

Former Stag Brewery, Mortlake, Hybrid Planning Application (22/0900/OUT) & Detailed Application School (22/0902/FUL)

Briefing Note – Response to Consultee Comments on Arboriculture

Date: 27th July 2022

Client Name: Reselton Properties Limited

Document Reference: WIE18671-114-BN-3.4.1-Arboriculture Response

This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

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Introduction

- 1.1. Comments have been received on 27 May 2022 from statutory consultees and internal consultees at the London Borough of Richmond upon Thames (LBRuT) on the Outline Planning Application (Application A - planning ref. 22/0900/OUT) and the Detailed Planning Application for the School (Application B - planning ref. 22/0902/FUL) at the former Stag Brewery site. This Briefing Note provides a response to those comments received pertaining to Trees; namely:
 - Application A: 22/0900/OUT 7. Trees
 - Application B: 22/0902/FUL 6. Trees
- 1.2. The internal consultees from LBRuT have made a number of requests for further information and have recommended heads-of-terms for tree related planning conditions. These will be responded to in turn. The majority of these items are the same for both Applications A and B. This Briefing Note will respond to those actions in the order that they are presented in the 'Stag Consultee Response Document'. As such, the consultee responses to Application A will be dealt with first,

and responses will only be made to the consultee responses to Application B where they differ from those received for Application A.

2. Application A: 22/0900/OUT Internal Consultees – 7. Trees

- 2.1. The LBRuT's internal consultees have made a number of requests for further information and recommended conditions as follows.

CAVAT

LBRuT Consultee Response

"The LPA will require a tree-by-tree "Full" CAVAT valuation (Including the calculation methodology for each tree), to be included for each tree in the tree survey and undertaken by an Arboriculturist experienced in using the method. This is to ensure that any loss of amenity from tree removals is, as a minimum, commensurate with the value of the new tree planting proposals. Individual CAVAT valuation will be an integral part of ensuring that all retained trees, both within and adjacent to the site, will receive appropriate protection during the preparation, demolition, construction and conclusion phases of a long and complex project.

This is to include the 3x Local Authority Street trees flagged for removal (T107, T152 & T333), who's CAVAT valuation will be used to secure remuneration for off-site replacement tree planting in the public realm via a section 106 payment."

Waterman Infrastructure and Environment Limited (WIE) Response

- 2.2. Policy LP 16 (Trees, Woodlands and Landscape) of the LBRuT Local Plan (July 2018) states that when assessing development proposals, the Council will "require, where practicable, an appropriate replacement for any tree that is felled; a financial contribution to the provision for an off-site tree in line with the monetary value of the existing tree to be felled will be required in line with the 'Capital Asset Value for Amenity Trees' (CAVAT)". The notes within the Local Plan which provide further details on this state that "An appropriate replacement for any tree that is felled will be required on-site where practicable. Where this is not possible, the Council will require a financial contribution to provide an off-site street tree".
- 2.3. From the above points it is clear that a CAVAT valuation is only required where 'appropriate replacements' cannot be planted on-site. Whilst the Local Plan does not define what an 'appropriate replacement' is, the proposed scheme will result in the loss of 50No. existing trees, whilst up to 404No. new trees will be planted. This represents a replacement ratio of 8:1 which is felt to represent 'appropriate replacements and is above the level of replacement planting proposed in a sample of other approved Major Applications in the LBRuT.

Table 1 LBRuT Approved Major Planning Applications with Proposed Tree Replacement Ratio

LBRuT Planning Ref	Name	Ratio of Proposed Trees to Removed Trees
21/2533/FUL	Elleray Hall Site North Lane Depot And East Car Park Middle Lane Teddington	1:1
21/0156/FUL	Milevale Properties Ltd 672 Hanworth Road Whitton Hounslow	0:3
21/0094/FUL	Twickenham Film Studios	0:2 (although CAVAT value of trees secured through S106 agreement for off-site planting)
19/0111/FUL	12 To 14 Station Road And 13 And 19 To 33 Lower Teddington Road Hampton Wick	1:1 (approximately)

