SIMON JONES ASSOCIATES Ltd.
ARBORICULTURAL PLANNING CONSULTANTS
Arboricultural Consultancy - Tree Surveys
Planning & Development · Hazard & Safety
Tree & Woodland Management - Expert Witnesses

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Arboricultural Implications Report

Proposed re-development at

41 Highgate West Hill

Highgate

London N6

February 2014

Ref. SJA air 13340-01a

SUMMARY

Simon Jones Associates has undertaken a survey of the entire estate at No. 41 Highgate West Hill. This report covers a small area of the greater estate and includes 12 individuals and three groups of trees growing immediately adjacent to this application area, as defined by the red application boundary on the accompanying tree protection plan at **Appendix 2.**

The trees were surveyed over various site visits and their details revised following the most recent site visit in November 2013, in accordance with British Standard BS 5837:2012, *Trees in relation to design, demolition and construction – Recommendations*.

As the individuals and groups of trees are all growing outside of the application boundary, an assessment of the impacts of the proposed development shows that none of these trees are to be removed.

No trees are to be pruned.

There are no incursions into the root protection areas (RPAs) of any of the trees to be retained.

The retention of all the trees means that there will be no alteration to the key arboricultural features of the site and there will be no adverse impact on the character and appearance of the conservation area or impact on the local landscape, and thus the proposal complies with national planning policy.

CONTENTS

APPENDICES.

1. INTRODUCTION.

1.1. Instructions.

1.1.1. Simon Jones Associates Ltd. has been instructed by Witanhurst Construction Ltd. to visit No. 41 Highgate West Hill, London N6 and to survey the trees growing on or immediately adjacent to this site.

1.1.2. We are instructed to record the trees' locations, species, dimensions, ages, condition, and visual importance; and to categorise them in accordance with British Standard BS 5837: 2012, *Trees in relation to design, demolition and construction — Recommendations*.

1.1.3. We are further asked to identify which trees are worthy of retention within a proposed re-development of the site; to assess the implications of the development proposals on these specimens, and to advise how they should be protected from unacceptable damage during construction.

1.2. Scope of report.

1.2.1. This report and the appended tree protection plan (TPP) reflect the scope of our instructions, as set out above.

1.2.2. The proposed development comprises the construction of a barbeque area with associated hard landscaping.

1.2.3. The report is intended to accompany a planning application to be submitted to the London Borough of Camden, and complies with local validation requirements, and with the recommendations of BS 5837: 2012.

1.3. Site inspection.

1.3.1. A site visit and tree inspection was undertaken by Matt Rew and Andrew Bigg of Simon Jones Associates Ltd., on the 1st and 2nd of April 2009, and revised by Simon Jones on various occasions up to and including November 2013 and their details amended to comply with the new BS (2012). Weather conditions at all times

were clear, dry and bright. Deciduous trees were surveyed in partial, and then full leaf.

1.3.2. The tree locations plan at **Appendix 2** is based on the topographical survey plan provided.

1.3.3. The tree protection plan at **Appendix 3** is based on the proposed site layout plan by Colvin & Moggrdige Landscape Architects, drawing no. 601-P-1234-000.

1.4. National policy context.

1.4.1. Paragraph 14 of the National Planning Policy Framework (NPPF), (March 2012), states that there is a presumption in favour of sustainable development:

"At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking."

1.4.2. The NPPF makes it clear that planning permission for development should be granted unless the proposal is inconsistent with policies within the development plan, any adverse effects significantly and demonstrably outweigh the benefits, or the NPPF itself indicates that the proposal should be restricted.

1.4.3. Under Section 197 of the Town and Country Planning Act 1990, local authorities have a statutory duty to consider the protection and planting of trees when granting planning permission for proposed development. The effects of proposed development on trees are therefore a material consideration in dealing with planning applications, and this is normally reflected in local development planning policies. However, as an overriding principle of national policy in the NPPF is that planning permission should be granted unless the adverse effects of a proposal significantly outweigh its benefits, it follows that development should only be refused on arboricultural grounds where loss of trees would have a significant and adverse impact on the character and appearance of the local landscape, on amenity or biodiversity. Against this background, the effects of the current proposal are evaluated in the following sections of this report.

