

BUCKS PLANT CARE LTD

ARBORICULTURAL CONSULTANCY SERVICE

Arboricultural Impact Assessment 3 (AIA3) 111 Flat A Gaisford Street London, NW5 2EG

A report to support planning application
2023/1665/P to install a garden room

2023

Report by: Patrick Prendergast
DHE, MArborA, MIHort, Tech Cert(ArborA)
On the instruction of Anna Gillespie
13th October 2023
Ref BPC 21057

Bucks Plant Care Ltd

www.bucksplantcare.co.uk

Mobile : 07952 338564

E-mail: Patrickprendergast@bucksplantcare.co.uk



BUCKS PLANT CARE LTD

CONTENTS	PAGE NO
1.0 INSTRUCTIONS AND TERMS OF REFERENCE	2
2.0 INTRODUCTION	5
3.0 CONSTRUCTION EXCLUSION ZONES (CEZS)	7
4.0 STATUTORY CONTROLS	9
5.0 WILDLIFE HABITATS	10
6.0 111 Flat A Gaisford Street, London, NW5 2EG - TREE REPORT	11
7.0 CONCLUSIONS	19

APPENDICES

1. Appendix 1- Tree Survey Schedules & Table 1 - Category Grading (Quality Assessment)
2. Appendix 2 – Arboricultural Impact Assessment

Summary: The trees on this site were surveyed on the 10th October 2023

It is proposed to install a garden room at the end of the garden. There are no arboricultural issues with this proposal.

1.0 INSTRUCTIONS AND TERMS OF REFERENCE

1.1. **Arboricultural Implication Assessment (AIA).** We are instructed by Anna Gillespie of the subject property at 111 Flat A Gaisford Street, London, NW5 2EG to:

- Survey from ground level, individually, or in groups, all on-site trees, identifying species, physiological condition and structural morphology, tree dimensions, preliminary management recommendations and BS: 5837 (2012) 'Retention Categories'. Estimate as far as possible off-site trees.
- Number all trees, either individually or in groups:
- Prepare a Tree Schedule.
- Work up an arboricultural impact assessment that will incorporate Root Protection Areas (RPA) for those trees worthy of retention.

1.2 PHASE 1, 2 & 3: ARBORICULTURAL IMPLICATION ASSESSMENTS (AIA) IN CONTEXT

1.2.1 **Phase 1 (AIA1).** The initial stage for trees within the development process is a survey of those trees that should be retained and those that may/should be removed. Retention trees are allocated Root Protection Areas (RPAs) that are then detailed on a Tree Constraints Plan (TCP). The RPAs provide for sufficient rooting (soil) volume to ensure that trees are successfully retained during and after the completed development. The TCP represents Phase 1 of an Arboricultural Implications Assessment (AIA1). It indicates a notional development footprint for any given site but moreover, it **may affect the value of land** earmarked for development. The AIA1 is **only** a baseline survey. It is not intended to represent, in isolation, the supporting information for an LPA* application: to obtain full planning permission.

1.2.2 Phase 2 (AIA2). The next stage is for 'site layout master planners' to factor the tree constraints into draft layout proposals. This draft is then referred to the consulting Arborist for further implication assessment, to arrive at a 'best fit' scheme, which achieves site proposal viability whilst allowing for the retention of appropriate trees. This layout review represents Phase 2 of an Arboricultural Implications Assessment (AIA2). Once it has been agreed, the consulting Arborist can then prepare a supporting report to accompany the planning application. This report should demonstrate that the trees have been properly considered such that the site layout is defensible in arboricultural terms, both at the application stage and also, if necessary, at Appeal. As the proposal develops, the AIA2 also involves the consulting Arborist working as part of the development team to secure discharge of any initial (frequently pre-commencement) tree related LPA Planning Conditions. These will need to be formally discharged to avoid any breach of Conditions and possible enforcement action.

