Arboricultural Report



Relating to:

Kennet, Gables Road, Church Crookham GU52 6QY

Tree Survey	✓
Arboricultural Impact Assessment	✓
Arboricultural Method Statement	✓

All to BS5837:2012 - Trees in relation to design, demolition and construction - Recommendations

Produced For: Mr C Barker

Date: 19th March 2024

Ref: APA/AP/2024/029

Prepared By:

Andrew Pinchin BSc (Hons), Dip Arb (RFS), FArborA

Contents Section

In	troduction	1	
-	Overview	1.1	
-	Key Issues for Implementation	1.2	
-	Contact Details	1.3	
-	Key Terms and Abbreviations	1.4	
-	The Proposal/Relevant Planning History	1.5	
-	Brief and Purpose	1.6	
-	Scope	1.7	
-	Documents Supplied and Used	1.8	
-	Site Details	1.9	
T	ree Survey	2	
-	Survey Method	2.1	
-	Tree Details	2.2	
-	Legal Protection Status of Trees	2.3	
A	rboricultural Impact Assessment	3	
-	Overview of Arboricultural Impact	3.1	
-	Tree works	3.2	
-	Incursions Within RPAs	3.3	
-	Light and Proximity Issues	3.4	
-	Mitigation	3.5	
-	Conclusion	3.6	
A	rboricultural Method Statement	4	
-	Introduction	4.1	
-	Pre-Commencement Meeting	4.2	
-	Sequencing and Inspection/Supervision	4.3	
-	General Site Precautions	4.4	
-	Carrying out of Tree Works	4.5	
-	Tree Protective Fencing and Ground Protection	4.6	
-	Site Access and Hard Surfacing	4.7	
-	Demolition	4.8	
-	Underground Services	4.9	
-	Foundations and Construction	4.10	C
-	Fencing and Landscaping	4.1	1
_	Amendments	4.12	2

Appendices

Appendix 1 – Tree Survey Schedule to BS5837:2012

Appendix 2 – Tree Protection Plan - Scale 1:250 at A3

Appendix 3 – BS5837 Categorisation System

BS 5837:2012



BSI Standards Publication

Trees in relation to design, demolition and construction – Recommendations

✓ BS5837: 2012 compliant report, supplied electronically as pdf document

This report is for the exclusive use of the client and those involved in the submission and approval of the planning application to which the report relates and the implementation of any consented works. It may not be sold, lent, hired out or divulged to any third party not directly involved in the subject matter without the express consent of APArboriculture

Introduction

1.1 Overview

- The proposal is to erect a detached carport/workshop as shown on the Tree
 Protection Plan at Appendix 2
- A planning application is being submitted to Hart District Council for these works
- 15 trees have been surveyed
- It will not be necessary to remove or prune any trees in connection with the proposal
- There are incursions within the RPAs of 5 trees (new foundations within the RPA of Scots Pine T9 and an extension of the existing gravel driveway within the RPAs of T9 and the 4 Cypresses in group G10)
- A specialist low invasive foundation design is to be used for the new carport/workshop within the RPA of Scots Pine T9
- A low invasive method of installation incorporating a cellular confinement system is to be used for the extension to the existing driveway within the RPAs of Scots Pine T9 and the 4 Cypresses in group G10
- All works within the RPAs of retained trees are to be carried out under direct arboricultural supervision
- A pre-commencement meeting is to be convened prior to any works starting on site

1.2 Key Issues for Implementation

If the proposed works are implemented, these are the key issues that the project manager/builder will need to be aware of:

- A pre-commencement meeting needs to be convened on site prior to any construction related activity starting (Section 4.2)
- The tree protective fencing and ground protection need to be in place prior to any construction related activity starting (specifications given in Section 4.6)
- There is a requirement for specialist methods to be used as detailed in the Arboricultural Method Statement (Sections 4.7 & 4.10)
- Some of the works need to be carried out under the direct supervision of a suitably qualified and experienced arboricultural consultant (Section 4.3)

1.3 Contact Details

Contact	Name	Company/LPA	Tel. / E-mail address	Sent report
Client	Mr C Barker	-	-	✓
Architect/Planning Agent	Marcus Bawtree	MB Design Services Ltd		✓
Arboricultural Consultant	Andrew Pinchin	APArboriculture		
LPA Tree Officer	Dave Harris	Hart District Council		

1.4 Key Terms and Abbreviations

Arboricultural Impact Assessment - An assessment of arboricultural impact	AIA
- Contains the tree protection information	AMS
British Standard 5837 2012: Trees in Relation to Design, Demolition and Construction – Recommendations – the relevant British Standard	The BS
- The volume of soil a tree needs to stay healthy	RPA
Local Planning Authority - The Council	LPA
Tree Preservation Order - A legal document that is used by the LPA to protect trees	TPO

1.5 The Proposal/Relevant Planning History

The proposal is to erect a detached carport/workshop as shown on the Tree Protection Plan at Appendix 2.

