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Arboricultural Impact Assessment

**in Relation to Proposed Interior Remodelling, Construction of
Two Garden Lounge Extensions, and Re-landscaping at**



**Abbeyfield House, Union Street,
Clitheroe, Lancashire, BB7 2NH**

Prepared by:

Bowland 
Consultancy

January 2018

**ARBORICULTURAL IMPACT ASSESSMENT
ABBNEYFIELD HOUSE, CLITHEROE**

Control sheet

Project No.: BTC1484

Site: Abbeyfield House, Union Street, Clitheroe, Lancashire, BB7 2NH

Client: Abbeyfield Lancashire Extra Care Society

Council: Ribble Valley Borough Council

Survey Date: 6 December 2017

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DISCLAIMER

Survey Limitations: Unless otherwise stated all trees are surveyed from ground level using non-invasive techniques, in sufficient detail to gather data for and inform the design of the current project only. The disclosure of hidden crown and stem defects, in particular where they may be above a reachable height or where trees are ivy clad or located in areas of restrictive ground vegetation, cannot therefore be expected. Detailed tree safety appraisals are only carried out under specific written instructions. Comments upon evident tree safety relate to the condition of said tree at the time of the survey only. Unless otherwise stated all trees should be re-inspected annually in order to appraise their on-going mechanical integrity and physiological condition. It should, however, be recognised that tree condition is subject to change, for example due to the effects of disease, decay, high winds, development works, etc. Changes in land use or site conditions (e.g. development that increases access frequency) and the occurrence of severe weather incidents are also significant considerations with regard to tree structural integrity, and trees should therefore be re-assessed in the context of such changes and/or incidents and inspected at intervals relative to identified and varying site conditions and associated risks.

Where trees are located wholly or partially on neighbouring private third-party land then said land is not accessed and our inspection is therefore restricted to what can reasonably be seen from within the site. Stem diameters and other measurements of trees located on such land are estimated. Any subsequent comments and judgments made in respect of such trees are based on these restrictions and are our preliminary opinion only. Recommendations for works to neighbouring third-party trees are only made where a potential risk to persons and/or property has been identified during our survey or, if applicable, where permissible works are required to implement a proposed development. Where significant structural defects of third-party trees are identified and associated management works are considered essential to negate any risk of harm and/or damage then we will inform the relevant Council of the matter. Where a more detailed assessment is considered necessary then appropriate recommendations are set out in the Tree Survey Schedule.

Where tree stem locations are not included on the plan(s) provided then they are plotted by the arboriculturist at the time of the survey using, where appropriate and/or practicable, a combination of measurement triangulation and GPS co-ordination. Where this is not possible then locations are estimated. Restrictions in these respects are detailed in the report.

This document is intended as a guide to identify key tree related constraints to site development only, and the potential influence of trees upon existing or proposed buildings or other structures resulting from the effects of their roots abstracting water from shrinkable load-bearing soils is not considered herein. The tree survey information in its current form should not therefore be considered sufficient to determine appropriate foundation depths for new buildings. Accordingly, an updated survey, with reference to the current NHBC Standards Chapter 4.2 - Building Near Trees, must therefore be prepared for the specific purpose of informing suitable foundation depths subsequent to planning approval being granted. The advice of a structural engineer must also be sought with regard to appropriate foundation depths for new buildings.

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**ARBORICULTURAL IMPACT ASSESSMENT
ABBEYFIELD HOUSE, CLITHEROE**

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1.0 INTRODUCTION

Terms of Reference

- 1.1 Bowland Tree Consultancy Ltd were instructed, by Sunderland Peacock & Associates, to:
- Survey, as individuals or by group, all trees having reasonable potential to affect or to be adversely affected by the proposed development of the site under consideration;
 - Annotate the proposed site plan to produce a Tree Impact Plan, identifying tree retention categories, crown spreads, Root Protection Areas, trees to be removed, etc.;
 - Prepare a tabulated Tree Survey Schedule based on guidance specified BS5837:2012 - Trees in Relation to Design, Demolition and Construction – Recommendations;
 - Evaluate the potential tree related impacts and design conflicts of the proposals, based on the supplied development proposal plan;
 - Advise on removal, retention and management options for the trees in the current context and in the context of the proposed development;
 - Advise on suitable retained tree protection measures required during development; and
 - Produce an Arboricultural Impact Assessment report outlining the main tree related issues and reasonably foreseeable tree impacts in relation to the proposals and indicating suitable mitigation provisions and retained tree protection measures.

