

Arboricultural Impact Assessment for R/O 53 Springfield Road, Bristol, BS6 5SW

Inspected and prepared by	Prepared for	Report date
Stuart Roberts DipArb(RFS), MICFor, RCArbor A	Florence Mae Ltd.	16 th June 2022
Site address	Report reference	Project
R/O 53 Springfield Road Bristol BS6 5SW	SpringfieldRd_AIA_062022	Construction of dwelling on vacant plot





Executive summary

This Arboricultural Impact Assessment has been prepared in order to provide Bristol City Council (**BCC**) with information in support of a planning application for development proposals to the rear of 53 Springfield Road in Bristol.

The information within is compliant with *BS5837: 2012 Trees in Relation to Design, Demolition and Construction – Recommendations* and contains details of the impacts of the proposals on the trees on and adjacent to the site.

The proposals involve the construction of a dwelling in the rear garden area of 53 Springfield Road.

There are four low quality trees on the site all of which are proposed for removal to facilitate the proposals. Mitigation for the removals is proposed through the planting of three trees on site and by making a financial contribution to BCC for four trees to be planted off-site in accordance with Bristol City Council Planning Policy (DM17).

As there will be no retained trees on or adjacent to the site there is no requirement for tree protection and no Arboricultural Method Statement has been prepared.

The site lies within the limits of the Cotham and Redland Conservation Area and that there are no trees on or adjacent to the site that are the subject of a Tree Preservation Order (**TPO**).



Chartered Foresters Registered Consultant



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- C Tree survey methodology



1.0 Instructions

- This Arboricultural Impact Assessment has been prepared in order to provide Bristol City Council (BCC) with information in support of a planning application for development proposals to the rear of 53 Springfield Road in Bristol.
- 1.2 This report has been prepared by a qualified arboriculturalist following a site survey conducted in accordance with *BS5837: 2012 Trees in Relation to Design, Demolition and Construction Recommendations* (**BS5837: 2012** hereafter).
- 1.3 This report has been informed by the following documents:

Document	Reference	Supplied by	
Title plan	OS Reference Number - ST 589 741	Florence Mae Ltd.	
Proposed site plan	0337/102H	Third Design Architecture	

 Table 1: Documents provided

2.0 Introduction

- 2.1 The application site is located on the south-west side of Sydenham Road in Bristol and is currently the rear garden area of 53 Springfield Road adjacent to a row of garages fronting Sydenham Road. Access is via a pedestrian access on the north-east boundary from Sydenham Road. The site contains a large laurel shrub and several small trees.
- 2.2 The proposals involve the construction of a dwelling in the garden area of 53 Springfield Road.





3.0 Report limitations

3.1 The tree survey was carried out from ground level on the 15th February 2022, observations were made in the context of planning and development in accordance with BS5837:2012 and specifically relate to the conditions found at the time of the survey. The survey does not constitute a detailed hazard assessment, no decay detection equipment has been used in assessing trunk condition and no samples of any kind have been taken for analysis.

4.0 Trees included in the survey

4.1 Four trees were identified in the survey and have been awarded a C category rating in accordance with the BS5837:2012 cascade chart for tree quality assessment, a rating of A, B, C or U is allocated based on the condition of a tree or group of trees in its/their current surroundings, with A representing the higher quality trees, B the moderate quality, C the average quality and U the trees that should be removed for arboricultural reasons. A full account of the tree survey methodology including the categorisation criteria for surveyed trees is presented at Appendix C.

5.0 Root Protection Areas

5.1 Below ground constraints or Root Protection Areas (**RPAs**) for all trees on site have been calculated in accordance with BS5837:2012. The RPA is a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure should be treated as a priority. The RPAs have been plotted onto the Tree Constraints Plan as a circle centred on the base of each tree stem with a radius of 12 times the trees stem diameter measured at 1.5 metres above ground level.

6.0 Statutory constraints

6.1 A review of on-line resources¹ reveals that the site lies within the limits of the Cotham and Redland Conservation Area and that there are no trees on or adjacent to the site that are the subject of a Tree Preservation Order (**TPO**). Currently it is necessary to provide BCC with a notification of the intent to carry out tree works on the site, BCC will then have a six-week period to decide whether to allow the works or to make a Tree Preservation Order (TPO). Tree works that are proposed as part of a consented full planning application are exempt from the notification requirement.