1.2.3 Phase 3 (AIA3). All the effort put into the pre-application phases (AIA1-2) to protect retention trees is likely to fail without effective site supervision. Arboricultural Implications Assessment (AIA3) covers the ***on-site project implementation***, including arranging (LPA) approved tree removal/ pruning, overseeing the installation of tree protection fencing, ground protection and any special engineering works through to periodic reporting on the retention of tree protection measures. Many if not all of the latter are usually specified as LPA Planning Conditions that need to be formally discharged. All personnel associated with the construction process must be familiar with the specified Tree Protection Plans (TPP) and Arboricultural Method Statements (AMS) that affect the site. The TPP and AMS should be retained on site at all times and they should be included in the site's Project Management Plan.

1.2.4 Phases 1–3 are in line with BS:5837 '*Trees in relation to design, demolition and construction - Recommendations*' (2012).

* Local Planning Authority

1.3 TREES & BUILDING SUBSIDENCE/HEAVE ISSUES

Assessing the potential influence of trees upon load-bearing soils beneath existing and proposed structures, resulting from water abstraction by trees on shrinkable soils, was not included in the contract brief and is not, therefore, considered in any detail in this report. **Bucks Plant Care Ltd** cannot be held responsible for damage arising from soil shrinkage or heave issues related to the retention or removal of trees on site.

1.4 TREE SAFETY MATTERS AND TREE RISK ASSESSMENT

The BS:5837 tree survey is carried out in sufficient detail to gather data for and to inform the current project. Our appraisal of the structural integrity of trees on the site is of a preliminary nature and sufficient only to inform the current project. The tree assessment is carried out from ground level – as is appropriate for this type of survey - without invasive investigation. The disclosure of hidden tree defects cannot therefore be expected. Whilst the survey is not specifically commissioned to report on matters of tree safety, we report obvious visual defects that are significant in relation to the existing and proposed land use.

Lastly and to further clarify, this BS:5837 survey does not constitute a full *Visual Tree Assessment* (= TRAM* Level 2 - *Basis Assessment*) that would ordinarily be carried out for Tree Risk Assessment reporting. In effect, this BS:5837 survey equates to a TRAM Level 1 *Limited Visual Assessment*.

* “*Tree Risk Assessment Manual*” Dunster, Julian A., E. Thomas Smiley, Nelda Matheny, and Sharon Lilly (2013) *International Society of Arboriculture*

1.5 SITE OBSERVATIONS

This report has been based on my site observations and my experience. This along with my qualifications are summarised below:

Author: Patrick Prendergast, DHE, MArborA, MIHort, Tech Cert(ArborA)

I have over 40 years experience in arboriculture, working in local authorities managing trees in the public realm and private sector dealing with development sites and planning issues. I have a sound education in both horticulture and

arboriculture:

- National Certificate in Commercial Horticulture, Kildalton, Co Kilkenny 1982
- Diploma in Horticulture from Royal Botanic Gardens Edinburgh 1987 –(D.H.E.)
- Technical Certificate in Arboriculture - Arboricultural Association 2003 - Tech Cert (ArborA)
- Royal Forestry Certificate in Arboriculture (1987)
- Profession Tree Inspection Certificate 2014

I have professional membership in relevant institutes:

- Member of the Chartered Institute of Horticulture (MCIHort)
- Member of the Consulting Arborist Society
- Member of the Arboricultural Association (MArborA)
- Associate member of the Chartered Institute of Foresters

I attend conferences and seminars to ensure that I keep up to date with current industry developments.

1.6 CAVEATS

The author does not have formal qualifications in the areas of structural engineering or law. However, making comment on such matters from an arboricultural perspective is both within the normal scope of our instructions and also within the range of the author's experience. Notwithstanding this, specialist professional advice should be sought to clarify/confirm any observations on engineering or legal matters that this report may contain.

