

# **SIMON JONES ASSOCIATES Ltd.**

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## **Schedule of Trees**

**at:**

**20 Highfields Grove, Highgate, London N6**

**October 2015**

# Tree Schedule: Explanatory Notes

## 20 Highfields Grove, Highgate, London N6

This schedule is based on a tree inspection undertaken by Frank Spooner of Simon Jones Associates Ltd., on Wednesday the 14th October 2015. Weather conditions at the time were dry with scattered cloud. Deciduous trees were in partial leaf.

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.

Trees are dynamic organisms and are subject to continual growth and change; therefore 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 "1".

### **2. Species.**

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

### **3. Height.**

Measured approximately, shown in metres.

### **4. Average Crown Spread.**

Not recorded on site to save time and not considered relevant.

### **5. Trunk diameter.**

Trunk diameter measured at approx. 1.5m above ground level; or in case of trunks that divide into separate stems between adjacent ground level and 1.5m, or at base, shown in millimetres.

### **6. Physiology.**

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

### **7. 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.

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 irreparable physiological or pathological defects, such that there may be a risk of early or premature collapse.

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

### **8. 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
- Visibility and impact in the local landscape

### **9. Failure Potential.**

Rated low, medium, high or severe, in accordance with the I.S.A. "Tree Hazard Evaluation Form", 2nd Edition.

Low - defects are minor (e.g. dieback of twigs, small wounds with good woundwood development)

Medium - defects are present and obvious (e.g. cavity encompassing 10-25% of the circumference of the trunk, co dominant stems without included bark)

High - numerous and/or significant defects present (e.g. cavity encompassing 30-50% of the circumference of the trunk, multiple pruning wounds with decay along a branch)

Severe - defects are very severe (e.g. heart rot decay, fungal brackets along the main stem, cavity encompassing more than 50% of the trunk)

### **10. Size of Part.**

Diameter of part of tree identified as being at the greatest risk of failure: less than 150mm diameter, from 150mm to 450mm diameter, from 450mm to 750mm diameter, or more than 7850mm diameter, in accordance with the I.S.A. "Tree Hazard Evaluation Form".

### **11. Target use.**

Usage or occupancy of area in which people or property could be harmed in the event of failure of a tree or parts of it. Rated occasional, intermittent, frequent or constant, in accordance with the I.S.A. "Tree Hazard Evaluation Form".

### **12. Hazard Rating.**

Rating of relative tree hazard potential, derived from an aggregation of Failure Potential, Size of Part and Target Use, designed to inform decisions regarding hazard abatement. Rated negligible, low, noticeable or high in accordance with "Well-maintained Highways", Code of Practice for Highway Maintenance Management.

### **13. Works.**

Indication of whether remedial works have been recommended.

### **Schedule of Tree Works.**

#### **1. Site/Road name.**

Name of site/road.

#### **2. Tree No.**

Given in sequential order, commencing at "1".

#### **3. Species.**

'Common names' are given, as in main schedule.

#### **4. Recommended Works.**

Works recommended to abate the identified hazard.

#### **5. Response Time.**

A response time has not been allocated in this instance as all works are intended to take place at the same time pursuant to a new S211 notice. There are no imminently dangerous trees that require more urgent attention.

