



**Red & Yellow**  
**Specialist Extra Care**  
Melliss Avenue – Kew

Tree survey and locations plan  
October 2018



**ARBORICULTURAL PLANNING CONSULTANTS**

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## **Tree Survey Schedule**

**Melliss Avenue, Kew**

**February 2018**

# Tree Survey Schedule: Explanatory Notes

## Melliss Avenue, Kew

This schedule is based on a tree inspection undertaken by Jeff Mashburn of SJATrees (the trading name of Simon Jones Associates Ltd.), on Wednesday the 14th February 2018. Weather conditions at the time were clear, dry and bright. Deciduous trees were not in 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 had access to the off-site trees along the eastern boundary, but not those along the southern boundary (for those, observations were 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". Numbers correspond with numbering on topographical survey 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 half metre, unless shown otherwise. For 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: Mature, with a large trunk diameter for the species; but showing signs of ancientness, irrespective of actual age, with decay or hollowing, and a crown that has undergone some retrenchment and has a structure characteristic of the latter stages of life.

Ancient: Beyond the typical age range and with a very large trunk diameter for species; with extensive decay or hollowing; and a crown that has undergone retrenchment and has a structure characteristic of the latter stages of life.

### 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 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, with 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

### 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, irreparable, 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**

## **Melliss Avenue, Kew**

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
1	Horse chestnut	15m	1160mm @1m	8.75m N 10.5m E 11.25m S 9m W	3m SW	2.5m W	Over-mature	Below average	Indifferent	Off-site tree; four-stemmed from 2.5m; central and smallest stem has been topped and now showing limited growth; lowest limbs to E have been reduced, leaving cuts up to approx. 130mm in diameter; moderate epicormic growth throughout crown, particularly where previously pruned; large cavity on S stem facing S at 4.5m above ground (approx. 280mm in width), with expected woundwood growth and visible decay; second large cavity on S stem facing W, 1m below large cavity (approx. 200mm in width), with limited woundwood growth and visible decay; lowest limb to E naturally fractured 1m from stem, showing cavity formation and limited woundwood growth; large cavities on central and smaller stem up to approx. 260mm and showing significant woundwood growth; normal bud density throughout crown, however estimate short shoot-extension lengths in upper crown; one of the most prominent trees along the footpath and an essential component of G3; on of low quality; but of high landscape value and moderate cultural value; of medium-term potential.	B (23)
2	Sycamore	11m	290mm 330mm	4m N 4.5m E 2.5m S 7.5m W	3m	2.5m W	Semi-mature	Average	Indifferent	Off-site tree; twin-stemmed from 1.5m; tight compression fork with evidence of included bark; ivy-covered; asymmetric crown due to historic suppression by neighbouring trees, since removed; significant component of G3, but only because of the limited overstorey nearby; of moderate quality and landscape value; of long-term potential.	C (2)
3	Sycamore	10m	est. 170mm est. 140mm est. 160mm est. 190mm est. 110mm	3.5m N 3m E 3.5m S 3m W	2.5m	3m	Young	Average	Indifferent	Off-site tree; showing characteristics typical of the species; significant component of G3, but only because of the limited overstorey nearby; of moderate quality and landscape value; of long-term potential.	C (2)
4	Sycamore	10m	340mm (over ivy)	4m N 2m E 2.5m S 4.5m W	3m	3m W	Young	Average	Indifferent	Off-site tree; ivy-covered; showing characteristics typical of the species; largely screened in public views by T3; of moderate quality and of long-term potential; but of low landscape value.	C (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
5	Horse chestnut	13m	1180mm (over ivy)	6.75m N 9.5m E 8.5m S 10.75m SW 9m W	2m SW	2m W	Over-mature	Below average	Poor	Off-site tree; bark loss beginning at 0.5m on W, progressing to approx. 2m above ground; soft, dry rot with fine, powdery decayed wood beneath; probed to 390mm depth; additional bark loss on S face of trunk at 1m above ground; white fungal mycelium visible, however no evidence of fungal fruiting bodies; historic wound to E at 3m above ground, showing full occlusion; moderately ivy-covered; main union at 2.5m with tight compression fork showing evidence of included bark for up to 1m in length; major limb to E overhanging footpath showing significant bark loss, decay and cracking; large, failed branch currently resting on the ground on-site; this branch was lost from major limb growing to SW and has left a wound of 250mm diameter; colour of fractured wood and presence of buds on failed limb suggest this was a recent failure; moderate deadwood throughout crown, consistent with age and species; above average levels of epicormic growth and estimate short shoot extension lengths throughout upper crown; prominent tree along footpath, forming an essential component of G3; of low quality; but of high landscape value and moderate cultural value; of short-term potential only.	C (23)
6	Lombardy poplar	22m	785mm	5.75m N 8m E 6.5m S 7m W	4m S	5m	Mature	Average	Indifferent	Off-site tree; multi-stemmed from 5m; numerous small cavities up to approx. 100mm diameter showing expected woundwood growth and no evidence of fungal fruiting bodies; numerous tight compression forks showing evidence of included bark and moderate deadwood throughout crown, consistent with age and species; asymmetric crown due to suppression by adjacent specimens; above average epicormic growth throughout crown; tallest member of G3 and is an essential component of that group; highly visible in views along public footpath between the site and the River Thames; of moderate quality and high landscape value; of long-term potential.	B (2)