2.0 INTRODUCTION

2.1 THE ASSESSMENT METHODOLOGY

The British Standard 5837 '*Trees in relation to design, demolition, construction - Recommendations*' (2012) provides "guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees.....with structures". The Standard recommends that trees with categories A-C (where A is the highest quality) are

a material consideration in the development process. Such trees may then become a constraint for a planning proposal. Category U trees are those that will not be expected to exist for long enough to justify their consideration in the planning process (i.e. no more than 10 years). Tree categories are used with the number 1, 2, or 3 to signify whether the category was made based on arboricultural, landscape or cultural (including conservation) values respectively. The tree categories are shown on plan by colour-coding:

- Category A (green colour-coded): Good examples of their species with an estimated life expectancy of at least 40 years.
- Category B (blue colour-coded): Not suitable for an 'A' category due to impaired condition or a tree lacking special 'A' qualities: with an estimated life expectancy of at least 20 years.
- Category C (grey colour-coded): Unremarkable trees of very limited merit or with a significant impaired condition not warranting an 'A' or 'B' category: with an estimated life expectancy of at least 10 years. See young trees below.
- Category U (red colour-coded): 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.
- Reasonably young trees below 150mm stem diameter would normally be given a C category (if they satisfy the retention quality criteria). However, as they are small they could be replaced/transplanted and as such they should not be regarded as a significant constraint on a development.

2.2 ARBORICULTURAL IMPACT ASSESSMENT (AIA 1)

As part of this AIA1 we have considered the following BS:5837 (2012) criteria:

1. Tree Categories (Quality Assessment).
2. Crown Spread measured to the four cardinal compass points for single specimens only.
3. Root Protection Areas (RPAs).
4. Tree Constraints.

N.B. Trees and shrubs are living organisms whose health and condition can change rapidly, for this reason the BS 5837 grades along with any conclusions or tree management recommendations remain valid for a period of 12 months.

3.0 CONSTRUCTION EXCLUSION ZONES (CEZS)

3.1 GENERAL

The three phases of an Arboricultural Implication Assessment were outlined in Section 1.1.1–1.1.4. In addition, during the development process for retention trees, there may be three or even four constraints to consider - Construction Exclusion Zone (CEZs):

- CEZ 1: Root Protection Area (see 3.1.1).
- CEZ 2: Tree Crown Protection (see 3.1.2).
- CEZ 3: Tree Dominance (see 3.1.3).
- CEZ 4: New Tree Planting Zone (see 3.1.4).

The above CEZ's are explained further below.

3.1.1 CEZ 1: ROOT PROTECTION AREA (RPA)

The RPA, calculated in m², should be protected before and during any demolition/construction works. This ensures the effective retention of trees by preventing physical damage to (a) roots and (b) their rooting environment (typical problems - soil compaction; soil level changes and soil capping that can impede gaseous exchange to living roots*). The RPA is based on a radial measure from the centre of the tree stem, which is calculated by multiplying the stem diameter by a factor of twelve (or by a factor of ten when measuring basal diameter immediately above the root flare for multi-stemmed trees). With the AIA1, the RPA is only shown indicatively on the preliminary Tree Constraints Plan (TCP), as its shape may be subject to amendment as the design progresses.

During the AIA2, the derived radial measure is converted by the consulting Arborist into the actual area to be protected, having due regard to prevailing site conditions and how these may have affected the tree(s).

The means of protecting the RPA will include the installation of tree protection

fencing prior to the start of any demolition or construction work on site, the prohibition of various harmful activities within the RPA (e.g. mechanical excavation, soil stripping & trenching, fire lighting, materials storage and creating excessive sealed surfacing), and may include the use of temporary ground protection and/or special engineering solutions where construction is proposed near to retention trees or within the RPA.

* Roots must have oxygen for survival, growth and effective functioning.

3.1.2 CEZ 2: TREE CROWN PROTECTION ZONE

This is the area above ground occupied by the tree crown (branches) and considers the required demolition/construction working space necessary for the development. The possibility of an acceptable quantum of pruning may be considered: subject to Council permission/consent (see Section 4.1.1).