**Tree Schedule**  
**20 Highfields Grove, Highgate, London N6**

No.	Species	Height	Crown Spread	Trunk diameter	Physio - logy	Structure	Comments	Risk of Failure	Size of Part	Target use	Hazard Rating	Works
1	Red oak	14m	3m	390mm	Average	Good		Low	<150mm	Intermittent	Low	N
2	English oak	16m	5m	530mm	Average	Moderate		Low	<150mm	Constant	Low	N
3	Scots pine	15m	3m	est. 490mm	Low	Poor	Off site tree.	Medium	150-450mm	Frequent	Noticeable	Y
4	English oak	18m	5m	est. 480mm	Average	Good	Off site tree.	Low	<150mm	Frequent	Low	Y
5	Lawson cypress	9m	3m	180mm	Average	Good		Low	<150mm	Frequent	Low	Y
6	Lawson cypress	7m	3m	160mm	Average	Good		Low	<150mm	Frequent	Low	Y
7	Beech	19m	3m	520mm	Average	Good		Low	<150mm	Frequent	Low	N
8	Lawson cypress	9m	3m	140mm	Average	Moderate	Drawn-up specimen with Height/Diameter ratio greater than 50: at risk of failure if companion shelter removed.	Low	<150mm	Frequent	Low	Y
9	English oak	17m	5m	590mm	Average	Good		Medium	<150mm	Frequent	Low	Y
10	Yew	6m	3m	130mm	Average	Good		n/a	n/a	n/a	Negligible	Y
11	Sycamore	17m	3m	210mm	Average	Poor	Drawn-up specimen with Height/Diameter ratio greater than 50: at risk of failure if companion shelter removed.	Medium	150-450mm	Frequent	Noticeable	Y
12	Sycamore	17m	3m	260mm	Average	Poor	Drawn-up specimen with Height/Diameter ratio greater than 50: at risk of failure if companion shelter removed.	Medium	150-450mm	Frequent	Noticeable	Y
13	Lawson cypress	4m	3m	80mm	Average	Moderate		n/a	n/a	n/a	Negligible	Y
14	Sycamore	17m	3m	260mm	Average	Poor	Drawn-up specimen with Height/Diameter ratio greater than 50: at risk of failure if companion shelter removed.	Medium	150-450mm	Frequent	Noticeable	Y
15	Sycamore	17m	3m	240mm	Average	Poor	Drawn-up specimen with Height/Diameter ratio greater than 50: at risk of failure if companion shelter removed.	Medium	150-450mm	Frequent	Noticeable	Y
16	Sycamore	18m	3m	250mm	Average	Poor	Drawn-up specimen with Height/Diameter ratio greater than 50: at risk of failure if companion shelter removed.	Medium	150-450mm	Frequent	Noticeable	Y
17	Sycamore	18m	3m	400mm	Average	Indifferent	Drawn-up specimen with Height/Diameter ratio greater than 50: at risk of failure if companion shelter removed.	Medium	<150mm	Frequent	Low	Y
18	Sycamore	18m	3m	310mm	Average	Indifferent	Drawn-up specimen with Height/Diameter ratio greater than 50: at risk of failure if companion shelter removed.	Medium	150-450mm	Frequent	Noticeable	Y

No.	Species	Height	Crown Spread	Trunk diameter	Physio -logy	Structure	Comments	Risk of Failure	Size of Part	Target use	Hazard Rating	Works
19	Sycamore	18m	5m	660mm	Average	Indifferent		Low	450-750mm	Frequent	Noticeable	Y

**Schedule of Tree Works**  
**20 Highfields Grove, Highgate, London, N6**

<b>Tree No.</b>	<b>Species</b>	<b>Recommended works</b>	<b>Response Time</b>
3	Scots pine	Fell and grind out stump	
4	English oak	Remove three specific branches: the lowest branch on the south side at 5m above ground level and the two lowest branches on west side at 6m above ground level, and reduction of other branches to provide 2m clearance between the trees canopy and the roof of the property.	
5	Lawson cypress	Fell and grind out stump	
6	Lawson cypress	Fell and grind out stump	
8	Lawson cypress	Fell and grind out stump	
9	English oak	Crown thin by 20%. Apply a layer of mulch 100mm deep around base of trunk for a 5m circle wherever possible [mulch must not be directly in contact with the tree's trunk].	
10	Yew	Fell and grind out stump	
11	Sycamore	Fell and grind out stump	
12	Sycamore	Fell and grind out stump	
13	Lawson cypress	Fell and grind out stump	
14	Sycamore	Fell and grind out stump	
15	Sycamore	Fell and grind out stump	
16	Sycamore	Fell and grind out stump	
17	Sycamore	Fell and grind out stump	
18	Sycamore	Fell and grind out stump	
19	Sycamore	Apply a layer of mulch 100mm deep around base of trunk for a 5m circle wherever possible [mulch must not be directly in contact with the tree's trunk].	