1.5. Site description.

1.5.1. The application site is located in the north-west corner of the grounds, adjacent to the recently constructed swimming pool within the lower garden. The application site boundaries directly adjoin the remaining grounds. Further to the north and east lie the residential properties and their gardens within Highfields Grove.

1.5.2. The site is on level ground, and is adjacent to the swimming pool with associated paving, near to the old tennis pavilion.

2. THE TREES.

2.1. Survey findings.

2.1.1. We surveyed a total of 12 individual trees, and three groups of trees, with trunk diameters of 75mm and above, growing immediately adjacent to the site[2]. Their details are found in the tree survey schedule at **Appendix 1**.

2.1.2. The numbers assigned to the trees in the tree survey schedule correspond with those shown on the appended tree locations and protection plans.

2.2. Statutory controls.

2.2.1. At the time of writing we understand that none of these trees are covered by a tree preservation order (TPO).

2.2.2. The site is within the boundaries of the Highgate Village Conservation Area.

2.3. Non-statutory designations.

2.3.1. There are no woodlands within or abutting the site that are classified as 'Ancient'. Ancient woodland, which is considered to be an important and threatened habitat, is defined by Natural England as "Land that has had continuous woodland cover since at least 1600 AD".

2.4. Assessment of suitability for retention.

2.4.1. In order to assess which trees should be retained in the context of a proposed re-development, we have identified the key arboricultural features within or immediately adjacent to the site, whose removal we consider would have a significant and adverse impact on the character and appearance of the local landscape, on amenity or on biodiversity. These are:

- The individual 14m tall English oak (no. 148) that is growing north-east of the application site;

[2] British Standard BS 5837: 2012, *Trees in relation to design, demolition and construction – Recommendations* recommends that all trees over 75mm stem diameter should be included in a pre-planning land and tree survey.

- The group of trees (G5) growing to the west of the application site which provide effective screening between the site and the adjacent properties that lie to the west.

2.4.2. In addition, we have categorised the trees in accordance with BS5837: 2012, and details of the criteria used for this process can be found in the notes that accompany the tree survey schedule. In line with the thrust of the NPPF and relevant local development policies, we have adjusted this methodology to give a greater weighting to trees that contribute to the character and appearance of the local landscape, to amenity, or to biodiversity.

2.4.3. One individual tree (Silver birch no. 112) and one off-site group of trees (G8) have been assessed as category 'U'. These are trees that are unsuitable for retention, on the basis of them being 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. On site trees that need removing solely to accommodate a proposed development are not placed in this category. Category ‘U’ trees are indicated on the accompanying tree locations and protection plans by **bracketed red** numbers.

2.4.4. Whilst there are no category ‘A’ trees, the Lombardy poplar no. 128 has been assessed as a category 'B' specimen. The remaining ten trees are assessed as category 'C' trees, being either of low quality, very limited merit, only low landscape benefits, no material cultural or conservation value, or only limited or short-term potential; or young trees with trunk diameters below 150mm; or a combination of these.

2.4.5. Of the remaining two groups, both have been assessed as category ‘C’.

2.4.6. Whilst BS 5837 states that trees in categories ‘A’, ‘B’ and ‘C’ are all a material consideration in the development process, the retention of category ‘C’ trees, being of low quality or of only limited or short-term potential, will not normally be considered necessary where they impose a significant constraint on development.

2.4.7. Furthermore, BS 5837 makes it clear that young trees, even those of good form and vitality, which have the potential to develop into quality specimens when mature "*need not necessarily be a significant constraint on the site's potential*"[3].

2.4.8. Moreover, BS 5837 states that "....care should be taken to avoid misplaced tree retention; attempts to retain too many or unsuitable trees on a site can result in excessive pressure on the trees during demolition or construction work, or post-completion demands for their removal"[4].

[3] Ibid. 4.5.10.