Scope and Purpose of Report

- 1.2 By detailing foreseeable tree related issues this report is intended to assist the Local Planning Authority (LPA), in this case Ribble Valley Borough Council, in their review of the proposed development and, as such, should be supplied to them in support of the planning application to which it pertains. Essentially, the report provides an initial analysis of the impacts that the proposed development is projected to have on trees located both within the site and, where practicable, on land immediately adjacent to its boundaries. It also offers guidance on suitable retained tree management and mitigation for projected losses, along with advice on appropriate tree protection measures in the context of the proposed development in accordance with current guidance.

Site Visit, Data Collection and Tree Plans

- 1.3 Further to the instruction a tree survey was carried out on 6 December 2017, in accordance with the preceding disclaimer, and all tree data collected on site is set out in the attached tabulated Tree Survey Schedule (TSS) at Appendix One which, for ease of interpretation, should be read alongside the appended BS5837:2012 Table 1.
- 1.4 The survey identified four individual trees (prefixed 'T'), one group of trees (prefixed 'G'), and one hedge (prefixed 'H'), which have been numbered accordingly on the appended Tree Impact Plan (TIP). The TIP, which details the existing site with an overlay of the proposed development, along with the readily definable tree constraints and projected impacts, is based on a topographical survey based proposal plan, which was provided in electronic format by the architects, Sunderland Peacock. In turn, for the purpose of this report, it is presumed that the provided plan's details are accurate.
- 1.5 The purpose of the TIP is to give an initial indication of the impacts that the proposed development is projected to have on trees, as well as to highlight areas where special construction and/or protection considerations may be necessary. It should subsequently be used by the LPA's tree specialist to preliminarily assess if the proposed development can potentially be constructed in accordance with BS5837:2012 and, along with the information provided in this report, as a basis for the LPA to request further details regarding specific matters relating to trees at suitable stages in the planning process.

2.0 STATUTORY PROTECTION IN RESPECT OF TREES AND ASSOCIATED WILDLIFE

Tree Preservation Orders and Conservation Area Designations

- 2.1 The Town & Country Planning Act (1990) (the Act) and associated Regulations empower Local Planning Authorities (LPAs) to protect trees in the interests of amenity by making Tree Preservation Orders (TPOs). The Act also affords protection for trees of over 75 mm diameter that stand within the curtilage of a Conservation Area (CA). Subject to certain exemptions, an application must be made to the LPA in question to carry out works upon or to remove trees that are subject to a TPO, whilst six weeks' notice of intention must be given to carry out works upon or to remove trees within a CA that are not protected by a TPO.
- 2.2 According to Ribbles Valley Borough Council's website, the site does not stand within a CA. However, the website does not contain details of specific TPOs and it is therefore essential that the presence of any statutory tree protection be checked directly with the council's planning department prior to scheduling or carrying out any tree works that are not directly related to, and subsequently authorised in accordance with, the implementation of a detailed planning permission.