## **Specification.**

All tree works are to be done in accordance with the British Standard BS 3998: 2010, *Tree work - Recommendations*.

Climbing irons or spikes are not to be used whilst pruning trees; they may only be used for the sectional removal of trees.

Care must be taken that the ground next to retained trees does not become compacted as a result of tree surgery operations. No vehicles or equipment such as tractors, timber lorries, cranes or excavators shall be driven or parked beneath the crowns of any trees to be retained, as this could cause soil compaction and consequent root death.

**Birds.** Please note that it is an offence under Wildlife and Countryside Act of 1981, amended by the Countryside and Rights of Way Act 2000, to:

- Kill, injure or take any wild birds
- Damage or destroy nests that are in use or are being built
- Intentionally or recklessly disturb any wild bird while it is nest building, or at (or near) a nest containing eggs or young, or disturb the dependent young of any bird.
- Take or destroy eggs

Care must therefore be taken that none of these offences are committed whilst undertaking the above works. If trees or hedges are to be felled or pruned between March and August, they should first be inspected carefully for nests; if found, and the proposed works are not necessary to preserve public health or safety, felling or pruning should be delayed until young birds have flown.

**Bats.** All bats are legally protected by the WCA and CRoW Act. Further protection is conferred by the Conservation of Habitats and Species Regulations 2010, following the European Habitats Directive (1992). These Acts and Regulations include provisions making it illegal to:

- Recklessly or deliberately kill, injure or capture (take) bats
- Recklessly or deliberately disturb bats (whether in a roost or not)
- Damage, destroy or obstruct access to bat roosts (whether in use or not)

Prior to undertaking any tree works, a scoping survey comprising a detailed visual inspection from ground level for any evidence of bat occupancy should be made by an appropriately qualified person, or if necessary by a suitably qualified ecologist. Where features that have the potential to be a bat roost have been observed, a secondary bat assessment comprising a close-up aerial examination should be undertaken immediately prior to the commencement of tree works. If following the secondary assessment it is reasonably suspected that a roost exists, a licensed bat worker should be contacted to undertake a more detailed assessment with specialist equipment. Should a tree be found to be supporting a bat roost, a licence will be required from the relevant Statutory Nature Conservation Organisation (SNCO), before any works can be carried out.

If emergency work is required to a tree on the grounds of public safety, that specimen must still be assessed for bats prior to work commencing; and if it is suspected that the tree supports a roost the relevant SNCO, local police liaison officer and a licensed bat worker must be informed. If the condition of the tree poses an imminent danger to the public then public safety will take precedence. However, the contractor must ensure that no reasonable alternatives are available, and that he undertakes only the minimum action that can be safely taken to reduce the risk to the public to an acceptable level. Furthermore, he should record the tree's condition and justification for the work in writing.

Where tree surgery is carried out, cuts will be made as far above any likely hole or crack in the bark which has potential to support a roosting bat, and crown thinning or reduction will be minimised. If, following secondary assessment no roosts are identified or reasonably suspected, but the potential for them still exists, work should proceed with caution. For example, stems and/or branches should be lowered carefully by rope and where possible large sections will be left on-site for a minimum of 48 hours to allow bats to vacate. Note that if a bat roost is damaged as a result of tree works it may be necessary to demonstrate to the SNCO that good practice was implemented.