A planning application is being submitted to Hart District Council for these works.

1.6 Brief and Purpose

This report has been commissioned by Mr C Barker to;

- Survey the trees in the vicinity of the proposed works in accordance with the BS.
- Assess the arboricultural impact of the proposed project.
- Present an effective tree protection strategy for the duration of the remaining works.
- Provide the necessary arboricultural information for a planning application to be determined by Hart District Council.

1.7 Scope

The trees in the vicinity of the proposed works have been surveyed in accordance with the BS. Trees with a stem diameter over 75mm have been included.

In addition to providing the necessary arboricultural information to enable a planning application to be validated and determined, the report is intended to be used as a working document for site personnel to inform and guide the tree protection process throughout the development works.

A full hazard assessment of the trees (including the assessment of decay or defects and their implications), has not been undertaken as this is considered beyond the scope of this report.

Detailed ecological considerations are also beyond the scope of this report.

1.8 Documents Supplied/Used

Document	Obtained From	Format/Ref
Existing and proposed plans	MB Design Services Ltd	Dwg

1.9 Site Details

The site in question is within the administrative jurisdiction of Hart District Council. It lies in Gables Road in Church Crookham.

In terms of levels, the site is essentially level with no inclines of significance from an arboricultural perspective.

Site Location Plan



The Online Soilscapes Viewer provided by the National Soil Resources Institute indicates that the underlying soil type is a naturally wet, very acid, sandy and loamy soil. This soil will be less vulnerable to compaction than soils with clay content.

2 Tree Survey

2.1 Survey Method

The trees were surveyed on 27th July 2021.

Locations of the trees were plotted with a laser measuring device using triangulation and trilateration techniques.

The trees were inspected from ground level using widely accepted Visual Tree Assessment techniques. No climbing inspections were undertaken. No samples of soil, tree tissue or suspected pests/pathogens were taken.

Heights of the trees were estimated by eye. Crown spreads at each of the four cardinal points were measured using a laser measuring device. The diameters of the trees were measured at a height of 1.5m above ground level (using a diameter tape) as per Annexe C of The BS.

Photographs were taken on site using a digital camera.

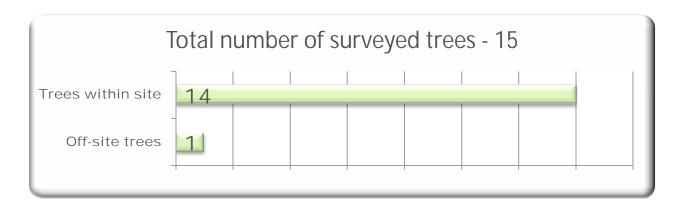
2.2 Tree Details

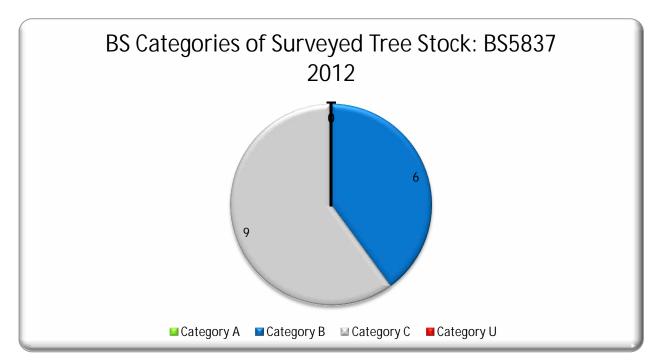
Full details of the surveyed trees and proposed works are given in the Tree Survey Schedule (Appendix 1). The locations of the trees are shown on the Tree Protection Plan (Appendix 2). The trees have been surveyed in accordance with the BS categorisation system, which can be summarised as follows:

- Category A trees of high quality and value with a life expectancy of more than 40 years
- Category B

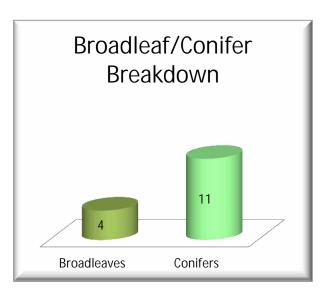
 trees of moderate quality and value, with a life expectancy of more than 20 years
- Category C trees of low quality and value, with a life expectancy of more than
 10 years
- Category U trees for removal, with a life expectancy of less than 10 years
 - See Appendix 3 for more details on the BS5837 Categorisation System

An overview of the surveyed tree stock is as follows:









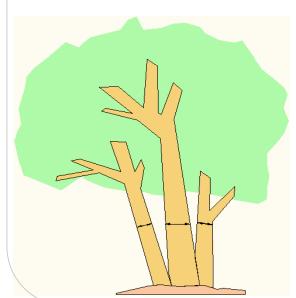
The RPAs of the trees have all been calculated in accordance with Annexe D of the BS and are given in the Tree Survey Schedule.

