# BS5837:2012 ARBORICULTURAL REPORT AND TREE SAFETY ISSUES, LAND AT 93 REDINGTON ROAD, NW3 7RR

**29 April 2022**

## Clients: Elena Dembovskaya and Lutfi Vala


UNDERTAKEN BY

**Alan Engley**

**M.Arb. (R.F.S), F.Arbor.A. MCI.Hort. M.I.C.For. RCArborA**
**Registered Consultant of the Arboricultural Association and Chartered Forester**
**Telephone: 01225 851200**
**Guidott House, 205 Bailbrook Lane, Bath BA1 7AB**
**Email: alan@engleytrees.co.uk**
**www.engleytrees.co.uk**

# CONTENTS

**BS5837:2012 ARBORICULTURAL REPORT AND TREE SAFETY ISSUES, LAND AT 93 REDINGTON ROAD, NW3 7RR**

**Date: 28 April 2022**

**Clients: Elena Dembovskaya and Lutfi Vala**

## 1. Summary

1.1 This report is intended to support development proposals at the above by providing updated BS [1]5837:2012 arboricultural information and guidance to prevent harm to retained trees. I have made recommendations based on health and safety grounds for the trees located at the front of the dwelling, where they line the highway. The inspected trees and proposed development are annotated on the Arkluta drawing no 21-RR-01P.

1.2 The enclosed drawing AJE/AF/29230 RevA April 2022, *'Tree Protection & Constraints, General Tree Safety measures and approximated Tree Planting Positions Plan'; (TPP)* shows the BS: 5837 tree categorisations, heights, crown radial spreads, Root Protection Areas *(RPAs)* and proposed tree planting positions.

1.3 The trees grow within a Conservation Area and therefore protected by Section 2.11 of the Town and Country Planning Act 1990; they may be protected by a Tree Preservation Order, which should be confirmed by contacting the local planning authority.

## 2. Site Inspection Date

2.1 Site Inspection Date – 15 October 2021
Weather – Fine Visibility – good, dry underfoot

## 3. Instruction/Scope/Limitations

3.1 I have been instructed by the clients to produce an arboricultural report for the purposes of providing pre development information the Council will normally require, conforming to BS 5837 Tree Categorisations and Tree Protection. I am to provide a Standalone Arboricultural Method Statement *(AMS)* **(Appendix 1)** occasionally used as a Condition attached to permitted development. I am to report on the health and safety of the roadside trees, assess the potential loss of visual amenity and recommend mitigation tree planting all as necessary, to enhance this part of the conservation area.

3.2 With reference to the attached TPP, note my canopy radial spreads and height dimensions are by tape and clinometer or estimated. Unless otherwise shown, they are guided by the supplied topographical survey.

3.3 All my tree dimensions can be found on the enclosed Tree Schedule Sheets **(Appendix 11)** as part of the full data collection. Note; my measurements are subject to the available access around the trees and must be checked on site.

3.4 My tree observations are taken from inside the property boundaries; in places, it is overgrown with dense vegetation and tree ivy, which made detailed observations of some trees difficult. I have made suitable comments on trees where I believe they are required.

*Trees, soil type and building materials*

3.5 It is beyond the scope of this assessment to give advice concerning the soil type and mature tree root proximity to building materials that may give rise to subsidence-type/impact damage; with new buildings these matters should be dealt with by a suitably qualified person. (Refer to [2]NHBC Standards for further advice).

*Tree safety issues*

3.6 The predevelopment report is not a detailed tree safety survey; it is for the purposes of the BS: 5837 2012 needed to inform the planning procedure. However, trees lining the roadside are assessed in order to manage them on safety grounds and for the purposes of visual amenity benefits, but not for BS 5837 matters.

## 4. Site Description Tree Categories and Arboricultural Features

4.1 No 93 is a substantial detached property set back on the westerly side of the road within a quiet, residential, lightly wooded area on the southerly outskirts of West Heath. The front garden has a boundary retaining wall lining the public footpath; inside of which is a narrow shrub border containing a row of Cypress trees. Facing from the road, inside the front left side garden boundary is an evergreen hedge

4.2 The rear landscaped garden is laid to lawn with trees growing around the inside of the northerly, southerly and westerly boundaries. Inside the northerly boundary is a tall, relatively young Cypress hedge and occasional maturing good quality ornamental trees. Inside the north westerly boundary are overgrown evergreen Laurel and a better formed Cypress tree. Beyond the rear boundary fence is mature woodland.

