



# **ARBORICULTURAL REPORT**

## **& Impact Assessment**

### **to BS 5837:2012 at:**

***Darley Yard,  
Worsbrough Bridge,  
Barnsley,  
S70 4SB***

Prepared for:  
***White Agus***

Date: *March 2024*

Reference: *AWA5857*



# Contents

<b>1. Introduction</b>	<b>3</b>
1.1 Instructions and Brief	3
1.2 Survey Details	3
<b>2. The Site</b>	<b>4</b>
2.1 Location and Description	4
<b>3. The Trees</b>	<b>5</b>
3.1 Legal	5
3.2 Tree Survey Results	6
3.3 Photographs	8
<b>4. Arboricultural Impact Assessment</b>	<b>9</b>
4.1 Proposed New Development	9
4.2 Direct Impacts	9
4.3 Indirect Impacts	9
4.4 Suitable Mitigation	10
4.5 Protection of the Retained Trees	10
<b>5. Signature</b>	<b>11</b>
<b>Appendix 1: Authors Qualifications &amp; Experience</b>	<b>13</b>
<b>Appendix 2: Survey Methodology and Limitations</b>	<b>14</b>
<b>Appendix 3: Explanation of Tree Descriptions</b>	<b>15</b>
<b>Appendix 4: Tree Data</b>	<b>16</b>
<b>Appendix 5: Tree Constraints Plan</b>	<b>17</b>
<b>Appendix 6: Tree Impacts Plan</b>	<b>18</b>

# 1. Introduction

## 1.1 Instructions and Brief

- 1.1.1 We have been instructed by White Agus to visit the site and prepare our findings in a report.
- 1.1.2 The report is required in accordance with BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations*, to provide detailed, independent, arboricultural advice on the trees present, in the context of potential development.

## 1.2 Survey Details

- 1.2.1 The survey took place during February 2024.
- 1.2.2 The trees were surveyed visually from the ground using “Visual Tree Assessment” techniques and in accordance with the guiding principles of British Standard 5837:2012.
- 1.2.3 Any additional off-site trees that could impact a new development design have been included in the tree survey parameters.
- 1.2.4 The tree positions were plotted on an Ordnance Survey map base-layer using enhanced GPS technology (1-2m accuracy) and laser distance measurer.
- 1.2.5 This report has been prepared by Mr Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, Principal and Director of AWA Tree Consultants Ltd.
- 1.2.6 The tree survey data collection was carried out by Lucy Garbutt, MSc, BSc (Hons), Arboriculturist at AWA Tree Consultants Ltd.
- 1.2.7 Full qualifications and experience are included within **Appendix 1**. Explanatory details regarding the survey methodology are included within **Appendix 2**. A full explanation of the tree data can be found at **Appendix 3**. Full details of all the trees surveyed are found in **Appendix 4**. For tree locations please refer to the Tree Constraints Plan at **Appendix 5** and for detail of the impacts of the new development refer to the Tree Impacts Plan at **Appendix 6**.

## 2. The Site

### 2.1 Location and Description

- 2.1.1 The site is located off Darley Yard, in Worsbrough, Barnsley.
- 2.1.2 The site comprises a commercial building with associated access and parking. To the north and east lie residential properties and to the south and west lie a parcel of disused land forming part of Worsbrough Dale Park.
- 2.1.3 The approximate area of the survey is highlighted in the (2022 Google Earth) image below:



## 3. The Trees

### 3.1 Legal

- 3.1.1 The following advice is for guidance purposes only. Some trees are protected by legislation, and it is essential that the legal status of trees is established prior to carrying out works to them. Unauthorised work to protected trees could lead to prosecution, resulting in enforcement action such as fines or a criminal record. Tree Preservation Orders, Conservation Areas, Planning Conditions, Felling Licences or Restrictive Covenants legally protect many trees in the UK.
- 3.1.2 An online search was undertaken with Barnsley Metropolitan Borough Council on 05/03/24 to check whether any trees at the site are protected by a Tree Preservation Order or are located within a Conservation Area. As of this date no trees at the site are protected by a Tree Preservation Order or are within a Conservation Area.
- 3.1.3 Due to the large potential penalties for illegally carrying out work to protected trees, before authorising any tree works a further check should be made with the Local Planning Authority to confirm if any trees are covered by a Tree Preservation Order or are within a Conservation Area. If either applies, then statutory permission is required before any works can take place (unless such work is approved as part of full planning permission).
- 3.1.4 The Multi-Agency Geographical Information for the Countryside (MAGIC) website was used to search for areas of ancient woodlands listed on the Ancient Woodland (DEFRA 2021), and a check for catalogued Ancient and Veteran trees using the woodland trust ancient tree inventory (ATI) (Woodland Trust 2021).
- 3.1.5 It was confirmed that there are no designated ancient woodlands or veteran or ancient trees within the survey area.
- 3.1.6 Trees provide a wide range of habitats for many species, some of which are legally protected such as bats, nesting birds, badgers and dormice. It is essential that appropriate care is taken to ensure that this legislation is not contravened.
- 3.1.7 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.
- 3.1.8 All tree work should be carried out according to British Standard 3998:2010 Tree Work - Recommendations.