For single stemmed trees, the RPA radius is derived by multiplying the diameter of the tree at 1.5m above ground level by 12. For multi-stemmed trees, the RPA radius is derived by multiplying an equivalent stem diameter by 12. The formulae for calculating the equivalent stem diameters are as follows:

Equivalent stem diameter calculations for trees with multiple stems:

Trees with 2-5 stems: $\sqrt{\text{(stem diameter 1)}^2 + (\text{stem diameter 2)}^2 ... + (\text{stem diameter 5)}^2}$

Trees with 5+ stems: $\sqrt{\text{(mean stem diameter)}^2 \times \text{number of stems}}$



All stems measured at 1.5m above ground level.

RPA radius derived by multiplying equivalent stem diameter by 12

As for single stemmed trees, shape may under some circumstances be modified (with sound arboricultural justification) as long as total area remains the same

The RPA is the area (given in m²) that contains sufficient rooting volume for a tree to survive and remain healthy. Disturbance within this area has the potential to impact significantly upon tree health and vitality.

Sections 4.6.2 and 4.6.3 of the BS provide for the shape of the RPA to be modified from the starting point of a circle where rooting patterns are likely to be eccentric, subject to the total area remaining the same.

No RPAs have been modified in this instance and the RPAs of the retained trees are all shown as nominal circles on the Tree Protection Plan at Appendix 2.

2.3 Legal Protection Status of Trees

Type of Protection	Details/Ref.
Conservation Area	No
Tree Preservation Order	No (Tree Preservation Orders adjacent)

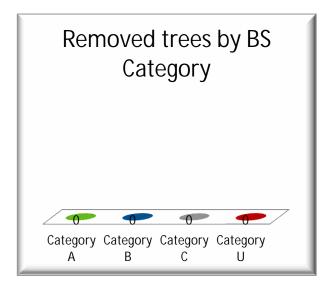
Screenshot from Hart District Council website showing locations of adjacent protected trees:

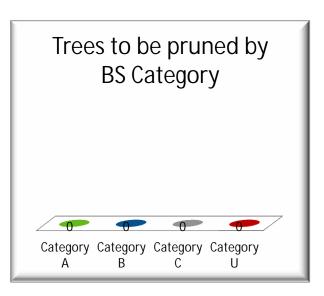


3 Arboricultural Impact Assessment

3.1 Overview of Arboricultural Impact







Number of trees with incursions within RPAs - 5

3.2 Tree Works

It will not be necessary to remove or prune any trees in connection with the project.

3.3 Incursions within RPAs

Incursions may be fully invasive (where a degree of root disturbance is considered acceptable) or low invasive (where specialist methods are used to limit the degree of disturbance). The table below details the incursions and how they are to be dealt with:

Incursions into RPAs of Retained Trees								
Type of Incursion	Trees affected	Action						
Installation of new carport/workshop foundation	Scots Pine T9	Specialist low invasive foundation design to be used. Works to be carried out in accordance with Section 7 of BS under direct arboricultural supervision with precautions as detailed in AMS						
Extension to existing gravel driveway	Scots Pine T9 and the 4 Cypresses in group G5	Low invasive method of installation to be used incorporating cellular confinement system. Precautions to be taken when installing access and hard surfacing as detailed in AMS. Works to be carried out under direct arboricultural supervision						

3.4 Light and Proximity Issues

Section 5.3 of the BS is concerned with the proximity of structures to trees and recommends that buildings are sited at distances from trees that allow for future growth without significant problems being experienced. Issues referred to include shading of buildings and open spaces, seasonal nuisances (dropping of leaves and fruits etc.) and concerns over safety.

These issues can lead to pressure to heavily prune or remove trees in the future and LPAs will be mindful of this potential pressure when considering whether proposals for development in proximity to trees are acceptable.

The proposed single storey rear extension is situated at an appropriate distance from the retained trees and no particular proximity problems relating to trees are anticipated in this instance.

