GHA Trees 5 South Drive High Wycombe Bucks HP13 6JU



Glen Harding MICFor MSc (Forestry), MArborA t: 07884 056025 e: info@ghatrees.co.uk www.ghatrees.co.uk

## BS5837:2012 TREE SURVEY AND ARBORICULTURAL IMPACT ASSESSMENT: 1 Surley Walk, Windsor, Berkshire

Dated: 11th March 2024

Our reference: GHA/DS/222160:24





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#### **Arboricultural Impact Assessment**

Location: 1 Surley Walk, Windsor, Berkshire

Our reference: GHA/DS/222160:24

Client: WAM

Dated: 8th March 2024

Prepared by: Glen Harding MICFor, MSc (Forestry), MArborA

Date of Inspection: 11th March 2024

#### **Instructions**

Issued by -WAM

TERMS OF REFERENCE –GHA Trees were instructed to survey the subject trees within and adjacent to 1 Surley Walk, Windsor, Berkshire, in order to assess their general condition and to provide a planning integration statement for the indicative proposed development that safeguards the long term wellbeing of the retained trees in a sustainable manner.

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#### **Executive Summary**

The proposal for the site is to construct a new extension to the side (south) of the existing house. The proposed scheme does not require the removal or pruning of any of the trees on site, or of trees within nearby adjacent sites; therefore, the landscape character of the site will be unaffected by the proposal. The retained trees require protection in accordance with industry best practice and BS 5837: 2012 –Trees in relation to design, demolition and construction – recommendations, in order to ensure their longevity.

#### **Documents Supplied**

The client supplied the following documents:

- Topographical survey
- Existing layout plans
- Proposed layout plans

#### Scope of Survey

- 1.1 The survey is concerned with the arboricultural aspects of the site only.
- 1.2 The planning status of the subject property was not investigated in detail.
- 1.3 A qualified Arboriculturist undertook the report and site visit and the contents of this report are based on this. Whilst reference may be made to built structure or soils, these are only opinions and confirmation should be obtained from a qualified expert as required.
- 1.4 No discussions took place between the surveyor and any other party.
- 1.5 The trees were inspected on the basis of the Visual Tree Assessment method expounded by Mattheck and Breleor (The body language of tree, DoE booklet Research for Amenity Trees No. 4, 1994)
- 1.6 The survey was undertaken in accord with British Standard 5837: 2012 –Trees in relation to design, demolition and construction –recommendations.
- 1.7 The client's attention is drawn to the responsibilities under the Wildlife and Countryside Act (1981).

#### Survey Method

- 2.1 The survey was conducted from ground level with the aid of binoculars if needed.
- 2.2 No tissue samples were taken nor was any internal investigation of the subject trees undertaken.
- 2.3 No soil samples were taken.
- 2.4 The height of each subject tree was estimated using a clinometer and recorded to the nearest half metre.
- 2.5 The stem diameter for each tree was measured in line with the requirements set out in BS 5837: 2012 –Trees in relation to design, demolition and construction recommendations.

- 2.6 The crown spreads were measured with an electronic distometer and recorded to the nearest half metre. Where the crown radius was notably different in any direction this has been noted on the Plan (appendix A) and within the tree table (Appendix B). The crowns of those trees that are proposed for removal, or trees where the crown spread is deemed insignificant in relation to the proposed development are not always shown on the appended plan; however their stem locations are marked for reference.
- 2.7 The Root Protection Area (RPA) for each tree is included in the tree table, both as an area, and as the radius of a circle.
- 2.8 The crown clearance was measured using a clinometer and recorded to the nearest half metre. Where it is significantly lower in one direction, this is noted within the tree table at appendix B.
- 2.9 All of the trees that were inspected during the site visit are detailed on the plan at Appendix A; this plan was produced in colour and MUST only be scanned or reproduced in colour. The trees on this plan are categorised and shown in the following format:

#### COLOUR CODING AND RATING OF TREES:

Category A –Trees of high quality with an estimated remaining life expectancy of at least 40 years. Colour = light green crown outline on plan.

Category B –Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Colour = mid blue crown outline on plan.

Category C –Trees of low quality with an estimated remaining life expectancy of at least 10 to 20 years, or young trees with a stem diameter below 150mm. Colour = uncoloured crown outline on plan.

Category U –Those in such a condition that they cannot realisitically be retained as living trees in the context of the current land use for longer than 10 years. Colour = red crown outline on plan.

All references to tree rating are made in accordance with BS 5837: 2012 –Trees in relation to design, demolition and construction –recommendations', Table 1.

#### The Site

- 3.1 The site is located on Surley Walk, a residential road located to the west of Windsor.
- 3.2 Access to the property is currently gained via a driveway to the front (east) of the site.

#### The Subject Trees

- 4.1 The details of the subject trees are set out in the Schedule at Appendix B.
- 4.2 The overall quality of the trees is good and both of the street trees surveyed have been assessed as BS 5837 category B.

#### The Proposal

- 5.1 The proposal for the site is to construct a new extension to the side (south) of the existing house.
- 5.2 The proposed location of the above structures can be seen on the appended plan.

#### **Arboricultural Impact Assessment**

#### PROPOSED TREE REMOVAL / RETENTION:

6.1 The proposed site layout and all of its associated structures allows for the healthy retention of both of the trees on the highway verge; therefore, the arboricultural landscape character of the site will be retained.

#### TREE PRUNING TO ACCOMODATE THE PROPOSAL OR ACCESS TO THE SITE

- 6.2 The implementation of the proposal does not lead to the requirement to prune either of the retained trees.
- 6.3 There is no part of the new structure which will have tree canopies overhanging it and the building works can progress safely without the need for any facilitation pruning.

