



101 Oxford Road, Reading
Arboricultural Report

In accordance with

BS5837:2012

Trees in relation to design, demolition and construction - Recommendations

Including;

Tree Constraints,
Arboricultural Impact Assessment

1. SUMMARY

1.1. Tree Survey

- 1.1.1. The tree survey was carried out to BS5837:2012 on the 30th of September 2022, a total of 5 individual trees and 1 group were recorded on the site.
- 1.1.2. The individual trees were all category B trees, and a mixture of fruit tree species, including: Apple and Cherry. The group is a small area of Category U young Sycamore.
- 1.1.3. The site falls within a conservation area, so all applicable trees are protected by this designation.

1.2. Arboricultural Impact Assessment

- 1.2.1. The only removal required is the small group of Sycamore trees and these will need to be removed regardless of the development for arboricultural reasons.
- 1.2.2. The layout and plans for the proposed property mean that the existing mature trees have adequate space and protection and will not be affected by the proposed development.

1.3. Tree Protection

- 1.3.1. Tree protection fencing will be a requirement on this site to protect the trees during the works. This is listed in the Tree Protection Plan at Appendix B.

1.4. Conclusion

- 1.4.1. The impact of the development to the trees on site is low.
- 1.4.2. Some protection of the existing trees will be required during the construction phase to avoid any impact from the actual construction works and logistics around that period.

2. CONTENTS

1. SUMMARY	2
2. CONTENTS	3
3. REPORT INTRODUCTION	4
4. BACKGROUND INFORMATION	5
5. TREE SURVEY	6
6. TREE CONSTRAINTS	8
7. ARBORICULTURAL IMPACT ASSESSMENT	10
8. REFERENCES	11
Appendix A – Tree Survey Data	12
Appendix B – Tree Protection Plan	16
Appendix C – Tree Removal Plan	18
Appendix D - Tree Protection Fencing	20

Report Date	11 th November 2022
Report Number and Version	19243 - Version 1.0
Signed	
Report Author	Dominic Ridley
Valid for 12 months	
Not controlled when printed	

3. REPORT INTRODUCTION

- 3.1.** Instructions were received from Clive Spencer of Spencer Architecture, to provide an arboricultural report in accordance with the guidance set out in BS5837:2012 *Trees in relation to design, demolition and construction – Recommendations*, for the site at; 101 Oxford Road, Reading; with reference to the proposed development.
- 3.2.** To comment on any significant trees on the site and/or on the neighbouring land adjacent to the boundary, where these may affect or be affected by the proposal.
- 3.3.** To recommend suitable measures to protect any retained trees during the development process
- 3.4.** To recommend on any appropriate mitigation measures following the potential loss of any existing trees.
- 3.5.** The site visit and tree survey was carried out on the 30th September 2022.

4. BACKGROUND INFORMATION

4.1. Purpose of the Report

- 4.1.1. The purpose of this report is to aid in the decision-making process, with reference to the existing and proposed trees on or adjacent to the site and their impact on the design, demolition and construction of the proposed project.
- 4.1.2. The aim is to achieve a harmonious relationship between trees and structures that can be sustained for the long-term benefits of both the trees and the proposed development.

4.2. The Site

- 4.2.1. The proposed site is the rear garden of a large, corner plot town house.
- 4.2.2. The site surveyed currently consists of an open garden area with a small group of trees situated around the edge of the site.

4.3. Proposed Development

- 4.3.1. The proposal involves the construction of a new detached property.

4.4. Statutory Protection

- 4.4.1. The trees on the site are within the Castle Hill/Russell Street/Oxford Road Conservation Area, so are afforded the relevant protection that this designation offers.
- 4.4.2. The local authority would need to be notified prior to carrying out any tree works if there was any requirement for this.

4.5. Reference Documents

- 4.5.1. The main document referred to in the report is the British Standards Institute publication BS5837:2012 *Trees in relation to design, demolition and construction – Recommendations*.
- 4.5.2. Other documents used in addition to the above can be found in the reference list at section 9.

