

SJ Stephens Associates

ARBORICULTURAL, LANDSCAPE & MANAGEMENT CONSULTANTS

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<u>Arboricultural Impact</u> <u>Assessment</u>

- Tree Survey
- Tree Protection Plan
- Arboricultural Method Statement

For:-

An Extension

<u>At:-</u>

7a St George's Terrace London NW1 8XH

On behalf of:-

Louis Crehan c/o Mutiny Architecture Ltd 13 Hawley Crescent London NW1 8NP

Prepared by:

Simon Stephens MA Oxon, Dip Arb(RFS), MArborA, C Env. MICFor Email: <u>simon@sjstephens.co.uk</u>

Survey Date: Report Date: Project no: 24th November 2024 30th November 2024 2371

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- A Tree Protection Plan: drawing no: 2371-01
- B Tree Schedule
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1 BACKGROUND

- **1.1** This Arboricultural Impact Assessment has been instructed by Mutiny Architecture, on behalf of the owner to specify tree protection measures and assess the arboricultural impact of the proposed construction of an extension at 7a St George's Terrace.
- **1.2** Trees were surveyed, with findings shown in the Tree Schedule in Appendix B and plotted on the Tree Protection Plan in Appendix A. This also shows tree protection measures, which are specified in the Arboricultural Method Statement in section 5 below. The arboricultural impact is assessed in section 6, which assumes that these measures are followed.
- **1.3** The tree survey was undertaken, and this report has been prepared, by Simon Stephens MA Oxon, Dip Arb (RFS), MArborA, C Env, MICFor a Registered Consultant with the Arboricultural Association, with over 20 years relevant experience.
- **1.4** This survey and report have been prepared in accordance with the recommendations of BS 5837:2012, Trees in relation to design, demolition and construction Recommendations.
- **1.5** Documentation supplied:
 - Mutiny Architecture, Proposed Ground Floor Plan: drawing no 290-10-100-03

2 SURVEY DETAILS AND SCOPE

- **2.1** The site survey included trees and shrubs, within and immediately adjacent to the red line boundary, with a stem diameter over 75mm at 1.5m height, as shown located on the Tree Protection Plan, included as Appendix A.
- **2.2** Tree inspection took place from ground level with the use of binoculars, sounding hammer and metal probe using the Visual Tree Assessment method (Mattheck & Breloer 1994). The presence and condition of bark and stem wounds, cavities, decay, fungal fruiting bodies and any structural defects that could increase the risk of structural failure were noted.
- **2.3** Tree diameters were measured using a girthing tape and tree heights were measured using a hypsometer. Where use of a tape was restricted by site factors, diameters were estimated, with the diameter recorded in the tree schedule as eg "est 300".
- **2.4** At the time of the survey, the weather was overcast, but with no restrictions to visibility. Broadleaf trees were in leaf. There were no limitations to access around the trees within the site.
- **2.5** Tree details are shown on the Tree Protection Plan included as Appendix A. Tree locations have been taken from the topographical survey provided. Where not included on the topographical survey, they have been determined by measuring distances from features shown on the plan, using a laser measuring device. The following information was recorded for each tree, and is shown in the Tree Schedule included as Appendix B:
 - Number: an identity number for each tree, prefixed with a "T", which cross references locations shown on the plan with the schedule in Appendix B. Where a number of trees are located close together and are similar in character and management requirements, they have been treated as a Group under a single number, prefixed with a "G".
 - **Species**: common name.
 - **Tree height**: approximate height in metres.
 - **Stem diameter**: diameter in millimetres, taken at 1.5m above ground. Where there are a number of stems, stem diameters are recorded in the condition column.
 - **Branch spread**: approximate spread in metres to N,S,E and W of the trunk. The approximate branch spread is drawn on the plan.
 - **Canopy clearance**: approximate height of the canopy above ground. Where a significant, low lateral branch is present, its height and direction of growth is included in the Condition column.
 - Age class: Young, Semi-mature, Early mature, Mature, Over-mature, Veteran.
 - **Condition**: features that affect the safe useful life expectancy and amenity of the tree, including the presence of decay or any physical defect.
 - **Management Recommendations**: recommendations to ensure the health and safety of the tree, within the future development.
 - Estimated Remaining Contribution: <10 years, 5-15 years, 10-20 years, 15-30 years, 20-40 years, >40 years.

