

## Arboricultural Impact Assessment Arboricultural Method Statement Tree Protection Plan

# PIXTON GREEN, ASHWICKE, CHIPPENHAM, SN14 8AL



#### On behalf of

Mark Hempleman-Adams

Prepared by

Alister Rankine BSc (Forestry); Tech Cert (Arbor A), ProfArborA *Arboricultural Consultant* 

February 2024

Version No	Checked by	Date
1.0	SR	05/02/2024



#### **EXECUTIVE SUMMARY**

- Proposed Development:
  - oErection of new 4-bay detached garage
- All trees on site to be retained
- Tree Protection:
  - Tree Protection Barriers

#### 1.0 Introduction

#### 1.1 Brief

This report is prepared by Hillside Trees Ltd on behalf of Mark Hempleman-Adams.

#### 1.2 Purpose of the Report

- **1.2.0** This report is intended to accompany a planning application relating to proposed development at Pixton Green, Ashwicke. This document has been produced to demonstrate that the implications of the proposed development in relation to the arboricultural and landscape value of the trees on the site have been fully considered during the detailed design process.
- **1.2.1** This report and the accompanying information is supplied in order to:
  - Identify trees to be retained and requiring protection during the site preparation and construction phase of the project.
  - Present information regarding the location of protective barriers (Construction Exclusion Zones) on a Tree Protection Plan.
  - Provide a Detailed Arboricultural Method Statement for the recommended works related to trees to be retained during and after the development.

#### 1.3 Documents Provided to Hillside Trees Ltd.

- John Hartley Surveyors Ltd. Drawing No.1507.1.1 Location and Block Plan
- John Hartley Surveyors Ltd. Drawing No.1507.2.3 Proposed Garage Elevations

#### 1.4 Tree Survey Methodology

- **1.4.1** A tree survey was undertaken on 4<sup>th</sup> December 2023 by an Arboricultural Consultant of Hillside Trees Ltd.
- **1.4.2** The survey took place from ground level aided by the Visual Tree Assessment method (Mattheck and Breloer, 1994).
- **1.4.3** This survey is not a tree risk assessment but takes into account any observed structural defects of the trees in order to inform conclusions with regard to their retentive worth.

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#### 1.5 Data Collection

**1.5.1** Data collected includes designated tree number, tree species, height, number of stems, stem diameter, crown clearance (height of periphery of crown spread above ground level), branch spread (to N, S, E and W), age class, physiological condition, useful life expectancy, tree structural condition, site notes (where this has a bearing on the present or future health or structural condition of the tree), and tree category.

#### 1.6 Presentation of the Data Collected

- **1.6.1** Data collected regarding individual trees and a group of trees are presented in the Tree Schedule table in Appendix A in accordance with BS5837:2012 'Trees in relation to design, demolition and construction Recommendations'. The tree schedule also gives scientific names for all trees mentioned in the report.
- **1.6.2** The data significant to the proposed site layout is also presented on the Tree Protection Plan Drawing Number 240202-PG-TPP-AR contained within the Detailed Arboricultural Method Statement (Appendix B).
- **1.6.3** All other relevant data are presented within the main body of this report.
- **1.6.4** Trees have been allocated an individual tree number. This tree number is used to identify individual trees and a group of trees throughout this report, within the Tree Schedule and on all plans presented in the appendices of this report.

#### 2.0 Arboricultural Constraints

An assessment of the trees surveyed presented in the Tree Schedule table in Appendix A, is also considered in the main body of the report below.

An Arboricultural Impact Assessment Plan has been produced showing the root protection areas (RPAs) for the individual trees identified in the Tree Schedule (Appendix A). This represents the minimum area in m<sup>2</sup> which ideally should be left undisturbed around each tree were it to be retained. The RPA has been calculated in accordance with Section 4.6 of BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations'.

The Arboricultural Impact Assessment Plan also shows a representation of the crown spread of each tree measured in four cardinal directions.

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Hillside Trees Ltd 2 Hillside, Bowden Hill, Chilcompton, Radstock, BA3 4EN Tel: 01761 233244 E: enquiries@hillsidetrees.co.uk The preparation of the Arboricultural Impact Assessment Plan described above has assisted in the design of the site layout through presenting the above and below ground constraints posed to the development of the site by the trees present.

#### 2.1 Trees Identified for Retention

The proposed development involves the erection of a new 4-bay detached garage

All the trees on site will be retained

#### 2.2 Trees Outside Site Boundary

There are no trees outside the site boundary affected within the current proposals:

#### 3.0 Tree Protection

The trees to be retained on site during and after development referred to in Section 2.1 will require protection.