Protected Species

- 2.3 Nesting birds are afforded statutory protection under the Wildlife & Countryside Act (1981) (as amended) and their potential presence should therefore be considered when clipping hedges, removing climbing plants and pruning and removing trees. The breeding period for woodlands runs from March to August inclusive. Hedges provide valuable nesting sites for many birds and clipping should therefore be avoided during March to July. Trees, hedges and ivy should be inspected for nests prior to pruning or removal and any work likely to destroy or disturb active nests should be avoided until the young have fledged.
- 2.4 All bat species and their roosts are protected under Schedule 5 of the Wildlife & Countryside Act (1981) (as amended) and under Schedule 2 of the Conservation of Habitats & Species Regulations 2010 (as amended). In this respect it should be noted that it is possible that unidentified bat habitat features may be located high up in tree crowns and all personnel carrying out tree works at the site should therefore be vigilant and mindful of the possibility that roosting bats may be present in trees with such features. If any bat roosts are identified then it is essential that works are halted immediately and that a suitably qualified and experienced ecologist investigates and advises on appropriate actions prior to works continuing.

Felling Licences

- 2.5 Subject to certain exemptions the Forestry Act (1967) requires that a 'Felling Licence' be obtained to remove growing trees amounting to more than five cubic metres of timber in a calendar quarter. Felling Licences are administered by the Forestry Commission and contravention of the associated controls can incur substantial penalties.
- 2.6 A felling licence is, however, not required for the felling of trees immediately required for the purpose of carrying out development authorised by a full planning permission granted under the Town and Country Planning Act 1990.

3.0 THE SITE AND THE SURROUNDINGS

- 3.1 The site under consideration is a predominantly hardscaped garden area to the south-west of an existing residential care home, Abbeyfield House, which is located in the Low Moor area on the western edge of the town of Clitheroe, and within the administrative boundaries of Ribble Valley Borough Council. Abbeyfield House is bordered to the north-east by Union Street, from which there is vehicular access to the existing property, and to the east, south, and west by neighbouring residential properties and their associated gardens.
- 3.2 The topographical survey plan provided indicates that ground levels around the existing building vary slightly according to the current landscaping layout, which comprises shrub beds, paved areas, and other hardscape features connected by a series of ramps, varying in elevation by up to 1.5 metres.

4.0 THE TREE POPULATION

- 4.1 As noted previously, a total of four individual trees, one group of trees, and one hedge were surveyed for the purpose of this appraisal. They range from young to early-mature in age, with heights of up to nine metres, maximum diametrical crown spreads of up to approximately seven metres, and stem diameters of up to 320 millimetres. Detailed tree dimensions and other pertinent information, such as structural defects and physiological deficiencies, are included in the Tree Survey Schedule (TSS) at Appendix One.
- 4.2 In respect of the survey it should be noted that tree quality is categorised within the existing context without taking any site development proposals into account. However, recommendations for works included in the TSS take both current site usage into consideration and the proposed site development where there are definable development related issues with regard to specific trees.
- 4.3 Under the UK’s planning system trees are a material consideration in the planning and development process. Nonetheless, only trees of a suitable quality and value should be considered a material constraint to development. In this respect the TSS includes a column (‘Cat. Grade’) listing the trees’ respective retention values, where they are rated either ‘A’, ‘B’, ‘C’ or ‘U’, as per BS5837:2012 Table 1 (Appendix One). ‘A’ category trees are those considered to be of ‘high quality’ and, accordingly, the most suitable for retention, whilst ‘B’ category trees are those considered to be of ‘moderate quality’, and ‘C’ category trees are those considered to be of ‘low quality’ with a correlated low retention value. In turn, ‘U’ category trees are those that are considered to be ‘unsuitable for retention’.
- 4.4 As detailed in Table B, below, three trees, the group, and the hedge were categorised as low quality (‘C’ category) and one tree was categorised as unsuitable for retention (‘U’ category).