- **Category grading**: tree classification taken from BS 5837:2012, Trees in relation to design, demolition and construction (see Appendix C for details), as follows:
 - Category U: Unsuitable for retention, trees with less than 10 years life expectancy, normally recommended for removal (Red)
 - Category A: high quality trees, able to make a substantial contribution for at least 40 years, normally retained unless there is an over-riding reason for removal and appropriate mitigation. (Green)
 - Category B: moderate quality trees, able to make a significant contribution for at least 20 years, normally retained. (Blue)
 - Category B/C: an intermediate category between categories B and C (not specifically described in BS5837). Trees, which should be retained wherever possible, providing retention does not unreasonably constrain the layout. (Blue)
 - Category C: low quality, in adequate condition to remain for at least 10 years, or young trees <150mm stem diameter. Trees which can be removed to allow the desired layout or new planting. (Grey)

For category A, B and C trees, a subcategory has been allocated, providing information on the reasons for selection of a specific category, as follows:

- Subcategory 1: mainly arboricultural values.
- Subcategory 2: mainly landscape values.
- Subcategory 3: mainly cultural values, including conservation.
- Trees have been classified irrespective of the possible proximity to future construction. The BS 5837 category is colour coded, as indicated above, on the plan included as Appendix A.
- **Protection Distance:** the protection distance in metres required to provide the Root Protection Area recommended in BS 5837, assuming a circular area centred on the tree.
- Root Protection Area (RPA): the area in m², as recommended in BS 5837, to provide sufficient rooting area to ensure tree survival and which, in most situations, should be fenced off to prevent root damage from construction activities.

3 SURVEY LIMITATIONS

- 3.1 No internal decay devices, or other invasive tools to assess tree condition, were used.
- **3.2** No soil excavation or root inspection was carried out.
- **3.3** This survey has not considered the effect that trees or vegetation may have on the structural integrity of future building through subsidence or heave.

3.4 The tree survey has been undertaken for planning purposes. Although any obvious structural defects have been noted, a Tree Hazard Assessment has not been carried out. Mature trees close to highly populated areas or public highways should normally be checked for safety annually, by a suitably qualified person.

4 LEGAL PROTECTION OF TREES

- **4.1** The Camden Council website was viewed on 30-10-2024, showing that the site falls within a Conservation Area. The presence of Planning Conditions currently attached to the site, was not checked.
- **4.2** Since the site is covered by a Conservation Area, six weeks notification must be given to the Local Planning Authority of any intended tree surgery works, to allow them the option of placing a Tree Preservation Order.
- **4.3** Once planning permission has been granted, provided the application clearly shows any trees to be removed or pruned, this overrides protection provided by Tree Preservation Orders or Conservation Areas, provided the work is necessary to implement the approved development. If not essential, a separate tree work application will need to be submitted for trees protected by a Tree Preservation Order.

5 ARBORICULTURAL METHOD STATEMENT

5.1 Site Overview

- 5.1.1 The proposal is for the construction of a rear extension to 7 St George's Terrace. The proposed site plan is included as Appendix F and is also shown, along with tree details, on the Tree Protection Plan attached as Appendix A.
- 5.1.2 There is a bay tree, T5, in the rear garden together with mature shrubs, including fatsia, berberis and rose, which need to be removed.

5.2 Tree Work

- 5.2.1 Details of proposed tree works are included in the Tree Schedule included as Appendix B.
- 5.2.2 Four shrubs are proposed for removal, as detailed in section 6.1 below.
- 5.2.3 All tree work must be undertaken to the standards set out in BS 3998:2010 Tree work Recommendations.