Arising from the above, the means of protecting CEZ 2 is likely to include providing an adequate separation distance between retention trees and new buildings. This will relate to the CEZ 3: below.

3.1.3 CEZ 3: TREE DOMINANCE ZONE

This is the area above ground dominated by the tree in relation to issues of shading, seasonal debris and the safety apprehension by the site owner/occupier. This area is assessed by considering the height and spread of the tree (now and in the future) relative to the proposed buildings, cross-referenced with the intended end-use. As such, what is assessed is the likely psychological effect of the tree(s) on the end-user.

The purpose of identifying CEZ 3 is to protect trees from post-development pressure by the site's end-users, who may, if resentful of the trees, seek to procure excessive pruning treatments (i.e. the bad practice of topping & lopping) or even to have them removed. This is a common LPA concern, which may lead to application withdrawals, refusals and/or dismissed Appeals.

The means of protecting CEZ 3 is likely to include optimising the site layout and room type (especially in relation to new residential dwellings), such that any

adverse impacts of trees are reduced to an acceptable minimum. The key principle is to ensure adequate separation distances between trees and new buildings: notably with habitable space & primary windows.

3.1. 4 CEZ 4: NEW PLANTING ZONE

In some cases, it may be appropriate to identify and protect areas intended for new landscape planting, which can fail to establish if the soil has been heavily compacted or contaminated during the demolition/construction process. The means of protecting CEZ 4 will either be by fencing prior to the start of demolition/construction works or by pre-planting soil remediation once construction has finished. Topsoil protection in areas destined for new planting is frequently an economic measure, saving on soil structure remediation and tree (failure) replacement costs.

4.0 STATUTORY CONTROLS

4.1 PLANNING LEGISLATION (TREES)

4.1.1 STATUTORY TREE PROTECTION

Trees can be protected in law – via Tree Preservation Orders (TPOs) or by virtue of them growing in a Conservation Area – by the Government's Town & Country Planning Act 1990 (the Act). Trees may also be protected by Planning Conditions. In all these instances, written LPA permission/consent is required before protected trees can be pruned or felled*. Contravention of the Act may carry a fine of up to £20,000 and a criminal record.

* Exceptions include those trees that are dead/hazardous or those that are causing an actionable nuisance to a third-party. In any event, evidence must be provided to defend the removal of such trees.

4.1.2 TREES ON SITE

The trees on and adjacent to this site are protected by Conservation Area status.

4.2 WILDLIFE LEGISLATION

The Wildlife and Countryside Act (1981) Chapter 69 forms the basis for the legal wildlife protection in Great Britain. Amongst other protected flora and fauna, nesting birds and all species of bat are afforded statutory protection. In brief, it is an offence to:

- Intentionally kill, injure or take a bat.
- Sell, hire, barter or exchange a bat, dead or alive.
- Be in possession or control of a bat or anything derived from them.
- Disturb a nesting bird.

It is recommended that the client and/or their agent review the Act - <http://www.jncc.gov.uk/page-3614> - for further information and guidance.

