

# Tree Survey and Impact Assessment

*for land to the rear of  
The Hollies Nursing Home  
Reading Road  
Burghfield Common  
Berkshire  
RG7 3BH*

Client  
TA Fisher  
Theale Court  
11-13 High Street  
Theale  
Berkshire  
RG7 5AH

January 2022

**1730-KC-XX-YTREE-TreeSurvey-and-ImpactAssessment-RevA**

The Studio, Timbers, Gables Road, Church Crookham, Fleet, Hampshire, GU52 6QY  
Telephone +44(0)1252 850096 | Email: mail@keenconsultants.co.uk

Keen Consultants is a trading name of Keen (Europe) Limited. Registered No. 12641584  
Registered office: 4 Sudley Road, Bognor Regis, West Sussex, PO21 1EU

**KEEN**  
**CONSULTANTS**

© Keen Consultants

*The copyright of this document resides with Keen Consultants unless assigned in writing by the company.*

### Document history

Revision	Issue Status	Details	Approved/Date
Rev0	Final	Initial combined Tree Survey and Impact Assessment	JK / 14 December 2021
RevA	Final	Updated Impact Assessment	JK / 12 January 2022

## Contents

1.0	Introduction.....	4
2.0	Tree survey .....	5
3.0	Application of survey information.....	7
4.0	Assessment of impact upon trees.....	8
5.0	New and replacement tree planting.....	10
6.0	Protection of trees during construction .....	11
7.0	Summary of impact assessment .....	11

## Tables

Table 1 - List of drawings referred to in the impact assessment .....	8
Table 2 - List of documents used to inform the impact assessment.....	8

## Appendices

- Appendix 1 - Introduction to key elements of tree information
- Appendix 2 - Tree Survey Explanatory Notes
- Appendix 3 - Schedule of Trees

## 1.0 Introduction

- 1.1 This tree survey sets out the information about trees to inform the planning process about the quality of trees on site. Following the tree survey the information is extended to consider the impact to them from the proposed development and how construction may proceed whilst ensuring trees are successfully retained.
- 1.2 In this report we consider the proposals for development of the site. We consider those proposals in relation to the survey of trees we conducted as part of the site analysis.
- 1.3 The site is located on the north western side of Reading Road, west of The Hollies Care Home.
- 1.4 Land to the north of The Hollies has recently been developed and provides an access road to serve this site.
- 1.5 The main body of the site are grass paddocks that descend in level to the north western boundary of the site where a mixed deciduous woodland (designated Ancient Semi Natural Woodland).
- 1.6 Against the woodland is a band of scrub containing low quality trees. separating it from a mixed deciduous woodland that continues down the slope.
- 1.7 Scrub vegetation is found along most boundaries.
- 1.8 Two belts of English oak are located toward the south eastern boundary of the site. These are protected by tree preservation order. A section of woodland at the north of the site is also protected by tree preservation order.
- 1.9 We have checked the online portals, including West Berkshire Council for statutory protection of trees applicable to the site. Online portals are not always reliable so before works are undertaken to trees a direct enquiry with the Council should be made.
  - **TREE PRESERVATION ORDERS** - details were available online and showed that there IS a Tree Preservation Order protecting trees upon the site. A copy of the Tree Preservation Order was not available to download therefore this would need to be formally requested from the Council.
  - **CONSERVATION AREAS** - details were available online and confirmed that the site IS NOT within a Conservation Area.

- The MAGIC information portal revealed that Ancient and Semi-Natural Woodland IS located adjacent the north western boundary of the site. Sections of land upon the site ARE listed on the Priority Habitat Inventory - Deciduous Woodland (England). Some of this is erroneous as there is no woodland cover in some of the locations designated.
- The online portal of the Woodland Trust, Ancient Tree Inventory, revealed that there are NO veteran trees recorded on site.

1.10 Nationally adopted guidance has been followed in the preparation of this report. *BS5837:2012: Trees in relation to design, demolition and construction – Recommendations* sets out a structure approach to considering trees during the development process. Guidance is given on the surveying of trees, the protected space that should be allocated to trees, what elements may give rise to harm to trees and what techniques can be deployed to minimise harm.

1.11 Sustainable development requires the coordination between disciplines throughout the project, accordingly the package of arboricultural information supports the design process and follows through to construction ensuring effective tree protection. We recognise the need to integrate with other disciplines to achieve a balanced approach to development proposals.

1.12 We set out how our key elements interact with others at [Appendix1](#) of this report. The appendix provides comprehensive information about the stages of providing tree information within the planning process.

1.13 Further explanatory notes about tree survey information are given in [Appendix2](#).

## 2.0 Tree survey

2.1 The objective of this tree survey is to assess the significant trees and woody vegetation on the site to obtain dimensions, assess their quality and evaluate their condition to provide sufficient information to enable decisions to be made on planning aspects of the site and its potential development.

2.2 The tree survey:

2.2.1 was initially carried out by Andrew Poynter BSc (Hons), FARborA, MICFor, MCIHort on the 7th April 2015, and was updated on the 10 September 2021 by Jago Keen, MSc, Dip.Arb., MARborA, MICFor. The survey was conducted from ground level, in accordance with the guidance in British Standard *BS5837:2012 Trees in relation to design, demolition and construction – Recommendations*;