5.3 Root Protection Areas

5.3.1 Root Protection Areas are shown for all trees in the tree schedule included as Appendix B. They are also shown for all retained trees, as circular areas centred on the trunk, on the Tree Protection Plan included as Appendix A. Where there are physical obstructions to root growth the Root Protection Area should be shown as an equivalent area that is more likely to reflect actual root growth. The Root Protection Area shows the area around a tree in which all construction activity must normally be excluded, unless appropriate protection measures are implemented.

5.4 Tree Protection Fencing

- 5.4.1 Tree Protection Fencing must be erected where shown on the Tree Protection Plan, included as Appendix A. This will provide full protection of the Root Protection Areas of all retained trees within the site .
- 5.4.2 Tree works can be completed before Tree Protection Fencing is erected, however no contractors plant or vehicles must be allowed to track within the Root Protection Areas unless ground protection panels are laid.
- 5.4.3 Tree Protection Fencing must be from weldmesh panels, at least 2m high, securely fixed, with wire or scaffold clamps, to a rigid framework. This framework must be constructed from scaffold tubes with vertical tubes, at a maximum interval of 3m and driven into the ground at least 0.6m. The structure must be well braced to resist impacts, constructed as per Figure 2 of BS5837:2012, which is reproduced in Appendix D. Alternatively, weldmesh panels can be supported on blocks, providing the blocks are pinned to the ground with road pins, or similar, and the panels are braced, as per Figure 3 of BS5837:2012, which is also reproduced in Appendix D.
- 5.4.4 Weatherproof notices must be fixed to the Tree Protection Fencing, and maintained, stating:-

TREE PROTECTION AREA KEEP OUT

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND CONSERVATION AREA STATUS CONTRAVENTION MAY LEAD TO CRIMINAL PROSECUTION THE FOLLOWING MUST BE OBSERVED BY ALL PERSONS:

- The Protection Fence must not be moved
- No person or machine must enter the area
- No materials or spoil must be deposited
 - No excavation must be permitted

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

- 5.4.5 After erection of Tree Protection Fencing and installation of ground protection, 2 days notice must be given to the Local Planning Authority before demolition or construction, including any ground work, starts on site.
- 5.4.6 Tree Protection Fencing must be maintained and retained for the duration of the works, or until such time as agreed in writing with the Local Planning Authority.

5.5 General measures

- 5.5.1 No construction activity whatsoever, including routing of underground services, storage of materials or on-site parking, must be allowed within Root Protection Areas, other than that specifically described above.
- 5.5.2 No mixing or storage of cement, concrete, oil, fuel, bitumen or other chemicals must be permitted within 10m of the trunk of any retained trees, nor in any position where the slope of the ground could lead to contamination of the Root Protection Area.
- 5.5.3 Fires must not be lit in a position where their flames could extend to within 10m of foliage, branches or trunk.
- 5.5.4 Landscape works carried out within Root Protection Areas must be undertaken with great care so as not to damage shallow roots. Rotovators or other heavy mechanical cultivation must not be used within the Root Protection Areas.
- 5.5.5 If any tree shown for retention is removed, uprooted or destroyed, another tree must be planted in the same location, at a size and species to be agreed in writing with the Local Planning Authority.
- 5.5.6 A copy of this report and the Tree Protection Plan must be kept on site and must be fully understood by the Site Agent.

5.6 Bat roosts

5.6.1 The current legislation makes it a criminal offence to disturb, damage or destroy any bat roost or hibernation area. However, none of the shrubs recommended for felling are considered suitable for bats to use either for hibernation or temporary roost sites. The lack of cavities, cracks, loose bark or slab ivy makes it unlikely that bats will use the trees, except possibly for foraging for food. Contractors must be reminded of their responsibilities and should contact the relevant authorities if any signs of bats are found.

5.7 Birds

5.7.1 The current legislation makes it a criminal offence to disturb nesting birds. The nesting season is generally assumed to be from 1st March to 31st July, however this can vary depending on species and location. During these months a careful inspection must be made before work commences and works must be postponed if active nests are found.