Table B: BS5837-2012 Retention Categories of the Surveyed Trees, Groups & Hedges

	Ret. Cats.	Tree/Group/Hedge Numbers	Totals
Those of a moderate or high quality that should be afforded appropriate consideration in the context of development	‘A’	-	-
	‘B’	-	-
Those of a low quality that should not be considered a material constraint to development	‘C’	T1, T2, T3 G1 H1	3 Trees 1 Group 1 Hedge
Those that should be removed for sound management reasons regardless of site proposals	‘U’	T4	1 Tree
			= 4 Trees, 1 Group & 1 Hedge in Total

5.0 THE DEVELOPMENT PROPOSAL AND ITS PROJECTED ARBORICULTURAL IMPACTS

The Development Proposal

- 5.1 The Proposed Ground Floor Plan (drawing number 5493-07A, dated November 2017), as prepared by Sunderland Peacock, indicates that the planning application is for various amendments to the interior modelling of the existing care home and the construction of two single-storey extensions to the south-west elevation in order to form new garden lounges, as shown on the TIP.
- 5.2 The application also includes a proposal to re-landscape the garden area to the south-west of the existing building, to include formation of covered outside seating areas, artificial games lawns, planters, and water features.

Projected Arboricultural Losses Relating to the Proposal

- 5.3 From the information provided to date it is projected that, as detailed in Table C, below, construction of the development as proposed will require the removal of three low quality (i.e. 'C' category) trees, one low quality group (comprising solely of two Cabbage Palms), and a short section of low quality Leyland Cypress hedge.
- 5.4 In addition, one tree that is located on neighbouring land (T4) is considered unsuitable for retention (i.e. 'U' category), as its future incremental growth is soon projected to displace the boundary fence, and it is therefore strongly recommended that the neighbouring landowner be advised of this issue and the associated damage responsibility issues that the tree's retention would present.

Table C: Arboricultural Impacts of Proposed Development & Other Tree Removal Proposals

	Ret. Cats.	Removals necessary to implement development	Removals recommended regardless of development	Total no. of removals
Those of a high quality that should be afforded appropriate consideration in the context of development	'A'	-	-	-
Those of a moderate quality that should be afforded appropriate consideration in the context of development	'B'	-	-	-
Those of a low quality that should be afforded appropriate consideration in the context of development	'C'	T1, T2, T3 G1 H1	-	3 Trees 1 Group 1 Hedge
Those that should be removed for sound management reasons regardless of plans	'U'	-	T4*	1 Tree*
Totals		3 Trees 1 Group 1 Hedge	1 Tree*	= 4 Trees, 1 Group & 1 Hedge in Total

*Denotes tree located on neighbouring land, whereby landowner is advised to have tree removed

- 5.5 Nonetheless, it is noted that the trees that are projected to require removal are all of low quality (i.e. 'C' category) and are located internal to the site where they are largely hidden from public view. As such, it is projected that their removal will have a negligible impact on the visual amenity of the local landscape.

6.0 RECOMMENDATIONS FOR SUCCESSFUL TREE RETENTION IN THE CONTEXT OF DEVELOPMENT

Root Protection Areas and Construction Exclusion Zones

- 6.1 Adequate protection of the Root Protection Areas (RPAs) of retained trees during construction is essential if their long-term viability is to be assured. RPAs, which are calculated through a method provided in BS5837:2012, are ground areas that should be protected by temporary protective fencing as Construction Exclusion Zones (CEZs) throughout the development process, thereby keeping the trees' root zones free from disturbance. Consequently, the RPA distances, as detailed in the TSS (see 6.2) and on the TIP, give an idea of the on-site below-ground constraints in respect of tree roots and assist in planning for appropriate tree retention in relation to feasible development.
- 6.2 The TSS includes two columns listing RPAs of individually surveyed trees and, where applicable, the largest tree in any surveyed groups as overall areas in square metres and as radial distances. The radial RPAs are indicated as magenta coloured circles on the TIP.
- 6.3 In the case of the development under consideration, however, none of the surveyed trees that are located within the site boundaries are proposed for retention, and the tree protection recommendations discussed herein are therefore not applicable.
- 6.4 Nonetheless, it should be noted that tree T4, which is recommended for removal due to projected fence damage resultant of future stem growth, is located on neighbouring land, and the applicable landowner should therefore be informed of the projected damage and associated responsibility issues that this presents. In turn, it is therefore important that, if the applicable land owner makes the decision not to remove the tree regardless of the responsibility issues, then provision should be made for the protection of its RPA in the context of the proposed landscaping by way of dialog between the professional responsible for the design of the landscaping and the project arboriculturist.