4.3 The locality has tree lined roads; the wider area has many deciduous and evergreen trees and woodland located to the north.

*Arboricultural features within the front garden*

4.4 The garden has a row of Cypress and Yew trees, no's T16 up to T21 with circa 11.5m heights; they are an attractive mix of colours and shapes with some recent losses of trees and Privet hedging.

The front garden contains a rapidly deteriorating diseased Cypress G19, almost certainly due to root disease, in all probability Honey fungus. **(Picture 1)**

**Picture 1** viewed facing northeast from the driveway to no 93 with the front of the dwelling to the left of the camera; note the light and dark brown foliage of G19 indicates the progressive nature of a soil borne root disease, combined with the dead golden privet hedge (Yellow arrow) sometimes an indicator of root pathogens, suggest 'Honey Fungus' *(Armillaria mellea)*. As the most likely culprit; I recommend tree felling, stump cutting and planting a replacement disease resistant specimen, such as a Yew tree.

4.5 Beyond the rear boundary are T1 and T2, mature Sycamore that are the southerly woodland fringe trees. T3 is a maturing Lawson's Cypress, shown as removed. G4 is a group of one sided; overgrown Laurel that could be retained in a heavily reduced form and still be an attractive amenity.

4.6 G5 is a poor quality ornamental planting of evergreen and deciduous trees and shrubs, with low amenity values. T6 is a solitary 'wind heave victim' Laurel, it too, could be retained in a reduced fashion. T7 & T8 are over-mature, deteriorating Elderberry and Sycamore trees, unworthy of retention.

4.7 G9 is a good quality young Cypress hedge. T10 is an attractive young Magnolia. T11 is a well formed Bay tree, in good condition. T12 is a small Japanese maple of average form. G13 are a self-sown seedling Sycamore and small Holly; the pair grow along the boundary wall. T14 is a similar Sycamore also of average form. T15 is a small, heavily one sided Prunus of low amenity value.

*Arboricultural Impact Assessment*

4.8 T3 Cypress is shown as removed to accommodate the new built structure, its loss mitigated by replacement planting, intervening foliage and background tree cover. G4 and T6 are Laurel shrubs that could be retained in heavily reduced forms; they respond particularly well to harsh pruning, they will re-grow and be a valuable amenity benefit. G5 comprises poor quality landscape stock and are unsuitable given the development proposals; I have recommended its removal, followed by replacement planting. I recommend T7 and T8 are removed followed by mitigation tree planting. G9 requires periodic pruning.

4.9 The above losses within the rear garden will be mitigated by intervening foliage and built structures, the backcloth of trees and by replacement tree planting, needed in any event to provide long term tree cover.

*Roadside trees*

4.10 T16 has a multi-stemmed upper canopy typically beginning to 'pull away' from the centre; I recommend modest crown reduction and re-shaping. G19 has the diseased tree; I have recommended its felling and retaining the nearby companions, followed by mitigation tree planting within the roadside border.

4.11 The modest pruning within the front garden will be barely noticeable; G19 has no attractive or positive amenity benefits; therefore its removal

followed by replacement planting will provide long term benefits and enhance this part of the conservation area.

4.12 All tree work to be carried out to BS [3]3998 standards.

*Tree categories and definitions extracted from BS 5837: 2012*

4.13 There are no trees I inspected that fall within BS cat 'A' "*trees of high quality and value*". There are 10 Cat 'B' trees "*those of moderate quality and value*". Sub category B2 "*those of moderate quality and value".*

4.14 There are 5 Cat 'C' 1*"those of low quality with an estimated remaining life of at least 10 years or younger trees with a stem diameter below 150mm; unremarkable trees of very little merit or such impaired condition that they do not qualify for higher categories' there is* ***1 Cat 'U'*** *tree 'those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for no longer than 10 years'*

## 5. Tree Survey Notes (See Schedule Sheets)

5.1 Due to variations of existing ground levels throughout the site, and unless otherwise indicated **(M),** height dimensions are estimated and given in metres. Accurate optically measured heights can be taken for detailed assessments on request and agreement with the surveyor.