[4] Ibid. 5.1.1.

3. ARBORICULTURAL IMPACTS.

3.1. Trees to be removed.

3.1.1. The development proposals, as shown on the proposed layout drawing, indicate that no individuals or groups of trees are to be removed.

3.2. Trees to be pruned.

3.2.1. No trees are to be pruned to facilitate implementation of the proposals.

3.3. Root Protection Area incursions.

3.3.1. The 'Root Protection Areas' (RPAs)[5] of the trees to be retained have been calculated in accordance with Section 4.6 of BS 5837; and have been assessed taking account of factors such as the likely tolerance of a tree to root disturbance or damage, the morphology and disposition of roots as influenced by existing site conditions (including the presence of existing roads or structures), as well as soil type, topography and drainage. Where considered appropriate, the shapes of the RPAs (although not their areas) have been modified as a result of these considerations, so that they reflect more accurately their likely root distribution.

3.3.2. As can be seen on the TPP, no parts of the proposed structures or associated hard surfacing are within the RPAs of any of the trees to be retained.

[5] The minimum area around a retained tree **"deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority."** BS 5837, paragraph 3.7.

4. ASSESSMENT.

4.1. Tree removals.

4.1.1. As the proposals will not require the felling of any trees or groups of trees, there will be no alteration to those trees that constitute the key arboricultural features of the site, and therefore the proposals will result in no impact on views from surrounding public areas, and on the character and appearance of the conservation area.

4.2. Pruning.

4.2.1. No trees are to be pruned to facilitate implementation of the proposals, and no part of the proposed structure will lie within 3m of the extents of the canopies of trees to be retained, thereby allowing adequate working space for construction, and a reasonable margin of clearance for future growth.

4.3. RPA incursions.

4.3.1. No part of the proposed structure abuts or is within the RPAs of any of the trees to be retained; and therefore, subject to the implementation of protective measures specified below and on the TPP, its construction will not cause unacceptable damage to roots or rooting environments as a result of root severance or damage, or compaction or pollution of the soil.

4.3.2. The necessary precautions to prevent other incursions into the RPAs of retained trees and to protect them during construction can be assured by the erection of appropriate protective fencing, as shown on the TPP at **Appendix 3**.

5. PROTECTION OF TREES TO BE RETAINED.

5.1. Protective fencing.

5.1.1. Construction exclusion zones (CEZs) will be formed by erecting protective fencing around the RPAs of all on-site trees to the specification recommended in BS 5837: 2012, Section 6.2, prior to the commencement of construction. This should consist of a scaffold framework comprising a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at maximum intervals of 3.5m. Onto this, welded mesh panels should be securely fixed with wire or scaffold clamps, as shown in **Figure 2** of that document.

5.1.2. The RPAs of the off-site trees will also be enforced by the erection of protective fencing to the same specification, prior to the commencement of construction, thereby safeguarding them from incursions by plant or machinery, storage and mixing of materials, or other construction-related activities which could have a detrimental effect on their root systems.

5.1.3. The recommended positions of the protective fencing are shown by **bold blue lines** on the TPP. The precise positioning of the fencing around the trees will be considered in conjunction with any other protective hoarding/fencing which may be required around the site boundary.

5.1.4. Within the CEZs safeguarded by the protective fencing, there will be no changes in ground levels, **no soil stripping**, and no plant, equipment, or materials will be stored. Oil, bitumen, diesel, and cement will not be stored or discharged within 10m of any trees. Areas for the storage or mixing of such materials will be agreed in advance and be clearly marked. No notice boards, or power or telephone cables, will be attached to any of the trees. No fires will be lit within 10m of any part of any tree.

6. CONCLUSION.

6.1. Summary.

6.1.1. On the basis of the above considerations we consider that there are no arboricultural impacts as a result of this scheme that might otherwise have any impact on the local landscape. Thus the proposal complies with national planning policy.

