

## Tree Survey Schedule: Explanatory Notes

### Fairfax Mansions, Finchley Road, London NW3

This schedule is based on a tree inspection undertaken by Frank Spooner of Simon Jones Associates Ltd., on Thursday the 11th April 2013. 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.

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". Numbers correspond with numbering on our tree constraints plan.

#### 2. Species.

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

#### 3. Height.

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

#### 4. 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.

#### 5. Radial crown spread.

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

#### 6. Crown break.

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

#### 7. Crown clearance.

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

#### 8. 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: Surviving beyond the typical age range for species

#### 9. Physiology.

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

#### 10. 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.

#### 11. 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

#### 12. 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**  
**Fairfax Mansions, Finchley Road, London, NW3**

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
1	Ash	18m	390mm S 610mm N	5m N 8m E 11m S 13m W	1m	8m N 14m E 4m S 4.5m W	Mature	Average	Poor	Twin stemmed from base; tight compression fork with evidence of included bark; abnormal swelling or 'Bottle-but' at base; trunk is immediately adjacent to some concrete steps, several "Elephants feet" and damage to steps; incorporated metal railings for steps; a graft where the metal bar has been incorporated by both stems; N stem has a large scaffold limb extending to full extent of W canopy which has been crown lifted to approx. 5m; numerous crown lifting wounds on both stems on all sides; limbs to N have been reduced back to approx. 5m from trunk; several moderate sized dead branches and evidence of snapped limbs within crown; suppressed to SE by a near-by sycamore tree; of low quality but high landscape value; of short-term potential only.	C (2)
2	Sycamore	18m	310mm S 340mm S	3m N 6.5m E 9m S 6.5m W	0.25m	8m N 4m E 4m S 4m W	Mature	Average	Indifferent	Twin stemmed from base; tight compression fork with evidence of included bark; trunk bifurcates at 0.25m; small amount of epicormic at base of trunk; two straight stems; crown lifted to approx. 4m; close to wall to N and property slightly further to N; hence N portion of crown has been reduced away from property; minor deadwood within crown; of moderate quality and moderate landscape value; of medium-term potential.	B (12)
3	Sycamore	15m	370mm (SW) 370mm (NE)	6m N 7m E 7m S 7m W	0.25m	3.5m N 4m E 3.5m S 4m W	Mature	Below average	Indifferent	Buttresses visible at ground level to N and E where they have been damaged up to 1m away from trunk to N 0.5m to E; minor fibre bucking to the W at base of trunk; trunk bifurcates at 0.25m with compression fork and included bark; moderate deadwood throughout canopy; epicormic on branches; poor extension growth; structure otherwise ok; of low quality but high landscape value; of short-term potential only.	C (2)
4	Sycamore	15m	840mm	7m N 7.5m NE 5m E 7m S 6m W	2.5m	2.5m N 3m E 4m S 2m W	Over-mature	Below average	Poor	Surface roots with wounds for 500mm in all directions; two large wounds on N side at base of trunk approx. 400mm by 150mm; trunk bifurcates at ground level; E stem has been removed at 1.5m; W stem has a large bulge where a limb has historically been removed; this bulge skews the DBH; at 3m the remaining trunk bifurcates with a healthy union; the canopy is asymmetrical with bias to N and W due to previous suppression from the stem that was removed; crown has never fully recovered; deadwood throughout crown, mainly small diameter; poor extension growth; low vitality; of low quality but moderate landscape value; of short-term potential only.	C (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
5	Sycamore	10m	360mm	2.5m N 4.5m NE 3m E 3.5m S 2.5m W	2m	3m N 3m E 2m S 3m W	Semi-mature	Average	Moderate	Some small to medium sized, up to 300mm length, wounds on trunk on N and W sides; likely caused by vehicular damage; stem trifurcates at 2m; crown has a bias to E, NE and SE; historically suppressed to W by tree no. 4; of moderate quality and landscape value; of medium-term potential.	C (12)
6-7	Ash	12m 9m	160mm 180mm	1.5m from #7	2m S	2.5m	Semi-mature	Average	Indifferent	Young, vigorously growing ash trees; both have been wounded on the SW side at 1.5m; probably caused by vehicular passage; small dead branches and snapped twigs; unremarkable, self-sown specimens; of moderate quality and landscape value; of medium-term potential.	C (12)
8	Sycamore	14m	380mm N 450mm E	8m N 6m E 10m S 3m SW 7m W	.25m	9m N 2m E 8m S 8m W	Mature	Below average	Moderate	Trunk arises at a slightly higher level to existing ground level; structural roots evident supporting this situation; pronounced buttresses again supporting tree; trunk bifurcates just above ground level without compression but the fork is spreading/wide angled; stem to E bifurcates and leans out across road; stem to N leans in that direction with branches extending towards the properties; many lower branches are dead; poor extension growth and with some epicormic growth throughout canopy; of low quality and high landscape value; of medium-term potential.	C (2)
9	Sycamore	14m	est. 350mm (over ivy) N est. 340mm (over ivy) S	4m N 3.5m E 3m S 4.5m W 5.5m NW	0.25m	2m	Over-mature	Below average	Indifferent	Trunk bifurcates at ground level; two stems heavily covered in ivy; advanced epicormic growth at base; both stems generally upright; S stem has been topped and reduced back over road; N stem has well balanced crown but poor extension growth and below average vitality; of low quality but moderate landscape value; of short-term potential only.	C (2)



