

Arboriculture Impact Assessment

47 Compayne Gardens
London

**Written by Alastair Gavin on behalf Tree Aware UK Ltd
on the 27/02/2024**

The purpose of this document is to assess the tree or trees and/or any significant vegetation at the above site, to fully identify any constraints that the tree/trees or significant vegetation may pose to the proposed construction or design in line with BS 5837: 2012 "trees in relation to design, demolition and construction – recommendations".

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1.0 Summary

The following points in this summary are intended for quick reference only, as we recommend that the Arboricultural Impact Assessment report is read fully.

1.1 Overview of Tree Constraints

Following a site inspection on the 21/02/2024, a general preliminary assessment of the site, is that the existing trees located on or near the site this being 47 Compayne Gardens. Should not pose a constraint to the new proposed garden room if the recommendations within this Impact Assessment are followed.

1.2 Notable Tree Constraints (Trees of a BS 5837 Category being either an A or B)

It was identified that the trees T1 and T3 near to the site were of a notable category being category B with the remaining trees T2, T4 and T5 being a category C. (Please see Appendix A, BS 5837 Tree Survey Schedule for specific tree details).

1.3 Impact on Trees

The footprint of the current proposed garden room does encroach into the Root Protection Area (RPA) of the two individual trees (T3 and T4). The level of encroachment is of a level where if standard construction techniques are used for the foundations root damage is likely to occur to the two trees that could impact the trees conditions.

There will also be significant overhang from the canopy of T3 that will likely result in reduced light levels and potential debris build up on the roof of the proposed garden room that could cause maintenance issues.

As the RPA of T1, T2, T3, T4, and T5, are near to the proposed garden room to be built. There is the potential for damage to occur to the tree's structures and root systems from the construction process of the building. This being in the form of indirect damage from compaction or contamination of the ground or direct damage such as impacts to the tree's structures.

Appropriate measures are recommended to mitigate against any likelihood of impact to the trees including their RPA. (Please see section 5.0 Conclusions and Recommendations for details of these measures).

2.0 Introduction

- 2.1 Instruction has been received from the client to assess the impact on the trees located on and near to the site from the proposed garden room, which might cause a constraint to the current proposed design/location.
- 2.2 A BS 5837 Tree Survey in accordance with BS 5837:2012 "Trees in Relation to Design, Demolition, and Construction"- Recommendations was carried out on the 21/02/2024. The trees included in the survey (please see Appendix A) have been visually inspected from ground level. No climbing inspection or any decay detection equipment has been used or carried out.
- 2.3 As there are trees located on and near to the site which are contributing to the character of the area, it is important to assess and ascertain the quality and value of the trees, and the likely impact on the trees from any proposed construction this being the proposed new garden room.
- 2.4 Dependant on their age, condition, and species trees differ in their ability to cope with root disturbance and damage. Subsequently, tree roots which are commonly located within the top metre of soil can be affected by natural and manmade topography and structures, which can restrict, redirect, and affect tree root growth rate. It is therefore important to consider all relevant factors when ascertaining the retention and or removal of trees.

3.0 Site Description

- 3.1 The site comprises of an area of land within an urban environment that has a small amount of tree cover. This is made up of predominantly privately-owned trees in front and rear gardens. These trees are of different ages and vary in species.
- 3.2 The area surrounding the site comprises of privately-owned properties with gardens of a small to medium size.
- 3.3 The trees in question (T1, T2, T3, T4, T5) are located around the rear garden area. The trees can be classed as individual trees.
- 3.4 During the BS 5837 Tree Survey no abnormal grounds conditions such as water logging or contamination were noted next to the trees surveyed.

4.0 Impact on Trees

- 4.1 The trees near to the proposed garden room have been assessed in accordance with BS 5837:2012 "Trees in Relation to Design, Demolition, and Construction"- Recommendations. Please see Appendix A for tree details in accordance with the methodology of BS 5837:2012. The trees have been categorised as follows.