- 2.4. As such, it is not felt that there is justification in providing a CAVAT valuation of all existing trees.
- 2.5. With regards to the second point, the LPA already has a number of mechanisms to control the removal of trees across the Site, either through Tree Preservation Orders or planning controls (such as the need to submit and work to an approved Arboricultural Method Statement). Furthermore, it is assumed that the planning conditions associated with any approved application will require that any tree which dies within the first five years post completion of the development will be replaced.
- 2.6. Providing a CAVAT value (and subsequent remuneration) for the off-site trees to be removed would be in accordance with the recommended 'Heads of Terms' for the S106 agreement proposed in the Committee Report for the original planning application. This is considered to be a reasonable request, as unlike other trees to be removed as a result of the Development, these are in the ownership of LBRuT and as such a reasonable level of compensation should be provided to facilitate off-site tree planting. To comply with Policy LP16 the level of compensation should be derived from the CAVAT value of the trees.
- 2.7. In the previous Committee Report (dated January 2020) it was recommended that a "CAVAT contribution of £91,935 to compensate for the loss of existing trees on the highway" be secured. Given the withdrawal of Application C, there are now only 5No. off-site trees to be removed (T59, T60, T107, T152 and T333). T59 and T60 are to be removed due to the impact of the proposed Development, whilst T107, T152 and T333 are to be removed as a result of the S278 works.
- 2.8. The CAVAT value of the 5No. offsite trees is as follows:
- T59 £5,380
 - T60 £1,471
 - T107 £17,483
 - T152 £1,207
 - T333 £7,183

Mortlake Green Access

LBRuT Consultee Response

"Page 14 of the "Landscape Design and Access Statement, Rev 01 dated March 2022" states that "No trees in Mortlake Green are proposed to be affected" and that "Pavements within Tree Protection Zones of existing trees in the park will be designed and detailed to avoid deep excavation and limit impact on existing root systems". From viewing the red line boundary there are several LA owned trees, including 2x street trees (T317 & T316), whose roots could be impacted by this proposed access. Council will expect the impacts of any proposed hard surfacing to be assessed in relation to the below and above ground constraints on existing trees, including those in the park and a no-dig solution used. All trees potentially impacted by these works will require a CAVAT valuation – include in survey"

WIE Response

- 2.9. The consultee response recognises the fact that the proposed new access to Mortlake Green has the potential to impact a number of trees. It states that the *"council will expect the impacts of any proposed hard surfacing to be assessed in relation to the below and above ground constraints on existing trees, including those in the park and a no-dig solution used"*.
- 2.10. The Arboricultural Impact Assessment (AIA) submitted with the Outline Planning Application (document ref. WIE18671-102-R-6-2-1-AIA) acknowledges this and identifies the areas within the RPAs of the trees in this area as a 'Construction Working Area' (CWA). In paragraphs 8.12 to 8.19 of the AIA, details are provided as to what actions can or cannot be undertaken within the RPAs of the retained trees this includes the following actions which must be avoided:
- Compaction of the ground;
 - Any change in soil levels (even if temporary), including ground excavation and soil stripping;
 - Covering the root zone with impervious surfaces;
 - A rise in the water table level or ground saturation; and
 - Damage by the direct toxicity of some materials (e.g. petrol, oil and lime in cement can kill underlying roots).
- 2.11. In Paragraph 8.1, it also states that *"all demolition and construction works affecting the CWA (which may include removal of existing hard surfacing, construction of new soft/hard landscape, access for piling activities and / or remediation activities (see paragraph 3.25 below)) would be carefully planned and executed via a Site specific Arboricultural Method Statement (AMS), secured via Planning Condition"*.
- 2.12. As the AIA will form part of any planning approval for the Development, the measures detailed above are considered to be sufficient to provide the Council with sufficient powers to enforce all necessary tree protection measures subject to the submission of suitable AMS secured through planning conditions.

- 2.13. Securing tree protection measures through the production of an AMS is in accordance with draft condition **NS27** proposed in the previous LBRuT Committee Report (dated January 2020) for Application A and which states that “*unless otherwise agreed in writing by the Local Planning Authority, no development shall take place until an Arboricultural Method Statement (AMS), has been submitted to and approved in writing by the Local Planning Authority*”, and draft condition **NS28** for Application B which states “*Prior to the commencement of development, an Arboricultural Method Statement (AMS), shall be submitted to and approved in writing by the Local Planning Authority;*.”
- 2.14. The consultee response also states that all trees “*potentially impacted by these works will require a CAVAT valuation*”. Again, for the reasons set out in paragraphs 3.2 to 3.6 of this document, this is not considered to be appropriate.