7	Ash	10m	165mm 220mm	2.75m N 4.75m E 3m S 4.75m W	1m S	1.5m W	Young	Average	Indifferent	Off-site tree; self-seeded; twin-stemmed from base; numerous small wounds on both trunks showing full occlusion; main union shows tight compression fork with evidence of included bark; significant component of G3; of moderate quality and landscape value; but of little potential.	C (2)
8	Horse chestnut	10m	est. 300mm	3m N 3m E 7m S 7m SW 4m W	2m SW	1m	Young	Average	Moderate	One-sided crown, possibly due to historic suppression by removed horse chestnut; canopy completely offset from base; visible in views to N along adjacent footpath; of moderate quality and of long-term potential; but of low landscape value.	C (12)
9	Lombardy poplar	10m	est. 230mm est. 130mm est. 180mm	1.5m N 1m E 2m S 2m W	1m	1.5m	Young	Average	Indifferent	Multi-stemmed from base; mechanical wounds at base showing exposed heartwood and expected woundwood growth; moderate deadwood throughout crown, consistent with species; visible in views to N along adjacent public footpath; of moderate quality and of long-term potential; but of low landscape value.	C (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
10	Sycamore	10m	200mm 280mm	3m N 3.5m E 4.5m S 3.5m W	2m S	2.5m W	Young	Average	Indifferent	Off-site tree; ivy-covered; asymmetrical crown as overtopped by T1; moderate deadwood in crown consistent with age and species; of moderate quality and long-term potential, but of low landscape value.	C (2)
11	Horse chestnut	10m	275mm	1m N 2m E 3.5m S 2.5m W	1.5m W	2m W	Young	Average	Moderate	Off-site tree; symmetrical crown as overtopped by T1; moderate deadwood in crown consistent with age and species; of moderate quality and long-term potential, but of low landscape value.	C (2)
12	Lombardy poplar	10m	est. 140mm est. 280mm	2m N 0.5m E 2m S 3.5m W	3.5m W	4m W	Young	Average	Indifferent	Off-site tree; heavily ivy-covered; one-sided crown as suppressed by T6; of moderate quality; of medium-term potential; of low landscape value.	C (2)
G1	Various	Up to 8m	Up to 300mm	4m N 2m E 3.75m S 2m W	0m	0m	Semi-mature	Below average	Poor	Off-site group; species include Leyland cypress, English oak, wild cherry and goat willow; row of Leyland cypress along S boundary fence, with self-sown cherry and goat willow to SE and planted fastigiate oak to SW; dense understorey of elder and rose; cypress show significant browning and numerous branch failures; the top half of the crowns of two cypress specimens are completely dead and one cypress is wind-thrown; no evidence of recent management to this area; low quality but currently provide significant screening of the biothane reactor site from public views to S; of low quality; of moderate landscape value; of medium-term potential.	C (2)
G2	Various	Up to 6m	est. 200mm (over ivy) est. 300mm (over ivy) est. 200mm (over ivy)	3m N 2m E 4m S 2.5m W	0.5m	0.5m	Young	Below average	Poor	Species include hawthorn (dominant) and elder, with several small lombardy poplars at the N end; growing along inside of E boundary; all heavily ivy-covered; of low quality but provides significant screening of biothane reactor site from views along heavily used footpath between the site and the River Thames; of low quality but high landscape value; of medium-term potential.	C (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio -logy	Structure	Comments	Category
G3	Various	Up to 10m	Up to 1180mm (over ivy)	4.25m N 4.75m E 4.25m S 4.5m W	1m	0m	Semi-mature	Average	Indifferent	Off-site double belt of trees and shrubs along outside of E boundary, with a gravel footpath running through the centre; overstory on W edge (i.e. along the site boundary) dominated by two large horse chestnuts and one poplar, with semi-mature horse chestnuts, sycamores, ash and poplar in between; overstory not continuous and broken by large gaps; understorey consists of horse chestnut, elder, holly, holm oak, ash and various broadleaved shrubs; the understorey is dense with ivy and bramble, as well as large volumes of debris associated with failures and felling of other large horse chestnuts; generally, the overstory trees are of moderate quality and the understorey is of low quality; however, the understorey provides significant screening in views from the heavily-used footpath between the site and the River Thames; the overstory contributes to the woodland setting of the footpath; of high landscape value and long-term potential.	B (2)
G4	Various	Up to 12m	Up to 200mm	3m N 3m E 3m S 3m W	0m	0m	Semi-mature	Average	Indifferent	Off-site; predominantly bamboo (up to 5m in height & approx. 3m across); the W half has fastigate oaks planted in a line through amongst the bamboo; the oaks are similar in size, age and condition to G5; the E half contains cherry & self-seeded goat willow; along the N edge are various planted ornamentals such as cherry and sumac some of which overtop the bamboo; this group provides significant screening in views N of the Thames Water retained land (to the N of site) and is generally of a moderate quality, moderate landscape value and long-term potential.	B (12)
G5	English oak 'Fastigiata Koster'	Up to 12m	130mm to 200mm	1.25m N 1.25m E 1.25m S 1.25m W	0.25m	0.25m	Semi-mature	Average	Moderate	On-site tree belt (with the exception of the northernmost 7m); the trees are even-aged and tightly planted at 1.5m regular intervals; underplanted with pyracantha and self-seeded elder, rose and bramble; level change 1m to W of trunks of 1.5m down to Melliss Avenue, from which the trees are separated by a retaining wall consisting of wooden beams; many beams are rotten or missing, risking soil loss from the root plates; within site and to E is a slope 1m high and 7.7m in length running down away from the trees; no signs of regular maintenance, with some failed branches left <i>in situ</i> ; one tree opposite parking bay 3 at SW corner of group has been felled; both a highly susceptible species and growth form to oak processionary moth (site located in the Forestry Commission's OPM core zone); individually these trees are all category 'C' and of limited merit; generally of moderate quality but medium-term potential.	B (2)



