



Part 2: BS: 5837 Arboricultural Implications Assessment & 'Draft' Tree Protection Plan Report

Site:

82 Woodside Avenue
London
N10 3HY

Date of Site Visit:

8th June 2023

Prepared for:

Marina & Lambros Kilaniotis

Prepared by:

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Bartlett Project Reference:

GD/230290/R2



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1.0 SCOPE OF REPORT

1.1 Instruction

1.1.0 Bartlett Consulting has previously been instructed to undertake a tree survey and compose a Tree Constraints Plan (TCP) following the guidance of British Standard 5837: 2012 *Trees in Relation to Design, Demolition and Construction – Recommendations*, gathering data on trees and vegetation within the boundary of 82 Woodside Avenue, London, N10 3HY as well as those on neighbouring properties considered to be within influencing distance. Data pertaining to one tree within the rear garden of the site as well as two trees and one hedgerow adjacent to the rear garden were obtained.

1.1.1 This report takes the previously gathered tree data and constraints, and overlays that information with the proposed site plan and proposed site layout, allowing for an evaluation of how the proposed extension, internal re-modelling and associated landscaping works will co-exist with the tree population. Where there are trees which have the potential to influence, those trees must be considered as a constraint within the project planning.

1.2 Documents & supporting information

1.2.0 Bartlett Consulting was provided with the following documentation and plans prior to composing this report. They were sent via email in both PDF and DWG file format:

- Garden Proposed DRwing No: 22081-2-900 Rev A

1.3 Aspects included within report

1.3.0 The information contained within this report follows the guidance of British Standard 5837 2012: *Trees in Relation to Design, Demolition and Construction – Recommendations*.

1.3.1 This Arboricultural Impact Assessment (AIA) is accompanied by a 'draft' Tree Protection Plan (dTPP). This plan illustrates trees to be retained and incorporated into the proposed development, identifies where above and below ground level constraints are caused and gives consideration to statutory controls, as well as the potential loss of trees on and adjacent to the site. Issues also considered identify any necessity to undertake facilitation pruning to retained trees, either arising from accommodation, excessive shading or due to an unacceptable amount of encroachment upon a retained tree's rooting zone.

1.3.2 The dTPP also identifies recommended locations of physical tree protection barriers, non-compacting ground protection, and site-specific working methodologies.

1.3.4 Mitigation measures are also provided within this report, identifying the need for physical tree protection barriers, non-compacting ground protection, as well as tree replacement planting.

1.3.5 Modified RPA's will be illustrated if known below ground level obstructions exist, or, where considered appropriate to do so, whilst tree shade patterns and future canopy spread for young trees will also be illustrated where necessary.

1.0 SCOPE OF REPORT (Continued...)

1.4 Aspects excluded from report

- 1.4.0 This report does not include an Arboricultural Method Statement (AMS), or a 'final' Tree Protection Plan (TPP).
- 1.4.1 The contents of this report do not include discussions regarding subsidence and/or heave as a result of retention or tree removal, nor does this report consider the water demands of trees present to determine foundation design and depth. If required, this can be provided on request.
- 1.4.2 Following the initial site visit and tree survey, we believe that there is a Low potential for wildlife and ecological associations with the trees subject to this report. Ecological associations are considered to be limited to nesting birds within the crowns
- 1.4.3 The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000, provides statutory protection to birds, bats, insects and other species that inhabit trees, hedgerows, or other associated vegetation. Ecological considerations that involve EU Habitats Directive will overrule any arboricultural recommendations as given within this report.
- 1.4.4 It is the recommendation of Bartlett Consulting that professional, detailed, advice from an ecologist is sought (if not done-so already) to confirm the consideration of Bartlett Consulting and to check if any such constraints apply to this site and its development proposals.
- 1.4.5 All trees must be thoroughly and properly assessed for nesting birds prior to the commencement of any recommended tree works.

2.0 IMPLICATIONS OF PROPOSED DEVELOPMENT UPON EXISTING TREE POPULATION

2.1 Description of the proposed development

2.1.0 From the information provided to us and listed in Section 1.2 above, it is our understanding that the following aspects of proposed development which influence, or are influenced by the existing trees are:

1. Partial demolition of existing lean-to shed
2. Construction of rear extension.
3. Re-landscaping including part excavation and removal of soils from rear garden.

