Arboricultural Impact Assessment and Method Statement

13/09/2019

Report Reference: 3BACON001/09/19



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Table of Contents:

1	Executive summaryPage 3
2	Introduction and site descriptionPage 3
3	Professional standards & referencePage 3-4
4	Summary of tree & site dataPage 5-11
5	ObservationsPage 12
6	DiscussionPage 12
7	RecommendationsPage 13
8	ConclusionsPage 13
	APPENDIX A – TREE PROTECTION PLANPage 13
	APPENDIX B – AFTERCARE AND RHIZOME MANAGEMENTPage 14
	APPENDIX C – TREE PROTECTION PLANPage 15-16
	DISCLAIMERPage 17

1 Executive summary

- 1.1 This arboricultural report has been compiled to analyse the potential physiological and environmental implications to the arboricultural features and ecological system and as a result of an extension application at 3 Bacon Lane, Highgate, London, N6.
- 1.2 This investigation will include:
 - Analysis of onsite tree related data obtained during a survey undertaken 13/09/2019
 - Observations regarding the localized environment
 - The site context and analysis of constraints
 - Discussion
 - Recommendations
- 1.3 Conclusions will be based upon analysis of data detailed within this report obtained 13/09/2019 and information supplied by the property owners to Thor's Trees 11/09/2019. No construction maps have been passed to Thor's trees, construction dimensions and information was clarified on site at the time of the survey.

2 Introduction

2.1 This report has been produced by Paul Zepler, a professional within the arboricultural industry in relation to all forms of human activity including built development. I am currently renewing my membership to the Arboriculture Association (previous member for ten years) and hold the qualifications of FdSc arb, NC/arb, LANTRA PTI. I have also worked as an Arboriculture Officer for thirteen years with an additional four years working in the industry in a practical capacity.

Site Description

2.2 The site is located within Highgate, London and situated within a conservation area. It is a beautiful part of the borough with detached houses set back from a private road and enclosed area. It is a leafy part of the borough and has a relaxed, detached ambiance. The property was probably built within the last 80 years but forms part of an area that has been sporadically redeveloped over recent years. The construction proposal is minor and seeks to extend structure into the rear garden area.

3 Professional Standard References

- 3.1 I have referred to the following standards and act as a framework to ensure good practice and tree evaluation in relation to trees throughout this project:
- 3.2 British Standard 5837:2012 (Trees in relation to design, demolition and construction: recommendations) as a good practice guide for trees in relation to structure
- 3.5 The Wildlife and Countryside Act 1981 for wildlife protection law and good practice.

- 3.6 Countryside and Rights of Way Act 2000 as point of reference for the protection of bats due to the documented presence of cavities within the tree survey.
- 3.6.1 Natural Environment and Rural Community's act 2006 as point of reference for the protection of bats due to the documented presence of cavities within the tree survey.

<u>Arboricultural survey</u>

4.0 Summary of site and tree data



info@thorstrees.co.uk









3 Bacon Lane, Camden, London																
	Tree Ref	Species	Height (M)		Crown-Spread N/E/S/W			Age	DBH (mm)	Condition	BS:5837 CAT	RPA (m)	Construction works within RPA	Observed Bird activity	Bat roost potential	Proposal
Zone A	T1	Taxus beccatta	13	4	4	4	4	М	500	Good	A	6	N	N	N	Retain and protect
Zone A	Т2	Cupressocyparis Ieylandii	8	2	2	2	2	E	80	Good	С	0.96	N	N	N	Retain and protect
Zone A	Т3	Laurus nobilis	14	1	1	1	1	E	45	Good	С	0.54	N	N	N	Retain and protect
Zone A	Т4	Cupressocyparis leylandii	12	3	3	3	3	SM	280	Good	В	3.36	Ν	N	N	Retain and protect
Zone A	Т5	Cupressocyparis leylandii	14	1	1	1	1	М	120	Good	С	1.44	N	N	N	Retain and protect
Zone A	T6	Sorbus aria	13	5	5	5	5	М	380	Poor	U	4.56	N	Ν	Ν	Advise owner of potential for structural failure
Zone A	G1	Laurus pobilis	85	1	Δ	1	4	SM	Multiple	Good	C	1 68	N	N	N	Retain and
Zone A	T8	Acer plataniodes	15	4	4	4	4	M	610	Good	A	7.2	Y	N	N	Retain and protect

		Crataegus														
Zone B	Т9	топодупа	6	1	1	1	1	SM	260	Poor	С	3.12	N	Ν	N	Remove
		Cupressocyparis														Retain and
Zone A	SL1	leylandii	N/A		N/A			SM	N/A	Good	N/A	N/A	N	Ν	Ν	protect
Zone B	T10	Prunus avium	9.5	3	3	3	3	M	330	Average	В	4	N	N	Y	Remove
Zono P	T11	Brupus avium	11	2	2	2	2	SM4	250	Avorago	C	2	N	Ν	N	Pomovo
Zone B				2	Z	2	Z	21/1	250	Average	Ľ	5	IN	IN	IN	Remove
Zone B	SA1	Mixed	N/S	N/A				N/A	190	N/A	N/A	2.3	N	N	N	Remove

.