- 2.2.2 is intended for planning purposes only;
  - 2.2.3 is not intended for the detailed design of foundations (further information upon vegetation can be provided upon request);
  - 2.2.4 is not a detailed health and safety condition survey of trees;
  - 2.2.5 recommends only preliminary works. Tree works required to achieve the scheme of development will be considered as part of the Impact Assessment and detailed on the Tree Protection Plan;
  - 2.2.6 places reliance on the topographical survey.
- 2.3 Details of each tree are recorded in the Schedule of Trees at [Appendix3](#).
- 2.4 Site soil investigations have not been conducted. The (online) 'Geology of Britain Viewer' that contains British Geological Survey materials © NERC [2018] reveals the following soil information:
- 2.4.1 Bedrock geology: Thames Group - clay, silt, sand and gravel.
  - 2.4.2 Superficial deposits: None recorded.
- 2.5 Survey information is used to prepare the constraints posed by trees on development. These constraints are shown on the Tree Constraints Plan. The Plan shows root protection areas prescribed by the guidance within BS5837 paragraph 4.6.2 and adjusted where appropriate as recommended in subsequent paragraph 4.6.3. The root protection area (RPA) is the minimum extent of rooting required to sustain the tree.
- 2.6 Trees change over time hence the contents of this survey can only be relied upon for a period of up to two years. The survey should be refreshed after two years or immediately prior to the design of detailed site layouts where they are phased.

### 3.0 Application of survey information

3.1 Trees place constraints on sites but they also provide opportunities in order to achieve optimum use of the site and location of built structures. This is set out below:

#### Avoid

The starting point of site layout design should be to avoid the RPA. Ideally, structures should be outside the root protection area to provide working space for construction however protection measures can be taken if such clearance, in isolated cases, is not achievable.

#### Mitigate

Where intrusion within the RPA is unavoidable then its impact on the tree can be mitigated by specialist measures:

- a) Foundations that avoid trenching e.g. screw piles, suspended floor slabs or casting at ground level for lightweight structures such as bin and cycle stores.
- b) Limited use may be made for parking, drives or hard surfaces within the root protection areas, subject to advice from a qualified arboriculturist. Cellular confinement systems that enable hard surfaces to be built above existing soil levels are acceptable methods.
- c) Service runs that cannot be routed outside the root protection area(s) can be installed by, for example, thrust boring, directional drilling, air excavation or hand digging. These operations often require supervision by the project arboriculturist.

#### Compensate

Replacement planting can ensure the continuity of tree cover where tree removal is unavoidable. Offsite provision may be considered in some circumstances but this will require negotiation with the local planning authority.

## 4.0 Assessment of impact upon trees

4.1 This assessment will consider the impact upon trees of implementing the proposals shown on the drawings listed below:

*Table 1 - List of drawings referred to in the impact assessment*

Originator	Drg No	Title
2020 Architecture	2021/P0162/02	Site Information Plan
RPS Group	JSL4137/100 Rev A	Landscape Strategy
Keen Consultants	1730-KC-XX-YTREE-TCP01Rev0	Tree Constraints Plan
Keen Consultants	1730-KC-XX-YTREE-TPP01RevA	Tree Protection Plan

4.2 Site proposals considered in this application include:

4.2.1 Residential dwellings

4.2.2 Access, parking and other hard surfaces

4.2.3 Utilities and services

4.2.4 New and replacement tree planting

4.3 The proposals are considered with reference to the following guidance documents referred to in this report:

*Table 2 - List of documents used to inform the impact assessment*

Originator	Title/Reference
British Standards Institute	<i>BS5837:2012 Trees in relation to design, demolition and construction – Recommendations</i>
Trees and Design Action Group	<i>Trees in the townscape: A guide for decision makers</i>
Department for Communities and Local Government	<i>National Planning Policy Framework (NPPF)</i>



- 4.4 National planning policy (paragraph 131 of the NPPF refers) makes clear the important contribution made by trees to the character and quality of built environments. Trees help to mitigate and adapt to climate change. The application proposals are respectful of the benefits trees provide and have been developed to ensure the retention of trees and the incorporation of new trees within the layout.
- 4.5 In summary, the proposals seek to retain the majority of the significant trees at the site and are located remote from root protection areas. The arrangement of dwellings is such that they exploit the open areas, away from trees, to result in a long-term, harmonious relationship between trees, dwellings and their garden spaces. New planting is proposed to supplement the existing tree population.

#### *Impact of application proposal*

- 4.6 Tree loss is mostly confined to the lower quality trees, with many of these being ash that have succumbed to the widespread disease, Ash Dieback. These lower quality trees do not typically pose a constraint to an effective and efficient layout of development that seeks to optimise the site in accordance with national planning policy.
- 4.7 Five stems are proposed for removal from the moderate quality group of oaks, number 80. It is necessary to remove these five stems to allow the road to connect between field parcels. The remainder of group 80 and the adjoining group of oaks, number 113, are all retained unaffected by the proposed road. The loss of these five stems does not therefore materially detract from the overall tree cover in this portion of the site.
- 4.8 The recently constructed roadway for the adjoining development is extended to serve the application site. At the site boundary there is a need to remove trees 122 and 124, as well as a section of the hedgerow, number 68. None of these are of exceptional quality and would not normally constrain a scheme of development. Their loss, as with other trees lost from the site, can be offset by new and replacement tree planting.
- 4.9 A buffer to the ancient woodland found to the north west of the site is provided. Dwellings and their garden spaces are set 15m from the woodland edge to secure a generous buffer. This buffer, including the trees within it, can be protected as part of the tree protection measures.

- 4.10 A short section of footpath is proposed within the root protection area of tree 76. To avoid harm to the tree the footpath can be formed above existing levels using the commonly used technique of 'no-dig' construction. This utilises cellular confinement systems to build hard surfaces above existing levels. The result is no harm to the retained trees.