2.2 Table 1: Implications of proposed development upon existing tree population

Tree Ref.	Species	Category	Removal due to		Mitigation Required		Aspect of Development affecting retained tree
			Works	Condition	Crown	RPA	
T1	Silver Birch (<i>Betula pendula</i>)	U	N/A	✓	N/A	N/A	• None
T2	Silver Birch (<i>Betula pendula</i>)	B2	N/A	N/A	✓	✓	• RPA and western crown spread encroach marginally within site
T3	Southern Magnolia (<i>Magnolia grandiflora</i>)	C1	N/A	N/A	N/A	N/A	• None
G4	Leyland Cypress (<i>X Cupressocyparis leylandii</i>)	C2	N/A	N/A	N/A	N/A	• None

2.3 Table 2: Mitigation measures required for proposed development & existing tree conflicts

Tree Ref	Species	Category	Mitigation Required
T2	Silver Birch (<i>Betula pendula</i>)	B2	1. Install robust tree protection as shown within dTPP ref GD/230290 2. Prevent any construction access via the rear garden gate and communal path to the rear
T3	Southern Magnolia (<i>Magnolia grandiflora</i>)	C1	1. Prevent any construction access via the rear garden gate and communal path to the rear
G4	Leyland Cypress (<i>X Cupressocyparis leylandii</i>)	C2	2. Prevent any construction access via the rear garden gate and communal path to the rear

2.4 Table 3: Tree work

Tree Ref	Species	Category	Schedule of works prior to erection of tree protection barriers
T1	Silver Birch (<i>Betula pendula</i>)	U	• Remove to ground level

3.0 SUMMARY OF IMPLICATIONS ASSESSMENT

3.1 Table 4: BS: 5837 categories & tree loss

BS: 5837 Category	Number
A	0
B	0
C	0
U	1
Total	1

3.2 Tree loss

3.2.0 The Silver Birch (T1) was identified on site as being within a poor structural and physiological condition with basal decay, cambial dysfunction on the main stem and co-dominant leaders resulting in significant die-back throughout the crown and major deadwood overhanging the garden.

3.2.1 Based on this initial assessment I recommend that this tree is removed on grounds of sound arboricultural advice and irrespective of any proposed scheme.

3.3 Discussion Direct Impacts

3.3.0 With removal of the Silver Birch (T1) there is little in way of constraint posed by trees within the site and the proposed construction and hard landscaping works are unlikely to have any negative effect on the adjacent trees.

3.3.1 The third-party Silver Birch (T2) encroaches marginally within the eastern site boundary with the RPA and western crown however this is marginal. Furthermore, the boundary brick wall is likely to have limited root spread to the west within the site.

3.3.2 As long as there is no use of the rear access for construction then the remaining third-party trees are not considered to be at risk from the proposed development.

3.3.3 As shown within the dTPP suitably installed robust tree protection fencing located to the rear of the site will prevent any encroachment within the RPA and crown spread of T2 and also stop access to or from the rear garden gate and communal path beyond.

3.0 SUMMARY OF IMPLICATIONS ASSESSMENT (Continued...)

3.4 Discussion Indirect Impacts

- 3.4.0 I have been informed that all construction access to the site will be via the side of the property following the removal of the existing lean-to shed.
- 3.4.1 Due to the limited available space within the site it would be advisable to adopt the “Just in time” concept with regards materials on site. Available space within the site is limited to the hardstanding of the car parking area to the front of the property.

3.5 Infrastructure requirements

- 3.5.0 Ground use planning should form part of the development project, with existing and/or proposed utility corridors identified on the proposed plans. It is strongly recommended that service ducts are shared across the service providers to limit further ground works and site disturbance.
- 3.5.1 Proposed service runs should be designed with full consideration to the guidance and recommendations of National Joint Utilities Guidelines No.10 – Volume 04: *Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees* and avoid the notional RPA of retained trees in all circumstances, in the first instance.
- 3.5.2 I do don't anticipate the need for any service to run either close to or through the RPA of any retained trees.