- Site constraints, such as accessibility, limited the precise measuring of all the individual crown spreads and stem diameters, and unless otherwise indicated, are approximated.
- Trunk diameters are given in millimetres and some are approximated because of visual obstructions.
- Branch, canopy and crown spreads, where given, are in metres and estimated radially from the centre of the trunk, to the main living lateral branch tips and where required, are defined by compass point or given as an average spread.
- Age Categories
- Overmature, mature, early mature, young
- Tree Condition (Physiological) (Good, fair, poor, dead or moribund) to mean the physiological condition for that particular tree given its species, age-group and geographical location.

5.2 Assessment and Category Classification

In making the assessment, particular consideration has been given to:-

- The general health, vitality and condition of the trees.
- Any structural defects and useful life expectancy.

5.3 This assessment and classifications listed within the schedule are made independently, without taking specific development proposals into consideration.

## 6. Mitigation Tree planting/suitable species

6.1 Suitable replacements for tree losses within the rear garden are 3 native 'Small Leaved Lime' (*Tilia cordata*) and 3 Silver Birch (*Betula pendula*). This is as a consideration of the present landscape and arboricultural features and character of the local landscape with links to other native tree species and as wildlife habitats.

6.2 Within the front garden, following tree felling, power stump cutting and backfilling using good quality topsoil, it is proposed to plant 3 disease resistant Yew cultivars within the same border. It should be expected that healthy young Yew trees will be very resistant to disease attack.

*Trees/plant size/condition*

6.3 The deciduous trees to be planted at light standard size 1.8-2.4m heights as bare root stock of good quality and pest and disease free.

6.4 The evergreen Yew trees to be container grown specimens with heights up to 1.8m, bushy, well formed specimens, pest and disease free.

6.5 The planting must be carried out to best industry standards and conform to the [4]BS 8454 2014 'Trees: From Nursery to Independence in the Landscape: Recommendations'

.....

*Alan J Engley*

**M.Arb. (R.F.S), F.Arbor.A. MCI.Hort. M.I.C.For. RCArborA**
**Registered Consultant of the Arboricultural Association and Chartered Forester**
**Telephone: 01225 851200**
**Guidott House, 205 Bailbrook Lane, Bath BA1 7AB**

29 April 2022

AJE/AF/29230

**APPENDIX 1**

# Standalone

## Arboricultural Method Statement *(AMS)*

**LAND AT 93 REDINGTON ROAD, NW3 7RR**

**Report AJE/AF 29230**

**Date: 29 April 2022**
**Client: Elena Dembovskaya and Lutfi Vala**

**1.** This AMS adopts a precautionary approach to tree protection and addresses all activities which have the potential to cause damage to the retained trees. The proposed scheme requires the following:

- Arboricultural monitoring including site visits.
- Tree survey sheets **(Appendix 11)**
- Removal of arboricultural features.
- Tree protection barriers.
- Tree planting details.
    - The matters identified above are addressed below.

**2. AMS details**

2.1 It is a modest, lightweight scale development and an easy task to protect all retained trees; in order to avoid unacceptable damage to them as a result of severance or asphyxiation of the root systems, site work planning is required. Prior to any site work commencing there has been a 'toolbox' meeting with the appointed arborist and site agent (Architect), in order to establish tree protection methods, tree works and future monitoring visits for this site.

2.2 The site agent is responsible for providing a programme of works, the movement of people and site supervision. The tree protection safety

-monitoring and details provided by the arborist will include provision of site visit records and certificate of completion, to be copied to the LPA by the site agent.

2.3 The retained trees must be protected using appropriate barriers such as Heras (See Fig 2 of the BS 5837:2012 on TPP) or, as needed, ground protection mats. **Ground-Guards Tel 0113267 6000** can supply the type of ground protection material suitable for this site, the load bearing to be agreed with the site engineer/Architect. All of the tree protection barriers will be in strict accordance with [1]BS 5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'.