#### *Impact of drainage and services*

- 4.11 The detailed layout of drainage and service runs is not shown on the proposed site layout however it is intended to make a foul drainage connection via a corridor of land that lies immediately south of the row of moderate quality oak trees, number 113.
- 4.12 The corridor is within the root protection area of these retained trees (and offsite tree number 110). To ensure no material harm to the trees a specialist form of installation will be needed. There are a variety of potential installation methods for this rising main but the most appropriate would seem to be thrust-boring or directional drilling. These techniques require drilling pits to be created along the length of the route. These can be established outside the root protection area of retained trees to avoid harm
- 4.13 The proposed pumping station is located remote from trees allowing the inflow route and rising main, other than as set out above, to also be located remote from trees.
- 4.14 Other drainage and services will need to avoid the root protection area of retained trees or utilise specialist installation techniques to avoid harm.

## **5.0 New and replacement tree planting**

- 5.1 The development proposals bring forward opportunity to plant a selection of trees throughout the development. Ample space is provided amongst the layout of built-form in which to incorporate new trees. These new trees will supplement the generous retained tree cover at the site. The Landscape Strategy has been devised to supplement the existing tree cover and enhance the landscape of the new development.

- 5.2 Retaining existing trees and introducing new trees ensures a resource of trees in places where residents and visitors alike will enjoy multiple benefits provided by the tree stock. In so doing the tree stock will be able to withstand climate change, protecting and enhancing the resources of soil, air, water, landscape, amenity value, culture and biodiversity, and increasing the contribution that trees make to the quality of life. In that respect the proposals are in line with the very latest guidance, in terms of integrating trees with built form, contained in *Trees in the townscape: A guide for decision makers* produced by the Trees and Design Action Group and the requirement of paragraph 131 of the National Planning Policy Framework.
- 5.3 Those multiple benefits of this new tree planting, as part of the site's green infrastructure, include contribution to open space, enhancement of sustainable drainage systems, and enhancement of biodiversity. In addition, as those new trees develop, so they will further contribute to local climatic regulation and, where they stand within the sun path of proposed buildings or surfaces within the re-development, they will minimise solar gain during summer months, and provide an accessible choice of shade and shelter.

## **6.0 Protection of trees during construction**

- 6.1 To ensure the retained trees are safeguarded a tree protection plan has been prepared to show the location of protective measures. These measures need to be implemented in advance of construction and maintained until such time as soft landscape proposals require their removal.
- 6.2 In some instances specialist construction techniques or approaches are indicated on the protection plan. These shall be implemented in accordance with site progress.

## **7.0 Summary of impact assessment**

- 7.1 The proposed development results in the loss of very few trees, the majority of which are low quality and value.
- 7.2 The ancient woodland is respected and provided with a generous buffer between dwellings and their garden spaces.

- 7.3 In places hard surfaces coincide with root protection areas but specialist measures can be deployed to minimise harm to trees
- 7.4 Services and utility installation can be sited remote from trees but where they do need to be located within root protection areas specialist measures can be deployed for their installation to minimise harm to retained trees.
- 7.5 New and replacement tree planting is provided as part of these development proposals. This new cohort of trees can provide a diverse portfolio of tree cover to ensure sustainability of green infrastructure in the future.
- 7.6 The application proposals recognise the important contribution trees make to the character and quality of built environments, and the role they play to help mitigate and adapt to climate change. The proposals seek to retain existing trees and integrate new trees in accordance with the requirement of local and national planning policy.

# Appendix 1

Introduction to key elements of tree information

Sustainable development requires the coordination between disciplines throughout the project, accordingly the package of arboricultural information supports the design process and follows through to construction ensuring effective tree protection.

Keen Consultants break the process down to coordinate with the key elements within both the RIBA Plan of Work (2013) and 'British Standard 5837:2012 Trees in relation to design, demolition and construction - Recommendations', this is set out in the table and explained below.

Figure 1 - Keen Consultants co-ordinated approach with cross references to key guidance.

Keen Consultants Tree Information	RIBA Stage	BS5837
Tree Survey	Concept	Feasibility
↓	↓	↓
Impact Assessment	Developed design	Proposals
↓	↓	↓
Method Statement	Technical design	Technical Design
↓	↓	↓
Site Monitoring	Construction	Demolition and construction

This cross referenced approach ensures trees are a material consideration and those to be retained will be safeguarded.

### Tree Survey and Tree Constraints Plan

To inform the design and layout of the proposed development a tree survey has been undertaken to identify the size and quality of trees both within the site and immediately offsite. We have then used this information to prepare the Tree Constraints Plan drawing that shows the location of each tree, its size and the area around each tree that needs to be considered during the design process. Once prepared this information has been provided to the design team so that they know what constraints the trees pose.

### Impact Assessment and Tree Protection Plan

During the design process the design team has consulted with the arboriculturist to ascertain if constraints may be breached, consider options emerging from the design and what spaces for new trees are needed.

Once the design was finalised an impact assessment has been prepared to accompany the planning application. The impact assessment demonstrates the proposals meet national and local planning policy and guidance. It demonstrates the benefits of the retained trees and incorporates new tree planting.

Another essential element of any application is the Tree Protection Plan.

## **Method Statement**

This statement sets out in words how each element of work is undertaken in relation to the trees. It dictates when activities occur and the method that will be used to achieve them. It will also set out a scheme of monitoring and supervision.

## **Site Monitoring**

Following the receipt of planning consent, it is a requirement that the installation of the protective barriers and ground protection are supervised, together with operations such as excavations or surfacing close to trees.

This varies according to the intensity of development near trees, the process is set out to ensure what is planned for in the Tree Protection Plan and method statement is delivered.

# Appendix 2

## Tree Survey Explanatory Notes



The survey of trees has been carried out in accordance with the criteria set out in Chapter 4 of *British Standard 5837:2012 Trees in relation to design, demolition and construction-Recommendations* (BS5837). The survey has been undertaken by the qualified and experienced arboriculturist detailed at Table 1 of this report and they recorded information relating to all those trees within the site and those immediately adjacent to the site which may be of influence to any proposals.