3.6 Erection of tree protection barriers and laying of non-compacting ground protection

- 3.6.0 In order to safeguard the third-party trees adjacent to the site, it will be necessary to erect tree protective barriers prior to the commencement of works on site and to ensure that they remain in-situ for the duration of the project, unless otherwise directed.
- 3.6.1 The proposals presently do not necessitate the installation of non-compacting ground protection.

4.0 APPRAISAL OF TREE LOSS & RETENTION

4.1 Table 5: Summary of trees

BS: 5837 Category	Remove	Retained		Total
		Tree work	No works	
A	0	0	0	0
B	0	0	1	1
C	0	0	2	2
U	1	0	0	1
Total	1	0	3	4

APPENDIX 1 LIMITATIONS OF REPORT

Limitations of the Arboricultural Implications Assessment

- This assessment is based upon information obtained from the BS: 5837 Tree Survey.
- All dimensions and measurement are based upon previously obtained data the BS: 5837 Tree Survey and from drawings provided to Bartlett Consulting.
- This assessment considers the possible implications to the proposed built structures. Suggestions from an arboricultural perspective may be provided outlining an alternative site layout. Such suggestions must be considered by the project Architect/Designer/or Engineer before implementing any suggestions.

Data on which the assessment is based

- Validity, accuracy and findings of the report are directed by the accuracy of information provided to Bartlett Consulting at the time of conducting the tree survey and during report writing.
- Checking of independent data/information will not be undertaken, with particular reference given to scaled maps and drawings provided to Bartlett Consulting

Validation of the assessment

- The assessment considerations/findings in this report remain valid for a period of one year, from the date of issuance.
- Such considerations/findings will become invalid if any building works are undertaken, soil levels altered, or any unsolicited tree works undertaken.
- If any alterations to the existing building structures, or soil levels, or if any unsolicited tree works have been completed, it is the recommendation of Bartlett Consulting that a new BS: 5837 Tree Survey/report is undertaken to reflect these changes.

Tree in relation to other properties

- This assessment only considers the trees in relation to the site and the proposed structures within it, as identified.
- The assessment does not comment upon trees in relation to structures beyond the boundaries of the site as identified (third party properties).
- Consideration of potential impact upon neighbouring built structures may be provided if pertinent, in the instances where boundary tree planting is proposed/required.
- Damage to, or potential damage to, any other built structures that is not referred to within this report are not considered, unless otherwise stated. This includes both neighbouring structures as well as any other structure on the site.

Trees in relation to subsidence, heave and direct damage

- This report does not deal with matters concerning subsidence or heave to any existing built structure on or neighbouring the site. It may be prudent to consider the effects of heave on any built structure if trees are to be removed.
- Similarly, the issue of direct damage (physical damage caused by tree roots) is not dealt with in this report.

Tree subject to statutory controls

- Whilst Bartlett Consulting has made attempts to ascertain if any of the trees subject to this report are 'protected', their status is always subject to change. Therefore, the final responsibility for checking statutory protection for trees rests with the employed contractor and not with Bartlett Consulting
- Any prescribed tree works to a protected tree are provided due to perceived hazard and risk, and should be considered acceptable by the Local Planning Authority (LPA). However appropriate notification must still be provided to the LPA as they may take an alternative point of view.

Trees are subject to environmental factors

- The statements, findings and preliminary recommendations made within this report do not take into account any effects of extreme climate and weather incidences, vandalism, changes in the natural and built environment around the tree(s) after the date of this report, nor any damage whether physical, chemical or otherwise.

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APPENDIX 2 REPORT REFERENCES

As a progressive company, we keep abreast of research data relating to Arboriculture. All observations, recommendations and works are based on current industry standard reference material and a selection of pertinent items is shown below.

This survey and report have evolved from industry material including the following:

- BS 5837: (2012) *Trees in Relation to Design, Demolition and Construction – Recommendations*
- BS 3998: (2010) *Tree Works - Recommendations*
- Town & Country Planning Act (Tree Preservation) (England) Regulations 2012
- Town & Country Planning Act (As amended) 1990
- Mattheck, C, Bethge K, Weber K. (2015) *The Body Language of Trees – Encyclopaedia of Visual Tree Assessment*
Karlsruhe Institute of Technology Campus North.
- National Joint Utilities Group (2007) *Publication Volume 4: Issue 2 Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees.*
- National House Building Council Standard, Part 4.2 – *Building Near Trees*

Bartlett Consulting's arboricultural expertise has been used to interpret these references for practical application to the site and the trees which are the subject of this report, and to provide the most appropriate advice and guidance at this stage of project planning.