3.5 Mitigation

No trees are to be removed or pruned in connection with the project and there are no specific proposals for landscaping/new tree planting.

3.6 Conclusion

In terms of tree works, no trees are to be removed or pruned in connection with the project.

The new carport/workshop is within the RPA of Scots Pine T9 and a specialist low invasive foundation design is to be used as detailed in the AMS.

The new hard surfacing (extension to the existing gravel driveway) is within the RPAs of Scots Pine T9 and the 4 Cypresses in group G10 and is to be installed in a low invasive manner incorporating a cellular confinement system.

A pre-commencement meeting is to be convened prior to any works starting on site and all works within the RPAs of retained trees are to be carried out under direct arboricultural supervision.

Subject to the AMS being complied with in full, the proposal is considered supportable from an arboricultural perspective.

4 Arboricultural Method Statement

4.1 Introduction

To safeguard the retained trees on and immediately adjacent to the site during the construction process, the tree protection measures set out below will be adhered to. These will protect the rooting systems and aerial parts of the trees.

The essential principle is that the area inside the tree protective fencing and where ground protection has been used is to be protected for the duration of the works.

A copy of this AMS will be maintained on site at all times and made available to all site personnel.

All site personnel will be made aware of the key implications of this AMS. The Arboricultural Consultant can give a 'tool-box talk' to site personnel if required to ensure that the tree protection details are fully understood.

As of 2005, Local Planning Authorities have powers to serve Temporary Stop Notices if agreed tree protection measures are not carried out. Adhering to this AMS will ensure that such costly and time consuming action is avoided.

4.2 Pre-Commencement Meeting

A pre-commencement site meeting, involving the Site Manager, the Arboricultural Consultant and the LPA Tree Officer will be held to ensure that all aspects of the tree protection process are understood and agreed.

Any potential problems can be discussed at this stage, along with the exact sequencing of events and the level of arboricultural inspection/supervision required.

The Arboricultural Consultant will communicate a record of the meeting to all parties by e-mail.

Matters to be discussed at Pre-Commencement Meeting

- Timing and sequencing of works
- Exact locations & specification for tree protective fencing and ground protection
- Works within the RPAs of retained trees (Scots Pine T9 and the 4 Cypresses in group G10)
- Any other arboricultural issues

It will also be useful for all parties to exchange current contact details at the meeting

4.3 Sequencing and Inspection/Supervision

Sequencing of events and effective arboricultural inspection/supervision are important elements of the tree protection process.

Works that have the potential to affect retained trees (in this case Scots Pine T9 and the 4 Cypresses in group G10) will be supervised by a suitably qualified and experienced Arboricultural Consultant.

The appointed Arboricultural Consultant will make a record of any visits to the site and will communicate details of each visit to the Client and the LPA. This will provide evidence of compliance and ultimately enable the LPA to discharge tree related planning conditions.

Key Stages with suggested sequencing of works:

- AMS issued to Site Manager/Building Company
- AMS read by all site personnel to ensure full understanding of implications. Any queries addressed by appointed Arboricultural Consultant
- Pre-commencement meeting convened

- Tree protective fencing erected and ground protection installed as per Tree Protection Plan
- Works carried out (with use of specialist methods and direct arboricultural supervision as detailed in AMS)
- Tree protective fencing and ground protection removed
- Landscaping works carried out (if any)

Summary of Required Arboricultural Inspection/Supervision:

Activity	Level of monitoring/supervision required
Erection of tree protective fencing and installation of ground protection	Inspection of tree protective fencing and ground protection by appointed arboricultural consultant
Installation of new low invasive carport/workshop foundation within RPA of Scots Pine T9	Direct supervision of works on site by appointed arboricultural consultant
Installation of new low invasive vehicular surfacing (extension to existing gravel drive) within RPAs of Scots Pine T9 and the 4 Cypresses in group G10	Direct supervision of works on site by appointed arboricultural consultant

4.4 General Site Precautions

The following points will be observed at all times:

No fires will be lit within 10m of the canopies of retained trees.

- Notice boards, telephone cables or other services will not be attached to any parts of retained trees.
- Site operations will be planned to avoid damage to the aerial parts of trees.
 Particular care will be taken when using piling rigs and plant with booms, jibs and counterweights.
- Materials that contaminate the soil (e.g. concrete mixings, diesel oil, builders' sand and vehicle washings) will not be permitted to enter the RPAs of retained trees.

4.5 Carrying out of Tree Works

It is not in this instance proposed to carry out any tree works in connection with the project.

4.6 Tree Protective Fencing and Ground Protection

Tree protective fencing and ground protection are used to ensure that the RPAs of retained trees are safeguarded.