The results are recorded in the Schedule of Trees at Appendix 3.

## **Schedule of trees**

Appendix 3 presents details of the individual trees, groups and hedgerows including heights, diameters at breast height, crown spread (given as a radial measurement of cardinal points from the stem), age class, comments as to the overall condition at the time of inspection, BS5837 category of quality and suitability for retention, and the root protection area information.

General observations particularly of structural and physiological condition for example the presence of any decay and physical defect and preliminary management recommendations have also been recorded where appropriate.

## **Details of the individual trees, groups and hedgerows**

All trees were assessed for their quality and benefits within the context of proposed development in a transparent, understandable and systematic way.

### **Individuals**

The default position is to record each tree as an individual for its unique contribution to the landscape

### **Groups and woodlands**

Trees have been assessed as groups where it has been determined appropriate by the surveyor. The term group has been applied where trees form cohesive arboricultural features either aerodynamically, visually or culturally.

### **Hedges and shrub masses**

We consider a hedgerow to typically comprise a line of trees or shrubs that currently is subject to, or has undergone, a pruning regime to contain its dimensions.

For the tree survey hedgerows and substantial internal or boundary hedges (including evergreen screens) have either been recorded in the Tree Schedule, including lateral spread, height and stem diameter(s), or indicated on the Tree Constraints Plan.

A tree survey in accordance with BS5837 does not assess hedgerows against *The Hedgerow Regulations 1997* or specifically from an ecological perspective, as such would be outside the scope of the British Standard assessment.

Shrub masses are collectives of woody plants, rather than trees, and are recorded where they are a significant feature of the site. They have either been recorded in the Tree Schedule or indicated on the Tree Constraints Plan.

## Individual trees within groups, woodlands and hedges

An assessment of individual trees within the groups has been made where there has been a clear need to differentiate between them for example, in order to highlight significant variation between attributes including physiological or structural condition or where a potential conflict may arise.

### BS5837 Categorisation

Trees have been divided into one of four categories based on Table 1 of BS5837, 'Cascade chart for tree quality assessment'. For a tree to qualify under any given category it should fall within the scope of that category's definition (see below).

Category U trees are those which would be lost in the short term for reasons connected with their physiology or structural condition. They are, for this reason not considered in the planning process on arboricultural grounds. Categories A, B & C are applied to trees that should be of material considerations in the development process. Each category also having one of three further sub-categories (i, ii, iii) which are intended to reflect arboricultural, landscape and cultural or conservation values accordingly.

Please note that the estimated remaining life expectancy figures are taken for BS5837 and relate to their categorisation. The life expectancy figures are therefore arbitrary and may vary in reality.

#### Category (U)

Trees that have a serious irremediable structural defect such that their early loss is expected due to collapse and includes trees that will become unviable after removal of other category U trees.

Trees that are dead or are showing signs of significant, immediate or irreversible overall decline.

Trees that are infected with pathogens of significance to the health and/ or safety of other nearby trees or are very low quality trees suppressing adjacent trees of better quality.

Certain category U trees can have existing or potential conservation value which may make it desirable to preserve.

#### Category (A)

Shown green on Tree Constraints Plan: Trees that are considered for retention and are of high quality with an estimated remaining life expectancy of at least 40 years and with potential to make a lasting contribution. Such trees may comprise:

#### Sub categories

- 1) trees that are particularly good examples of their species, especially if rare or unusual, or are essential components of groups such as formal or semi-formal arboricultural features for example the dominant and/or principal trees within an avenue.
- 2) trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.
- 3) trees, groups or woodlands of significant conservation, historical, commemorative or other value for example veteran or wood pasture.

## Category (B)

Shown blue on Tree Constraints Plan: Trees that are considered for retention and are of moderate quality with an estimated remaining life expectancy of at least 20 years and with potential to make a significant contribution. Such trees may comprise:

### Sub categories

- 1) trees that might be included in category A but are downgraded because of impaired condition for example the presence of significant though remediable defects, including unsympathetic past management and storm damage.
- 2) 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.
- 3) trees with material conservation or other cultural value.

## Category (C)

Shown grey on Tree Constraints Plan: Trees that are considered for retention and are of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. Such trees may comprise:

### Sub categories

- 1) unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
- 2) trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value or trees offering low or only temporary/transient screening benefits.
- 3) trees with no material conservation or other cultural value.

## Devising BS5837 root protection areas

### Default situation

The root protection area is a function of the stem diameter, it is multiplied by 12 to give a radius. For multi-stemmed trees the stems are combined to provide an effective diameter figure which is then multiplied.

Initially the root protection area should be plotted as a circle, and in many situation it remains a circle.

### Influenced situation

Adjustments to the root protection area are made where pre-existing site conditions that would influence root distribution are present. Typically this will be buildings and retaining walls, lighter structures such as hard surfacing, sheds and garages generally do not have the same influence.

Ponds, rivers and watercourses will also influence root distribution as waterlogged soils are not conducive to root growth. Rainwater attenuation and ditches are likely to have a lesser impact if they are dry for significant periods.

## Veteran trees

Natural England have introduced Standing Guidance that requires the allocation of buffer zones to veteran (including ancient) trees. They have prescribed that a buffer zone of 15 times the stem diameter of the tree is allocated. This will result in a buffer zone of larger diameter than the root protection area. Where veteran trees are identified during the tree survey they are allocated a Natural England buffer zone on the Tree Constraints Plan.

The Guidance is silent on what can and cannot be done within the buffer zone but it is reasonable to assume that it is prescribed to avoid material harm to the tree. It is also silent on what can and cannot be done when the land within the buffer zone is previously developed.