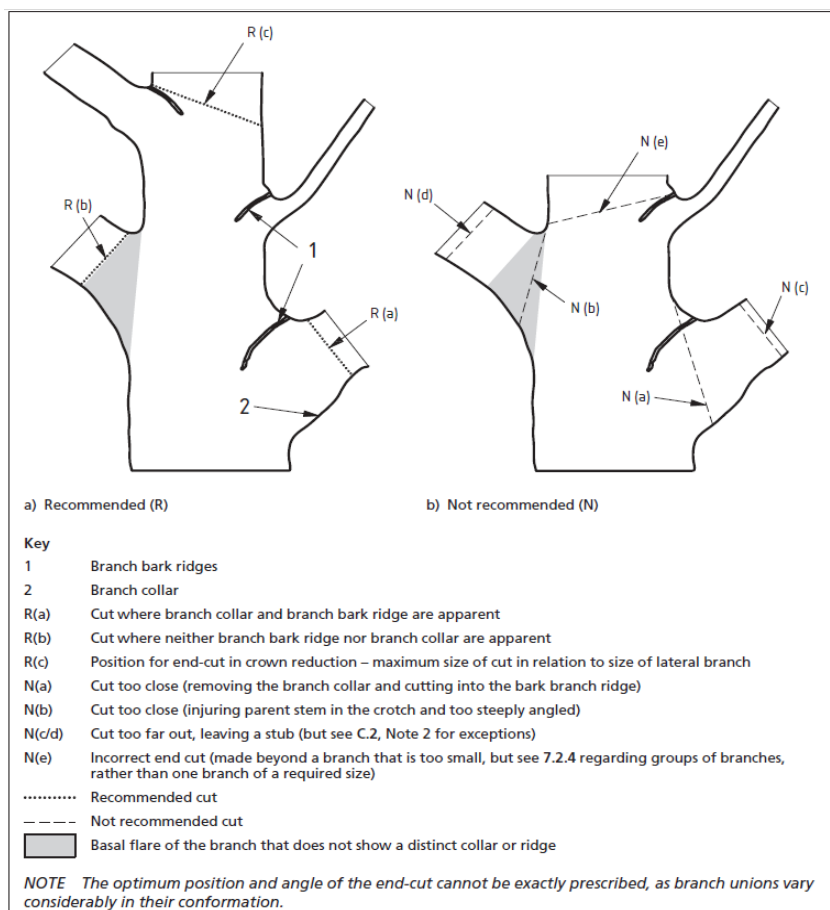
If bats are discovered when limbs are removed or trees are felled, work must stop immediately and the relevant SNCO, the local police liaison officer and if possible a licensed bat worker must be informed.

## Definition of Terms.

### 1. Pruning (in general)

1.1. Pruning shall be undertaken following the principles of good arboricultural practice as stated in British Standard BS 3998: 2010. The positions of final pruning cuts will comply with Figure 2 'Positions of final cuts' at p23 of that document, as shown below.

1.2. Where aerial growth is to be removed, great care shall be taken not to leave a stub which may provide a food base for both fresh wound parasites and decay fungi and not to cut back into or beyond the branch collar. Injury of the wood and bark of the parent stem or branch above the cut will also be avoided.



## 2. Crown Thinning.

2.1. Crown thinning is defined as the removal of a proportion of the smaller secondary live woody growth (whilst retaining the framework branches); in addition to weak, damaged, dead, crossing or duplicated branches and soft growth, to reduce the leaf area of the canopy by the percentage stated in the schedule of works.

2.2. The aim of crown thinning is to produce an even canopy of foliage on a well structured, balanced and sound framework of limbs and branches, typical for the species or variety of tree concerned. Crown thinning does not generally include the removal of inner lower branches from the central area of the crown, most pruning wounds shall be made in the outer quarter of the canopy.

## 3. Crown Reduction.

3.1. Crown reduction is defined as the reduction of the outline dimension of the canopy, from the tips of limbs and branches toward the main trunk, by pruning growth to an appropriately sized lateral branch, twig or bud to leave a flowing silhouette.