The required tree protective fencing is shown on the Tree Protection Plan (Appendix 2).

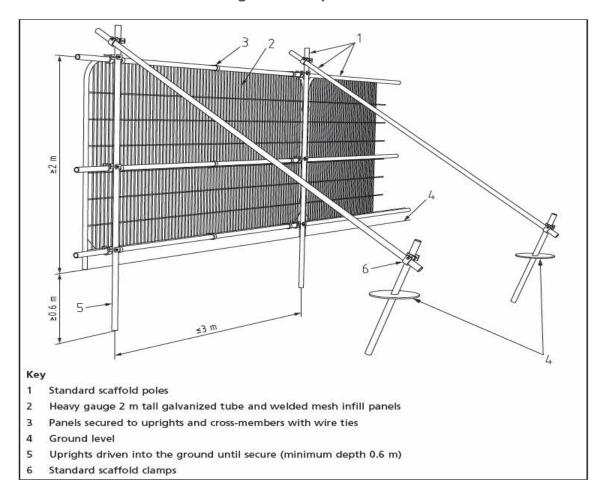
The fencing will remain in position for the duration of the development and will only be moved/altered as agreed in writing by the LPA following arboricultural advice.

The tree protective fencing will be 2.0m Heras fencing as specified in the BS.

The fencing will be supported by a scaffold framework with supporting struts firmed into the ground on the side of the trees.

The purpose of the supports is to prevent the fencing being moved during the development. Clear signs will be attached to the fencing (e.g. Tree Protection Area – Keep Out!).

Tree Protective Fencing Default Specification - BS5837: 2012



Braced Heras Tree Protective Fencing in situ – BS5837: 2012



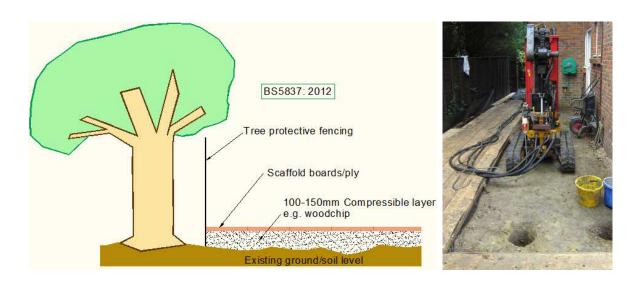
It may *in some cases* be acceptable (e.g. on smaller sites) for rubber or concrete 'feet' at the base of heras fencing to be pinned to the ground or for short outriggers to attached to the fencing and pinned to the ground in lieu of a full scaffold framework. As this is a relatively small domestic project this approach is considered appropriate in this instance.

Ground protection has also been specified to protect the RPAs of retained trees as shown on the Tree Protection Plan at Appendix 2.

To accord with the BS, the specification for the ground protection will be as follows:

- A geotextile membrane on the ground
- 100-150mm depth of a compressible layer (e.g. woodchips)
- Side butting scaffold boards or plywood on top

Schematic of ground protection & example on site



4.7 Site Access and Hard Surfacing.

New vehicular surfacing (an extension to the existing gravel drive) is proposed within the RPAs of Scots Pine T9 and the 4 Cypresses in group G10 as shown on the Tree Protection Plan at Appendix 2. The levels of incursion within the RPAs are significantly less than the 20% maximum figure recommended in the BS.

A low invasive method of installation is to be used for the new surfacing incorporating a Cellular Confinement System (CCS). The depth of the CCS will be determined following consultation with an engineer or the product manufacturer's design service.

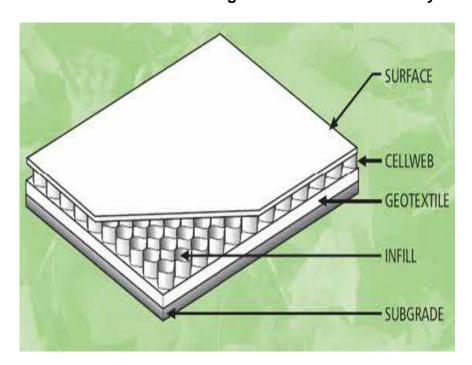
Installation of the CCS is to take place under direct arboricultural supervision.

The final surface treatment will be fully permeable grave to match the existing drive.