With this added layer of protection it is important to establish if a tree is veteran or not. The Guidance was not intended to be applied to all mature trees but to the sub-set of trees that are of great age. This is analogous with the NPPF requirement to safeguard trees that have attained an age where they are worthy of veteran or ancient status.

It is therefore important to establish a basis for defining trees as veteran as opposed to those trees that may have veteran characteristics or those trees that are mature.

Stem size is a useful guide and, in combination with size, so are characteristics of the tree. If we consider the guidance on stem size being a suitable guide to classifying trees as veteran we see:

- a) The most up to date (2013) guidance is that in <sup>1</sup>*Ancient and other veteran trees: further guidance on management* edited by David Lonsdale and published by The Tree Council in conjunction with The Ancient Tree Forum. Lonsdale considers that many trees may have veteran characteristics at any age however proposes, at a species level, size thresholds when a tree may be considered a veteran. A chart (see Figure 1 below) lists, species by species, the size criteria for trees reaching veteran status and then moving on to the later, ancient stage of life. Of those species listed in the chart we only need consider oak. We see that until trees attain a stem girth of around 4.6m (equivalent stem diameter of 1.46m) then an oak is only considered to be 'Locally notable'
- b) A somewhat older (1999) publication, <sup>2</sup>*Veteran Trees: A guide to good management* edited by Helen Read and published by English Nature et al, is very similar in its definition by setting out three distinct bands for oak trees:
  - i) those with a diameter of more than 1.0m are potentially interesting
  - ii) those with a diameter of more than 1.5m are valuable in terms of conservation
  - iii) those over 2.0m in diameter are truly ancient
- c) English Nature's own <sup>3</sup>*Development of a veteran tree site assessment protocol (Report Number 628)* of 2005 sought to give more structure to grading sites where veteran trees were present. It considered that trees over 1.0m diameter could be classed as veteran.

---

<sup>1</sup> *Ancient and other veteran trees: further guidance on management* edited by David Lonsdale and published by The Tree Council in conjunction with The Ancient Tree Forum

<sup>2</sup> *Veteran Trees: A guide to good management* edited by Helen Read and published by English Nature et al

<sup>3</sup> *Development of a veteran tree site assessment protocol (Report Number 628)* of 2005

In summary, a tree may enter its veteran stage at 1.0m diameter but a more reliable size threshold, as held out by the latest guidance on the matter, is 1.5m diameter.

The other factor, tree characteristics, is also worth considering as veteran tree characteristics can be found on even young trees. Of course, if we count every tree with veteran tree characteristics as veteran we do a disservice to those truly veteran trees that warrant protection.

Read (1999), as set out above, considers veteran tree characteristics as:

- large girth for species
- major trunk cavities or progressive hollowing
- naturally forming water pools
- decay hollows
- physical damage to trunk
- bark loss
- large quantities of deadwood within the crown
- sap runs
- crevices in the bark, under branches or on the root plate sheltered from direct rainfall
- fungal fruiting bodies
- high number of interdependent wildlife species
- epiphytic plants
- an 'old' look
- high aesthetic interest

Lonsdale (2013) adds to this list:

- progressive narrowing of successive annual increments in the stem
- changes in crown architecture
- progressive or episodic reduction in post-mature crown size, often known as retrenchment

Lonsdale also states that "In order to qualify as a veteran, the tree should show signs of crown retrenchment and signs of decay in the trunk, branches or roots, such as exposed deadwood or fungal fruit bodies".

The English Nature Report Number 628 refers to Read (1999) for a list of veteran features but does add that in addition a tree may also:

- have a pollard form or show indications of past management
- have a cultural/historic value
- be in a prominent position in the landscape

These three criteria, when examined, are not truly indicative of a veteran tree on their own as these criteria could be applied to street trees in peri-urban locations that date from the mid-20th century - many of those are of pollard form, have cultural and historic value and a prominent position in the landscape.

In summary, it is important to consider the size of the tree and its characteristics. Just because a tree is mature does not mean it is veteran neither does the presence of veteran characteristics alone.

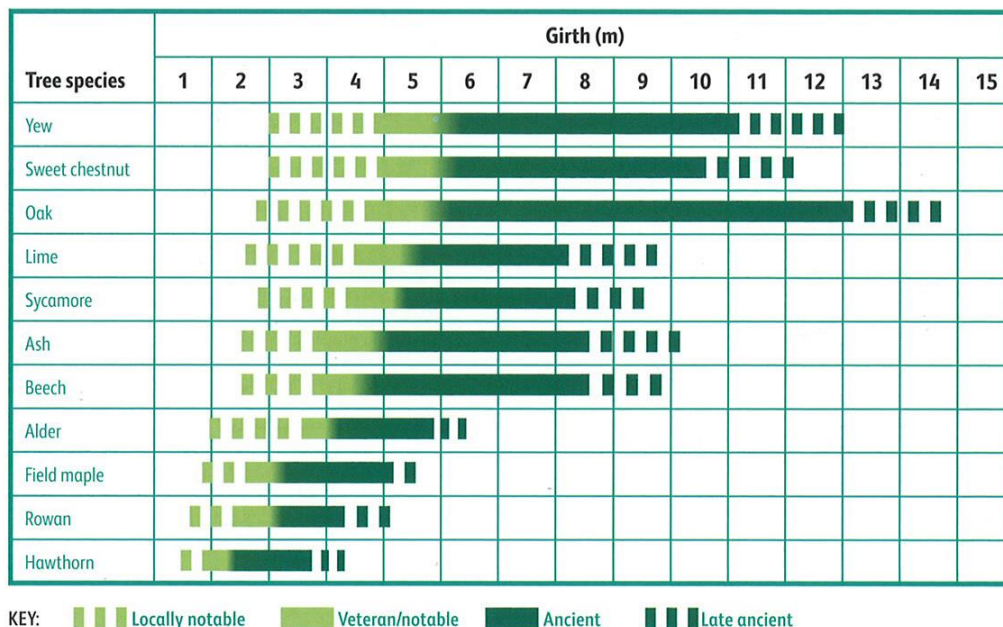


Figure 1- Chart of girth in relation to age and developmental classification of trees