## 3.2 Tree Survey Results

- 3.2.1 The tree survey revealed 5 items of woody vegetation, comprised of 4 individual trees and 1 tree group.
- 3.2.2 Of the surveyed trees: all 4 trees and 1 tree group at the site are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).
- 3.2.3 Full details of the surveyed trees, tree groups and hedges are provided in the attached tree data schedule at Appendix 4. General comments are provided below:
- 3.2.4 The significant tree cover within the site consists mainly of scrubby adjacent trees which overhang into the site and are likely self-set. Most of the trees and groups on site consists of Willow trees which are adjacent to the site beyond a boundary fence. Generally, these trees lie to the east and south of the site itself.
- 3.2.5 The central areas of the site contain little of arboricultural significance, generally consisting of hard standing.
- 3.2.6 Species diversity at the site is low. The dominant species is Willow with only one other tree – an Elder on the site.
- 3.2.7 Most of the trees are early-mature with only occasional semi-mature trees.
- 3.2.8 Willow trees G1, T2, T4 and T5 are all in fair condition, with some notable defects and significantly limited prospects as a result. All four Willows on site have low amenity value, with tight unions and partially included bark, and minor deadwood within their crowns. T4 and T5 are heavily ivy covered and both access and ivy prevented detailed inspection for these trees.
- 3.2.9 Elder T3 is the only other tree on site and is also adjacent beyond a boundary fence. T3 is in poor condition, with moderate deadwood and moderate dieback within the crown. Some of the stems are in contact with the fence and are growing through. T3 has low amenity value.
- 3.2.10 The remaining trees within the site are of particularly low value and should not pose any significant constraint on the development potential of the site.
- 3.2.11 Some trees were covered in dense ivy or were inaccessible (as detailed in Appendix 4). In such cases measurements were estimated and the condition values are indicative only.
- 3.2.12 The tree Root Protection Area (RPA) for each tree has been plotted as a polygon centred on the base of the stem. Due to the presence of roads, structures, topography (and past tree management) the RPA is likely to be

a simplified representation of the tree roots actual morphology and disposition. However, detailed modifications to the shape of the RPA would largely be based on conjecture and so have been avoided.

- 3.2.13 Some lower value tree, hedge and shrub groups do not have RPAs detailed on tree plans. The detailed extent and spread of these low value groups, in conjunction with the tree schedule, is sufficient to assess the associated potential constraints.

### 3.3 Photographs



Photo 1: T2 from north west.



Photo 2: T3 from north east.

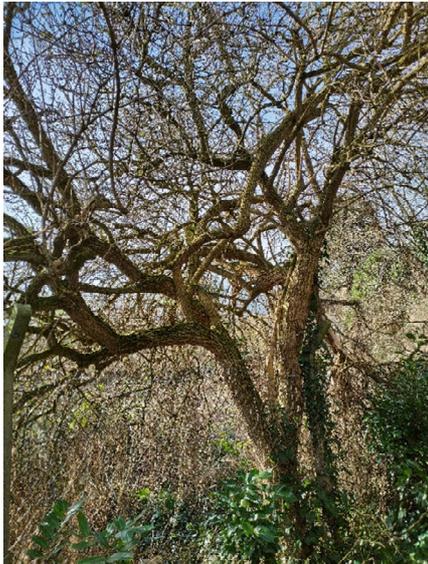


Photo 3: Stem of T3 from north.



Photo 4: T4 and T5 from north west.