5. TREE SURVEY

5.1. Survey Data

- 5.1.1. Tree survey data can be found at Appendix A

5.2. Survey Methodology and Limitations

- 5.2.1. Trees were visually inspected during the site visit and data was collected in accordance with the requirements of BS5837:2012.
- 5.2.2. All observations were carried out from ground level only, any inspections of the crown of trees (if necessary) were carried out using binoculars.
- 5.2.3. All trees on the site were measured using; a girth tape, field tape measure and hypsometer – heights being measured from the uphill side of the tree.
- 5.2.4. Any trees on neighbouring property or outside of the site boundary that were inaccessible during the site visit have had their measurements estimated. Accuracy was aimed to be maintained by basing these measurements upon those of adjacent measured trees and known structure heights.
- 5.2.5. Only trees with a stem diameter of over 75mm at 1.5m above ground level have been included in this survey.
- 5.2.6. This survey is not intended to be a replacement for a tree condition and safety survey or for the requirements of a requested mortgage or insurance report.

5.3. Soil

- 5.3.1. No on-site assessment of soil characteristics was carried as part of this survey.

5.4. Analysis

5.4.1. 5 individual trees were recorded on the site and 1 group of young self-set trees.

5.4.2. Species include on or adjacent to the site are included in the following table:

Table 1; Tree species on or adjacent to the site

Common Name	Scientific Name
Apple	<i>Malus domestica</i>
Cherry	<i>Prunus avium</i>
Sycamore	<i>Acer pseudoplatanus</i>

6. TREE CONSTRAINTS

6.1. Root Protection Areas (RPA)

- 6.1.1. The Root Protection Areas (RPA's) have been calculated in accordance with the guidance set out in BS5837:2012, and are detailed in the Tree Protection Plan (TPP) located in Appendix B.
- 6.1.2. Where site conditions have had or are likely to have affected rooting morphology, structure or development, such as the proximity of buildings, walls, areas of hard standing or changes in levels in the areas adjacent to the tree, the RPA's may be altered accordingly. Trees where this is likely to be relevant are detailed in the survey data and the Arboricultural Impact Assessment.

6.2. Tree Constraints

- 6.2.1. The plan detailing the above and below ground tree constraints is covered by the TPP at Appendix B, these are based on the measurements taken during the survey and applied to the methodology set out in the document BS5837:2012.
- 6.2.2. As the development is in a relatively innocuous part of the property there is little impact on the majority of the trees on the site.
- 6.2.3. The only section of trees that require removal are a small group of young, self-set Sycamore trees. These trees would require removal regardless of the proposal as they are growing in an unsuitable location for the tree and will likely cause damage to the adjacent building and wall as they grow.
- 6.2.4. T1 has a root protection area that will extend into the proposed site, but this can be protected by the installation of tree protection fencing at the onset of the project.
- 6.2.5. The other trees on the site are outside of the development area and providing they are protected during the project will not be affected by construction.
- 6.2.6. Due to the species all being small tree species and largely at full maturity, there is unlikely to be future conflict between the new development and the existing trees. They are all situated to the north of the property so will not cause any shading affects onto the proposed property.
- 6.2.7. The impact of falling leaves is also very low as the trees will all be lower than the height of any guttering.

- 6.2.8. The trees will enhance the development and offer a useful softening of the urban landscape and screening between the two properties.
- 6.2.9. Other Future pressures on the tree stock would likely be limited, and due to the pre-existing conservation area, the council will always be notified prior to any works which will afford extra protection to the existing trees and allow for only essential works to be carried out on the trees in the future.

7. ARBORICULTURAL IMPACT ASSESSMENT

7.1. Tree Removal Plan

- 7.1.1. A tree removal plan has been included at Appendix C.

7.2. Discussion

- 7.2.1. The impact of the proposal on the preexisting tree stock on the site is considered as low. The only removals will need to be carried out regardless of the project and are to remove a small group of category U trees that are exempt from any conservation area protection due to their small size.
- 7.2.2. The existing mature trees are deemed to be far enough away to have little to no affect from the proposed development, with only T1 having a root protection area that extends within the site limits, and this tree can easily be protected by tree protection fencing, which will need to be installed at the onset of the project. Appendix B and D show extent of tree protection and the specification for the required fencing.
- 7.2.3. There is very little potential for future conflict with any of the trees and the new proposal, particularly as all of the trees will be outside of the site boundary.
- 7.2.4. The conservation area will also add an additional level of future protection for all of the mature trees on the site.