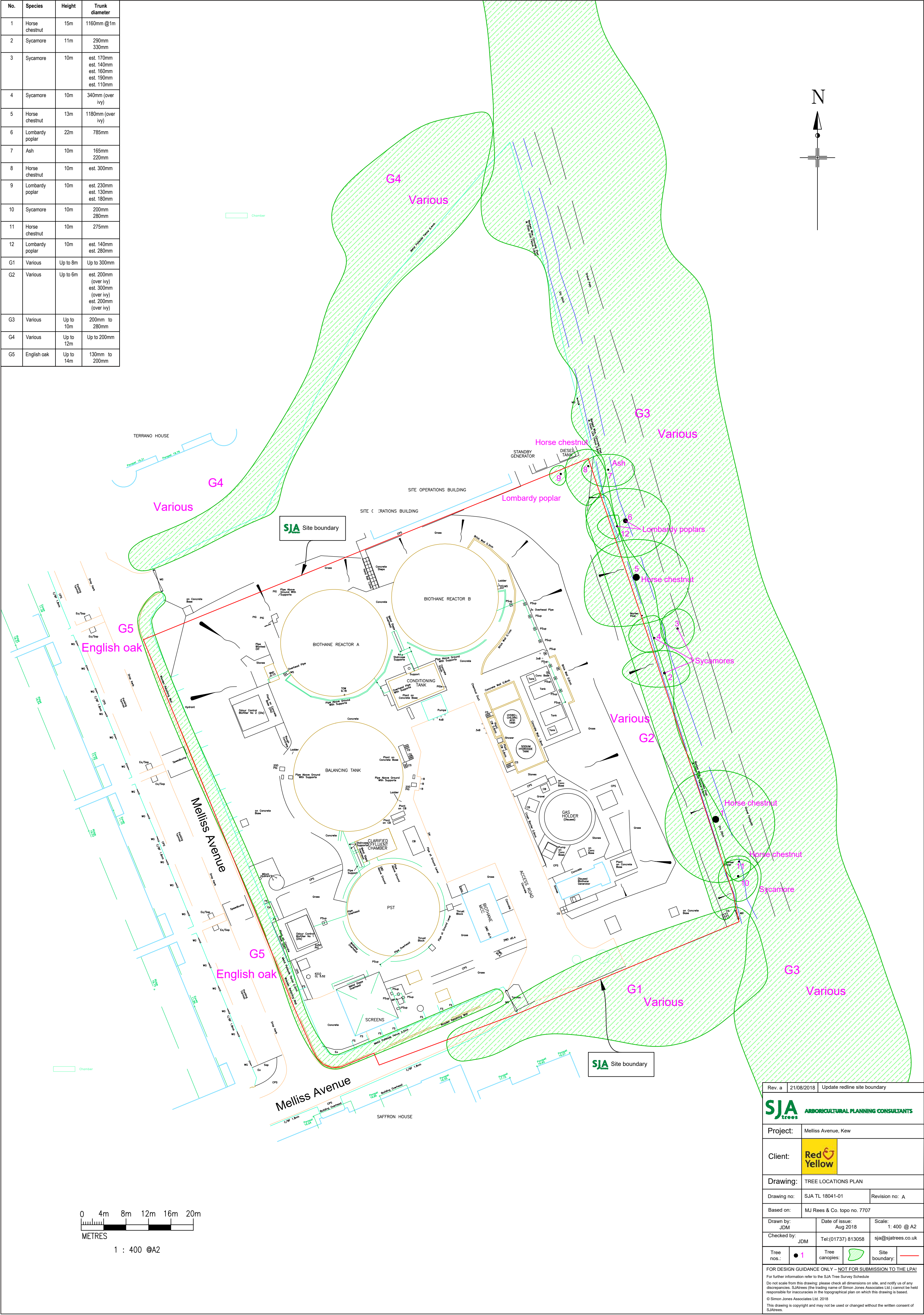
## **Root Protection Areas (RPAs)**

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><i>Tree No.</i></b>	<b><i>Species</i></b>	<b><i>RPA</i></b>	<b><i>RPA Radius</i></b>
1	Horse chestnut	608.7m <sup>2</sup>	13.92m
2	Sycamore	87.3m <sup>2</sup>	5.27m
3	Sycamore	55.3m <sup>2</sup>	4.2m
4	Sycamore	52.3m <sup>2</sup>	4.08m
5	Horse chestnut	629.9m <sup>2</sup>	14.16m
6	Lombardy poplar	278.8m <sup>2</sup>	9.42m
7	Ash	34.2m <sup>2</sup>	3.3m
8	Horse chestnut	40.7m <sup>2</sup>	3.6m
9	Lombardy poplar	46.2m <sup>2</sup>	3.84m
10	Sycamore	53.56m <sup>2</sup>	4.13m
11	Horse chestnut	34.22m <sup>2</sup>	3.3m
12	Lombardy poplar	44.33m <sup>2</sup>	3.76m
G1	Various	40.7m <sup>2</sup>	3.6m
G2	Various	76.91m <sup>2</sup>	4.95m
G3	Various	-	-
G4	Various	18.1m <sup>2</sup>	2.4m
G5	English oak	18.1m <sup>2</sup>	2.4m



No.	Species	Height	Trunk diameter
1	Horse chestnut	15m	1160mm @1m
2	Sycamore	11m	290mm 330mm
3	Sycamore	10m	est. 170mm est. 140mm est. 160mm est. 190mm est. 110mm
4	Sycamore	10m	340mm (over ivy)
5	Horse chestnut	13m	1180mm (over ivy)
6	Lombardy poplar	22m	785mm
7	Ash	10m	165mm 220mm
8	Horse chestnut	10m	est. 300mm
9	Lombardy poplar	10m	est. 230mm est. 130mm est. 180mm