Photo 5: T4 and T5 from north east.



Photo 6: T4 from south east.

## 4. Arboricultural Impact Assessment

### 4.1 Proposed New Development

4.1.1 It is proposed to demolish the existing building on site and build a new residential development with associated access, parking, landscaping and facilities. The development proposals have been provided by my client and inform this arboricultural impact assessment and the Tree Impacts Plan at Appendix 6.

### 4.2 Direct Impacts

4.2.1 From assessing the new development proposals, no trees or groups will require removal to facilitate the development.

4.2.2 2 trees will require pruning works to facilitate the development – these are T4 and T5.

4.2.3 The crowns of T4 and T5 both overhang into the footprint of the proposed garage. Crown lift T4 and T5 by 1 – 2m and crown reduce by 2m to facilitate the development. Do not prune beyond the boundary.

### 4.3 Indirect Impacts

4.3.1 The tree Root Protection Area (RPA) detailed on the Tree Plans at Appendices 5 and 6, has been used as a layout design tool, to inform on the area around a tree where the protection of the roots and soil structure is treated as a priority.

4.3.2 Potentially damaging activities are proposed in the vicinity of the retained trees T2 – T5. The demolition of the existing building will require care, to avoid damaging the crowns of T2 – T5. The demolition works should not adversely impact on the health or future condition of the trees provided the demolition is undertaken from the north and east, inwards from within the footprint of the existing building (often referred to as “top down, pull back”), with care taken not to damage the overhanging crowns of T3, T4 and T5.

4.3.3 Potentially damaging activities are proposed in the vicinity of retained trees. The new development encroaches close to and into the edge of the RPA’s of T3, T4 and T5. Construction within the RPA can have negative impacts on tree roots. However, the encroachment is minor, and the extent of roots in the area has likely been limited by existing hard standing and buildings on site. As such, it is unlikely that significant roots will be within these areas and the retained tree should remain largely unaffected by the works, provided care is taken during construction.

- 4.3.4 New landscaping is proposed that encroaches into the edge of the RPA's of T2, T3, T4 and T5. The construction of hard surfaces within the RPA can have negative impacts on tree roots. However, the extent of roots in the area has likely been limited by existing hard standing and buildings on site. As such, it is unlikely that significant roots will be within these areas and the retained tree should remain largely unaffected by the works, provided care is taken during construction.
- 4.3.5 The design of the new development has considered the trees crown position in relation to the development. Some shade from trees may be beneficial. In particular, deciduous trees give shade in summer but allow access to sunlight in winter. However, the design proposals avoid excessive shading, and give adequate provision for future tree growth.
- 4.3.6 All the retained trees have been assessed as suitable for retention in terms of BS5837 (2012) section 5 "Proximity of structures to trees." The retained trees will not cause unreasonable inconvenience or nuisance issues, leading to associated pressures for felling or excessive pruning. The layout allows sufficient space to enable the retained trees to grow to maturity without significantly adversely affecting the amenity of the new development
- 4.3.7 The buildability of the proposed development has been assessed in terms of access, adequate working space and provision for the storage of materials, including topsoil, in relation to the trees.

#### **4.4 Suitable Mitigation**

- 4.4.1 The development of the site provides an excellent opportunity to undertake new tree planting throughout the site as part of a soft landscaping scheme. As such, suitable new tree planting has the potential to mitigate for the required tree removals and, in the longer term, has the potential to improve the sites tree cover.

#### **4.5 Protection of the Retained Trees**

- 4.5.1 The retained trees will require protection by fencing in accordance with BS 5837: 2012, during the development phase.
- 4.5.2 An associated Arboricultural Method Statement, detailing protective fencing specifications and construction methods close to the retained trees has been provided.

## 5. Signature

I trust this report provides all the required information.

Signed



.....  
**Adam Winson**, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, ACIEEM

6<sup>th</sup> March 2024

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# Appendices

**Appendix 1: Authors Qualifications and Experience**

**Appendix 2: Survey Methodology and Limitations**

**Appendix 3: Explanation of Tree Descriptions**

**Appendix 4: Tree Data**

**Appendix 5: Tree Constraints Plan**

**Appendix 6: Tree Impacts Plan**

## Appendix 1: Authors Qualifications & Experience

### **Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, ACIEEM, QTRA Registered**

Adam is the company Director and Principal Consultant. He has a mix of the highest-level academic qualifications and relevant work experience. He has worked within the tree care profession for over 20 years and was awarded an MSc in Arboriculture and Urban Forestry, with distinction. Adam is a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters, a Professional Member of the Arboricultural Association and he has original research published by the UK Forestry Commission. His work ranges from individual expert tree inspections to managing trees on major infrastructure projects. His work often involves trees with preservation orders or litigation, and he has appeared as a tree expert, at planning appeal hearings up to the crown court. Adam also regularly undertakes locum Tree Officer work for several Local Planning Authorities.