Protection measures based on the RPA's presented in the Arboricultural Impact Assessment Plan, will involve the erection of tree protection barriers as discussed in the Detailed Arboricultural Method Statement (Appendix B). Such measures acknowledge the fact that the extent, distribution and actual position of roots of a tree within the RPA are not known.

The tree protection barriers are illustrated in the Tree Protection Plan contained within the Detailed Arboricultural Method Statement.

#### **REFERENCES**

Mattheck, C. and Breloer, H. (1995). The Body Language of Trees: A handbook for failure analysis. Research for Amenity Trees 4. HMSO, London, 240pp.

#### STANDARDS PUBLICATIONS

Trees in relation to design, demolition and construction – Recommendations (BS5837), British Standards Institution, London (2012)

Tree Work Recommendations (BS3998), British Standards Institution, London (2010)

# Appendix A

## **Tree Schedule**

Table 1 Cascade Chart taken from BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.

Appendix A - Tree Schedule

Pixton Green, Ashwicke

Client:

Mark Hempleman-Adams

Surveyor:

Alister Rankine

Date of Survey:

4th December 2023



Tree Number	Single or Group	Number in Group	Common Name	Scientific Name	Height (m)	Calculated Stem Diameter (mm)	Number of Stems	Root Protection Area (Radius, m)	Crown Clearance (m)	N - Radius (m)	S - Radius (m)	E - Radius (m)	W - Radius (m)	Age Class	Physiological Condition	ULE (Years)	Tree Structural Condition and Site Notes. Long-Term Recommendations	BS Category
T1	S		Silver birch	Betula pendula	14	380	1	4.56	4	3	3	3	3	М	G	20-40	Good	B1
T2	S		Silver birch	Betula pendula	14	350	1	4.20	3	2	2	2	2	М	G	20-40	Good	C1
T3	S		Silver birch	Betula pendula	12	300	1	3.60	3	2	2	2	2	М	F	20-40	Fair	C1
G4	G	16	Leyland cypress	x Cupressocyparis leylandii	15	400	1	4.80	4	3	3	3	3	М	F	40+	Fair	C1

Table 1 – Cascade chart for tree quality assessment

Category and definition	and definition Criteria								
Category U Those in such condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	e in such condition that they of realistically be retained as trees in the context of the nt land use for longer than 10  Trees that have a serious, interiedial, 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 have a serious, interiedial, 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 have a serious, interiedial, 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 have a serious, interiedial, 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 TO BE CONSIDERED FO	OR RETENTION	Criteria - Subcategories		Identification on plan					
Category and definition	1 Mainly arboricultural qualities	identification on plan							
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue	Trees groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture	LIGHT GREEN  RGB code: 000-255-000 AutoCAD 90					
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	MID BLUE RGB code: 000-000-255 AutoCAD 170					
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 very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	GREY RGB code: 091-091-091 AutoCAD 252					

# **Appendix B**

## **Detailed Arboricultural Method Statement**



# **Arboricultural Method Statement Tree Protection Plan**

# PIXTON GREEN, ASHWICKE, CHIPPENHAM, SN14 8AL



#### On behalf of

Mark Hempleman-Adams

Prepared by

Alister Rankine BSc (Forestry); Tech Cert (Arbor A), ProfArborA *Arboricultural Consultant* 

February 2024





### **Arboricultural Method Statement**

#### INTRODUCTION

The purpose of this document is to give a step by step guide to protecting trees on this site. It is vital that all members of the team are familiar with it so that they not only understand **why** trees need protecting but also **how** they are to be protected and their own role in protecting them.

#### THE IMPORTANCE OF TREES

- Trees play a crucial role in the fight against climate change. One mature tree can absorb in the region of 1 tonne of carbon during its lifetime the world needs all the trees it can get
- Trees are an important wildlife habitat, for example many insects and birds rely on them for food and shelter
- Trees are an integral part of human habitat. People like trees for their landscape value and for their shading and sheltering properties

#### WHAT WILL CAUSE DAMAGE TO A TREE?

- Wounds to the trunk or limbs of a tree can let in pathogens which could go on to infect and eventually even kill a tree
- Removal of branches decreases the number of leaves a tree has. Leaves are vital to the tree for manufacture of the energy they need through photosynthesis
- Compaction of the soil around a tree will damage its roots making it unable to absorb water or oxygen which can result in the tree's death. The extent of the roots are shown on the Tree Protection Plan in the document below as Root Protection Areas or RPA's

#### HOW YOU AND YOUR TEAM CAN PREVENT DAMAGE TO TREES

- Ensure all members of the team read this document before work starts
- Follow the instructions given, don't cut corners
- Take pride in protecting trees treated well they will outlive you and continue to give benefit for years to come

Planning permission for this project depends on this method statement being followed. Dealing with breaches of condition is far harder, more time consuming and costly than following the instructions. Failure to comply could even result in prosecution.