7.3. Conclusion

- 7.3.1. The proposal also has no negative affect on the existing tree cover.
- 7.3.2. Providing appropriate measures are taken to protect the trees as listed in this document, the development could be incorporated into the site with a low impact on the existing tree cover.

8. REFERENCES

AAIS – Through the Trees to Development. APN12

BS3998:2010 *Tree Work – Recommendations*

BS5837:2012 *Trees in relation to design, demolition and construction – Recommendations*,

Lonsdale, D. (1999). *Principles of Tree Hazard Assessment and Management*
TSO, Norwich

Lonsdale, D. (ed.) (2013) *Ancient and Other Veteran Trees: further guidance on management*.
The Tree Council, London

Mattheck, C. and Breloer, H. (2006) *'The Body Language of Trees'*
TSO, Norwich

National Tree Safety Group (NTSG) (2011). *Common Sense Risk Management of Trees*. Forestry
Commission, Edinburgh

NJUG Guidelines for The Planning, Installation And Maintenance Of Utility Apparatus In Proximity
To Trees

Read, H (2000) - *Veteran Trees: A guide to good management*
English Nature

Slater, D (2016). *Assessment of Tree Forks. Junctions in Trees: Assessment of Junctions for Risk
Management*. Arboricultural Association, Gloucestershire

Strouts, R.G. and Winter, T.G. (1994). *Diagnosis of Ill-Health in Trees*.
TSO, Norwich

UK Soil Observatory (UKSO)
Cranfield University 2017. The Soils Guide. Available: www.landis.org.uk. Cranfield University, UK.
www.ukso.org/maps.html

Appendix A – Tree Survey Data

Notes for Tree Survey Data sheet:

Column Headings	Definition
Ref. Number	Tree (T#), Group (G#) or Hedge (H#) Number
Tree Species	Tree species (<i>scientific name</i>)
Height (m)	Total tree height in metres; '*' denotes estimated value
Stem Ø @1.5m (mm)	Stem diameter in mm, either multi-stemmed tree, or single stem tree
No. of Stems	Number of stems at 1.5m above ground level
Crown Spread Radius in m	Crown radius spread in metres measured at the four cardinal points
RPA Radius (m)	Root protection area radius in metres as measured from the centre of the tree
Existing height above ground level	First branch height in metres and direction of growth; canopy clearance height in metres
Height First Branch (m)	Height of first main branch and direction of growth
Age Class	Categorised age class; NP Newly planted Y Young SM Semi mature; in the first third or normal life expectancy M Mature; in the middle third or normal life expectancy OM Over Mature; in the final third or normal life expectancy V Veteran; a tree showing signs of veteran features (not necessarily a very old tree) D Dead
General Observations	Structural / Physiological condition; Comments relating to structural or physiological observations Preliminary Management Recommendations; any proposed or required remedial works
ULE (YEARS)	Useful life expectancy remaining estimated in years <10 Less than 10 years 10+ Between 10 and 20 years 20+ Between 20 and 40 years 40+ Over 40 years
Category Grading	Tree category as per cascade chart below
RPA Area (m²)	Total root protection area in metres squared

Trees Schedule

Ref. Number	Tree Species	Height (m)	Stem Ø @1.5m (mm)		Crown Spread Radius (m)				Height First Branch (m)	Age Class	General Observations		ULE (Yrs)	Category Grading	Root Protection Area (m²)
			Multistem (MS)	Singlestem (SS)	(N)	(E)	(S)	(W)			Structural / Physiological condition	Preliminary Management Recommendations			
T1	Cherry	4		180	3	2	3	3	1N	M	Fair – no significant defects	None	10+	B1	15
T2	Apple	4		150	2	2.5	2.5	2.5	2S	M	Fair – minor crown deadwood	None	10+	B1	10
T3	Apple	5		180	2	2	2	2	2	M	Fair – historic stem wound	None	10+	B1	15
T4	Apple	4		150	2.5	2	2	2	2	M	Fair – historic, large low limb removed	None	10+	B1	10
T5	Cherry	2		80	1	1	1	1	1	EM	Fair – no significant defects	None	10+	B1	3
G1	Young Sycamore	5		<75	1	1	1	1	GL	Y	Young self-set trees	Remove to facilitate development		U	