### **James Brown, BSc (Hons) Arboriculture, MArborA, PTI (Lantra), QTRA Registered**

James is a highly experienced and qualified Arboricultural Consultant. He has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Foresters student award. He is a Professional Member of the Arboricultural Association, an Associate of the Institute of Chartered Foresters, and he is working towards becoming a Chartered Arboriculturist. James joined AWA in 2016, he has many years' experience as an Arboricultural Consultant, he previously worked in Europe's largest container tree nursery and he has experience of local authority Tree Officer work.

### **James Godfrey, BA (Hons), FdSc Arboriculture and Tree Management, TechArborA, PTI (Lantra), QTRA Registered**

James has had extensive arboricultural experience working as an arborist within the public and private sector. While working at AWA, James completed his FdSc in Arboriculture and Tree Management, graduating with a distinction and was also awarded for achieving the highest overall mark in his year. James has used his arboricultural knowledge to inform and carry out accurate tree surveys and produce detailed reports that aim to balance appropriate tree retention with the requirements of landowners.

### **Joe Thomas, MSci Biology, Award L4 Arboriculture, TechArborA, QTRA Registered**

Joe achieved a first class degree in Biology with an integrated Masters (MSci) from the University of Sheffield. Additionally, he has a Level 4 Award in Arboriculture. Joe joined AWA after an Urban Forestry role with the Sheffield and Rotherham Wildlife Trust and Sheffield City Council, where he gained a variety of experience in different aspects of the arboriculture sector.

### **Lucy Garbutt, MSc Animal Behaviour, BSc (Hons) Biology, CIEEM membership**

Lucy graduated with a masters degree in Animal Behaviour from the UK's highest rated university, St Andrews of Scotland, immediately following the completion of her BSc degree in Biology from Lancaster University. Lucy has experience in botany and plant science and moved into arboriculture after previous experience of protected species and botanical surveys with a large environmental consulting company.

### **Sophie Beckerman, BA (Hons), Dip Arboriculture Level 4, TechArborA**

Sophie has more than 10 years' experience as an arborist, working for a variety of private companies as well as undertaking tree management with Sheffield City Council Ranger Service and The Wildlife Trust. Her expertise in arboriculture is demonstrated in the practical NPTC qualifications gained, and her excellent knowledge is reflected in the L4 diploma in Arboriculture, which she completed while working. Her roles as a climbing arborist and team leader included estimating for jobs and project management, supervising tree contracting teams - ensuring that work is carried out safely and efficiently and that health and safety standards are adhered to, and risk assessments are carried out.

## Appendix 2: Survey Methodology and Limitations

The survey was undertaken in accordance with British Standard 5837:2012 *Trees in relation to design, demolition and construction – Recommendations*. The trees were assessed objectively and without reference to any proposed site layout. The trees were surveyed from the ground using ‘Visual Tree Assessment’ (VTA) methodology. VTA is appropriate and is endorsed by industry guidance. It is used by arboriculturists to evaluate the structural integrity of a tree, relying on observation of trees biomechanical and physiological features. Measurements are obtained using a diameter tape, clinometer, laser distometer and loggers tape. Where this is not practical measurements are estimated. Tree groups have been identified in instances as defined in BS 5837:2012. Shrubs and insignificant trees may have been omitted from the survey.

This report represents a BS 5837:2012 tree survey and should not be accepted as a detailed tree safety inspection report; however, tree related hazards are recorded and commented upon where observed, yet no guarantee can be given as to the absolute safety or otherwise of any individual tree. All recommended tree work must be to BS 3998:2010 - ‘*Tree Work: Recommendations*’.

The findings and recommendations contained within this report are valid for a period of twelve months from the date of survey. The author shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with these guidelines and terms.