THE PROJECT ARBORICULTURALIST IS ON HAND TO HELP. IF IN DOUBT, PLEASE RING FOR ADVICE. 01761 233244

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Directors: A Rankine BSc (Forestry), Tech Cert (Arbor A), ProfArborA, S J Rankine BSc (Hons), Dip Arb L4, TechArborA



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#### **This Method Statement Comprises:**

- 1. Method Statement Document
- 2. Appendices:
  - I. Tree Protection Site Notice
- 3. Tree Protection Plan (240202-PG-TPP-AR)

#### THESE DOCUMENTS ARE TO BE KEPT TOGETHER

#### **Full Site Address:**

Pixton green, Ashwicke, Chippenham, SN14 8AL

#### **Proposed Development:**

Erection of new detached 4-bay garage

#### **Contacts:**

#### **Client:**

Mark Hempleman-Adams

#### **Project Manager (for the client):**

John Hartley John Hartley Surveyors Ltd

Telephone: 01225 811876

Email: jh@johmnhartleysurveyors.co.uk

#### **Contractor / Builder:**

To be confirmed

#### **Site Manager:**

To be confirmed

#### **Arboricultural Officer:**

Kate Tate
Assistant Arboricultural Officer
Department of Environment & Community Services
South Gloucestershire Council

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Tel: 01761 233244 E: enquiries@hillsidetrees.co.uk



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Tel: 01454 86953

Email: Kate.Tate@southglos.gov.uk

#### **Project Arboriculturalist:**

Alister Rankine Hillside Trees Ltd.

Telephone: 01761 233244

Email: alister@hillsidetrees.co.uk

#### **Works Requiring Tree Protection / Works:**

Development Tree Number		Type of Protection / Works	Reference
Operations			
Site Traffic	T1, T2, T3, G4	Tree Protection Barrier (T1, T2, T3 only)	Appendix I
		Tree Protection Site Notices (T1, T2, T3	Appendix I
		only)	
		Existing fence (G4 only)	
Garage Construction	T1, T2, T3, G4	Tree Protection Barrier (T1, T2, T3 only)	Appendix I
		Tree Protection Site Notices (T1, T2, T3	Appendix I
		only)	
		Existing fence (G4 only)	

#### **Sequencing of Operations:**

The tree protection measures appropriate for the site operations below, if required by the Local Planning Authority will be monitored by the Project Arboriculturalist. It will be the responsibility of the Project Manager and / or the Site Manager to inform the Project Arboriculturalist if site visits and reports are required and to arrange them accordingly

<u>Please note: If the Project Manager and / or the Site Manager fails to inform the Project</u>

Arboriculturalist when site monitoring is required and the schedule of monitoring visits

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is not followed, it will not be possible to issue a Certificate of Compliance at the end of the project.

#### 1. Pre-commencement site meeting

a. The Appointed Contractor will co-ordinate with the Project Arboriculturalist to discuss and agree the site operations programme and tree protection.

#### 2. Install tree protection barriers

- a. Tree protection barriers will be installed in the locations shown on the Tree Protection Plan
- b. The areas between the tree protection barriers and the trees will be construction exclusion zones (CEZ's)
- c. Tree protection barriers will be 'Heras' weldmesh panels secured in robust bases and tightly clamped.
- d. Site Notices will be securely fixed to the tree protection barrier panels (Appendix I)
- e. There will be no movement of tree protection barriers unless it is overseen by the Project Arboriculturalist
- f. No activity is planned to take place within the CEZ's; however, any work that does take place within the CEZ's will require approval of the Local Planning Authority and will be overseen and approved by the Project Arboriculturalist.

#### 3. Construction of new garage

a. Construction of the new buildings will not require access to the CEZ.

#### 4. Installation of services

a. Installation of services will not require access to the CEZ



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#### 5. Removal of tree protection barriers

- a. Tree protection barriers will only be removed once all works associated with the development have been completed. These include:
  - Construction and fitting out of the new garage
  - Installation of services