6.1.2. The TPP shows the general and specific provisions to be taken during construction of the proposed development, to ensure that no unacceptable damage is caused to the root systems, trunks or crowns of the trees identified for retention. These measures are indicated by coloured notations in areas where construction activities are to occur either within, or in close proximity to, retained trees, as described in the relevant panels on the drawing.

6.1.3. The LPA can readily secure the implementation of and adherence to the measures shown on the TPP by the use of appropriate planning conditions.

6.1.4. Accordingly we conclude that, subject to the above, the proposed development would not have a significant and adverse impact on the character and appearance of the local landscape or the conservation area, insofar as this is contributed to by trees; and accordingly it complies with national planning policy guidance.

February 2014

APPENDIX 1

SCHEDULE OF TREES

SIMON JONES ASSOCIATES Ltd.

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Schedule of Trees

at:

Witanhurst, 41 Highgate West Hill, Highgate

November 2013

Tree Schedule: Explanatory Notes

Witanhurst, 41 Highgate West Hill, Highgate

This schedule is based on a tree inspection undertaken by Matt Rew & Andrew Bigg of Simon Jones Associates Ltd., on the 1st & 2nd of April 2009, and revised by Simon Jones on various occasions up to and including November 2013. Weather conditions at all times were clear, dry and bright. Deciduous trees were surveyed in partial, and then full 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) Field Guide to the Trees of Britain and N Europe.

3. Height.
Measured approximately with the aid of a clinometer, shown 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 Clearance.
Distance from adjacent ground level to lowest part of lowest branch, in metres.

7. 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

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

9. 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 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.

10. 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

11. 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 and value: in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested).

- Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features
- Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance
- Trees, groups or woodlands of significant conservation, historical, commemorative or other value

Category B: Trees of moderate quality and value: those in such a condition as to make a significant contribution (a minimum of 20 years is suggested).

- Trees that might be included in the high category, but are downgraded because of impaired condition
- Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboricultural features, or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality
- Trees with clearly identifiable conservation or other cultural benefits

Category C: Trees of low quality and value: currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150mm.

- Trees not qualifying in higher categories
- Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit
- Trees with very limited conservation or other cultural benefits

TREE SCHEDULE

Witanhurst, 41 Highgate West Hill, Highgate

No.	Species	Height	Trunk diameter	Radial Crown Spread	Crown Clear-ance	Age class	Physio - logy	Structure	Comments	Cate gory
111	Rowan	7m	260mm @250mm	2.5m	0m	Young	Average	Moderate	Multi-stemmed from base; of only low-level screening value; of moderate quality but low value; but of long-term potential.	C (1)
112	Silver birch	3m	120mm	0m	n/a	Young	Dead	Hazardous	Dead tree; of low quality and value and of no potential.	U
113 A	English oak	12m	305mm	1m N 7m E 5m S 5.5m W	0m E 0m S	Semi-mature	Average	Moderate	Single straight trunk from base; one sided suppressed canopy by adjacent specimen. Of moderate quality but low value; but of long-term potential.	C (1)
113 B	English oak	12m	340mm @1m	5m N 6.5m E 1m S 7.5m W	4m N 2m E	Semi-mature	Average	Moderate	Single straight trunk from base, light ivy cover to over half height; one sided suppressed canopy by adjacent specimen. Of moderate quality but low value; but of long-term potential.	C (1)
119	Silver birch	10m	145mm	2.5m	1m	Young	Average	Moderate	Drawn-up specimen with Height/Diameter ratio greater than 50; single straight trunk from base, slightly leaning trunk; low level narrow canopy. Of moderate quality but low value; but of long-term potential.	C (1)
123	Scots pine	10m	195mm	4.5m	1.5m	Young	Average	Poor	Drawn-up specimen with Height/Diameter ratio greater than 50; single straight trunk with a slight lean growing up and out through dense laurel. Of moderate quality but low value; but of long-term potential.	C (1)
124	Scots pine	10m	200mm	2.3m	0m	Young	Average	Moderate	Single straight trunk ivy covered to over half height; tree has very limited visibility due to adjacent specimens to the SE and E. Of moderate quality but low value; but of long-term potential.	C (1)
125	Scots pine	10m	255mm (over ivy)	3.5m	0m	Semi-mature	Average	Moderate	Single straight slightly leaning trunk, ivy covered to over half height. Of moderate quality but low value; but of long-term potential.	C (1)
126	Silver birch	8.5m	115mm	2m N 2.75m E 2.75m S 1.25m W	1m	Young	Average	Moderate	Drawn-up specimen with Height/Diameter ratio greater than 50; mechanical wounding at base, probably caused by mowers or strimmers; of only low-level screening value; of moderate quality but low value; but of long-term potential.	C (1)
127	Scots pine	13m	300mm (over ivy)	1.5m N 4.5m E 4.75m S 2.5m W	0m	Semi-mature	Average	Moderate	Slightly leaning trunk; heavily ivy-covered; one-sided crown as suppressed by adjacent specimens; of moderate quality but low value; but of long-term potential.	C (1)