## 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.

<b>Tree No.</b>	<b>Species</b>	<b>RPA</b>	<b>RPA Radius</b>
1	Ash	237.1m <sup>2</sup>	8.69m
2	Sycamore	95.8m <sup>2</sup>	5.52m
3	Sycamore	123.9m <sup>2</sup>	6.28m
4	Sycamore	319.2m <sup>2</sup>	10.08m
5	Sycamore	58.6m <sup>2</sup>	4.32m
6-7	Ash	11.6m <sup>2</sup> 14.7m <sup>2</sup>	1.92m 2.16m
8	Sycamore	156.9m <sup>2</sup>	7.07m
9	Sycamore	107.7m <sup>2</sup>	5.86m

**Tree Categories**

Trees are categorised in line with Table 1 of the British Standard 'Trees in relation to design, conservation and construction - Recommendations', BS 5837: 2012, according to their health, condition, quality and value.

- Category '1' - Trees unsuitable for retention
- Category '2' - Trees of high quality and value
- Category '3' - Trees of moderate quality and value
- Category '4' - Trees of low quality and value

Category '1' trees should be retained, planned around, and be protected from damage.

Category '2' trees should also be retained if possible.

Category '3' trees will not usually be retained where they impose a significant constraint on development.

**Root Protection Areas (RPAs)**

To avoid the prediction of the likely impact of development on retained trees, a model is used. This model, based on the size of individual specimens, is the central feature of the British Standard 'Trees in relation to design, conservation and construction - Recommendations', BS 5837: 2012. This document provides a useful and consistent starting point for the assessment of likely impacts on trees.

The Standard recommends that an area around each retained tree should be protected from disturbance in order to maintain the tree's viability, within which the protection of the roots and soil structure is treated as a priority.