3.2. Reduction may be of the entire crown, or of one part of the crown. The extent of reduction is given in metres.

3.3. Where a limb, branch or leader is to be shortened it shall be cut back cleanly to a vigorous side branch leaving the branch bark ridge and branch collar intact. **Retained side branches intended to form the new dominant shoot shall be at least 30% of the diameter of the parent branch at the pruning point.** The contractor shall relate the position of any individual final pruning cut to the form of the canopy as a whole, so that upon completion of the work the tree has as natural an appearance (for the species) as constraints allow.

## 4. Selective Pruning.

4.1. Selective pruning is defined as the removal or shortening of individual branches for a specific reason.

4.2. This can be to remove or reduce specific branches which whilst they are not dead are at risk of failure (torn or split branches, branches that protrude from the crown, have excessive end weight, or are "hazard beams"); or to clear branches that are interfering with buildings, landscape features or other structures, or with the efficient and safe use of infrastructure (e.g. utilities, street furniture and transport routes).

4.3. Where such work is specified the amount of material to be removed and the diameter(s) of the pruning cut(s) should be the minimum required for the purpose.

## 5. Tree Felling.

5.1. Felling is defined as the cutting down of a tree to a point as close to ground level as is reasonably practicable, but no higher than 100mm above surrounding ground level. (Unless a tree has pronounced buttress roots which makes this impractical, in which case it should be cut to as close to 100mm as possible).

5.2. Felling shall be carried out in a controlled manner, using guide ropes where appropriate to ensure that trees or branches fall away from buildings, equipment, and other trees and understorey shrubs.

5.3. Where necessary, trees should be dismantled and removed in sections rather than felled from the ground to prevent them falling into, and damaging buildings, equipment, vehicles and the crowns of other trees.



5.4. No part of any tree shall fall outside the boundaries of the premises unless prior agreement has been reached with the adjacent landowner, and the client has been informed in advance.

5.5. In order to allow time for bats to re-locate, trees that are covered with dense ivy will be left for a period of 24 hours prior to cutting up or removal.

## **6. Mulching.**

6.1. An area specified for mulching will be covered with a layer of wood chip, pulverized bark, or leaf mould. Materials that have been contaminated by herbicides or other chemicals should not be used. Care will be taken that vehicles do not drive onto the area to deposit the mulch; it should be tipped at the edge of the area, moved into position using wheel barrows, and spread with hand tools so that the ground beneath does not become compacted.

6.2. The depth of the mulch will be no more than 100 mm, to allow continued aeration of the root system and to prevent overheating of uncomposted material.

6.3. Mulches should be kept away from direct contact with the bark of the trunk, or of exposed buttress and surface roots, since this might encourage infection by pathogens by maintaining wet conditions.

## **7. Stump Removal.**

7.1. Stump removal is defined as the action taken to physically remove the stump of a felled tree from the ground. The schedule specifies that tree stumps are to be removed in the following way:

7.2. **Ground out.** ("chipping" and "cutting" are synonymous with grinding) Stumps shall be ground to a minimum of 300mm below ground level with a proprietary machine which may be self-powered or driven from a power take-off shaft. Where stumps are to be ground out the Contractor is responsible for satisfying himself as to the whereabouts of any underground services or apparatus.

7.3. Where the intention of stump grinding is to reduce the potential for the spread of Honey fungus, it should normally extend through the base of the stump, leaving the major roots disconnected.

## **8. Dead-Wooding.**

8.1. Dead-wooding is the removal of all dead, dying or diseased branch wood, broken branches and stubs left from previous tree surgery operations that are 25mm in diameter or above at their point of origin.

## **9. Removal of Arisings.**

9.1. The working area is to be left clean and tidy when the contractor goes off site at the end of the working day. The contractor shall keep all highways, drives and footpaths clear of obstructions.

9.2. The contractor shall be responsible for the disposal of all arisings from the works at his own expense. All charges, fees, transport and other expenses in connection with tipping shall be borne by the contractor.