Underground Utilities and Drainage

- 6.5 The installation of underground utilities in close proximity to trees can cause serious damage to their roots. As such, it is essential that utilities be routed outside RPAs unless there is no other available option.
- 6.6 In the case of the development under consideration, however, none of the surveyed trees are proposed for retention and the tree protection recommendations discussed herein are therefore not applicable.

Arboricultural Method Statement and Tree Protection Plan

- 6.7 Government guidance recommends that, where considered expedient by the LPA, an Arboricultural Method Statement (AMS) and a Tree Protection Plan (TPP) be prepared detailing special mitigation construction issues in relation to the development under consideration. Essentially, the AMS and TPP describe and detail the procedures, working methods and protective measures to be used in relation to retained trees in order to ensure that they are adequately protected during the construction process.
- 6.8 In the case of the development under consideration, however, none of the surveyed trees are proposed for retention and the tree protection recommendations discussed herein are therefore not applicable.

7.0 OTHER RECOMMENDATIONS

Non-Development Related Tree Works and Recommendations

- 7.1 Any general management pruning works for retained trees that are stated to be non-development related, as detailed in the TSS, are recommended in accordance with prudent arboricultural management and should therefore be carried out regardless of any site development proposals and potential changes in land usage. All tree works should be carried out in accordance with BS3998:2010 - Tree Work – Recommendations.

Tree Work Related Consents

- 7.2 No tree pruning or removal works should commence on site until necessary consents have been obtained from the LPA as part of a planning approval or in respect of any statutory tree protection (e.g. TPOs).

Arboricultural Contractors

- 7.3 All tree works should be carried out by suitably qualified and experienced arboricultural contractors carrying appropriate public liability insurance cover and be implemented to the minimum current CE and UK industry standards and in accordance with industry codes of practice. Only certificated personnel should, in accordance with The Control of Pesticides Regulations, apply any pesticides.

Contractors and Subsequently Identified Tree Defects

- 7.4 Tree contractors should be made aware that, should any significant tree defects become apparent during operations that would not have been immediately obvious to the surveyor, then such defects should be notified immediately to the client and subsequently confirmed to the consultant within five working days.

New Tree Planting

- 7.5 All tree planting at the site should be carried out in strict accordance with BS8545:2014 Trees: from nursery to independence in the landscape – Recommendations.

Retained Tree Management

- 7.6 Any tree risk management appraisals and subsequent recommendations made in this report were based on observations and site circumstances at the time of the survey. Trees are dynamic living organisms whose structure is constantly changing and even those evidently in good condition can succumb to damage and/or stress.
- 7.7 In this respect, it should be noted that, under the Occupiers' Liability Act (1957 & 1984), site occupants have a duty of care to take reasonable steps to prevent or minimise the risk of personal injury and/or damage to property from any tree located within the curtilage of the land they occupy. In turn, it is accepted that these steps should normally include commissioning a qualified and experienced arboriculturist to survey their trees in order to identify any risk of harm to persons or damage to property that they may present and, where unacceptable risks are identified, taking suitable remedial action to negate those risks.