<u>Tree Reference number</u>	<u>Common Name</u>	<u>BS 5837 Category</u>
T1	Cherry	B
T2	Cherry	C
T3	London Plane	B
T4	Willow	C
T5	Sycamore	C

- 4.2 The footprint of the current proposed garden room does encroach into the Root Protection Area (RPA) of two individual trees, T3 category B tree by approximately 8% of the trees total RPA, and T4 category C tree by approximately 10% of the trees total RPA. The level of encroachment and position of the proposed building is of a level where if standard construction techniques are used for the foundations such as strip or trench foundations which require extensive excavation root damage is likely to occur to the two trees that could impact the trees conditions.
- 4.3 There will also be significant overhang from the canopy of T3 as the garden room is positioned underneath the canopy. This will likely result in reduced light levels and potential debris build up on the roof of the proposed garden room that could cause maintenance issues. (T3 has however been reduced in the past and as such will require regular re-reductions this will reduce the likely debris fall and increase light levels).
- 4.4 As T1, T2, T3, T4, T5, are near to the proposed garden room to be constructed. There is the potential for damage to occur to the tree's root systems and structures from the construction process. This being in the form of indirect damage from compaction or contamination of the ground but also possible direct impact to the tree's structures. The potential risk to these trees is present if tree protection measures are not used during the construction process of the proposed.

5.0 Conclusions and Recommendations

- 5.1 As there is encroachment directly into the RPA of T3 and T4 that could impact the tree's root systems. It is recommended that a pile and beam or pile and raft foundation or alternative, that reduces the need to significantly excavate the ground should be used to minimise the impact to the tree's root systems. If this is used with standard tree protection, then there will be little perceived impact to their conditions.
- 5.2 As the garden room is overhung by T3's canopy it is recommended that this tree is re-reduced regularly as it has been reduced previously and in line with

good arboricultural practice. This will reduce the likely debris fall and increase light levels.

- 5.3 As trees T1, T2, T3, T4 and T5 to be retained are near to the proposed garden room to be constructed, which puts them at risk from the construction process in the form of indirect damage. This being from compaction or contamination to the root protection areas, and or direct damage to the tree's structures. It is recommended that basic tree protection in the form of tree protection fencing and or ground protection matting should be used to protect the trees RPA and structures during the construction process of the garden room.
- 5.4 It is recommended to ensure adequate tree protection is used and to promote awareness to protect the trees, during the construction process that an Arboricultural Method Statement (AMS) is produced along with a Tree Protection Plan (TPP).
- 5.5 If the above measures are followed and an Arboricultural Method Statement including a tree protection plan produced and adhered to during construction. This will allow T1, T2, T3, T4, T5, present near to the area of construction, to be viably retained with no likely negative impacts.

Appendix A BS 5837 Tree Survey Schedule

Sequential Reference Number	Species (Common Name)	Height	Stem Diameter x 12 = RPA	Branch Spread N S E W in metres	First Significant Branch	Canopy Height	Life Stage	General Observations	Estimated Remaining Contribution in years	BS 5837 Category
T1	Cherry	13m	230mm#	5, 3, 4, 4#	1.9m	2m	Semi Mature	Good formed tree located on boundary line with trees structure in neighbouring properties garden as such tree could not be fully inspected, evidence of past branch pruning, lean to stem at base towards the West which then straightens, tree appears to be in a good condition.	20+	B
T2	Cherry	9m	450mm	6, 4, 3, 5#	1.5m	2.5m	Mature	Mature Cherry with dead Ivy in canopy, average form, suppressed by T1 and T3, evidence of past canopy reduction with regrowth's present. Potential weak stem union with possible decay present as a result of past branch removal/loss, decay fruiting body at base of stem southeast side. <u>Recommendation</u> Monitor condition (may require removal due to extent of decay)	10+	C

T3	London Plane	20m+	920mm	9, 7#, 9#, 9#	6m	5m	Mature	Large mature tree with good form, evidence of past reduction with regrowth's present, small decay cavities in old pruning wounds, tree is in a good condition. <u>Recommendation</u> Re-reduce every few years	20+	B
T4	Willow	20m+	830mm	2, 5#, 4, 8#	3m	2m	Mature	Tree located in neighbouring garden as such tree could not be fully inspected, tree previously pollarded with re-growths present, hanging/split limb in canopy, average to poor form, tree appears to be in an average to poor condition, decay fruiting body on lower stem east side, tree potentially causing damage/cracks to boundary wall. <u>Recommendation</u> Remove hanging /split limb. Monitor condition (may require removal due to extent of decay)	10+	C
T5	Sycamore	15m	180mm#	2, 7#, 3, 3#	3m	3m	Mature	Tree located in neighbouring garden as such tree could not be fully inspected, Ivy on stem, tree suppressed by T3, canopy favours the southern side, average form to tree, which is a likely self-set, tree appears to be in a good condition.	10+	C

								<u>Recommendation</u> Remove Ivy		
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Appendix B Root Protection-Constraints Plan

(Please see separate document, Drawing No 79034-7-01)