## Appendix 3: Explanation of Tree Descriptions

**HEIGHT** of the tree is measured from the stem base in metres. Where the ground has a significant slope the higher ground is selected.

**CROWN HEIGHT** is an indication of the average height at which the crown begins.

**STEM DIAMETER** is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; the diameter is measured close to ground level or else a combined stem diameter is calculated.

**CROWN SPREAD** is measured from the centre of the stem base to the tips of the branches in all four cardinal points.

**AGE CLASS** of the tree is described as young, semi-mature, early-mature, mature, or over-mature.

**PHYSIOLOGICAL CONDITION** is classed as good, fair, poor, or dead. This is an indication of the health of the tree and takes into account vigour, presence of disease and dieback.

**STRUCTURAL CONDITION** is classed as good, fair or poor. This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions.

**LIFE EXPECTANCY** is classed as; less than 10 years, 10-20 years, 20-40 years, or more than 40 years. This is an indication of the number of years before removal of the tree is likely to be required.

### Retention Categories

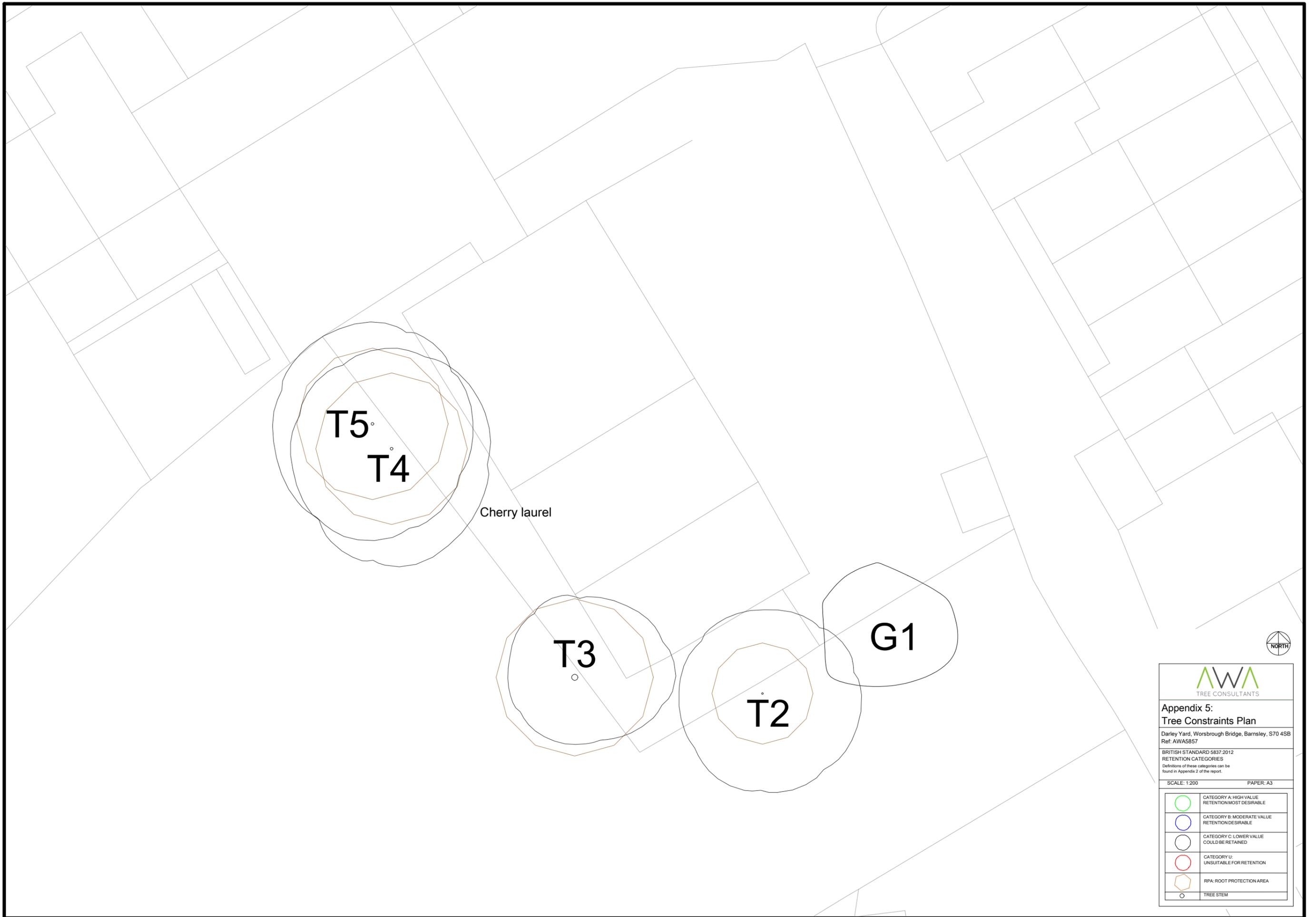
**A (marked in green on Appendix 5) = retention most desirable.** These trees are of very high quality and value with a good life expectancy.

