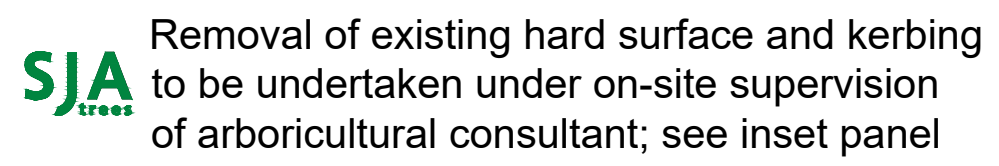
No.	Species	Works (Outline only)
36	Turkey oak	Crown lift north canopy over access road to 4.5m above ground level
37	Common lime	Crown lift to 3m above ground level
40	Common lime	Crown lift to 3m above ground level
42	Common lime	Crown lift to 3m above ground level
44	English oak	Crown lift to 2.5m above ground level
50	English oak	Crown lift south canopy to 4.5m above ground level
56	Sweet chestnut	Crown lift south canopy to 4.5m above ground level
103	Common lime	Crown lift to 3m above ground level
104	Flowering cherry	Crown lift to 3m above ground level
105	Turkey oak	Crown lift to 3m above ground level
107	Gost Willow	Reduce west canopy back to boundary

Pruning it to be undertaken in accordance with the British Standard Recommendations for Tree work BS3998: 2010

Climbing onrs or spikes are not to be used whilst pruning trees.

Trees that require supervised demolition within RPAs		
No.	Species	Type of structure / surface
49	Flowering cherry	Proposed removal of parking area and reinstatement of soft landscape
101	Common lime	Proposed removal of parking area and reinstatement of soft landscape
102	English oak	Proposed removal of parking area and reinstatement of soft landscape
103	Common lime	Proposed removal of parking area and reinstatement of soft landscape
104	Flowering cherry	Proposed removal of parking area and reinstatement of soft landscape
105	Turkey oak	Proposed removal of parking area and reinstatement of soft landscape
106	Common lime	Proposed removal of parking area and reinstatement of soft landscape
107	Goat willow	Proposed removal of parking area and reinstatement of soft landscape

An aerial photograph showing a coastal area. A large grey building with a blue outline is visible. A red rectangle is marked on the ground. A scale bar indicates 0 to 4 metres.



BUTTENSHAW AVENUE

SJA trees
Area of existing hard surfacing to be retained as proposed carparking area for Moat House apartments

SJA trees
Trees to be pruned to specification in inset panel

SJA trees Edge of canopy following pruning

SCHEDULED ANCIENT MONUMENT

SJA TPO area boundary
trees

SJA trees
Shallow excavation of the yellow hatched areas within the parking bays to be undertaken manually under on-site supervision of arboricultural consultant

SJA trees Moat House application boundary

SJA trees
Protective fencing as per BS5837; see inset panel

Manual Excavation

The excavation for proposed parking bays within the RPAs of trees nos. 55, 56 and 107 shall be undertaken by hand under arboricultural supervision. The soil will be loosened with a pick or fork, and then will be removed by means of a shovel. The roots of the trees will be cut cleanly with a hand saw or secateurs. The edge of the excavation closest to the trees will be covered with hessian sacking to prevent drying out.

The proposed replacement kerbs and hard surface RPAs of trees nos. 50, 51, 53, 54, 55, 56 and 107 will be supervised by an arboricultural consultant and replacement kerbs/surfaces shall be installed to ensure that the stability of any existing surface is not replaced, so that the soil is not disturbed and no roots are severed.

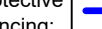
Supervised demolition

Within root protection areas (RPAs) existing kerb stones and surface shall be removed with care, under the direct supervision of the arboricultural consultant. Surfaces will be broken up with hand-held breakers, and then removed by hand, wheelbarrow, or in the bucket of an excavator standing outside the RPA. At the discretion of the arboricultural consultant, an excavator positioned outside the RPA and using an appropriately sized toothless bucket may be used in some instances. Once completed, the base of the excavation and/or the edge closest to the trees will be covered immediately with hessian sacking to prevent drying out of the soil, and where necessary be shuttered to prevent soil collapse.

h oak

CONE OF LIGHT

OUTLINE OF PAPER

 ARBORESCENT PLANNING CONSULTANTS	
Project:	Arboretfield, Moat House - Parcel S
Client:	Crest Nicholson Chiltern
Drawing:	TREE PROTECTION PLAN
Drawing no:	SJA TPP 24/234-041a
Based on:	24-J633-SK02
Drawn by:	ETJ/GF/JTES
Date of issue:	August 2024
Scale:	1: 250 @ A1
Checked by:	NHK
Tel: (01737) 813058	sja@satrees.co.uk
Tree nos. ● 107 ● [38]	Canopies of trees to be retained 
Category 'A' RPA: 	Category 'C' RPA: 
Indicative pruning line: 	Protective fencing: 
Supervised demolition: 	Veteran pruning: 
For further information refer to the SAfrees Tree Survey Schedule Do not scale from this drawing; please check all dimensions on site, and notify us of any discrepancies. SAfrees (the trading name of Simon Jones Associates Ltd) cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based. © Simon Jones Associates Ltd 2024 This drawing is copyright and may not be used or changed without the written consent of SAfrees. This drawing is based on the proposed layout plan shown and referred to above. SAfrees authorities is reproduced, without amendment, by the Local Planning Authority (LPA), and to its possession on the LPA website, to assist in consideration of this application. This drawing is designed to reflect only the principles of layout and for design insofar as these relate to the protection of trees to be retained, and should NOT be read as a definitive engineering or construction method statement. Reference should be made to the architect or structural engineer, as appropriate, over any matters of construction detail or specification, or any engineering standards or regulatory requirements relating to proposed structures, hard surfaces or underground services.	