Tree Root Protection Areas (RPA) – update and provide existing site conditions.

LBRuT Consultee Response

“When illustrating the RPA of any tree, both on and adjacent to the site, BS5837 (Trees in relation to design, demolition and construction - Recommendations: 2012) Section 4.6.2. specifies the following;

- Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based Arboricultural assessment of likely root distribution.”*
- These modifications are to account for and include but not be limited to “The morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures and underground apparatus)”*
- RPA's in submitted Tree Constraint Plans (TCP) and Tree Protection Plans (TPP) must be calculated and modified to account for asymmetric root development in the proximity of existing structures and hard surfacing as part of the full application”*

WIE Response

- 2.15. The consultee response acknowledges that Section 4.6.2 of BS5837:2012 -Trees in relation to design, demolition and construction – Recommendations states that “*Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based Arboricultural assessment of likely root distribution.*”
- 2.16. The consultee then goes on to request that the RPAs shown on the Tree Constraints Plan (TCP) and the Tree Protection Plan (TPP) “*must be calculated and modified to account for asymmetric root development in the proximity of existing structures and hard surfacing as part of the full application.*”
- 2.17. BS5837:2012 provides recommendations only. During the design development, the Arboricultural Consultant reviewed the impact of the proposed development on a tree-by-tree basis, and it was not considered that plotting the RPAs as polygons would provide any further protection for the

trees. For example, as shown in **Figure 1**, in the case of trees T70 to T82 along Lower Richmond Road, it could be argued that their RPAs should be off set to acknowledge the barrier to root growth created by the road to the south (it is assumed that roots are still likely to develop below the pavement). Therefore, this would extend the RPAs further to the north, however this would have no impact on the development proposals.

Figure 1 Excerpt from Tree Protection Plan



- 2.18. On this basis, it is considered that in this instance, plotting the RPAs as circles is a robust approach to follow and in accordance with the recommendations made in BS5837.

Shading

LBRuT Consultee Response

“The impact of shading needs to be assessed and incorporated as part of the submitted Arboricultural documentation. There is also an increased risk that such shading will lead to an increase in post-development pressure on affected trees for their eventual removal. It must be stipulated that any such future requests for tree removal for these reasons will be resisted as per the Councils Local plan and tree policy.”

WIE Response

- 2.19. All trees cast shade and BS5837 states that shade can affect both buildings and open spaces.
- **Shading of buildings.** Shading of buildings by trees can be a problem, particularly where there are rooms which require natural light. Proposed buildings should be designed to take account of existing trees, their ultimate size and density of foliage, and the effect that these will have on the availability of light.
 - **Shading of open spaces.** Open spaces such as gardens and sitting areas should be designed to meet the normal requirement for direct sunlight for at least a part of the day.
- 2.20. However, shading can also be desirable to reduce glare or excessive solar heating, or to provide for comfort during hot weather. The combination of shading, wind speed/turbulence reduction and evapo-transpiration effects of trees can be utilized in conjunction with the design of buildings and spaces to provide local microclimatic benefits such as summer cooling and winter shelter.
- 2.21. Shading can be of particular concern where buildings and open spaces are to be sited immediately to the north of large mature trees or dense groups of trees. Positioning residential gardens immediately to the east of large trees can also result in dense shade being cast in the early evening at the time when the gardens are most likely to be occupied.
- 2.22. The majority of the retained trees are either to the north of the proposed Development, and therefore the shade these trees cast is unlikely to be significant (where shading is likely to be a significant constraint, BS5837:2012 recommends that a shading arc for should be plotted on the Tree Constraints Plan, but that this should be plotted to the north of the trees as shading to the south of the trees is not considered likely to be a significant constraint).
- 2.23. Where trees are in close proximity to the proposed buildings, it is considered that this is acceptable for the following reasons:
- As deciduous trees, they will provide shade and cooling to any affected flats in the summer when most needed, but will allow light, and therefore have a heating affect in the winter.
 - There are examples nearby of trees being closer to residential properties where there appears to be a harmonious relationship between the trees and the dwellings.
 - As protected trees, the council will have control over any management works requested for these trees.
- 2.24. In light of the above, shading has been considered within the design of the Development.

