BS 5837:2012 Tree Survey & Arboricultural Impact Assessment

32 Messina Avenue
London
NW6 4LD

Date: 15th November 2023

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1. Instruction

Usherwood Arboriculture have been instructed by Hoeg Architects to provide a tree survey and arboricultural impact assessment with regards to the proposed- New rear ground floor brick extension to match existing, with associated rear metal framed double glazed doors and windows- 2 new double-glazed rooflights over new ground floor rear extension- Proposed landscaping works to rear garden- New tiled mansard extension to match adjoining properties, with 4 new associated lead clad dormers with timber framed sash double glazed windows- 5 new double-glazed rooflights over mansard roof extension at 32 Messina Avenue, London, NW6 4LD. The survey has been carried out in accordance with BS5837:2012, Trees in relation to design, demolition and construction-Recommendations.

Drawing No.	Title	Drawn/Written by
HA-1007-001	Existing & Proposed Ground Floor Plan	Hoeg Architects

Table 1. Drawings and documents supplied for consideration within this report

2.Executive Summary

This document considers the potential impact of development upon a single category C Laurel located in the adjacent property. The tree grows behind a boundary wall with the canopy extending into the application site. The proposal requires the cutting back of lateral branches where they extend into the site in order to construct the rear extension. There will be no further impact on the off-site tree other than the proposed reduction.

3.The Site

The Site is located on the south-east side of Messina Avenue and comprises a 3-storey Victorian terrace house with level front and rear gardens. The rear garden is mainly laid to paving and walled on all sides.

Soil conditions.
The British Geological Survey, Geology of Britain viewer describes the local bedrock geology as London Clay Formation- Clay, silt and sand. There is no information on local superficial geology.

Legal Constraints
Trees can sometimes be the subject of a Tree Preservation Order (TPO) or a property may be situated within a designated conservation area. Both a TPO and conservation area designation require the owner/occupier or those wishing to work on trees to seek the Council's consent or provide written notice prior to carrying out any works. It is a criminal offence to carry out any works to protected trees without the Council's consent. The site and neighbouring properties are not situated within a Conservation Area or subject to a tree preservation order.

Aerial image above, courtesy of Google Maps, showing the application site outlined in red.

4. Tree Survey

Trees were assessed in accordance with recommendations and guidelines contained within British Standard 5837:2012 - 'Trees in relation to design, demolition and construction-Recommendations' henceforth referred to as BS5837. The survey was carried out in relation to the condition and quality of trees growing either within or near the boundary of the site. Where details have been omitted including the heights of crown break and the direction of the first major lateral branch, these details were not seen as being relevant to this application. Where access allowed, tree heights were measured with a Haglof electronic clinometer and trunk diameters with a diameter tape measure. Crown spreads were measured with a tape measure at the four cardinal points.

All trees were assessed from the ground utilizing the Visual Tree Assessment method as developed by Mattheck and Breloer (The Body Language of Trees, Research for Amenity Trees No 4 Department of the Environment).

This tree survey should not be treated as a hazard assessment, it has been carried out to inform the planning process with regards to the appropriate retention and protection of trees as visual and ecological assets within the landscape. However, where clear and obvious defects are observed, the relevant parties will be informed.

Tree Assessment and Categorization

Tree quality ratings have been assessed in accordance with BS5837's Table 1, Cascade chart for tree quality assessment.

U= Trees in such a condition that any existing value would be lost within 10 years and which should in the current context, be removed for reasons of sound arboricultural management. (Trees that have serious, irremediable structural defects, such that their early loss is expected due to collapse or ill health including trees that will become at risk due to the loss of other U category trees).

A = Trees of high amenity quality and value in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested).
1) Trees that are particularly good examples of their species if rare, unusual or essential components of groups or formal or semi-formal arboricultural features.
2) Trees, groups of trees or woodland which provide a definite screening or softening effect to the locality in relation to views in or out of the site, or those of particular visual importance.
3) Trees groups or woodlands of significant conservation, historical, Commemorative or other value (e.g. veteran tree or wood pasture).

B = Trees of moderate quality and amenity value: those in such a condition as to be able to make a significant contribution (a minimum of 20 years is suggested).
1) Trees that might be included in the high category but are down-graded because of impaired condition (e.g. remediable defects).
2) Trees, groups of trees or woodland that form distinct landscape features but do not form essential components of the landscape.
3) Trees with clearly identifiable conservation or other cultural benefits.

C = Trees of low quality and amenity value currently in adequate condition to remain until new planting is established (a minimum of 10 years is suggested) or trees under 150 mm stem diameter.
1) Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
2) Trees presenting groups or woodlands but not with a significantly higher landscape value and or offering low or temporary/transient screening benefit.
3) Trees with no conservation or other cultural benefits.
Note: Category C trees are the least suitable for retention, where they would impose a significant constraint on the development their removal for development purposes may be considered acceptable by the LPA.