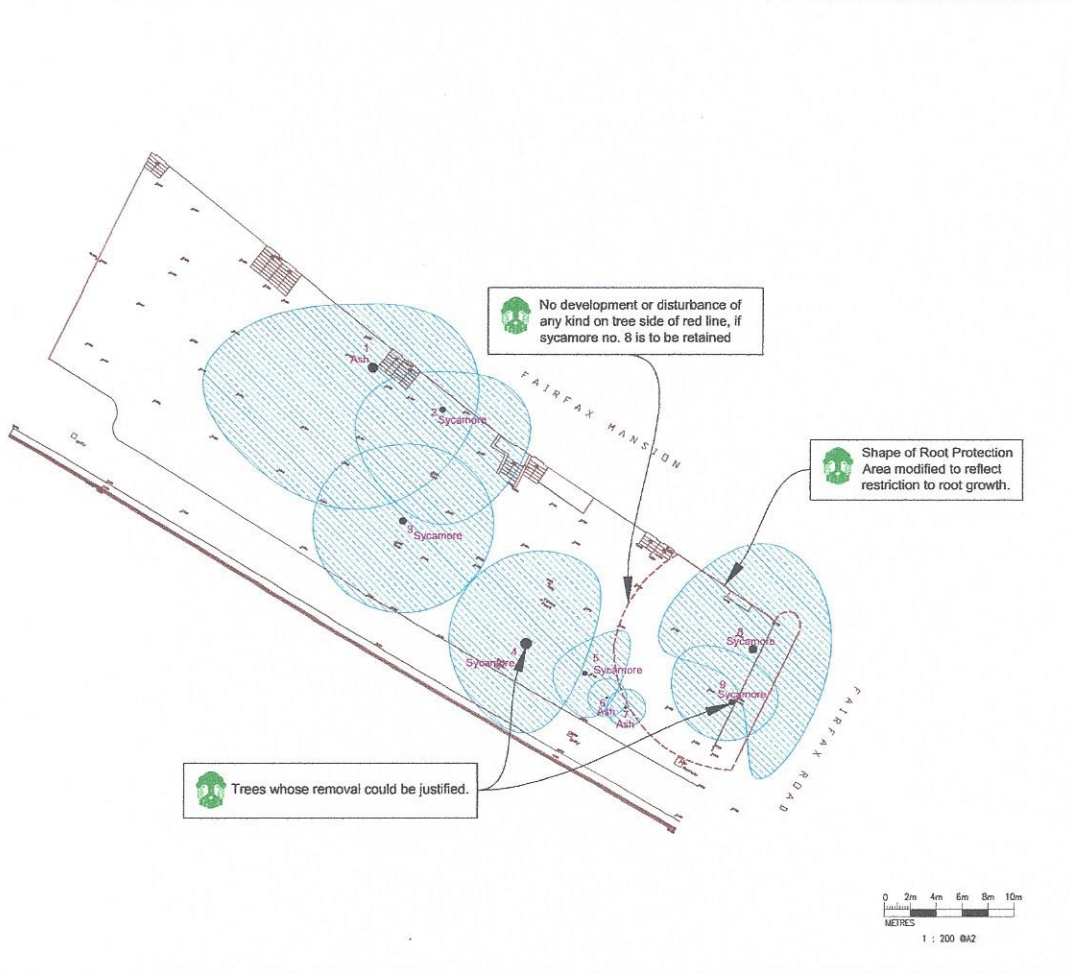
These root protection areas (RPAs) have been calculated for all non-Category '1' trees in accordance with Section 4.9 of the Standard, and are shown as areas bounded in green, blue or grey according to tree category. Normally portrayed as a circle of a fixed radius from the centre of the trunk, but where there appear to be barriers to root growth they have been restricted to more accurately reflect the likely distribution of roots.

**Trees whose Removal could be Justified**

Trees whose canopies are shown in light blue are those whose removal could be justified in arboricultural terms. These comprise Category '3' specimens that are either surrounded by other, better quality trees, or those which are situated informally within the site and are not contributing significantly to the local landscape, boundary screening, or public views. Some Category '3' trees only show the indicator where it can be demonstrated that their removal will neither impair the local landscape significantly, nor open up views into or out of the site.

A tree shown as one whose removal could be justified does not mean that it **will** be removed, nor that it is removed is necessarily desirable in arboricultural or landscape terms. It means simply that in our judgement, it should not be considered to be a material constraint on a proposed development layout.

If specimens whose removal could be justified are to be retained, they must be protected from construction damage in the same way as those trees identified as being retained, i.e. there must be no development or disturbance of any kind within their root protection areas, the extent of which are circled in green, blue or grey. In addition, proposed buildings should be sited no closer than 2m from the canopies of these trees.

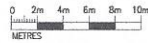


**Arboricultural Constraints**

The bold red line represents the closest to trees to be retained that proposed development (except for dwellings) can be located without encroaching into root protection areas (RPAs).

The bold blue line represents the closest to the canopies of trees to be retained that dwellings may be located without encroaching upon or unacceptable parking. Subject to tree species, habit, size and orientation, principal dwellings can be located as close to 2m from existing canopy spread, (allowing for reasonable future pruning), as long as blind or partially blind hard walls face the trees. Non residential structures such as garages, sheds or bin stores may be located up to and even towards tree canopies, but must not encroach into RPAs.

Where proposed dwellings are located within an arc between the North West and East of retained trees, their shadow path through the main part of the day, (wherever existing windows of living rooms or kitchens, (habitable rooms, used for long periods during the day) - BS 9238 Part 2), should not be sited so they directly face the trees within a distance equivalent to their present heights. These areas are indicated by the dashed pink segments on the plan.



1 : 200 @A2

**Simon Jones Associates Ltd.**

Project:	Fairfax Mansions, Fitching Road
Client:	James Arkwright Residential Ltd
Drawing:	TREE CONSTRAINTS PLAN
Drawn by:	LSJ TOP 14/05/13
Checked by:	LSJ
Date:	April 2014
Scale:	1:200 @ A2
Tel:	01773 813608
Fax:	01773 818146
Email:	info@simon.co.uk
Tree Area:	2
Drawn:	LSJ
Check:	LSJ
Scale:	1:200 @ A2