Installation of Cellular Confinement System (CCS) - Sequencing:

- Remove surface vegetation if necessary using a glyphosate based herbicide or with the use of hand tools. Compaction of soil to be avoided
- Level ground using sharp sand/top soil and apply geotextile membrane
- Lay the CCS depth to be determined by an engineer or by reference to the Geosynthetics Ltd Design Service
- Fill CCS with no-fines road stone (ideal particle size 20-40mm diameter), ensuring that machinery/plant/vehicle use is restricted to areas where the CCS has been filled
- Install edging (e.g. boards or kerbs with concrete haunching) on geotextile membrane. Drilled kerbs may be retained using road pins
- Apply final surfacing (fully permeable gravel in this instance)

Illustrative cross section through Cellular Confinement System



The low invasive hard surfacing will ideally be installed at the outset of the development process, whereupon it will act as effective ground protection for the remainder of the works.

If the low invasive hard surfacing is not installed at the outset of the works, the ground protection will be maintained as per the Tree Protection Plan at Appendix 2 until such time as installation of the low invasive surfacing takes place.

Nb. Use of a cellular confinement system will raise the level of the new surfacing above that of the existing (the exact amount depending on the depth of the cellular confinement system and final gravel layer). Some grading of levels will therefore be necessary to match the levels (raising the level of the existing gravel slightly so as to ramp up to the level of the new).

The exact manner of installation of the low invasive surfacing and how the levels are to be matched can be discussed and clarified at the pre-commencement meeting.

4.8 Demolition

No demolition works are to take place within the RPAs of retained trees.

4.9 Underground Services

It will not be necessary to install any new underground services within the RPAs of the retained trees.

4.10 Foundations and Construction

The proposed new carport/workshop is within the RPA of Scots Pine T9 as shown on the Tree Protection Plan at Appendix 2.

A specialist low invasive foundation will be used, comprising either a reinforced concrete raft cast above existing soil level or a piled foundation with the beams above existing soil level.

Full details of the foundation design (including cross sectional drawings) will be submitted to and approved in writing by the LPA prior to any development related activity commencing on site.

The foundation installation works will be carried out in accordance with Section 7 of the BS under direct arboricultural supervision with the following specific precautions being observed:

- Hand tools only will be used within the RPA of the tree (other than a small tracked piling rig if a piled foundation is used)
- No lowering of existing soil levels will take place within the RPA of the tree (other than for any piles to be installed if a piled foundation is used)
- Care will be taken at all stages to prevent compaction of the underlying soil within the RPA of the tree
- The underside of the concrete raft (if used) will be lined with heavy gauge polythene sheeting/DPM to protect the rooting environment of the tree from the potentially toxic effects of exposure to cement.

Full details of the sequencing of the works and the arboricultural precautions to be observed as the foundation is being installed can be discussed and clarified at the precommencement meeting.

4.11 Fencing and Landscaping

During the landscaping phase of the project, the following precautions will be observed:

- Soil within the RPAs of retained trees (and where new tree planting is proposed)
 will not be compacted. This will preclude the use of heavy plant within RPAs
 unless suitable ground protection is used
- There will be no changes in ground levels within the RPAs of retained trees
- Unwanted vegetation within the RPAs of retained trees will be removed manually or using contact herbicides that will not damage tree roots
- No underground irrigation or drainage pipes will be installed within the RPAs of retained trees

It is not in this instance proposed to install any new fence posts within the RPAs of retained trees.

4.12 Amendments

Issues may arise on projects of this nature that require amendments to the previously agreed tree protection details. Any amendments to this AMS will be approved in writing by the LPA prior to being implemented. Copies of paperwork relating to any amendments will be communicated by the Arboricultural Consultant to the Client and LPA.

Appendix 1 Tree Survey Schedule





Site: Kennet, Gables Road, Church Crookham GU52 6QY

LPA: Hart District Council

Date of Survey: 27th July 2021

Page 1

Date of Survey: 27 Ju	1y 2021													
Tree Common N	lame	Height	Crown Spread	Crown Height	Age Class	No. of Stems	Stem Diameter	RPA Radius	Vigour	Structural Condition	Landscape Value	BS Cat	Useful Life	Notes & Observations
No. of trees:		15	7 6 6 4	2	М	1	470	5.6	Normal	Fair	Medium	B1	20+	Stem inclining slightly to north-east; small Beech growing at base
Recommended Works: Reasons for Works:	No works pro	oposed												
		15	4 4 5 4	2.5	EM	1	340	4.1	Normal	Fair	Medium	B1	20+	Some Ivy on lower stem; small Beech at base
No. of trees: 1 Recommended Works: Reasons for Works:	No works pro	oposed												
No. of trees:		8	4 3 5 3	3	М	2	340 e	4.1	Normal	Fair	Low	C1	10+	Off-site tree; twin-stemmed at base; of modest landscape significance
No. of frees.	No works pro	oposed												
No. of trees:		7	2 2 4 2	1.5	EM	3	310	3.7	Normal	Fair	Low	C1	10+	Multi-stemmed at base and topped in past; of modest quality & landscape significance
Recommended Works: Reasons for Works:	No works pro	oposed												
		7	4 4 4 4	1.5	EM	2	380 m	4.6	Normal	Fair	Low	C1, C2	20+	Group of 3 trees comprising 2 Yews and a Cypress; topped in past; of modest quality and landscape significance
No. of trees: 3 Recommended Works: Reasons for Works:	No works pro	oposed												