8.0 SUMMARY AND CONCLUSIONS

- 8.1 Four individual trees, one group of trees, and one hedge were surveyed in respect of a proposal to remodel the interior, construct two garden lounge extensions and re-landscape the garden area of the existing property at the site under consideration.
- 8.2 Three trees, one group, and one hedge were categorised as low quality and one tree, which is located on neighbouring land, was categorised as unsuitable for retention regardless of the development proposals due to projected growth-related damage to a section of boundary fence and the associated responsibility issues that this presents.
- 8.3 An appraisal of the documentation provided from the agent to date indicates that construction of the development as proposed will require the removal of three low quality trees, one low quality group, and a short section of low quality hedge.
- 8.4 However, the trees in question are all of low quality and are located to the rear of the existing property where they are largely hidden from public view, and their loss is therefore projected to have a negligible impact on local visual amenity.
- 8.5 In addition, the neighbouring landowner is advised to have the 'U' category tree removed due to the projected growth-related damage to a section of boundary fence. Nevertheless, should the applicable land owner decide not to remove the tree, regardless of the responsibility issues that this presents, then provision should be made for the protection of its RPA in the context of the proposed landscaping by way of dialog between the professional responsible for the design of the landscaping and the project arboriculturist.

REFERENCES

- BS8545:2014 - Trees: From Nursery to Independence in the Landscape – Recommendations. BSI British Standards, London.
- BS3998:2010 - Tree Work - Recommendations. BSI British Standards, London.
- BS5837:2012 - Trees in Relation to Design, Demolition and Construction – Recommendations. BSI British Standards, London.
- National House Building Council (2017). NHBC Standards Chapter 4.2 - Building Near Trees. NHBC, Amersham.
- National Joint Utilities Group (2007). Volume 4: NJUG Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees (Issue 2) – Operatives Handbook.

APPENDICES

TREE SURVEY SCHEDULE FOR ARBORICULTURAL IMPACT APPRAISAL

Site: Abbeyfield House, Union Street, Clitheroe, Lancashire, BB7 2NH

Client: Abbeyfield Lancashire Extra Care Society

Surveyor: Phill Harris Chartered Arboriculturist

Survey Date: 6 December 2017

Job Ref: BTC1484

No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	FC	General Observations and Comments	Management Recommendations	ERC	Cat. Grade	RPA (m ²)	RPA Radius (m)
T1	Leyland Cypress	9	2x320 (ts)#	N 3.5 E 3.5 S 3.5 W 3.5	1.7 1.7	EM	G	<ul style="list-style-type: none"> Located in fenced off and subsequently inaccessible area of garden, therefore not inspected in detail. Stem evidently bifurcates at a height of approximately 0.2m with a tight compression fork. Moderate stem lean south. 50mm diameter upright branch arises at a height of approximately 0.5m with an acute included bark union. Crown evidently previously heavily topped on several occasions. 	<ul style="list-style-type: none"> Remove in order to construct development as proposed. 	10+	C1	93	5.43
T2	Crab Apple	3.5	2x80 1x50 (ms)	N 1 E 1 S 1.5 W 1	0.5-E 2	Y	G	<ul style="list-style-type: none"> Stem bifurcates at a height of approximately 1.8m, with a decayed cavity between union. Crown evidently previously heavily topped on several occasions. 	<ul style="list-style-type: none"> Remove in context of site landscaping. 	10+	C1	7	1.48
T3	Crab Apple	4.5	220	N 2 E 2 S 2 W 2	1.6-E 2	EM	M	<ul style="list-style-type: none"> Stem bifurcates at a height of approximately 1.8m, with a decayed cavity between union. Crown evidently previously heavily topped on several occasions. 	<ul style="list-style-type: none"> Remove in context of site landscaping. 	10+	C1	22	2.64
T4	Leyland Cypress	4.5	160#	N 1.5 E 1.5 S 1.5 W 1.5	N/A 1.5	Y	G	<ul style="list-style-type: none"> Growing on neighbouring land with stem approximately 150mm from boundary fence, and therefore projected to cause structural displacement to fence on incremental growth. 	<ul style="list-style-type: none"> Inform tree owner of projected displacement to fence (note: removal of tree is only realistic management option to prevent sustained long-term damage). 	<10	U	12	1.92
G1	2no. Cabbage Palm	≤ 2.5	N/A	N ≤ 1 E ≤ 1 S ≤ 1 W ≤ 1	N/A N/A	Y	G	<ul style="list-style-type: none"> Loose group in raised planting area. 	<ul style="list-style-type: none"> Remove in order to construct development as proposed. 	10+	C1	N/A	N/A
H1	Leyland Cypress	≤ 2	N/A	≤ 3 wide	N/A ≥ 0	Y	G	<ul style="list-style-type: none"> Short length of outgrown young hedge located in fenced off and subsequently inaccessible area of garden. 	<ul style="list-style-type: none"> Remove in context of site landscaping. 	40+	C1	N/A	≠1.5