No.	Species	Height	Trunk diameter	Radial Crown Spread	Crown Clear-ance	Age class	Physio - logy	Structure	Comments	Cate gory
128	Lombardy poplar	19m	395mm (over ivy)	2.5m	4m	Semi-mature	Average	Moderate	Drawn-up specimen with Height/Diameter ratio greater than 50; prominent buttress roots; single straight trunk, heavily ivy covered to just over half height; tree is of moderate quality and of low to moderate value due to its size and visibility from surrounding area; of medium-term potential.	B (12)
148	English oak	14m	560mm (over ivy)	6.25m	2m N 4m S	Semi-mature	Average	Moderate	Situated in the SW corner of the tennis court between the tennis court and the retaining wall; single straight trunk growing up through 147g; dominant spreading canopy, lower canopy on the N side are suppressed by 147g; tree is of moderate quality but currently only of low value as tree is only visible within the local vicinity of the pavilion due to the tree screening surrounding this specimen. Of long-term potential.	C (1)
G5	Various	5m to 17m	110mm to 425mm (over ivy)	5.5m	0m	Various	Average	Moderate	Visual group of various species, including Lombardy poplar, Scots pine, Silver birch, laurel, Wild cherry. Group provides dense low level screening between Witanhurst and adjacent property to the NW. Of moderate quality but low value; but of long-term potential.	C (1)
G6	Various	3.5m to 10m	75mm to 335mm	6.25m	0m	Young	Average	Moderate	Species include Laurel, Silver birch, European larch, rowan, English oak. Providing an intermittent screen between Witanhurst and the adjacent properties to the NW. Of moderate quality but low value; but of long-term potential.	C (1)
G8	Lombardy poplar	10m to 20m	150mm to 450mm	2m	4m	Semi-mature	Average	Indifferent	Row of approx. 110 off-site trees growing in gardens of adjacent properties. Some have lower trunk decay present, up to 1.5m; all have fastigiate crowns with tight branch unions typical of this variety; from southern end to opposite tree no. 78 all have all been topped at approx. 8m to 10m. From this point on to a point opposite tree 103 the trees have been topped but have now been allowed to re-grow with growth up to at least 10m in length. From this point northwards they are either being managed or are just not growing at the same rate as the re-growth is not as substantial as those to the south, especially at the N end where there is significant regrowth from where they appear to have been pollarded in the past. Likely to be significant decay at former pollard points, and re-growth, all of which are wind exposed, at high risk of failure. Of low quality, but of moderate value; however of only short-term potential.	U

Root Protection Areas ('RPA's)