# Appendix 3

## Schedule of Trees

*for land at  
The Hollies Nursing Home  
Reading Road  
Burghfield Common  
Berkshire  
RG7 3BH*

## Key to Tree Schedule

Column Heading	Explanation
Tree No.	Unique number corresponding with number on plan
Species	English names
Ht (m)	Height in metres
Branch Spread	Crown radius in metres to cardinal points of the compass
Stem diameters (cm)	All measurements conform to Annex C of BS 5837:2012 Single stem - Stem diameter in centimetres measured at 1.5m above ground level. Multi-stemmed tree with 2 to 5 stems – Diameter of each stem Multi-stemmed tree with more than 5 stems – Average stem diameter and number of stems
Height of crown clearance	Height in metres between the ground and underside of canopy
Height of first major branch and direction of growth	Height from ground level to base of first major branch and the approximate direction of growth
Abbreviations as suffix to a dimension	<i>Suffix 'e' denotes an estimated dimension.</i> <i>Suffix 'av' denotes an average dimension</i>
Age class	Age Class definitions: Y = Young S = Semi-mature E = Early mature M = Mature O = Over mature
Category grading (see Appendix A2 for detailed explanation) and Estimated remaining contribution (yrs)	Summary of BS 5837: 2012 categorisation: 1. Trees that do not warrant consideration for retention: U = those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management. 2. Trees to be considered for retention: A1, 2 or 3 = trees of high quality and value (substantial contribution >40 yrs) B1, 2 or 3 = trees of moderate quality and value (significant Contribution >20 yrs) C1, 2 or 3 = trees of low quality and value (but adequate, ie >10 yrs or young trees – until new planting can be established)
Estimated remaining contribution	Useful estimated remaining contribution of the tree or tree group
Condition	Brief description including physiological and structural defects
Preliminary management recommendations	Describes current arboricultural requirement for the tree in its current context and should be undertaken as soon as reasonably practicable.
Root protection radius	Radius of minimum root protection area in metres calculated from section 4.6 and Annex D of BS5837:2012
Root protection area	Total area of minimum root protection area extrapolated from root protection radius



## Survey of trees at land to the rear of The Hollies, Burghfield Common RG7 3BH

Tree No.	Species	Ht (m)	Branch spread (m)				Stem diameters (cm)							Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Preliminary management recommendations	Root protection radius (m)	Root protection area sq.m	
			N	E	S	W	Single Stem	2-5 stems					More than 5 stems										
								Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia										No. stems
57	English Oak	11	5	3	0	2	29							2	-	Y	C1	>10	Subservient to others		3.48	38	
58	Ash	16	5	6	7	2	37							2	-	Y	C1	>10	Inclined to the south-east. Showing signs of Ash Dieback.		4.44	62	
59	Ash	16	4	5	5	7	68							6	2E	MI	B1	>20	Twin stemmed from ground level otherwise fair. Heavy ivy cover up the main stem. Showing signs of Ash Dieback.		8.16	209	
60 to 62	Hawthorn	<9	3av			<33								3	-	MI	C1	>10	Predominantly scrub of multi-stemmed form		3.96	49	
63	English Oak	17	6	5	7	8	61							1	-	MI	A1	>40	Good form and condition, slightly biased to the west. Heavy ivy cover up the main stem.		7.32	168	
68	Mixed vegetation	<6	2av			<25ave								0	-	S	C2	>10	Linear group comprising of predominately native species.		3.00	28	
68A	Mixed tree group	9av	3av			15ave								0	-	Y	C2	>10	Mixed saplings including Ash, Field Maple, Goat Willow and Blackthorn. Ash Dieback prominent throughout.		1.80	10	
69	English Oak	18	5av			55ave								2	-	E	B2	>20	Group of three trees separate from larger wooded area. In reasonable condition although heavy ivy cover up the stems prevents clear inspection. Some deadwood within the crowns but otherwise good condition.		6.60	137	
70	English Oak	18	6	7	6	8	75e							6	6W	M	B2	>20	Prominent tree in good condition located on edge of woodland group. Ivy covered stem.		9.00	255	
71	English Oak	22	7	9	9	6	80e							6	4.5W	M	B2	>20	Prominent tree located on edge of woodland. Ivy covered stem.		9.60	290	
72	English Oak	22	9	7	10	10	89							2	3S	M	C1	>10	Large specimen although significant structural failure in the recent past. Has resulted in significant loss of crown on the southern side, the failing branches has also damaged a large branch beneath it.		10.68	358	