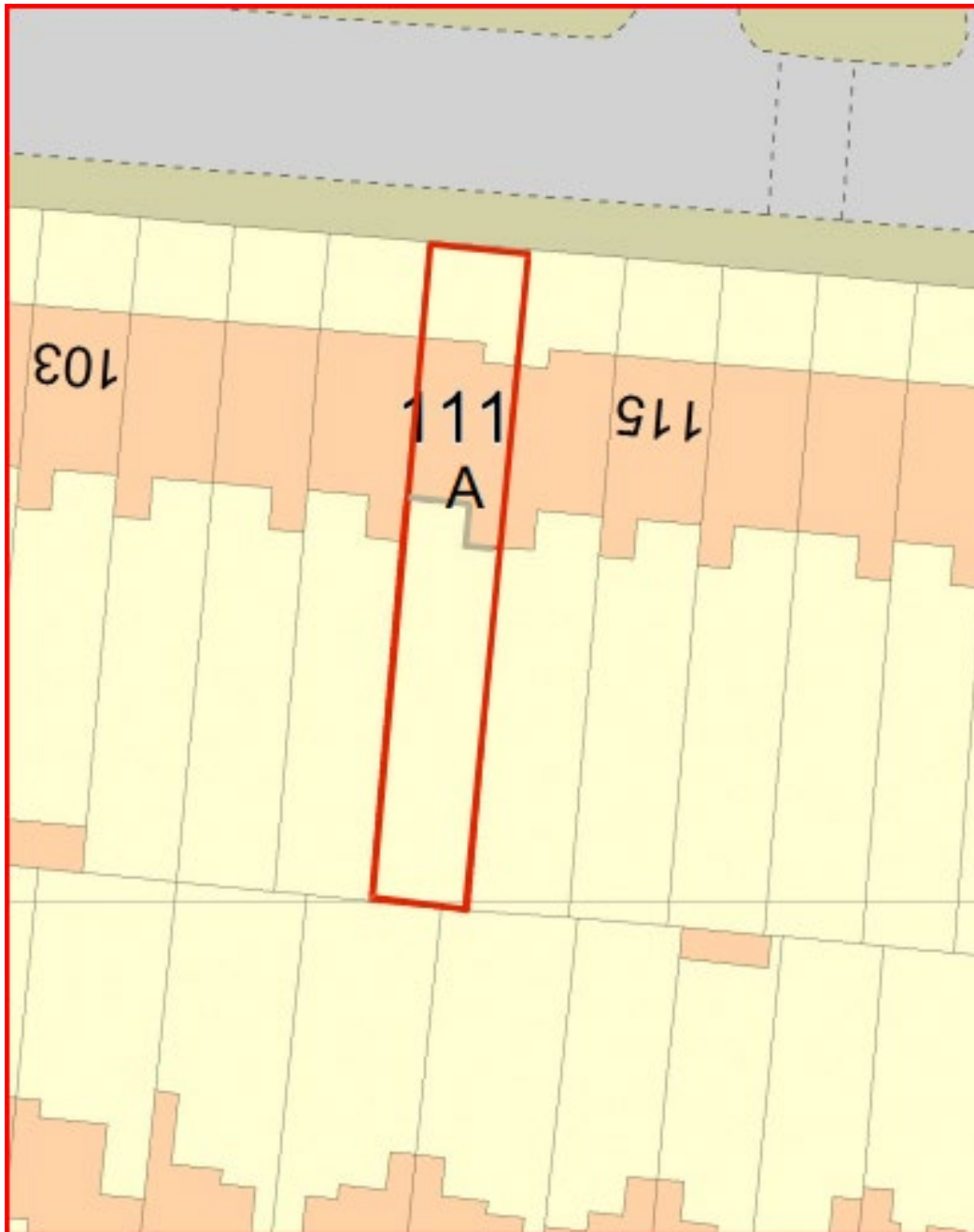
5.0 WILDLIFE HABITATS

A cursory assessment of wildlife habitat values of trees and hedgerows on the site was carried out during the survey. No protected or exceptional habitats were identified and details were not recorded. However, trees and hedgerows of most species provide valuable nesting sites for a wide range of birds and it is likely that nesting birds will be present on the site during the period March to September. We have not been made aware of the presence of roosting bats and have not identified any obvious signs of roost sites. However, this does not mean that roost sites are absent.