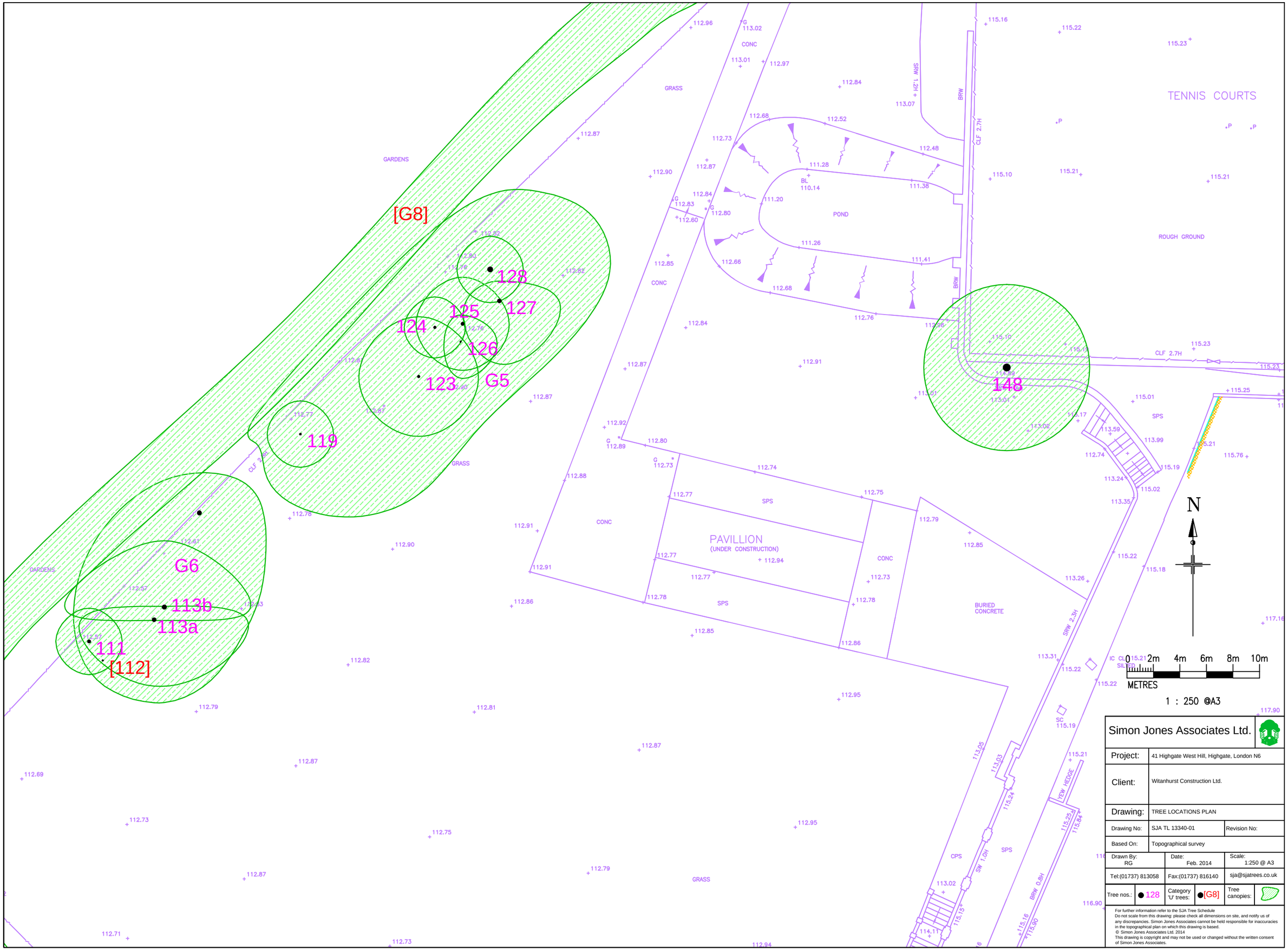
Root Protection Areas have been calculated in accordance with paragraph 4.6.1 of the British Standard 'Trees in relation to design, demolition and construction – Recommendations', BS 5837: 2012. This is the minimum area which should be left undisturbed around each retained tree. RPAs are portrayed initially 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.