Tree Survey Schedule Page 2

				1											
Tree Ref	Common N	Name	Height	Crown Spread	Crown Height	Age Class	No. of Stems	Stem Diameter	RPA Radius	Vigour	Structural Condition	Landscape Value	BS Cat	Useful Life	Notes & Observations
No. of	f trees:		15	9 9 9 9	6	М	1	620	7.4	Normal	Fair	Medium	B1	20+	Multi-stemmed at 2-3m ht; broad, spreading crown
	nmended Works: ns for Works:	No works p	proposed												
No. of	f trees: 1		16	3 3 3 3	2.5	M	1	520	6.2	Normal	Fair	Medium	B1	20+	Multi-stemmed at 5m ht
	nmended Works: ns for Works:	No works p	proposed												
			17	4 4 4 4	2.5	EM	1	390	4.7	Normal	Fair	Medium	B1, B2	20+	Typical of species
Recon	f trees: 1 nmended Works: ns for Works:	No works p	proposed												
			19	4 6 5 5	6	М	1	540	6.5	Normal	Fair	Medium	B1, B2	20+	Typical of species
No. of	f trees: 1														
	nmended Works: ns for Works:	No works p	proposed												
	f trees: 4		12	2 1 1 2	.5	SM	1	200 m	2.4	Normal	Fair	Low	C1, C2	20+	4 Cypresses of relatively modest landscape significance
Recon	f trees: 4 nmended Works: ns for Works:	No works N/A	proposed												

Total no. of surveyed trees: 15

Key to Tree Survey Schedule (*BS5837: 2012*)

Tree Ref. – Consecutive numbering. T = Individual Tree: G = Tree Group: H = Hedge

Species – Common or Latin name for tree

Height – Height of tree in metres

Crown Spread – Radial crown spread in metres at the four cardinal points (N E S W)

Crown Height – Height of lowest parts of crown above ground level in metres

Age Class - Young, Semi-Mature, Early-Mature, Mature, Over-Mature

No. of Stems – Number of stems over 75mm in diameter at 1.5m above ground level

Stem Diameter – Diameter of stem in mm at 1.5m above ground for single stemmed trees. For multi-stemmed trees, equivalent diameter figure calculated as per the BS (e= estimated value; m = mean value)

RPA Radius – The radius of the Root Protection Area of the tree (from the tree centre) in metres

Vigour – An indication of the physiological condition/health of the tree: Normal, Moderate, Poor, Dead

Structural Condition – An assessment of the overall structural condition of the tree: Good, Fair, Poor

Landscape Value – High, Medium, Low

BS Cat – BS5837: 2012 Category. A- High, B- Moderate, C- Low, U-Remove. For full description of categories see Table 1 of BS5837:2012