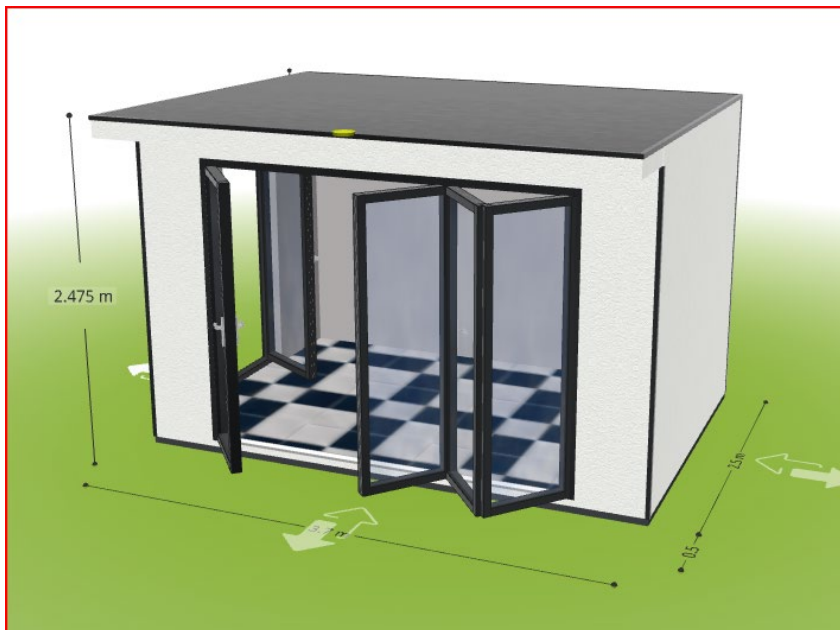
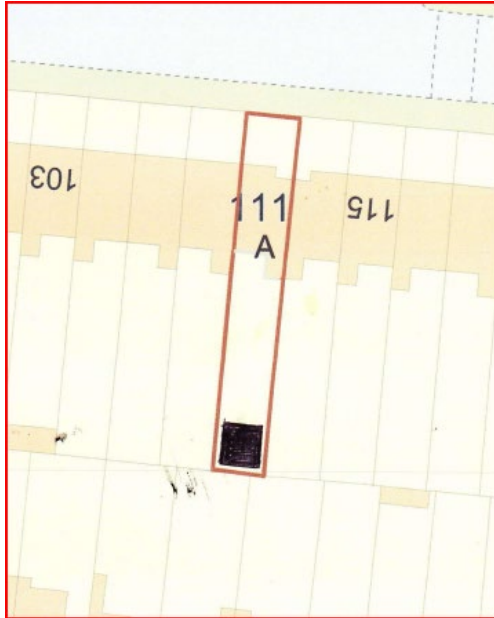
6.0 111 FLAT A GAISFORD STREET, LONDON, NW5 2EG - TREE REPORT (to be read in conjunction with the appended AIA plan and Tree Survey)

6.1 THE PROPERTY AND THE DEVELOPMENT PROPOSAL

6.1.1 Site description: The site consists of a basement flat in a terraced property.



6.1.2 **The proposal:** It is proposed to install a wooden garden room at the bottom of the garden as illustrated below.



The location and detail of the proposed development and the positioning and numbering of the trees can be found plotted on the AIA plan at Appendix 2 and separate document Ref : AIA/21057. NB The original of this plan was produced in colour – a monochrome copy should not be relied upon.

6.2 **TREES ON-SITE**

There are no on-site trees.

6.3 **TREES OFF-SITE**

There are four off-site trees.

Photo 1 – T01 cherry



Photo 2 – T02 – decay in base of lime tree



Photo 3 – T03 – Fig



Photo 4 – T04 apple



6.4 **IMPACT PROPOSAL ON TREES** (to be read in conjunction with the Arboricultural Impact Assessment- AIA - at Appendix 3)

6.4.1 **Underground Utilities:** Locations of proposed underground services were not identified on the provided plans, although these *must not* be sited within the Root Protection Area (RPA) of any retention tree without prior discussion and approval from the LPA and/or a Consulting Arborist. See section 6.5.