## Survey of trees at land to the rear of The Hollies, Burghfield Common RG7 3BH

Tree No.	Species	Ht (m)	Branch spread (m)				Stem diameters (cm)							Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Preliminary management recommendations	Root protection radius (m)	Root protection area sq.m	
			N	E	S	W	Single Stem	2-5 stems					More than 5 stems										
								Stem 1	Stem 2	Stem 3	Stem 4	Stem 5											Mean dia
73	Group of English Oak	<17	3av				<30ave								2	-	S	C2	>10	Group of what appear to be self-sown specimens in an unmanaged condition. Many of the trees have poor form and have heavy ivy coverage up the stems.		3.60	41
74	Group of English Oak	17av	6av				40ave								2	-	M	B2	>20	Linear group comprising of some prominent trees, but also some weaker specimens one of which has a snapped top. Scrub undergrowth beneath these trees including Hazel and ivy.		4.80	72
75	Group of Goat Willow	<10	3av				15ave								0	-	Y	U	<10	Group of self-sown trees in poor condition, one has a snapped stem and is resting on the ground.		1.80	10
76	English Oak	14	4	5	6	7	68								4	4W	E	C1	>10	Smaller tree within linear group. Unusual structural form. Past failure in one of the structural limbs growing south westwards.		8.16	209
77	Apple	10	2	6	6	5	37								1	2E	M	C1	>10	Mature specimen in poor condition with multi stemmed form from approximately 2m.		4.44	62
78	English Oak	16	6	7	4	5	50e								3	4.5E	E	C1	>10	Reasonable specimen with a main stem that divides at approximately 5m. Tree stands off the hedgeline. Ivy covered stem.		6.00	113
79	Pair of Ash	13av	5av				25ave								4	-	Y	U	<10	self-sown specimens with poor crown form together with significant decay at the base of both trees. Showing signs of Ash Dieback.	Remove.	3.00	28
80	Row of English Oak	19av	8av				65av								2	-	M	B2	>20	Prominent linear group of oak trees in good overall condition although some do have leaning stems. Understorey of Ash, Hawthorn and Blackthorn.		7.80	191
81	Silver Birch & Goat Willow	16av	3av				25ave								2	-	M	C2	>10	Appear to be self-sown specimens located in the corner of the field.		3.00	28

## Survey of trees at land to the rear of The Hollies, Burghfield Common RG7 3BH

Tree No.	Species	Ht (m)	Branch spread (m)				Stem diameters (cm)							Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Preliminary management recommendations	Root protection radius (m)	Root protection area sq.m	
			N	E	S	W	Single Stem	2-5 stems					More than 5 stems										
								Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia										No. stems
82	English Oak	24	8	8	9	7	75e								5	6S	M	B1	>20	Prominent tree located near to the edge of the woodland area.		9.00	255
83	English Oak	17	7	8	5	6	56								2.5	5S	E	C1	>10	Reasonable specimen although asymmetric crown form.		6.72	142
84	Field Maple	11	3	3	5	3		36	29						2	2S	M	C1	>10	Twin stemmed specimen with asymmetric form. Extensive dead bark on lower stem.		5.55	97
85	Goat Willow	9	1	3	3	0	25e								1	1.5S	Y	U	<10	Regrown stump. Second significant stem has been removed previously.		3.00	28
86	English Oak	25	7	10	10	10	117								6	4.5S	M	C1	>10	Prominent tree in good overall condition however, main stem divides at approximately 1.5m and there is high potential for included bark within this tight union in the future, this makes long term retention questionable without significant crown management.		14.04	619
87	English Oak	18	4	8	8	5	69								2	3E	M	C1	>10	Reasonable condition overall although significant lean and crown asymmetry southwards due to adjacent trees.		8.28	215
88	Group of English Oak, Willow & Silver Birch	<17	4av				25ave								2	-	S	C2	>10	Group of poor quality trees that appear to be self-sown specimens.		3.00	28
89	Horse Chestnut	15	2	3	5	8	54								2	4SW	S	U	<10	Poorly formed specimen with significant decay at approximately 3m where a significant limb has previously torn out.		6.48	132
90	Ash	13	2	3	9	3		28	39						1	1S	S	U	<10	Prolific Ash dieback.		5.76	104
91	Mixed hedgerow	<9	3av				<25								0	-	M	C2	>10	Overgrown hedge that includes Hawthorn, Elder, Hazel and young Ash amongst it. Also within the hedge is significant bramble and ivy growth.		3.00	28
92	Ash	15	8	8	6	8		35e	50e						1	2E	S	U	<10	Prolific Ash dieback.		7.32	169
93	Ash	10	2	3	4	4	30e								4	4SW	S	U	<10	Partially collapsed.		3.60	41

## Survey of trees at land to the rear of The Hollies, Burghfield Common RG7 3BH

Tree No.	Species	Ht (m)	Branch spread (m)				Stem diameters (cm)							Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Preliminary management recommendations	Root protection radius (m)	Root protection area sq.m	
			N	E	S	W	Single Stem	2-5 stems					More than 5 stems										
								Stem 1	Stem 2	Stem 3	Stem 4	Stem 5											Mean dia
94	Group of Aspen	13av	4av				25ave												>10	Group of three trees in the corner of the field.		3.00	28
95	Ash	15	3	5	6	5	37												>10	Prolific Ash dieback.		4.44	62
96	Aspen	16	7	6	7	6	*70e												<10	*Measured at just above ground level. Multi stemmed specimen from just above ground level but the number of tight unions and the propensity of failure for this species means that long term retention is unviable. Ivy covered stem.		8.40	222
97	Lawson Cypress	6	2av				30e												>10	Ornamental conifer out of keeping with the wider natural setting.		3.60	41
97A	Row of mixed broadleaves	15av	7av				40ave												>20	Established row of trees growing within adjoining land. Species consist primarily of English Oak, Aspen and Ash. Ash showing signs of Ash Dieback.		4.80	72
98	Goat Willow	15	5	6	6	6	80												>10	Reasonable specimen. Some crown dieback.		9.60	290
99	Ornamental Conifers	<6	1av				20ave												>10	Non native species located in an area that appears to be used for recreation.		2.40	18
100	English Oak	20	12	10	13	12	80e*												>20	*Measured at just above ground level. Multi stemmed form although good unions near the base, tree has spreading form and provides screening.		9.60	290
101	Mixed Broadleaves	13av	6av				30av												>10	Mixture of species including ash, hawthorn and hazel that provide boundary screening, the ownership of this vegetation is unclear but is principally beyond the ditch line suggesting it is within adjacent property. Showing signs of Ash Dieback.		3.60	41