¹<u>https://maps.bristol.gov.uk/pinpoint/</u>



7.0 Site images



8.0 Tree removals and arboricultural works

8.1 It is proposed to remove all trees on the site to facilitate the proposals. T01 is a large multi stem Laurel that has outgrown its current location and dominates the rear garden, it is not feasible to retain T01 and develop the site and as the laurel is a relatively short-lived species nearing the end of its useful life expectancy, the decision was made to remove the tree. As T01 has a large crown when viewed from Sydenham Road the loss will have a moderate impact on the overall visual amenity of the area.





- 8.2 Trees 02 and 03 are small holly trees on the north-west site boundary and tree 04 is a small multi stem ash on the south-east site boundary. Due to the level differential between Sydenham Road and the rear garden area of 53 Springfield Road, a retaining wall is required to separate the sites. The wall requires the removal of T02 and encroaches on a significant percentage of the root protection areas of trees 03 and 04 making their retention unfeasible.
- 8.3 Trees 02, 03 and 04 are small trees that have limited visibility from outside of the site so their loss will have a minor impact on visual amenity. The ash (T04) has early symptoms of Ash Dieback Disease and although not currently severely impacted, is unlikely to survive more than five years.

9.0 Planning policy

9.1 Bristol Local Plan comprising Core Strategy (BCS9) and Site Allocation and Development Management Policies (DM15 and DM17)², includes a Tree Replacement Standard (BTRS) to ensure that trees lost in the interest of development are replaced. Replacement trees can either be planted on site, if there is room to do so, or if replacement trees cannot be planted on site BCC will plant them in nearby council owned land at a cost of £765.21 per tree. The number of replacement trees required depends on the stem diameter of the trees lost to development, as detailed in table 2, and in this instance will require 7 replacement trees as mitigation.

Trunk diameter	Number of replacement trees	Number of trees removed	Replacement trees
in cm	required by BTRS	to facilitate proposals	required on site
Less than 15	0-1	0	
15 - 19.9	1	3- (T2, T3 and T4)	3
20 - 29.9	2	0	
30 - 39.9	3	0	
40 - 49.9	4	1 - (T1)	4
50 - 59.9	5	0	
60- 69.9	6	0	
70 – 79.9	7	0	
80+	8	0	
	Total number of replac	ement trees required by BTRS	7

Table 2: Tree replacement requirements for trees lost to development

9.2 Three replacement trees will be accommodated on site, planting plan including species, location and planting stock size to be submitted separately to this report. A financial contribution of £3,064.84 is proposed for the remaining four trees that cannot be accommodated on site.

10.0 Conclusion

10.1 As there will be no trees retained on the site there is no potential for an adverse impact on retained trees and no requirement for tree protection measures.



²<u>https://www.bristol.gov.uk/documents/20182/34540/BD5605%20Site%20Allocations_MAIN_text%20V8_0.pdf/46c75ec0-634e-4f78-a00f-7f6c3cb68398</u>



Appendix A: Tree Survey Schedule





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Tree Survey Schedule

Client: Florence Mae Ltd.

Location R/O 53A Springfield Road, Cotham, Bristol, BS6 5SJ

Surveyor: Stuart Roberts

Date of Survey: 15th February 2022

Tree Number	Single (S) or Hedge (H)	Tree Name (species)	Height (m)	Calculated Stem Diameter (mm)	Number of Stems	Crown Clearance (m)	North (m)	South (m)	East (m)	West (m)	Age Class	Physiological Condition	Structural Condition	Condition Notes	Recommendations	Estimated Remaining Life Contribution	BS Category	Root Protection Area (Radius, m)
01	S	Cherry	10	455	7	0	2	5	4	4	М	G	F	Multi stem from ground level from narrow	Fell to facilitate	20+	C2	5.5
		laurel												forks, roots restricted by adjacent site	development			
														features, foliage in contact with adjacent	proposals.			
														buildings.				
02	S	Holly	7	150	1	2	2	2	2	1	Sm	G	G	Small single stem holly on the north garden	Fell to facilitate	40+	C1	1.8
														boundary.	development			
															proposals.			
03	S	Holly	7	150	1	2	2	2	1	2	Sm	G	G	Small single stem holly on the north garden	Fell to facilitate	40_	C1	1.8
														boundary.	development			
															proposals.			
04	S	Ash	8	193	3	2	3	3	2	3	Y	F	F	Small multi stem ash on the south garden	Fell to facilitate	<10	C1	2.3
														boundary, early symptoms of Ash Dieback	development			
														Disease.	proposals.			