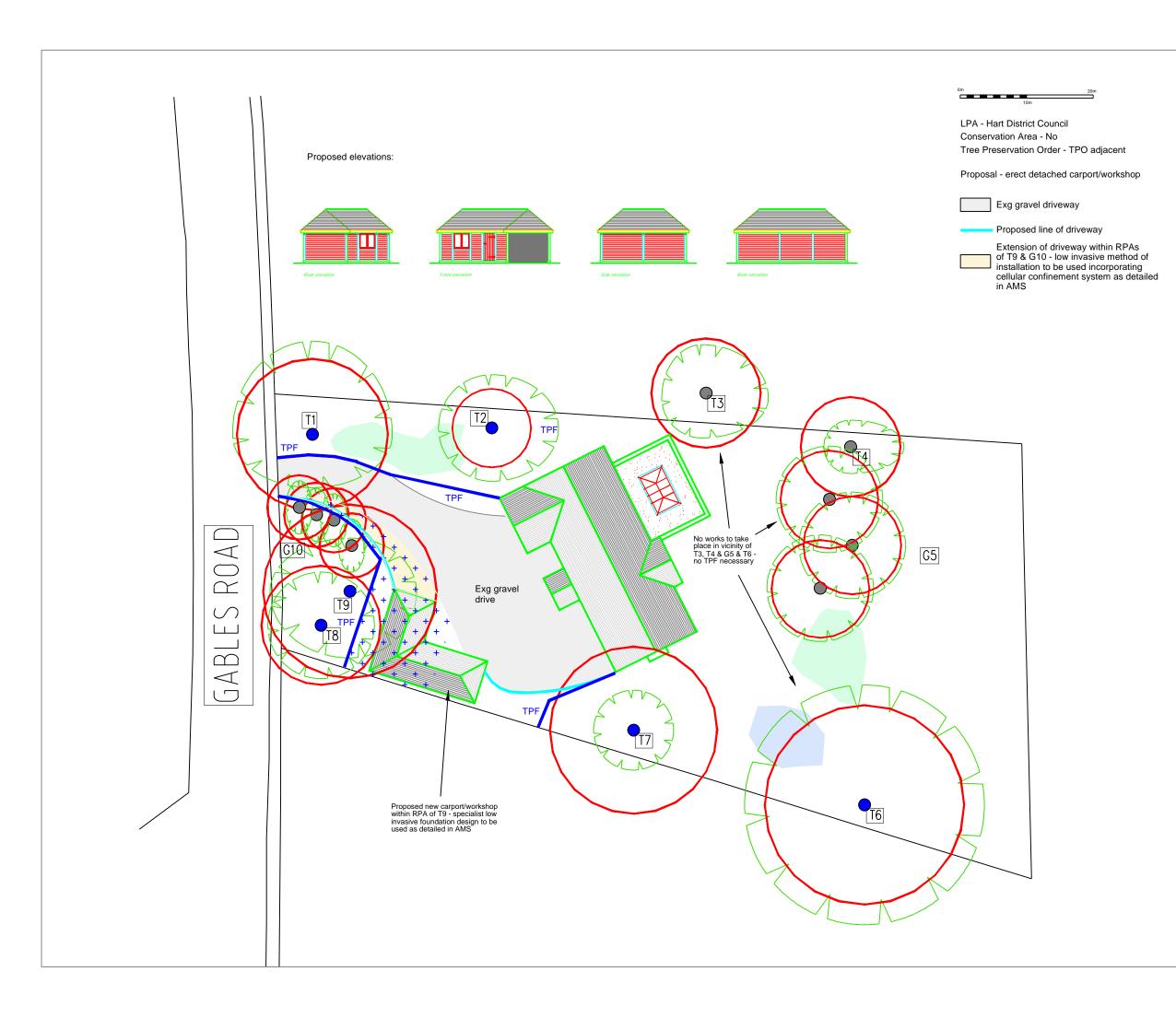
Useful Life – Estimated remaining contribution to the landscape in years

Notes and Observations – miscellaneous notes where it is considered that these may be useful

(Recommended works and reasons for works also given in Tree Survey Schedule).

Appendix 2 Tree Protection Plan







INDICATIVE



Root Protection Area (RPA) of retained tree (ref. BS5837:2012)



Category A



Category B



Category C





Tree to be removed



Ground protection

Tree protective fencing

Plan to be printed in colour and to scale

Tree Protection Plan

Kennet, Gables Road Church Crookham Hants GU52 6QY

1:250 (A3) 19.03.24

TPP/APA/AP/2024/029

APArboriculture

15 Church Street Weybridge Surrey **KT13 8NA**



Tel: 01932 450104

aparboriculture@gmail.com

www.aparboriculture.co.uk

Appendix 3 BS5837 Categorisation System



BS5837:2012 Categorisation System (Abbreviated)

Category A	Trees of high quality with an estimated remaining life expectancy of at least 40 years. Particularly good specimens (A1); Trees, groups or woodlands of particular landscape significance (A2); Trees, groups or woodlands of significant conservation, historical or commemorative value (A3)
Category B	Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Trees of slightly lower individual quality (B1); Trees of collective value but of lesser overall landscape significance than Category A trees (B2); Trees with material conservation or cultural value (B3)
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 150mm. Unremarkable trees of limited merit (C1); Trees, groups or woodlands of low landscape value (C2); Trees with no material conservation or cultural value (C3)
Category U	Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years (dead, declining and diseased trees etc.) It will normally be recommended that these trees be removed (unless they have particular conservation/ecological value)

- Category A, B and C trees should be considered for retention
- Although Category C trees are generally of lower overall quality and landscape significance, they may still constitute a material planning constraint
- Category U trees are usually unsuitable for retention



Tree to be removed (Category U trees and other trees where justification can be presented within context of development works being proposed)

The legal protection status of the trees will also be an important consideration regarding retention or otherwise of trees (see Section 2.3 of report)