2.4 The new garden/house structure is shown within the RPA of T1, its roots and RPA will be protected from site activities by barriers, therefore there will be no loss of RPA (m²). The foundation type is to be a no-dig design using sleeved mini piles (to avoid interface of concrete and soil/roots) and dealt with by the Architect with arboricultural input. The TPF and ground mats shown on the TPP are to be removed only for agreed site operations and under arboricultural supervision and remain until the end of the development period.

*Avoiding harm to the trees*

2.5 There will be no fires lit within 15m of the furthest extent of the canopy of any retained tree. There will be no concrete, oil, cement, bitumen or other chemicals mixed or stored within 10m of any trunk or materials stored within 5m of the bole of any tree, or group of trees to be retained on site or adjoining land.

2.6 The potential temporary storage compound and welfare facilities positions, are shown on the TPP, they will be within the site boundaries and must be where the RPAs are protected at all times.

2.7 There are no drains within the new structure. All services will be from the existing structures or beyond the tree RPAs and are dealt with by the site agent. There will be no trenching within RPAs to accommodate new services or soakaways.

2.8 All building materials and designs must be led by the project architect and are beyond the scope of this AMS.

*Planting details*

2.9 Mitigation replacement trees will be native species used as 'structural planting' and form part of the soft landscaping. The new tree positions and planting specification are shown on TPP Ref AJE/AF/29230 RevA April 2022. Generally, soft landscaping matters will be dealt with by others.

2.10 Where any future soft landscaping works are within the RPAs, it will be considered by the arborist, if there is to be digging work, for any reasons, it shall always be under arboricultural supervision.

2.11 All tree work will conform to [2]BS 3998 (2010)

*Future site visits, supervision and maintaining an arboricultural record*

2.12 Future supervision shall be led by the site agent who will contact the arboriculturalist/email correspondence as necessary. Where visits are essential, they must ensure the barriers are sound at all times. The agent will arrange a final 'signing off' document agreeing the tree protection has been carried out in accordance with the AMS and is a proper record and audit of the arboricultural management.

2.13 The site agent will keep a copy of this AMS and communicate the information to all construction operatives. The appointed arborist and contact number will be A J Engley 01225 851200.

**Suitable signage to be attached to barrier fences on this site**


**3. Trees Works**

All Tree works should be undertaken in accordance with the BS3998:2010 'Recommendations for Tree Works' and in conjunction with a risk assessment and arboricultural method statement.

There are few restrictions regarding the most suitable time of the year for carrying out tree and hedge work. However, non-urgent tasks should be avoided during the bird nesting period, usually March until August.

**4. Legal/Constraints**

Unless otherwise stated, at least an annual inspection should be carried out of the mature trees, or sooner following exceptional weather conditions such as very high winds.

It is an offence under the Wildlife and Countryside Act to disturb a nesting bird or roosting/breeding bat. Work to trees with the potential for roosting bats is best carried out from mid-September to late October. This assumes that young bats are weaned and independent, and is before hibernation. Mid-March to the end of April is also a suitable time, after hibernation and before young are born, although due account should be taken of nesting birds, which also (with few exceptions) enjoy statutory protection.

**5. Reference/Further Information**

[1]British Standard 5837: 2012 'Trees in relation to design, demolition and construction – Recommendations'.

[2]British Standard 3998 'Tree Works Recommendations 2010'

.....

**Alan J Engley**

AJE/AF/29230

*28 April 2022*

# APPENDIX II TREE SURVEY SCHEDULE – LAND AT 93 REDINGTON ROAD, NW3 7RR

## Clients: Elena Dembovskaya and Lutfi Vala

**Abbreviations:**

**Life Stage (age)**
**OM - Over-mature**
**M - Mature**
**EM – Early mature**

**DI - Dense vegetation and Ivy cover sufficient to obscure views of the inspected trees**
**GL - Ground level**

**TD – Trunk Diameter**
**MS – Multi-stemmed**
**Rad SPD - Radial spread (m)**

**(M) – Measured using a Nikon Hypsometer and (or) tape/Distometer measurement**

**Outer crown (lowest branches above GL)**
**Note, all measurements are subject to the available access around each tree**