Headlines and Abbreviations:

No. - Allocated sequential reference number - Tree (T), Group (G), Woodland (W) or Hedge (H) reference number - aster to plain and to numbered legs where applicable
Common name
Height - In metres, to nearest half metre - where possible approximately 80% are measured using an electronic clinometer and the remainder estimated against the measured trees. In the case of Groups and Woodlands the measurement failed is that of the highest tree
Stem Diam. - Stem diameter in millimetres, to nearest 10mm - measured and calculated as per Annex C of BS5837:2012. MS = multi-stemmed, TS = twin-stemmed
Branch Spread - Crown radius measured (or estimated where considered appropriate) from the four cardinal points (north, east, south and west) to give an accurate visual representation of the crown
Branch & Canopy Clearances - Existing height above ground level, in metres, of first significant branch and direction of growth (eg. 2.5-N) and of canopy at lowest point - to inform on crown to height ratio, potential for shading, etc.
Life Stage - Estimated age class - Y = young, SM = semi-mature, M = mature, PM = post-mature
Physiological Condition - a measure of the tree's overall vitality, i.e. D = Dead, MD = Moribund, P = Poor, M = Moderate, G = Good
General Observations and Comments: Comments relating to the tree's overall condition and any other pertinent factors including structural defects, current and potential direct structural damage, physiological decline, poor form, etc.
Management Recommendations: Either Preliminary or In Consideration of the Proposal - In the case of Arboricultural Consultancy Surveys the recommended management works only take existing site and tree circumstances and conditions into account and not proposed developments, Arboricultural Impact Assessment and Method Statement related
ERC: Surveys take the proposed development into consideration with recommendations made accordingly. More than one option may be given if considered appropriate
RPA (m²): Estimated Remaining Contribution - in years as per BS5837:2012 (i.e. <10, 10+, 20+, 40+)
RPA Radius (m): Category Grading - tree retention value listed as U, A, B or C - in accordance with BS5837:2012 Table 1
(Estimated Dimensions): Root Protection Area in m² - calculated area around the tree that must be appropriately protected throughout the development process in order to avoid root damage
 Where trees are located off-site, or are inaccessible for any other reason, and accurate measurements or other information cannot be taken then the information provided is estimated and is duly suffixed with an 'e' symbol



BS5837:2012 Table 1 – Cascade Chart for Tree Quality Assessment

Category and definition	Criteria (including subcategories where appropriate)	Identification on plan
<p>Trees unsuitable for retention (see Note)</p> <p>Category U</p> <p>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</p>	<p>Note</p> <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 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 <p><i>Note: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see BS5837:2012 paragraph 4.5.7.</i></p>	<p style="text-align: center;">Red</p>
<p>Trees to be considered for retention</p> <p>Category A</p> <p>Trees of high quality with an estimated remaining life expectancy of at least 40 years</p>	<p>1. Mainly arboricultural qualities</p> <p>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)</p>	<p>2. Mainly landscape qualities</p> <p>Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features</p>
<p>Category B</p> <p>Those of moderate quality and value: those in such a condition as to make a significant contribution. A minimum of 20 years is suggested.</p>	<p>Trees that might be included in the high category, but are downgraded because of impaired condition. Examples include the presence of remediable defects including unsympathetic past management and minor storm damage</p>	<p>3. Mainly cultural values, including conservation</p> <p>Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)</p> <p style="text-align: center;">Green</p>
<p>Category C</p> <p>Those trees of low quality and value: currently in adequate condition to remain until new planting could be established - a minimum of 10 years is suggested - or young trees with a stem diameter below 150 mm</p>	<p>Trees present in numbers, usually as groups or woodlands, so they form distinct landscape features which attract a higher collective rating than they might as individuals. But which are not, individually, essential components of formal or semi-formal arboricultural features. For example, trees of moderate quality within an avenue that includes better, A category specimens. Or trees which are internal to the site, therefore individually having little visual impact on the wider locality</p>	<p>Trees with clearly identifiable conservation or other cultural benefits</p> <p style="text-align: center;">Blue</p>
<p>Category D</p> <p>Those trees of very low quality and value: currently in poor condition to remain until new planting could be established - a minimum of 5 years is suggested - or young trees with a stem diameter below 75 mm</p>	<p>Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit</p>	<p>Trees with very limited conservation or other cultural benefits</p> <p style="text-align: center;">Grey</p>