Legend:

AGE: **OM** = Over mature **M** = Mature **SM** = Semi mature **EM** = Early Mature REF: **T** = Tree **SL** = Shrub-line **G** = Group **SA** = Shrub area

Note: In accordance with BS:5837 recommendations all trees that have a DBH of below 150mm will be categorised as C based upon age not physiological condition or prominence.

5. Observations

- 5.1 Foundation for the proposed extension has been lined out through rubble and hard-core, the construction zone does not-cross into the RPA of any adjacent trees.
- 5.2 Foundation for the proposed patio has been lined out through rubble and hard-core and crosses into the RPA of T8.
- 5.3 A garage is being proposed within Area B but there are no arboriculture features that will conflict with this proposal apart of T9 which is of poor quality and is subject to LPA conservation area notification of removal as is T10 and T11.
- 5.4 No bird or bat nesting/roosting activity has been observed throughout the site.

6. Discussion

- 6.1 No construction maps have been supplied to Thor's tree. This report has been built on the demarcation of construction lines that have already been partially excavated.
- 6.2 There is no access conflict, as building materials will be brought through the house and side road.
- 6.3 No excavation depths have been provided to Thor's tree to inform this report.
- 6.3 Patio excavation falls within the RPA of T8. The level/depth of excavation should be considerably less than that of the building extension. The cross of the patio into the RPA is 10% by volume as the tree is 4.9m from the stem and the RPA is 7.2m. This level can be offset by good rhizome management and aftercare.



7. Recommendations

- 7.1 Hand-dig methodology under arboriculture supervision should be employed for patio excavation into the RPA of T8 (SEE APPENDIX A).
- 7.2 Landscaping should be agreed to off-set tree loss within the rear garden of the property.
- 7.3 Lift T8 to 5m over property boundary to minimalize potential for construction plant conflict.
- 7.4 Follow aftercare programme for T8 rhizome (SEE APPENDIX B)
- 7.5 Follow Tree Protection Plan ((TPP) SEE APPENDIX C)

7. Conclusion(s)

There is very little impact to preserved or conserved trees within the site. A full BS: 5837 report is not necessary for the progression of this proposal. If construction team follow the recommendations and TPP then no negative impact to arboricultural features should arise as a result of this project.



APPENDIX A

Excavation for Patio within RPA of T8

New foundations for building, structure and hard surfacing situated within the RPA of retained trees are to be designed in conjunction with arboricultural recommendations to accommodate loading of the structure. The foundations should be designed to limit the amount of exaction within the RPA in order to retain roots and as such the consulting arborist should be present during the excavation process. Any severe intrusion within the RPA of T8 may require remedial pruning works to redistribute weight to mitigate structural stability of the affected tree.

Hand dig methodology:

STEP 1: Install TPP over all RPA that do not require excavation.

STEP 2: Mark out line of excavation.

STEP 3: lift/remove any existing hard surface and remove from site by hand.

STEP 4: Initiate hand dig using hand tools or air-spade (in this instance hand tools).

STEP 5: Continue excavation to required depth / cease excavation if more than 4 roots >25mm are encountered and contact local authority case officer for progression decision.



APPENDIX B

Aftercare rhizome management:

All roots should be retained where possible, if during excavation fibrous roots are uncovered that can be redirected then they should be covered in damp hessian until the end of the project when they can be covered with back fill from the dig. Here it would be beneficial to use a root barrier between the patio foundation and rooting area of T8.

All roots that are above 25mm/dia that require removal should be severed at the boundary of excavation and covered with damp hessian until the end of the project when they can be covered with back fill from the dig. Here it would also be beneficial to use a root barrier between the foundation and rooting area of T8 to avoid future hard standing displacement.

The fenced off area of the RPA of T8 should be watered twice weekly throughout the project and mulched with a pre-rot medium before and after the project. This will aid in water retention and nutrient transfer.

APPENDIX C

Tree Protection Plan:

In this instance a fence can be run across the back line of the RPA and adjacent foundation dig. This should be 4.3m from the back fence line and run from the top of the garden adjacent to T1 down to the bottom of the garden adjacent to T8. All respective RPA will be encompassed by this line apart from T8 as documented within this report.

Area of fencing requirement below:



Tree Protection Fencing Specification





PLEASE KEEP OUT

The trees in this area are protected by Statutory Protection and / or Planning Conditions. Any works in this fenced off area may result in damage to the above ground parts or root system of these trees.

Damage to these trees is a criminal offence and breach of the planning consent and may lead to a criminal prosecution. and / or enforcement action.

Any works in this area must be undertaken as per the Arboricultural Report.



Unless otherwise stated this arboricultural report is valid for a period of no longer than one year. Should there be any period of extreme weather, construction or excavation works within the RPA vicinity of any trees stated within this document a structural analysis will be required to validate this period of time. If this report be submitted as part of a planning application it is valid to be submitted for a period of up to six months after compilation. Should this report be coordinated with a mortgage application then only the information provided by the client and a site survey will be incorporated. Should this report contain recommendations as a result of potential property structural related issues then it is highly recommended that a structural engineers report be obtained to validate removal or reduction options. The rest is based on experience and standards compiled by governing bodies and professional recommendations.