6.4.2 **CEZ 1: Root Protection Areas (RPAs)**

The rear of the property is bounded by a brick wall, which along with the foundation acts as a root barrier to the neighbouring trees.



The wall next to the cherry tree was built about 20 years ago and considering the size of the cherry tree growing next to it there are no signs of damage to the wall, which indicates it has a suitable foundation.



6.4.2.1 Footprint of the Proposed Build

No trees will be impacted by the proposed gate installation.

Although the surrounding boundary walls act as a barrier to the trees it is proposed to support the garden building using screw piles. This will also minimise any impact to roots which may be present in the garden. There is no open access to the garden so no machinery will be brought onto site.



6.4.3 CEZ 2: Tree Crown Protection Zones

There are no crown protection issues as the crown of the cherry is 4 meters above ground level.

6.4.4 CEZ 3: Tree Dominance Zones

There are no crown dominance issues.

7.0 CONCLUSIONS

7.1 DEVELOPMENT PROPOSAL & POTENTIAL IMPACT ON TREES

7.1.1 It is proposed to install a wooden garden room at the end of the garden.

7.1.2 There will be no impact to the neighbouring trees.




7.1.4 There is no requirement for a Tree Protection Plan and method statement in this case as the boundary wall act as protection barriers.

APPENDIX 1
TREE SURVEY SCHEDULE

Ref.	Species	Measurements	General Observations	Retention Category	RPA	Physiological Condition	Structural Condition	Recommendations
T01	Wild Cherry (<i>Prunus avium</i>)	Height (m): 18 Stem Diam(mm): 450 Spread (m): 5N, 5E, 5S, 5W Crown Clearance (m): 4 Life Stage: Mature Rem. Contrib.: 10+ Years	Off-site large tree separate by a boundary wall	C	Radius: 5.4m. Area: 92 sq m.	Good	Good	no action required
T02	Lime (<i>Tilia sp.</i>)	Height (m): 20 Stem Diam(mm): 500 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 7 Life Stage: Mature Rem. Contrib.: <10 years	Off-site tree with decay in the base	U	No RPA due to Retention Category of U.	Fair	Fair	removal planned by local authority

Ref.	Species	Measurements	General Observations	Retention Category	RPA	Physiological Condition	Structural Condition	Recommendations
T03	Fig (<i>Ficus carica</i>)	Height (m): 4 2 stems (mm): 150,150 Spread (m): 0N, 2E, 2S, 2W Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 10+ Years	Off-site small tree	C	Radius: 2.5m. Area: 20 sq m.	Good	Good	no action required
T04	Apple (<i>Malus sp.</i>)	Height (m): 5 Stem Diam(mm): 200 Spread (m): 5N, 1E, 2S, 2W Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 10+ Years	Off-site fruiting tree	C	Radius: 2.4m. Area: 18 sq m.	Good	Good	no action required