10	Sycamore	10m	200mm 280mm
11	Horse chestnut	10m	275mm
12	Lombardy poplar	10m	est. 140mm est. 280mm
G1	Various	Up to 8m	Up to 300mm
G2	Various	Up to 6m	est. 200mm (over ivy) est. 300mm (over ivy) est. 200mm (over ivy)
G3	Various	Up to 10m	200mm to 280mm
G4	Various	Up to 12m	Up to 200mm
G5	English oak	Up to 14m	130mm to 200mm



Rev. a21/08/2018Update redline site boundary

SJA

ARBORICULTURAL PLANNING CONSULTANTS

Project:Melliss Avenue, Kew

Client:

Red

Yellow

Drawing:

TREE LOCATIONS PLAN

Drawing no:

SJA TL 18041-01

Revision no:

A

Based on:

MJ Rees & Co. topo no. 7707

Drawn by:

JDM

Date of issue:

Aug 2018

Scale:

1: 400 @ A2

Checked by:

JDM

Tel:(01737) 813058

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Tree nos.:

● 1

Tree canopies:

Site boundary:

FOR DESIGN GUIDANCE ONLY – NOT FOR SUBMISSION TO THE LPA!

For further information refer to the SJA Tree Survey Schedule

Do not scale from this drawing: please check all dimensions on site, and notify us of any discrepancies. SJAtrees (the trading name of Simon Jones Associates Ltd.) cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based.

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