Table Heading	Definition						
Tree Number	Tree numbers as they appear in the Tree Schedule and are marked on the Tree Protection Plan drawings.						
Single or group	S for a single tree, G for a group of trees and H for a hedge						
Species	The common name of the tree						
Height (m)	In meters measured with a laser clinometer						
Calculated stem diameter (mm)	Calculated diameter of the stem(s) measured in millimetres at 1.5 meters from ground level						
Number of stems	Indicates the number of stems measured to inform the Root Protection Area						
Crown clearance (m)	Height in metres of crown clearance above adjacent ground level						
Crown spread (m)	The spread of the crown measured in metres, taken at the four cardinal points from the trunk						
Age class	(Np) Newly planted, (Y) Young, (SM) Semi-Mature, (EM) Early mature, (M) Mature, (A) Ancient or (V) Veteran						
Physiological condition	Good – tree has good health and vitality. Fair- tree has minor health and vitality problems. Poor- tree has low vitality and significant health problems. Dead- dead tree.						
Structural condition	G-good P- poor F- Fair D-dead						
Condition notes	Specific notes relating to the condition of the tree						
Recommendations	Recommendations for tree surgery based on any physical defects found or for further investigation of defects that require a more detailed assessment						
Estimated remaining contribution	In years <10, 10+, 20+ or 40+						
RPA (Root Protection Area) Radius (m):	The radius of the area in square metres that will need to be protected during construction with a protective fence and/or load bearing surface						
Category grading	Category A: Trees of high quality with an estimated remaining life expectancy of at least 40 years						
Category	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 <150mm						
	Category U: Trees 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						
	TREE SURVEY SCHEDULE KEY						





Appendix B: Tree Constraints Plan





Appendix C: Tree survey methodology

Baseline survey

A site visit was undertaken by qualified arboriculturalist Stuart Roberts. The inspection took place from ground level and employed the Visual Tree Assessment method (Mattheck and Breloer, 1994).

Category ratings: In accordance with the BS5837:2012 Cascade chart for tree quality assessment, a rating of A, B, C or U is allocated based on the condition of a tree or group of trees in its/their current surroundings. No consideration is given to any specific development proposal when allocating category ratings, category definitions are detailed below:

Category	Criteria
A	Those trees or groups which have high quality and value, are in good structural and physiological condition and are expected to have a useful life expectancy of at least another 40 years- indicated in green on the associated plans
В	Those trees or groups which would be considered as category A trees but which are of lower value, poorer structural condition, or which are expected to have a useful life expectancy of a minimum of 20 years- indicated in blue on the associated plans
С	Those trees or groups which are of low quality and value, trees currently in adequate condition to remain until new planting is established or are young trees with a stem diameter less than 150mm. Category C trees are expected to have a life expectancy of a minimum of 10 years- indicated in grey on the associated plans
U	Trees or groups in such a condition that any existing value would be lost within ten years and which should, in the current context, be removed for reasons of sound arboricultural management- indicated in red on the associated plans

BS5837:2012 Tree categorisation criteria

Sub categories are awarded in accordance with the following criteria:

Sub category	Inclusion criteria
1	Trees with arboricultural value
2	Trees with landscape value
3	Trees with cultural or conservation (ecological) value

BS5837:2012 Tree sub-category criteria







Root protection areas

Below ground constraints or Root Protection Areas (**RPAs**) for all trees included in the site survey are calculated In accordance with *BS5837:2012 4.6.1*. The RPA is a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure should be treated as a priority. The RPAs have been plotted onto the Tree Constraints Plan and Tree Protection Plan as a circle centred on the base of each tree stem with a radius of 12 times the trees stem diameter measured at 1.5 metres above ground level.

BS5837:2012 4.6.2 requires that where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically the RPA should be modified to produce a polygon of an equivalent area. Any trees on site identified as requiring a modification to their RPA are indicated within the AIA.

Data presentation

Data collected regarding the individual trees or groups is presented in the Tree Survey Schedule in Appendix A in accordance with *BS5837: 2012*. Trees have not been physically tagged but have been assigned individual numbers that are used to identify a tree, group or hedgerow throughout the report, within the Tree Survey Schedule and on the associated plans.

The following information has been collected for each tree in the survey:

- Tree or group number
- Single or group category
- Common and scientific name of species
- Height in metres
- Number of stems
- Stem diameter
- Clearance of crown from ground level in metres
- Radius of crown
- Age class
- Physiological condition
- Estimated remaining contribution in years
- Structural condition
- Preliminary management recommendations
- Tree categorisation
- Root Protection Area (RPA)