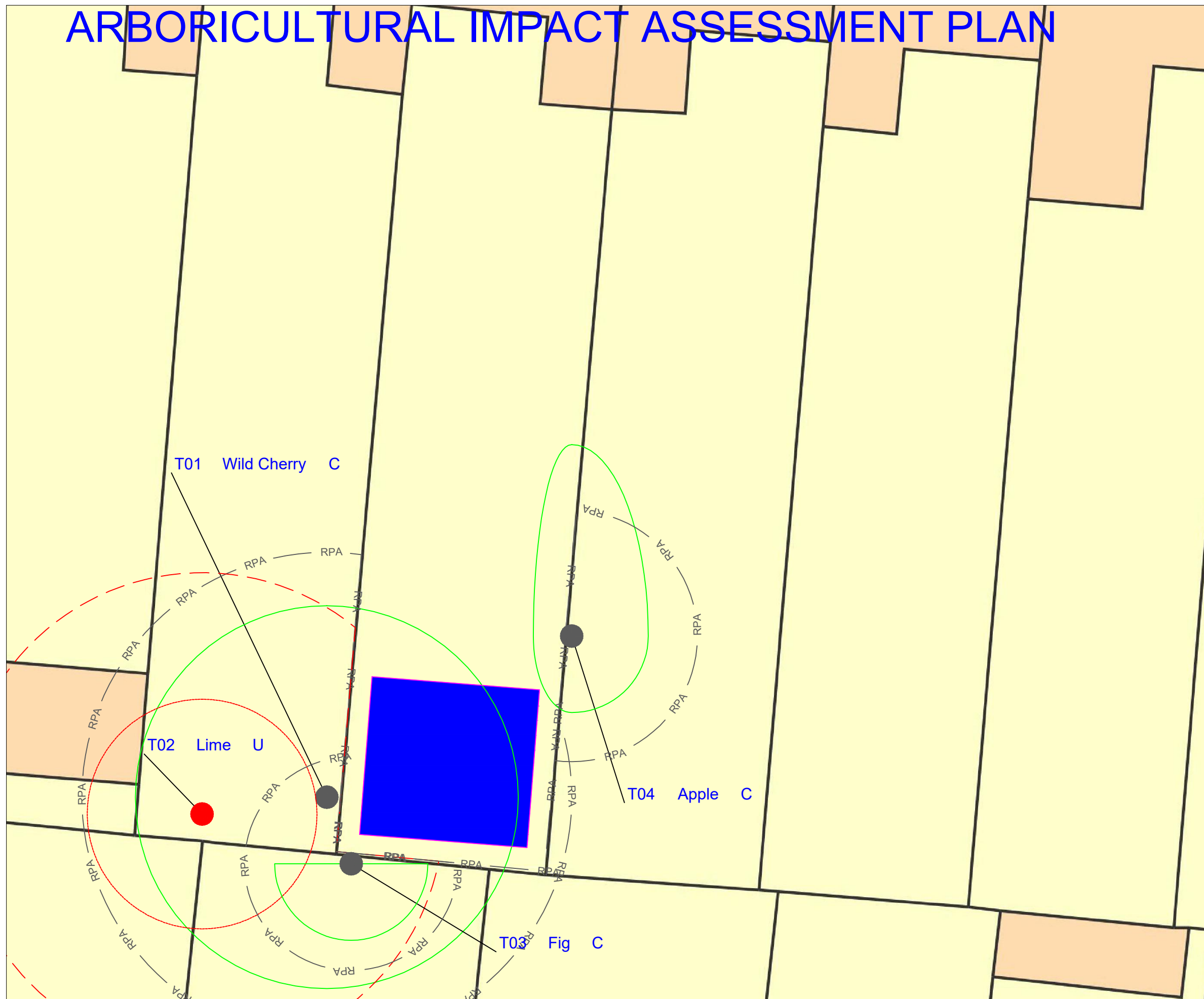
BS5837:2012 Table 1 – Cascade chart for tree quality assessment

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	<ul style="list-style-type: none">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 declineTrees 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 <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see [BS5837:2012] 4.5.7.</i></p>			
	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)	
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	
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	

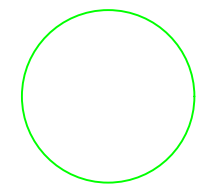
APPENDIX 2

Arboricultural Impact Assessment plan

ARBORICULTURAL IMPACT ASSESSMENT PLAN



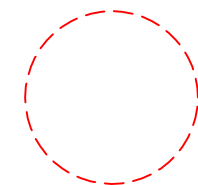
General Notes



Tree canopy



RPA Cat C



RPA Cat U



Proposed building

AIA plan		
No.	Revision/Issue	Date

Firm Name and Address	
Bucks Plant Care Ltd Wylterne Bridge Street Great Kimble HP17 9TW	

Project Name and Address	
111FlatA Gaisford Street London NW5 2EG	

Project BPC - 21057	Sheet 01
Date 13.10.2023	
Scale 1:100 in A3	