## Survey of trees at land to the rear of The Hollies, Burghfield Common RG7 3BH

Tree No.	Species	Ht (m)	Branch spread (m)				Stem diameters (cm)							Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Preliminary management recommendations	Root protection radius (m)	Root protection area sq.m											
			N	E	S	W	Single Stem	2-5 stems					More than 5 stems																				
								Stem 1	Stem 2	Stem 3	Stem 4	Stem 5											Mean dia	No. stems									
102	English Oak	17	5	3	8	8		40e	60e																2	2E	M	B2	>20	Reasonable specimen although very closely twin stemmed from ground level. Heavy ivy coverage prevents clear inspection of the stem.		8.65	235
103	Ash	16	9	6	3	5		45e																	3	4E	E	B2	>20	Larger tree located adjacent to boundary in a satisfactory condition although significant crown asymmetry into the site.		5.40	92
104	English Oak	18	9	10	10	9		60e																	2	4S	E	A1	>40	Prominent tree located offsite with very good form.		7.20	163
105	English Oak	17	8	8	9	8		55																	2	3W	E	B1	>20	Prominent tree with slightly uneven crown form due to previous crown lifting works on northern side.		6.60	137
106	Holm Oak	12	6	6	5	6		45e																	1	2.5N	E	B1	>20	Good tree with slight stem lean but should mature to be a good specimen.		5.40	92
107	Ash	13	4	6	5	4		39																	2	4W	S	C1	>10	Self-sown specimen located on the boundary. Showing signs of Ash dieback.		4.68	69
107A	Ash	10	3	3	1	2		17																	2	2N	S	U	<10	Suppressed by adjoining larger tree. Advanced Ash Dieback.		2.04	13
108	Row of Hawthorn	8av	3av					25ave																	0	-	M	C2	>10	Heavily ivy covered specimens that provide some screening.		3.00	28
109	Row of Leyland Cypress	8av	3av					<25																	2	-	Y	C2	>10	Short group of trees located offsite and within adjacent garden.		3.00	28
109A	Crack Willow	7	3	3	2	4		30e																	2	2N	S	C1	>10	Small tree growing amidst hedgerow.		3.60	41
110	English Oak	18	8	9	9	9		70e																	3	4W	M	B1	>20	Prominent tree located offsite and immediately adjacent to a decked area accommodating a summer house. Heavy pruning to the upper crown on the north western side has been undertaken but no obvious reason as to why this has occurred.		8.40	222

## Survey of trees at land to the rear of The Hollies, Burghfield Common RG7 3BH

Tree No.	Species	Ht (m)	Branch spread (m)				Stem diameters (cm)							Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Preliminary management recommendations	Root protection radius (m)	Root protection area sq.m	
			N	E	S	W	Single Stem	2-5 stems					More than 5 stems										
								Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia										No. stems
111	Hawthorn	<8	2av				<20ave								2	-	M	C2	>10	Short linear group that is in line with other hawthorn grouped to the north. Heavy bramble cover at the base and ivy throughout the crowns.		2.40	18
112	English Oak	13	4	3	4	4	40e								5	6S	E	U	<10	Moribund condition with significant deadwood throughout the crown. Ivy present.		4.80	72
113	Group of English Oak	18av	9av				75ave								2	-	M	B2	>20	Prominent linear group of oaks in good overall condition. Understorey vegetation has been removed.		9.00	255
114	No longer present.																						
115	Apple	6	3av				25ave								1	-	O	U	<10	Group of three trees in poor overall condition.		3.00	28
116	Apple	6	3	3	0	3	23								2	2N	M	C1	>10	Suppressed specimen in a satisfactory condition.		2.76	24
117	No longer present.																						
118	Beech	12	5	5	4	4		25e	30e						2	-	S	C1	>10	Two stems forming combined crown and appear to be in a reasonable condition. Unable to see whether twin stemmed from ground level due to fence.		4.69	69
119	Beech	15	5	5	5	4	51								2	2NW	E	C1	>10	Good form however significant bark damage on south western side, this could be the consequence of a bonfire nearby.		6.12	118
120	Apple	8	1	1	2	5	38*								3	1.2W	M	U	<10	*Measured at just above ground level. Main stem divides at approximately 1.2m. Poor overall condition with significant deadwood.		4.56	65
121	Apple	6	1	2	2	0	16								1	1S	M	U	<10	Poor form with recent stem failure resulting in approximately half the crown being lost.		1.92	12
122	Leyland Cypress	13	5av				36								0	-	Y	C1	>10	Non native species located in boundary vegetation.		4.32	59

## Survey of trees at land to the rear of The Hollies, Burghfield Common RG7 3BH

Tree No.	Species	Ht (m)	Branch spread (m)				Stem diameters (cm)								Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Preliminary management recommendations	Root protection radius (m)	Root protection area sq.m	
			N	E	S	W	Single Stem	2-5 stems					More than 5 stems											
								Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems										
123	Silver Birch	11	1	4	4	3		16	19							2	2N	S	U	<10	Poorly formed specimen that is twin stemmed from ground level.		2.98	28
124	Lawson Cypress	10	3av				21									0	-	S	C1	>10	Non native specimen located within boundary vegetation.		2.52	20
125	Mixed broadleaf woodland	<22	6av				<75									2	-	S-M	B2	>20	Woodland group located beyond northern boundary. Some of the woodland is classed as ancient woodland. Mixed species including Ash, English Oak, and Aspen. Ash with advanced Ash Dieback.		9.00	255