Lighting Provision

LBRuT Consultee Response

"Proposed Site Wide Landscape GA Plan Ref: P10736-00-004-GIL0101, dated 11/03/2022" that there are numerous, potential conflicts between lighting positioning in relation to newly planted trees, with some lighting columns being positioned either adjacent to or within the plotted canopies of proposed trees. The positioning and design of lighting in relation to proposed and existing trees needs to be carefully considered regarding potential obstructions, with particular attention given to the requirement for increased management and maintenance of these trees as they grow. Potential

obstructions need to be highlighted and alternative lighting positions submitted and agreed by the LPA in cases where such conflicts are identified. – construction within root zones / services / canopy / illumination.”

WIE Response

- 2.25. Working with Michael Grub Studio (the scheme’s lighting design practice), Gillespies LLP (the scheme’s landscape architects) have updated the *Proposed Site Wide Landscape GA Plan Ref: P10736-00-004-GIL0101* to remove conflicts between proposed trees and lighting columns.

Hard Surfacing and Footpaths

- 2.26. The consultee response states that *“areas of hard surfacing areas within the RPA of retained trees must use a permanent no-dig solution (ie. Cellweb), not just as protection measures during the demolition and construction phase, but also potential temporary access route to Mortlake Green. Further details of design, detail, cross sections are required”*.
- 2.27. Areas where new hard surfaces and replacement of existing hard surfaces are proposed within the RPAs of retained trees, have been identified in AIA as Construction Working Areas (CWA). As stated in paragraphs 2.10 to 2.13 of this document, the AIA has been written in such a way, so as to require details of these elements to be submitted to and approved by LBRuT through the submission of an AMS which will be secured through conditions).

Tree Protection

LBRuT Consultee Response

Section 8.13 of the report states "Tree protection should generally accord with the recommendations contained within BS5837:2012". Replace the words "Generally" and "Should" with "Will", unless otherwise previously agreed in writing with the local planning authority”.

WIE Response

- 2.28. This point is accepted, and the report will be updated accordingly.

Recommended Conditions

- 2.29. The Consultee recommended the following conditions:
- Tree planting - further information / detail
 - Foundation design - details of foundation design and methodology for installation and construction that does not deleteriously impact nearby trees.
 - Underground services - Impact on the roots of retained trees properly assessed. Where a conflict is identified, a methodology of installation that avoids damage to tree roots must be submitted to the LPA for approval.
 - Tree protection

- 2.30. The consultee response lists the headings of a number of recommended conditions. The first one (Tree Planting – further information / detail) relates to the landscape proposals for the Development and is therefore not covered by this Briefing Note.
- 2.31. The remaining three recommended conditions are those that would be required to secure an AMS and as such are considered appropriate, subject to suitable wording.

3. Application B: 22/0902/FUL Internal Consultees - 6. Trees

- 3.1. As previously stated, the majority of consultee responses to this application are the same as those for the '22/0900/OUT Internal Consultees – 7. Trees', and are therefore not reconsidered in this section of this Briefing Note.
- 3.2. The Consultee Responses which have been previously considered are:
 - CAVAT Valuation (paragraphs 2.1 to 2.8)
 - Tree Root Protection Areas (paragraphs 2.9 to 2.14)
 - Shading (paragraphs 2.19 to 2.24)
 - Lighting Provision (paragraph 2.25)
 - Hard Surfaces and Footpaths (paragraph 2.27)
 - Recommended Conditions (paragraphs 2.29 to 2.31)
- 3.3. The following is the only additional consultee response associated with this application.

Tree Loss

Consultee Response

“Concerns around the future of T83-86 and T68 should be considered as part of a more detailed design that can be secured through the production of an Arboricultural Method Statement.”

WIE Response

- 3.4. The consultee response raises concerns over the future of trees T83 to T86 and T68 and recommends that the impacts of the Development on these trees should be assessed, and any tree protection measures required specified through an AMS secured through planning conditions.
- 3.5. This comment is accepted with the exception of noting that T68 is identified in the AIA as being removed due to its proximity to the proposed paving around the sports pitch.