APPENDIX 3 TREE PROTECTION PLANNING

The draft Tree Protection Plan (dTPP) referenced GD/230290/dTPP can be found as an appendix at the end of this report. The TPP has been prepared in accordance with Section 7.1 of British Standard 5837:2012.

Tree protective fencing will be required to safeguard the trees against damage which may be sustained throughout redevelopment of the site, and this plan is indicative of the anticipated locations and/or zone of tree protection measures.

The TPP has been drafted at this early stage to inform the client and landowners of these requirements, as well as illustrate how the tree protection measures and tree constraints may influence the free space around the site once development commences.

Vertical Barriers: physical protection measures for the retained trees, which will ensure that the designated RPA becomes an exclusion zone during any stage of development. Fencing will prevent machinery, men, materials, and other site activities from occurring within the RPA or damaging the tree crown.

Vertical barriers should be fit for the purpose of excluding construction activities, and appropriate to the degree and proximity of the site operations. A final specification will be provided once the layout has been finalised and agreed by all parties. An illustration has been included below for reference.

The vertical barriers shall completely exclude access during all phases of site operations. The protected areas shall not be used for the storage of materials or spoil, nor for the mixing of substances or the disposal of any residues. Materials, equipment and arising debris will not be stacked against the vertical barrier, even temporarily. A4 sized Notice Signs must be laminated and attached to the vertical barrier at regular intervals so all visitors and operatives are aware of the tree protection requirements.

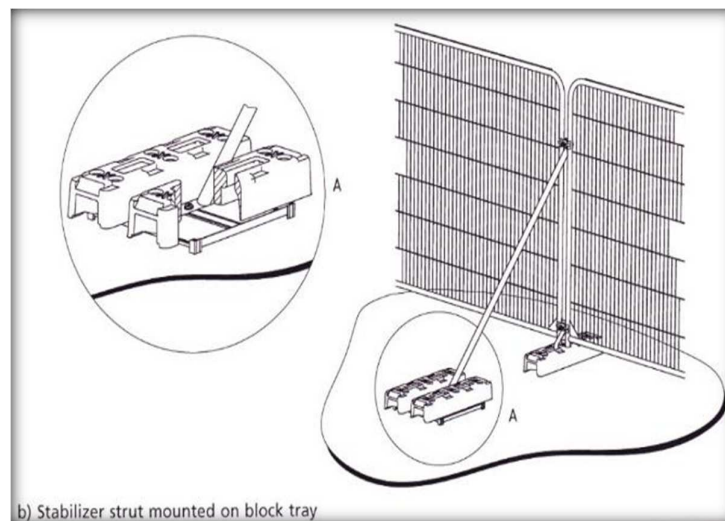


Figure 1: Illustration of Vertical Tree Protection Barrier

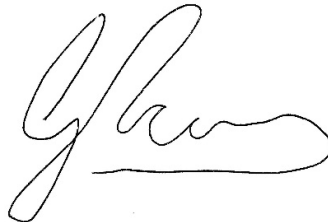
We trust that the contents and recommendations contained within this report were informative, easy to understand and helpful to you, with regards to managing your tree. Should you have any further questions or concerns, please do not hesitate to contact us again.

REPORT CLASSIFICATION: BS: 5837 Arboricultural Implications Assessment & Draft Tree Protection Plan

REPORT STATUS: Final

REPORT COMPLETED BY: Mr G Davies *FdSc Arb*
Arboricultural Consultant

SIGNATURE:



DATE: 15th June 2023

REPORT REVIEWED BY: Ruth Le Poidevin
Consultancy Administrator

SIGNATURE:



DATE: 20/06/2023

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DRAFT TREE PROTECTION PLAN

SCALE :
1 : 150 @ A4

DATE :
6/21/2023



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GD/230290dTPP

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