5.Tree Survey Data & Appraisal

This survey concerns a single tree, full details of the survey data can be found in the Tree Survey Schedule at **Appendix 1**. An explanation of Tree Quality category ratings is set out on the previous page.

Category A individual trees and groups of trees.
No trees have been graded as category A (trees of high quality) as part of this survey.

Category B individual trees and groups of trees.
No trees have been graded as category B^2 (trees of moderate quality) as part of this survey.

Category C individual trees and groups of trees.
1 tree has been graded as category C (trees of low quality) as part of this survey.

Category U individual trees and groups of trees.
No trees have been graded as category U (trees unsuitable for retention) as part of this survey.

1 tree species has been recorded as part of this survey, common and botanical names are set out within the table below.

Common Name	Botanical Name
Cherry Laurel	*Prunus laurocerasus*

Table 2. Tree species recorded on site and their botanical names.

T1 Off-site Laurel

Image above of T1 category C Laurel situated within the adjacent garden. The tree grows behind a boundary wall with lateral branches extending into the application site.

6.Arboricultural Impact Assessment

The Arboricultural Impact Assessment (AIA) sets out the potential risks and threats associated with proposed construction to trees both within and near to an application site and seeks to minimise those risks through the implementation of a sound and recognised methodology set out within an arboricultural method statement.

Construction and development in general can impact trees in a number of ways, the most notable being damage to the tree's root system leading to decline and potential structural instability. BS5837 recognises this and sets out recommendations to minimise damage associated with the effects of soil compaction and root severance.

The proposal requires the reduction of a single off-site category C Laurel.

The Laurel identified as T1 extends approximately 1.5-2m into the application site and will be cut back just beyond the outer edge of the boundary wall.

Image above showing T1 Laurel and the proposed reduction where it extends into the application site.

All tree works will be carried out as far as possible in accordance with BS3998:2010, Tree work- Recommendations. Pruning cuts will be made with bypass loppers or a sharp pruning saw, keeping pruning wounds to a minimum, however, clearance will have to be sufficient to extend the height of the existing boundary wall.

Below ground, we have assessed the site and believe that the existing wall foundation will have curtailed any substantial root growth from T1 into the development area. Therefore, no tree protection measures are required.

7. Conclusion

The proposal requires the cutting back of a single off-site Laurel. Whilst the required reduction is quite substantial, if carried out correctly, there should be no future impact upon the category C tree.

8. Qualifications & Experience

I have been involved in the horticultural and arboricultural industries for 40 years, firstly as a contractor and for the last twenty years as a Local Authority tree officer and consultant. I hold the AA Tech cert arb, and ND Arb (RFS) as well as being a Lantra accredited Professional Tree Inspector. I am also a technical member of the Arboricultural Association and professional member of the Consulting Arborists Society.

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Appendix 1: Tree Survey Schedule

Trees have been listed on the schedule with both their common and scientific names.

Tree height is normally measured and rounded up to the nearest metre for trees above 10 metres in height using a Haglof electronic clinometer.

Stem or trunk diameters were measured using a diameter tape in mm at 1.5 metres above ground where access allowed, otherwise diameters have been estimated.

Crown spread has been measured in metres from the trunk to the tips of the live lateral branches taken at the four-cardinal points N-E-S-W using a ground tape.

Age Class
Young - Trees in the first fifth of full life expectancy
Semi-mature - Trees in the second fifth of full life expectancy
Early-mature - Trees in the third fifth of full life expectancy
Mature - Trees in the fourth fifth of full life expectancy
Post-mature – Trees having reached full life expectancy and trees in natural decline
Veteran - Trees of interest biologically, culturally and aesthetically due to certain features and/or age.