6 ARBORICULTURAL IMPACT ASSESSMENT

- **6.1** The following shrubs, categorized as per BS 5837 (see Appendix C for details), are proposed for removal:
 - Category C low quality:
 - T1 climbing rose
 - T2 a berberis shrub
 - T3 a mature fatsia shrub
 - o T4 a semi-mature fatsia shrub
- **6.2** No shrubs/trees of any significance are proposed for removal and the new extension has been kept back from trees to provide adequate separation distances to ensure their future sustainability.
- **6.3** Protection measures have been specified to protect the Root Protection Area of all retained trees.
- **6.4** Provided the recommendations in this report are followed, the arboricultural impact of this extension on existing tree cover will be minimal and is considered acceptable.

7 REFERENCES

- BS5837:2012 Trees in relation to design, demolition and construction Recommendations.
- BS3998:2010 Tree Work. Recommendations.





APPENDIX A

Tree/ Group No.	Species	Height (m)	Stem Diam. at 1.5m (mm)	Branch Spread (m)		Canopy Cleara -nce (m)	Age Class	Observations	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Protect -ion Distnce (m)	Root Protect. Area (m2)		
				Ν	S	Е	w								
T1	Climbing rose	3.5	75	0.3	3	0.5	1	1.6	Mature	Unpruned	Remove to construct extension	5-15	C2	0.9	3
T2	Berberis	4	160	1	1.5	1.5	1	0.3	Mature	Twin stems from base - both 110mm diameter. Reasonable vigour. Unpruned.	Remove to construct extension	5-15	C2	1.9	12
Т3	Fatsia	3	180	3	1	3	1.5	1.2	Mature	5 stems-average 80mm diameter - all leaning to north. Overgrown shrub.	Remove to construct extension	10-20	C2	2.2	15
T4	Fatsia	1.7	45	1	0.5	1	0.5	0.3	Semi mature	Twin stems - 20 and 40mm.	Remove to construct extension	15-30	C2	0.5	1
T5	Вау	8.5	220	2	3	4	1	1.7	Mature	Twin stems - 130 and 180mm, showing good vigour. Growing against building in adjacent site.		15-30	B2	2.6	22
Т6	Portugal laurel	5	est80	1	1.5	2	1	1.5	Early mature	Growing other side of 1.6m brick boundary wall.		15-30	B-C2	1.0	3
T7	Mimosa	5	160	2	3	0.5	3.5	1.5	Semi mature	Growing in adjacent garden the other side of 1.7m brick boundary wall.		15-30	B-C2	1.9	12

BS 5837:2012, Table 1 Cascade chart for tree quality assessment

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Category and definition	Criteria (including subcategories where a	ppropriate)		Identification on plan				
Trees unsuitable for retention	(see Note)							
Category U Those in such a condition	• 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)							
be retained as living trees in	Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline							
the context of the current land use for longer than	 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 							
To years	NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.							
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation					
Trees to be considered for rete	ention							
Category A	Trees that are particularly good	Trees, groups or woodlands of particular	Trees, groups or woodlands	See Table 2				
Trees of high quality with an estimated remaining life expectancy of at least 40 years	examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	visual importance as arboricultural and/or landscape features	of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)					
Category B	Trees that might be included in	Trees present in numbers, usually growing	See Table 2					
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and 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	as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	conservation or other cultural value					
Category C	Unremarkable trees of very limited	Trees present in groups or woodlands, but	Trees with no material	See Table 2				
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	merit or such impaired condition that they do not qualify in higher categories	without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	conservation or other cultural value	64.5				

British Standard BS 5837:2012 Default specification for protective barrier

Figure 2

Key

- 1 Standard scaffold poles
- 2 Heavy gauge 2 m galvanised tube and welded mesh infill panels
- Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps



Examples of above-ground stabilising systems

Figure 3a

Stabiliser strut with base plate secured with ground pins





Figure 3b Stabiliser strut mounted on block tray



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Appendix E







ARC	DESIG MU·TI·N
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ssued for Planning	steph	07.10.24	00
DESCRIPTION	ΒY	DATE	REV
This drawing is the copyright of Mutiny Architecture Lt	d. Not to be reproduce	d, retained or d	disclosed to