Note – Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation

DISCLAIMER

Survey Limitations: Unless otherwise stated all trees are surveyed from ground level using non-invasive techniques. The disclosure of hidden crown and stem defects, in particular where they may be above a reachable height or where trees are ivy clad or in areas of ground vegetation, cannot therefore be expected. All obvious defects, however, are reported. Detailed tree safety appraisals are only carried out under specific written instructions. Comments upon evident tree safety relate to the condition of said tree at the time of the survey only.

Unless otherwise stated all trees should be re-inspected annually in order to appraise their on-going mechanical integrity and physiological condition. It should, however, be recognised that tree condition is subject to change, for example due to the effects of disease, decay, high winds, development works, etc. Changes in land use or site conditions (e.g. development that increases access frequency) and the occurrence of severe weather incidents are also significant considerations with regards tree structural integrity and trees should therefore be re-assessed in the context of such changes and/or incidents and inspected at intervals relative to identified and varying site conditions and associated risks.

Where trees are located wholly or partially on neighbouring private third-party land then said land is not accessed and our inspection is therefore restricted to what can reasonably be seen from within the site. Stem diameters of trees located on such land are estimated. Any subsequent comments and judgments made in respect of such trees are based on these restrictions and are our preliminary opinion only. Recommendations for works to neighbouring third-party trees are only made where a potentially unacceptable risk to persons and/or property has been identified during our survey. Where significant structural defects of third-party trees are identified and associated management works are considered essential to negate any risk of harm and/or damage then we will first attempt to inform the site occupier of the issues and, if not possible, then inform the relevant Council. Where a more detailed assessment is considered necessary then appropriate recommendations are set out in the Tree Survey Schedule.

Where tree stem locations are not included on the plan(s) provided then they are plotted at the time of the survey using, where appropriate and/or practicable, a combination of measurement triangulation and GPS co-ordination. Where this is not possible then locations are estimated. Restrictions in these respects are detailed in the report.

The tree survey and any report information provided is intended as a guide to identify key tree related constraints to site development only. As such, the potential influence of trees upon existing or proposed buildings or other structures resulting from the effects of their roots abstracting water from shrinkable load-bearing soils is not considered herein. The tree survey information in its current form should not therefore be considered sufficient to determine appropriate foundation depths for new buildings. Accordingly, an updated survey, with reference to the current NHBC Standards Chapter 4.2 - Building Near Trees, must therefore be prepared for the specific purpose of informing suitable foundation depths subsequent to planning approval being granted. The advice of a structural engineer must also be sought with regard to appropriate foundation depths for new buildings.

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Statutory Tree Protection: It is the client's responsibility to check for the presence of any statutory tree protection measures, such as the site's location within a Conservation Area and/or the presence of any Tree Preservation Orders, directly with the applicable Council's planning department prior to scheduling or carrying out any tree works. In turn, it is also the client's responsibility to check for the need for a felling licence with the Forestry Commission prior to scheduling or carrying out any tree works. Bowland Tree Consultancy Ltd cannot be held responsible for any decisions made by the client to prune or remove trees where any such statutory protection exists.