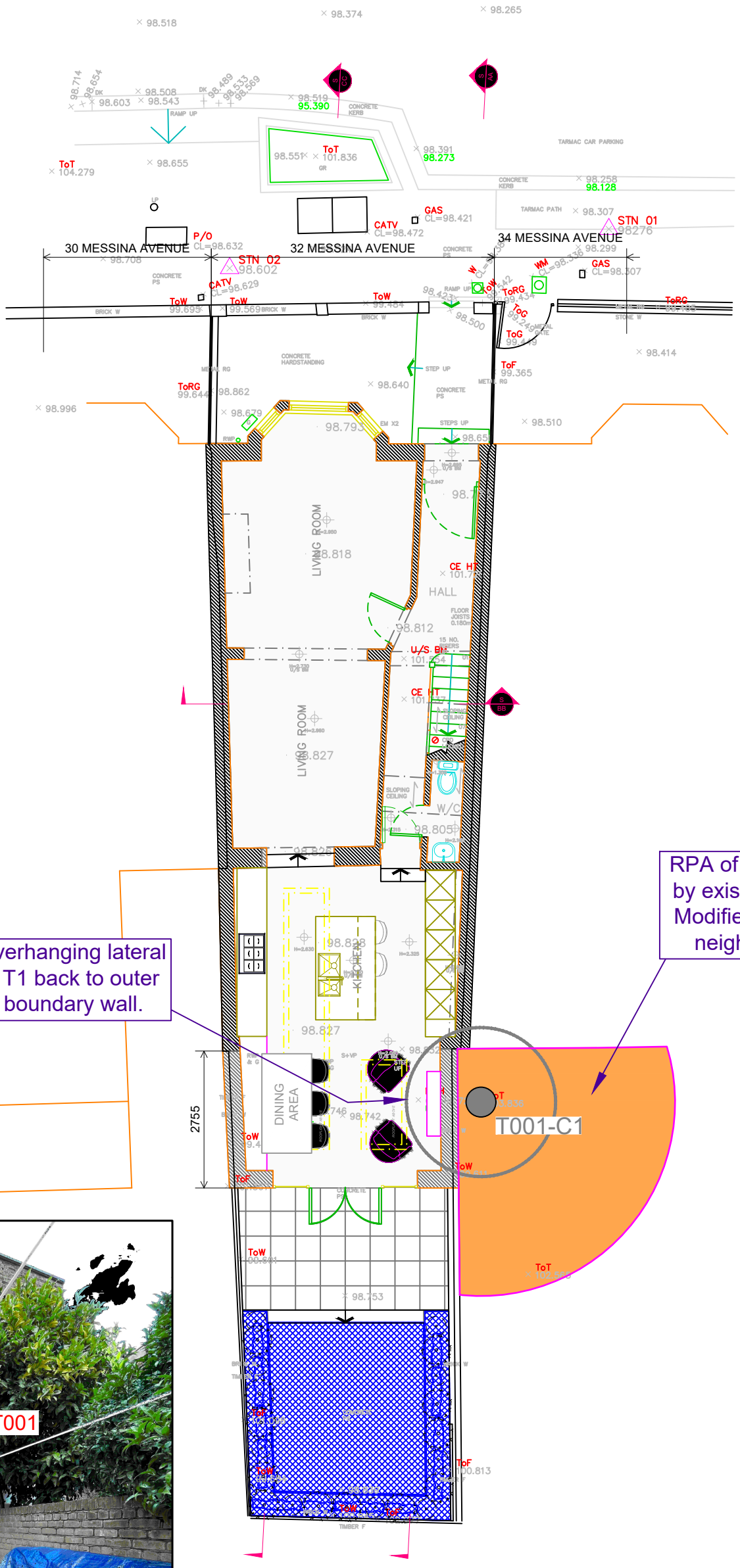
ERCY-The estimated remaining contribution in years calculated considering the tree's species, location, current age and physiological and structural condition at the time of the survey.

BS5837 Survey Data

Ref.	Species	Measurements	General Observations	Category	Recommendations
T001	Laurel Cherry (Prunus laurocerasus)	Height (m): 6 Stem Diam(mm): 200 Spread (m): 1.5N, 1.5E, 1.5S, 1.5W Crown Clearance (m): 2.5 Lowest Branch (m): 2.5(W) Life Stage: Early Mature Rem. Contrib.: 20+ Years	Large multi-stemmed Laurel bush located in neighbouring garden. Tree extends over application site.	C1 RPA Radius: 2.4m. Area: 18 sq m.	Cut back lateral growth of canopy level with outer edge of existing boundary wall. No further protection required.

Appendix 2: Arboricultural Impact Plan

General Notes
Do not scale off drawing - refer to the tree data schedule for accurate crown spread measurements.
Depictions of tree canopies are based on measurements taken to four cardinal compass points.
No liability of any kind Is accepted for any omissions or inaccuracies in respect of this plan.
The original of this drawing was produced in colour; a monochrome copy should not be relied upon.



Key

Trees
Showing Canopy extents, category colour and tag number (with category).
T1-B

Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category B
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

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 150 mm.

Category U
Trees in such a condition that they can not realistically be retained as living trees in the context of the current land use for longer than 10 years.

BS 5837:2012 Modified Root Protection Area

1:100
0 3m

Drawing Title
Arboricultural Implication Plan

Client
Hoeg Architects

Site/Project
32 Messina Avenue,
London, NW6 4LD

Scale/Sheet	Date
1:100 - A3	14/11/2023

Drawing No	Rev	Drawn By	Chked By
UA/AIP/1	1	CS	LU

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