**ROOT PROTECTION AREA (RPA): (Radius of *A nominal circle) The RPA is 12 x the diameter of a single stemmed trunk.* For multi-stems (MS) it is the resultant combined diameters at 1.5m. Note – 'the RPA may change its shape...but not reduce its area...as assessed by an arboriculturalist'**

**ERC**
**Estimated remaining contribution in years (ERC)**
**1 – up to 10 years**
**2 – up to 20 years**
**3 – up to 30 years**
**4 – 40 years +**

**BS TREE CATEGORIES (CAT):**

**U – Unsuitable for retention**
**A – High quality and value (min 40 years contribution)**
**B – Moderate quality and value (min 20 years contribution)**

**C – Low quality and value (min 10 years contribution)**

**Or young trees with a stem diameter below 150mm**
**Note, categories are for identifiable trees within the wide hedges**

**SUB-CATEGORIES (SUB CAT):**
**1– Mainly arboricultural values 3 -Mainly cultural values**
**2– Mainly landscape values**
**Note: USPD it is unsuitable for retention in the context of the proposed development.**

**Surveyor: A J Engley**

**Survey Date: 22.10.21**
**Weather: Fine**
**Visibility: Good, dry underfoot**

**PHYSIOLOGICAL CONDITION (CON)**
**G – Good condition**
**F – Fair condition**
**P – Poor condition**
**M – moribund or dead**

| Tree Ref No | Species | Height | TD Single Stem Dia (mm) | RPA Radius (m) | RPA ($m^2$) | North Radial spread (m) | East | South | West | Lowest Outer Crown (m) | AGE | CON | ERC | Structural Condition & Observations | Management Recommendations | BS Category |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T1 Neighbouring | Sycamore (*Acer pseudoplatanus)* | 22 | 900 | 10.8 | 366 | 7 | 7 | 10.5 (M) | 8 | 4 | M | F | 4 | DI southerly fringe tree of small woodland, it grows against the far side of the wooden boundary fence, 2m in front of a similar companion tree. | - | B2 |
| T2 Neighbouring | Sycamore | 22 | 450 | 5.4 | 92 | 5 | 5 | 5 | 5 | 12 | M | F | 4 | Outer woodland/fringe specimen | - | B2 |
| T3 | Lawson's Cypress (*Chaemycyparis lawsoniana)* | 12 | 250 | 4 | 28 | 3 | 3 | 2.9 | 3 | GL | M | F | 4 | Attractive form. | Shown as removed to accommodate the new building. | B2 |