Tree No.	***Species***	***RPA Radius***	***RPA***
111	Rowan	3.1m	30.6m^2
112	Silver birch	n/a	n/a
113A	English oak	3.7m	42.1m^2
113B	English oak	4.1m	52.3m^2
119	Silver birch	1.7m	9.5m^2
123	Scots pine	2.3m	17.2m^2
124	Scots pine	2.4m	18.1m^2
125	Scots pine	3.1m	29.4m^2
126	Silver birch	1.5m	7.1m^2
127	Scots pine	3.6m	40.7m^2
128	Lombardy poplar	4.7m	70.6m^2
148	English oak	6.7m	141.9m^2
G5	Various	5.1m	81.7m^2
G6	Various	4.0m	50.8m^2
G8	Lombardy poplar	n/a	n/a

APPENDIX 2 & 3

TREE LOCATION PLAN

TREE PROTECTION PLAN



Simon Jones Associates Ltd.			
Project:	41 Highgate West Hill, Highgate, London N6		
Client:	Witanhurst Construction Ltd.		
Drawing:	TREE LOCATIONS PLAN		
Drawing No:	SJA TL 13340-01	Revision No:	
Based On:	Topographical survey		
Drawn By: RG	Date: Feb. 2014	Scale: 1:250 @ A3	
Tel:(01737) 813058	Fax:(01737) 816140	sja@sjatrees.co.uk	
Tree nos.: ● 128	Category 'U' trees: ●[G8]	Tree canopies:	

For further information refer to the SJA Tree Schedule
Do not scale from this drawing: please check all dimensions on site, and notify us of any discrepancies. Simon Jones Associates cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based.

8

Protective fencing as shown on SJA TPP 07 and as per BS5837; see inset panel

Application site boundary

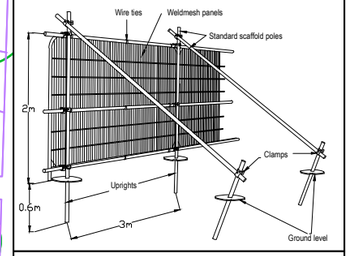
[G8]
128
125
127
124
126
123
G5
119
G6
113b
113a
111
[112]
148
G 112.73

N

0 2m 4m 6m 8m 10m
METRES
1 : 250 @A3

Protective Fencing

To be erected prior to the commencement of all works on site, and retained in place throughout construction. To comprise either 2.4m wooden site hoarding; or a 2m high scaffolding framework, with uprights at maximum 3m spacings, every other one braced to the ground with 45 degree struts; supporting standard anti-climb 'Heras' welded mesh fence panels secured with anti-lift devices to concrete or plastic bases pinned to the ground by scaffold uprights sunk to a minimum depth of 600mm; individual panels fixed to each other with at least 2 clamps and to scaffolding with heavy-duty cable ties. "TREE PROTECTION ZONE - KEEP OUT" or similar notices to be attached to every fifth panel.



TREE PROTECTION FENCING as shown in BS 5837: 2012, Section 6.2.2 & Figure 2.

Arboricultural Impacts: Summary

Impact	No. of Trees
Trees to be removed	0
Trees where manual excavation needed within RPAs	0
Trees where above soil surfacing needed within RPAs	0
Trees that will require pruning	0

Simon Jones Associates Ltd.					
Project:	41 Highgate West Hill, Highgate, London N6				
Client:	Whitanhurst Construction Ltd.				
Drawing:	TREE PROTECTION PLAN				
Drawing No:	SJA TPP 13340-01		Revision No:		
Based On:	601-P-1234-000				
Drawn By: RG		Date: Feb. 2014		Scale: 1:250 @ A3	
Tel:(01737) 813058		Fax:(01737) 816140		sja@sjatrees.co.uk	
Tree nos.:	● 128	Category 'U' trees:	● [112]	Canopies of trees to be retained:	
Category 'B' RPA:		Category 'C' RPA:		Protective fencing:	

For further information refer to the SJA Tree Schedule

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

This drawing is designed to reflect only the principles of layout and /or design insofar as these relate to the protection of trees to be retained, and should NOT be read as a definitive engineering or construction method statement. Reference should be made to the architect or structural engineer, as appropriate, over any matters of construction detail or specification, or any engineering standards or regulatory requirements relating to proposed structures, hard surfaces or underground services.