**B (marked in blue on Appendix 5) = retention desirable.** These trees are of good quality and value with a significant life expectancy.

**C (marked in grey on Appendix 5) = trees which could be retained.** These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

**U (marked in red on Appendix 5) = trees unsuitable for retention.** These trees are in such a condition that any existing value would be lost within 10 years.

Tree ID	Tree Species		Maturity	Measurements				Crown (m)				Tree Condition				Value		Management				
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Estimated	Crown height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
G1	Willow	<i>Salix sp.</i>	Semi-mature	3	10+	70 avg.	Yes	1	3	3	3	3	Self set adjacent willow saplings group beyond boundary fencing				Fair	Fair	20 to 40 yrs	Low	C	No works required to facilitate the development.
T2	Willow	<i>Salix sp.</i>	Early-mature	6	6	100 avg.	Yes	1.5	5	6	6	5	Limited access around base	Mutiple stemmed at base. Vertical. Tight unions and partially included bark.	Overhanging into site. Old pruning wounds.	Self set Willow situated beyond boundary fencing. Overhanging existing building on site	Fair	Fair	20 to 40 yrs	Low	C	No works required to facilitate the development.
T3	Elder	<i>Sambucus nigra</i>	Early-mature	6	4	250, 200, 200, 50	No	1	5	6	4	4	Limited access around base	Mutiple stemmed at base. Vertical. Tight unions and partially included bark.	Moderate deadwood in the crown. Moderate dieback. Overhanging into site.	Multiple stemmed Elder with moderate deadwood and dieback in crown. Some stems in contact with fence. Self set beyond boundary fencing and overhanging existing property.	Fair	Poor	10 to 20 yrs	Low	C	No works required to facilitate the development.
T4	Willow	<i>Salix sp.</i>	Early-mature	15	6	150 avg.	Yes	4	6	6	7	6	Limited access around base	Mutiple stemmed at base. Vertical. Tight unions and partially included bark. Heavily ivy covered.	Minor deadwood. Heavily ivy covered.	Self set adjacent Willow. Stem and crown are heavily ivy covered. Access is limited.	Fair	Fair	20 to 40 yrs	Low	C	Pruning works required to facilitate the development. Crown lift by 1 - 2m and reduce by 2m to facilitate the proposed building.
T5	Willow	<i>Salix sp.</i>	Early-mature	15	6	150 avg.	Yes	4	6	6	7	6	Limited access around base	Mutiple stemmed at base. Vertical. Tight unions and partially included bark. Heavily ivy covered.	Minor deadwood. Heavily ivy covered.	Self set adjacent Willow. Stem and crown are heavily ivy covered. Access is limited.	Fair	Fair	20 to 40 yrs	Low	C	Pruning works required to facilitate the development. Crown lift by 1 - 2m and reduce by 2m to facilitate the proposed building.