#### **General Precautions**

- 1. Any welfare and/or site storage facilities will be positioned outside the CEZ's. The location will be agreed between the Site Manager and the Project Arboriculturalist prior to commencement of the project.
- 2. Any crane or plant for the manoeuvring of materials will be sited on locations to be agreed between the Site Manager and the Project Arboriculturalist prior to commencement of the project. All crane operations should be conducted under the supervision of a banksman to ensure adequate clearance from the retained trees is maintained at all times.
- 3. No materials that are likely to have an adverse effect on tree health will be stored or discharged within 10 metres of the trunk of a tree that is to be retained. Such materials include:
  - Oil
  - Bitumen
  - Cement
- 4. No fires will be lit unless the site of the fire is agreed with the Project Arboriculturalist.
- 5. Concrete will not be mixed or transported over unprotected ground, within 10 metres of the trunk of any tree.
- 6. In the event of unforeseen incidents occurring that may adversely affect or threaten the welfare or security of the trees, the Site Manager shall inform the Project Arboriculturalist at the earliest opportunity and not more than one working day following the incident.
- 7. The Project Arboriculturalist will visit the site to inspect and assess the circumstances and make any appropriate recommendations. The Local Planning Authority Arboricultural Officer will be informed by the Project Arboriculturalist of such incidents and



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recommendations will be submitted for approval by the Local Planning Authority, initially verbally, and then in writing.

- 8. A record of any emergency incidents and works shall be maintained by the Project Arboriculturalist.
- 9. Incidents which may merit such contingency plans include:
  - Accidental / unauthorised damage to the limbs, roots or trunk of trees
  - The spillage of chemicals within or adjacent to a Root Protection Area
  - The discharge of toxins / waste within or adjacent to a Root Protection Area
  - The un-scheduled breaching of a tree protective barrier or Construction Exclusion Zone.

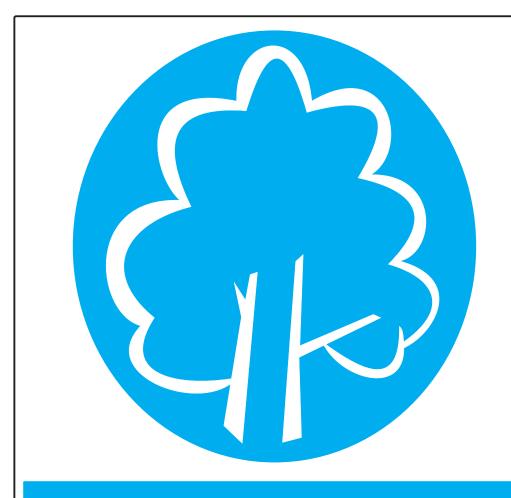
#### This Method Statement has Been Informed by the Following Information

- Arboricultural Site Survey carried out by Hillside Trees Ltd on 4<sup>th</sup> December 2023
- John Hartley Surveyors Ltd. Drawing No.1507.1.1 Location and Block Plan
- John Hartley Surveyors Ltd. Drawing No.1507.2.3 Proposed Garage Elevations
- BS5837: 2012 'Trees in relation to design, demolition and construction Recommendations'

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## Appendix I

## **Tree Protection Site Notice**



PROTECTIVE FENCING. THIS
FENCING MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.



# TREE PROTECTION AREA KEEP OUT!

(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A
TREE PRESERVATION ORDER.

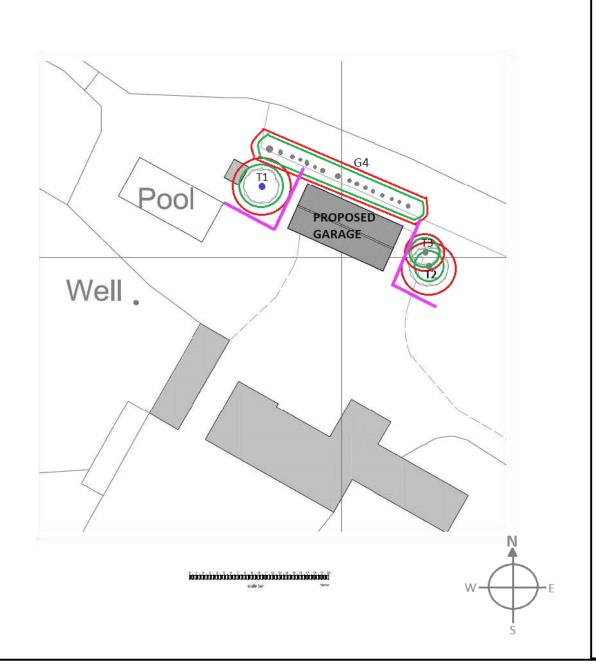
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY
LEAD TO CRIMINAL PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

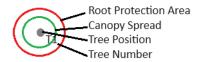
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## **Tree Protection Plan**

Drawing No: 240202-PG-TPP-AR



#### Symbol Guide



#### BS5837:2012 - Tree Category





Category A High Quality Category C Low Quality Trees



Category B Moderate **Quality Trees** 



Category U Poor Quality



Tree Protection Barrier



Project Name:

Pixton Green, Ashwicke

Drawing Title:

Tree Protection Plan

Drawing Number:

240202-PG-TPP-AR

Client:

Mark Hempleman-Adams

Date:

February 2024