| Tree Ref No | Species | Height | TD Single Stem Dia (mm) | RPA Radius (m) | RPA ($m^2$) | North Radial spread (m) | East | South | West | Lowest Outer Crown (m) | AGE | C O N | E R C | Structural Condition & Observations | Management Recommendations | BS Category |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G4 | Laurel (*Prunus*) | 4.5 | MS 350 | 4.2 | 55 | 6 | 4.5 | 4.5 | 5 | GL | M | F | 4 | Overgrown hedge growing away from fence towards development proposals. If retained, cut to 0.5m above GL. It will rapidly re-sprout to form a tidy hedge. | • Cut to 0.5m | C1 |
| G5 | Ornamental Group *Choisya rhododendron,* Juniper, Acer palmatum, Cypress | 2-5 | MS | - | - | 2m Spreads joint canopy | 2 | 2 | 2 | - | M & OM | F / P | 1 | Poor quality, over mature ornamental trees of a previous landscape design. Now outcompeted by large trees. | • Best felled and mitigation replanting nearby using 3 Silver Birch (*Betula pendula)* | C1 (USPD) |
| T6 | Laurel | 5 | 75 | 0.9 | 3 | 0 | 3 | 4 | 3 | GL | M | F | 1 | Wind heave victim, heavily one sided propped by lowest limb. | • Retain<br>• Reduce crown to 1.5m height, reshape | C1 |
| T7 | Elder | 8 | 350? | 4.2 | 55 | 0 | 5 | 3 | 0 | 2 | OM | F ? | 1 | DI ¾ height. Very poor deteriorating condition. | • Fell, replant nearby. Use 3 native Lime (*Tilia cordata*) | C1 |
| T8 | Sycamore | 12 | 350 | 4.2 | 55 | 3 | 3 | 3 | 3 | 4 | OM | M | 1 | DI ¾ height. Very poor condition. | • Fell. | U |
| G9 | Leylandii | 8.5 | 350? | 4.2 | 55 | 2 | 2 | 2 | 2 | GL | Y | G | 3 | Fine, dense hedge in good condition. Good wildlife habitat. | • Clip annually. | B2 |
| T10 | Magnolia x Grandiflora | 4.5 | 40 | 0.9 | 3 | 2 | 2 | 2 | 2 | 2 | Y | F | 4 | Very good form. | - | B2 |
| T11 | Bay | 5 | 300 | 3.6 | 41 | 3 | 3 | 3 | 7 | 2 | Y | F | 4 | Very good form. | - | B2 |
| T12 | Japanese Maple (*Acer palmatum*) | 2.5 | MS 20 | 0.90 | 3 | 2 | 1 | 1 | 1 | 0.5 | MA | F | 2 | Average form. | - | B2 |
| G13 | Sycamore above Holly growing within boundary fence | 14<br>8 | 600<br>150 | 7.2<br>- | 163<br>- | 6<br>3 | 6<br>3 | 6<br>3 | 6<br>3 | 5 | M<br>M | F<br>F | 4<br>4 | DI, SSS. Grows on the boundary wall, average form. | - | B2<br>B2 |
| T14 | Sycamore | 14 | 500 (at 1.3) | 6 | 113 | 6 | 6 | 6 | 6 | 7 | M | F | 4 | SSS, forks at 1.3m. DI grows on boundary wall. Average form. | - | B2 |
| T15 | Prunus | 7 | 250 | 3 | 28 | 5 | 3 | 1 | 3 | 3 | OM | P | 1 | Heavy one sided towards the (N) very poor form. | - | C1 |

| Tree Ref No | Species | Height | TD Single Stem Dia (mm) | RPA Radius (m) | RPA ($m^2$) | North Radial spread (m) | East | South | West | Lowest Outer Crown (m) | AGE | CON | ERC | Structural Condition & Observations | Management Recommendations | BS Category |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Condition report regarding trees along the front garden lining the road.**<br>T16-T21 mature ornamental Cypress and Yew trees; they grow to the front of the dwelling and are prominent in views from the house, the road and properties opposite.<br>T16-G19, grow within the front garden shrub border above a diseased Golden Privet hedge which has been partially decimated by a root disease, probably Honey fungus. | | | | | | | | | | | | | | | | |
| T16 | Lawson's Cypress var '*Ellwoodii'* | 7 | 450 | - | - | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | M | F | 2 | Attractive form, starting to pull away within the top 25% of its height separating into outgrowing leaders that will become Increasingly susceptible to storm damage. | • Modest crown reshaping top 1.5m needed to reduce risk of failure. | - |
| T17 | Golden Irish Yew (*Taxus baccata* var) | 4 | 250 | - | - | 1 | 1 | 1 | 1 | 1 | M | F | 2 | Attractive form | - | - |
| T18 | Cypress | 7 | 350 | - | - | 1 | 1 | 1 | 1 | 1 | M | F | 2 | - | - | - |
| G19 | 2 Cypress (Blue foliage) | 11.5 | 600 | - | - | 1.9 | 1.9 | 1.9 | 1.9 | GL | M | F / P | 1 | The south westerly end tree is diseased and rapidly deteriorating over the last 2 seasons. Almost certainly the result of a root disease. | • Fell G19, power stump cut root and replant using disease resistant species such as Yew (possibly Golden Irish Yew). Plant into good quality top soil removing diseased material as best as possible | - |
| H20 | Irish Yew hedgerow running on a north/west south/east axis | 3 | 250 | - | - | 1 | 1 | 1 | 1 | GL | M | F | 4 | Recently clipped, good form. | - | - |
| T21 | Golden Lawson's Cypress var 'Lutea' | 2.75 | 200 | - | - | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | M | F | 3 | Average form. | • Best clipped below window sill height. | - |