T5

T4

Cherry laurel

T3

T2

G1

**AWA**  
TREE CONSULTANTS

**Appendix 5:  
Tree Constraints Plan**

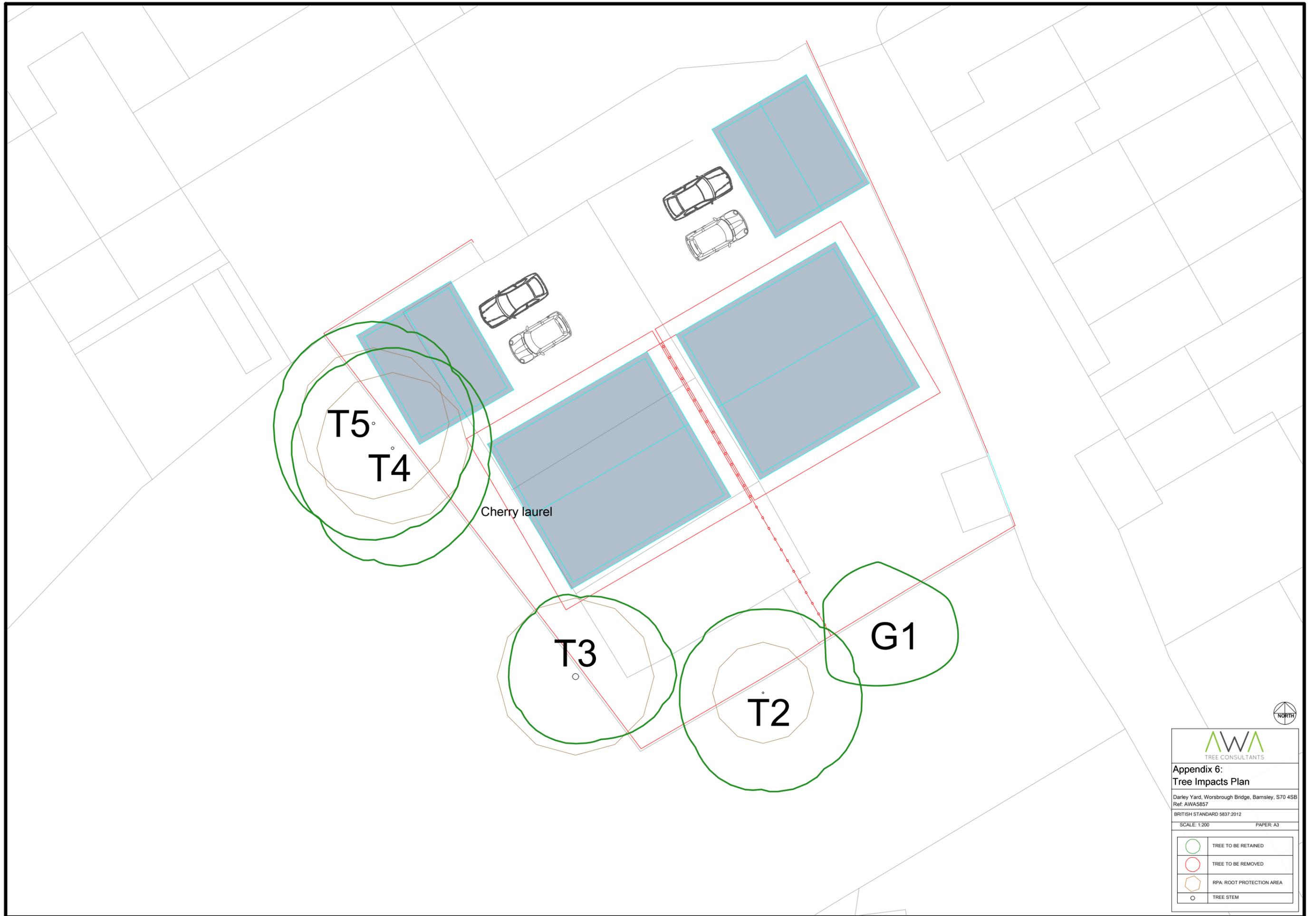
Darley Yard, Worsbrough Bridge, Barnsley, S70 4SB  
Ref: AWA5857

BRITISH STANDARD 5837:2012  
RETENTION CATEGORIES  
Definitions of these categories can be found in Appendix 2 of the report.

SCALE: 1:200 PAPER: A3

	CATEGORY A: HIGH VALUE RETENTION MOST DESIRABLE
	CATEGORY B: MODERATE VALUE RETENTION DESIRABLE
	CATEGORY C: LOWER VALUE COULD BE RETAINED
	CATEGORY U: UNSUITABLE FOR RETENTION
	RPA: ROOT PROTECTION AREA
	TREE STEM





  
 TREE CONSULTANTS

**Appendix 6:**  
**Tree Impacts Plan**

Darley Yard, Worsbrough Bridge, Bamsley, S70 4SB  
 Ref: AWA5857

BRITISH STANDARD 5837:2012

SCALE: 1:200      PAPER: A3

	TREE TO BE RETAINED
	TREE TO BE REMOVED
	RPA: ROOT PROTECTION AREA
	TREE STEM