#### ASSESSMENT OF RETAINED TREES ROOT PROTECTION AREAS

6.4 Section 4.6.3 of BS 5837: 2012 states that the Root Protection Area (RPA) of each tree should be assessed by an arboriculturalist considering the likely morphology

- and disposition of the roots, when known to be influenced by past or existing site conditions.
- 6.5 The RPAs of T1 and T2 have been amended to take account of the existing road; these adjustments can be seen on the appended plan.

#### ASSESSED IMPACT ON RPAS BY PROPOSED STRUCTURES & PROPOSED MITIGATIONS

6.6 The proposed new structure is situated outside of the assessed RPAs of both of the trees; therefore, these trees pose no below ground constraints on the new structure or vice versa.

#### PROPOSED ACCESS TO THE NEW DEVELOPMENT

6.7 The existing driveway and parking areas will be retained and there are no plans to upgrade or extend these areas as part of the proposed site works.

#### **INSTALLATION OF SERVICES**

- 6.8 The full details of existing and proposed new services have not been made available at the time of writing.
- 6.9 From an assessment of the subject site, undertaken in conjunction with the project architect, the existing drainage system has been assessed as suitable for re-use and it is assumed that the electric and gas cabling is also satisfactory. Therefore, there is no reason to assume that any new service installations will be required within the RPAs of any trees.

#### Post Development Pressure

#### FUTURE TREE AND STRUCTURE RELATIONSHIPS

7.1 The retained trees are at a satisfactory distance from the proposed new building outline and highly unlikely to give rise to any inconvenience.

### <u>Tree Protection Measures and Preliminary Method Statement for Development Works</u>

#### 8.1 TREE PROTECTION BARRIERS

The position of the fence MUST be marked out with biodegradable marker paint on site and agreed with appropriate representatives from the LPA and contractor. The fencing MUST be erected prior to any works in the vicinity of the trees and removed only when all development activity is complete. The protective fencing MUST be as that shown in BS 5837 (see Appendix C). The herras panels MUST be joined together using a minimum of two anti-tamper couplers which MUST be installed so they can only be removed from the inside of the fence. The panels

MUST supported by stabilizer struts, which MUST be installed on the inside and secured to the ground using pins or appropriate weights.

The Fence must be marked with a clear sign reading:

"Construction Exclusion Zone -No Access"

#### 8.2 MIXING OF CONCRETE

All mixing of cement / concrete MUST be undertaken outside of the RPA of all of the retained trees.

#### 8.3 USE CRANES, RIGS AND BOOMS

Precautionary measures MUST be observed to avoid contact of any retained trees when manoeuvring cranes rigs or booms into position.

#### 8.4 ON SITE SUPERVISION

Regular site supervision is essential to ensure all potentially damaging activities near to trees are properly supervised. A pre start site meeting MUST occur to ensure all parties are aware of their responsibilities relating to tree protection on site; this MUST include a site induction for key personnel. After this pre start meeting, day-to-day responsibility for tree protection will be devolved to the site manager who will make contact with the retained arboriculturalist as needed.

#### 8.5 OTHER TREE PROTECTION PRECAUTIONS

NO level alterations will occur within the RPA of any tree to be retained.

NO fires lit on site within 20 metres of any tree to be retained.

NO fuels, oils or substances with will be damaging to the tree shall be spilled or poured on site.

NO storage of any materials within the root protections zone.

#### Conclusion

- 9.1 In conclusion, the principal arboricultural features within the site can be retained and adequately protected during development activities.
- 9.2 Subject to precautionary measures as detailed above, the proposal will not be injurious to trees to be retained.

#### Recommendations

- 10.1 Site supervision —An individual e.g. the Site Agent, must be nominated to be responsible for all arboricultural matters on site. This person must:
  - a. Be present on the site the majority of the time.
  - b. Be aware of the arboricultural responsibilities.

- c. Have the authority to stop any work that is, or has the potential to cause harm to any tree.
- d. Be responsible for ensuring that <u>all</u> site personnel are aware of their responsibilities towards trees on site and the consequences of the failure to observe those responsibilities.
- e. Make immediate contact with the local authority and / or retained arboriculturalist in the event of any related tree problems occurring whether actual or potential.
- 10.2 It is recommended, that to ensure a commitment from all parties to the healthy retention of the trees, that details are passed by the architect or agent to any contractors working on site, so that the practical aspects of the above precautions are included in their method statements, and financial provision made for these.

11<sup>th</sup> March 2024 Signed:



Glen Harding MICFor, MSc (Forestry), MArborA For and on behalf of GHA Trees

# Appendix A TREE PLAN (see separate PDF)

## <u>Appendix B</u> <u>TREE TABLE</u>

Tree Number	Tree Name (species)	Ht (m)	Calculated Stem Diameter (mm)	Number of Stems	Root Protection Area (Radius, m)	N (m)	E (m)	S (m)	W (m)	Age Class	Clearance (m)	Estimated life expectancy	BS Category	Comments / Recommendations
T1	Acer ssp	15	550	1	6.60	5.5	6	5	5.5	M	3	40+	A1	No significant / notable defects observed during inspection.
T2	Acer ssp	15	500	1	6.00	6	5.5	5.5	5.5	M	3	40+	A1	No significant / notable defects observed during inspection.

#### KEY:

Tree No: (T= individual tree, G= group of trees, W= woodland)

Age class: Young (Y), Middle aged (MA), Mature (M), Over mature (OM),

Veteran (V)

Height (Ht): Measured in metres +/- 1m

## <u>Appendix C</u> TREE FENCING DETAIL

BRITISH STANDARD BS 5837:2012

Figure 3 Examples of above-ground stabilizing systems