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	- 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) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - 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 <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>			See Table 2
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good 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)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in 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	Trees present in numbers, usually growing 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	Trees with material conservation or other cultural value	See Table 2
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	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	See Table 2

Appendix B – Tree Protection Plan



Providence
Evangelical
Church

L Twr

2.6m

2.3m

1.5m

3.2m

2.8m

T4

T3

T2

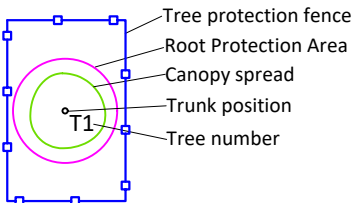
T1

T5

BS5837:2012 - Tree Category

-  **Category A Trees**
High quality and value
At least 40 years life-expectancy
-  **Category B Trees**
Moderate quality and value
At least 20 years life-expectancy
-  **Category C Trees**
Moderate quality and value
At least 10 years life-expectancy
-  **Category U Trees**
Poor quality and value
Less than 10 years life expectancy

Key



0.8m

Measurement from
trunk to fence

0 2.5 5 7.5 10 12.5m
1:250

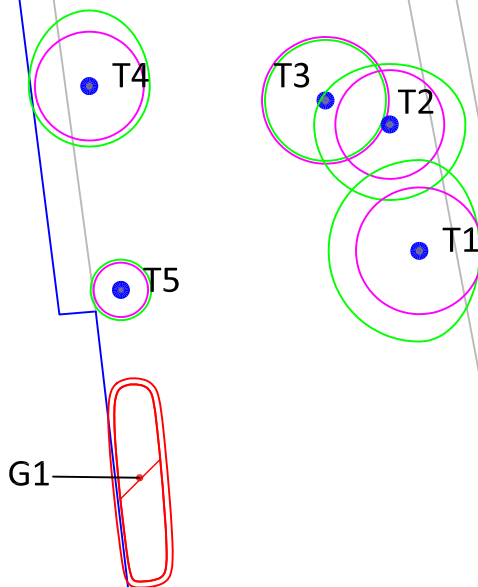
Project Name: 101 Oxford Road Reading		Client: BABAR BUTT ESQ
Drawing Title: Tree Protection Plan		Agent: Spencer Architects
Drawing Number: TPP-1		Date: 8-11-2022
Revision		Scale: 1:250 @ A4

Appendix C – Tree Removal Plan



Providence Evangelical Church

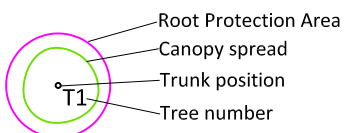
101



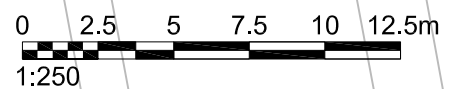
BS5837:2012 - Tree Category

-  **Category A Trees**
High quality and value
At least 40 years life-expectancy
-  **Category B Trees**
Moderate quality and value
At least 20 years life-expectancy
-  **Category C Trees**
Moderate quality and value
At least 10 years life-expectancy
-  **Category U Trees**
Poor quality and value
Less than 10 years life expectancy

Key



 Tree group to be removed



Project Name: 101 Oxford Road Reading		Client: BABAR BUTT ESQ
Drawing Title: Tree Removal Plan		Agent: Spencer Architects
Drawing Number: TR-1		Date: 8-11-2022
Revision		Scale: 1:250 @ A4

Appendix D - Tree Protection Fencing

Figure 2 Default specification for protective barrier

