



# **ARBORICULTURAL REPORT**

## **& Impact Assessment**

**to BS 5837:2012 at:**

***4 Bence Farm Court,  
Barnsley Road,  
Darton,  
Barnsley,  
South Yorkshire  
S75 5NT***

Prepared for:  
***Paul Woodcock***

Date: *July 2021*

Reference: *AWA3908*



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# 1. Introduction

## 1.1 Instructions and Brief

- 1.1.1 We were instructed by Paul Woodcock 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 July 2021.
- 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 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, Principle and Director of AWA Tree Consultants Ltd. The tree survey data collection was carried out by Mr James Brown BSc (Hons) Arboriculture, MArborA, PTI (Lantra), Arboriculturist at AWA Tree Consultants Ltd.
- 1.2.6 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 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 Barnsley Road in Darton in the Metropolitan Borough of Barnsley, South Yorkshire and comprises a residential property with garden.
- 2.1.2 The approximate area of the survey is highlighted in the (2021 Google Earth) image below:



## 3. The Trees

### 3.1 Legal

- 3.1.1 An online search was undertaken with Barnsley Metropolitan Borough Council on the 29<sup>th</sup> of July 2021 to check if trees at the site are protected by a Tree Preservation Order (TPO) or if the site is within a Conservation Area. As of this date no trees within the site are legally protected.
- 3.1.1 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).
- 3.1.2 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.
- 3.1.3 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 7 items of woody vegetation, comprised of 4 individual trees, 2 tree groups and 1 hedge.
- 3.2.2 Of the surveyed trees, tree groups and hedge: 3 trees and 2 tree groups are retention category 'C' and 1 tree and 1 hedge are retention category 'U' (explanatory details regarding the retention categories are included at Appendix 3).
- 3.2.3 Full details of the surveyed trees, tree groups and hedge are provided in the attached tree data schedule at Appendix 4. General comments are provided below:
- 3.2.4 G1 forms an unmanaged Cypress hedge bordering the site's western boundary. A trench appears to have been recently dug to the east of G1, resulting in root damage and root loss and as such G1 likely has limited future prospects regardless of development at the site and would be unsuitable to retain close to a new development at the site. A stone wall is situated to the west of the hedge, between the hedge and the roadside, so the hedge provides little screening value.
- 3.2.5 T2, T3, T5 and T7 are semi mature individual trees. The trees provide some

amenity within the site but are of low value and provide little amenity to the surrounding area. The trench dug to the west of T2, between G1 and T2, has resulted in root damage and root loss, and the tree likely has limited future prospects regardless of development at the site and would be unsuitable to retain close to a new development at the site. There appears to have been ground disturbance and soil compaction around the base of T5 and at the base of T7 to the south and west, and this may have some negative impact on the trees in the long term.

- 3.2.6 G4 and G6 form low value young to semi mature shrubby tree groups. Access to G4 was limited and so the tree group was only given a cursory inspection.
- 3.2.7 The tree Root Protection Area (RPA) detailed on the Tree Constraints Plan at Appendix 5 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.
- 3.2.8 Some lower value tree groups and hedges 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.
- 3.2.9 The 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.

### 3.3 Photographs



Photo 1: G1 and T3 from east



Photo 2: T2 from north east



Photo 3: G4 from north east



Photo 4: T5 from south east



Photo 5: G6 from west



Photo 6: T7 from north west

## 4. Arboricultural Impact Assessment

### 4.1 Proposed New Development

4.1.1 It is proposed to build a new extension to the existing residential property, with associated landscaping. 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, 3 trees, 1 tree group and 1 hedge require removal to facilitate the proposed development as they are situated in the footprint of the development or their retention and protection throughout the development is not suitable.

4.2.2 The trees, tree group and hedge that require removal to facilitate the proposed development are G1 to T5.

4.2.3 The trees, tree group and hedge requiring removal are all of low value, provide little amenity to the surrounding area or screening to the site and their removal will have little negative impact.

4.2.4 G1 and T2 likely have limited future prospects regardless of the proposed development at the site.

### 4.3 Indirect Impacts

4.3.1 The tree Root Protection Area (RPA) detailed on the Tree Plans at Appendix 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 The proposed new development will have no significant indirect impacts on the trees to be retained.

4.3.3 If construction access is required within the RPA of retained tree T7, ground protection should be used within the RPA to avoid compaction of the soil so that tree root functions remain unimpaired. The ground protection should be capable of supporting any traffic within the RPA without being distorted or causing compaction of the underlying soil.

4.3.4 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.

## 5. Signature

I trust this report provides all the required information.

Signed



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

**30<sup>th</sup> July 2021**

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Chartered Foresters  
Registered Consultant

# 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

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

Adam is the company Director and Principle 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 has original research published by the UK Forestry Commission. His work ranges from individual expert tree inspections to managing trees on major multimillion pound housing developments and 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.

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

James has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Forester's Student award. He is a Professional Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters. James joined AWA in 2016, after previously working in Europe's largest tree nursery and has experience of Local Authority tree officer work. His main work consists of tree surveys for development projects and preparing Tree Protection Schemes to BS 5837:2012.

### **Dr Felicity Stout Ph.D, MA, BA (Hons), Cert Ed (Forestry), TechArborA, PTI (Lantra)**

Felicity has worked in the tree care profession for the last 10 years. She has a Certificate in Higher Education in Forestry, with a focus on Urban Forestry. She has practical arboricultural contractor experience and is a qualified and experienced Social Forestry practitioner. Felicity has a PhD in History, with a particular interest in the history of woodland and tree management and has published in The Arboricultural Journal on this subject.

### **Mr Tom Readman Cert Arb L3, Level 4 Forestry and Arboriculture, Valid Tree Risk-Benefit Validator**

Tom joined AWA from his previous role as a tree risk surveyor with Harrogate Borough Council, where he undertook tree risk surveys at a range of sites and prescribed suitable works. Tom also has extensive previous experience as a climbing arborist. Tom achieved at Distinction Star, and was recognised as the student of the year, in the Extended Diploma in Forestry and Arboriculture and is now completing a Foundation Degree in Arboriculture, while working at AWA. Tom's work focuses on tree risk surveys and accurate tree data collection for development projects to BS 5837:2012.

### **Mr James Godfrey BA (Hons), Cert Arb L3, Level 4 Forestry and Arboriculture, TechArborA**

James has extensive arboricultural experience working as a team leader in both the public and private sector. Achieving a Distinction Star in the Extended Diploma in Forestry and Arboriculture allowed James to utilise this knowledge in order to inform the maintenance and wellbeing of trees across the UK over the course of his career. During his time at Darlington Borough Council, James was responsible for on-site assessment and advising of remedial works for council owned trees. Currently, James is completing a Foundation Degree in Arboriculture and Tree Management, while working at AWA.

### **Mr David Miller BA (Hons), PGCE education, Dip Arboriculture Level 4**

David joined AWA after having managed his own tree care team for 8 years and gained a wealth of experience in the tree care industry. Prior to this David spent 10 years working in secondary mainstream and special education. David has also travelled worldwide, mainly trekking and running. His main work at AWA consists of tree surveys for development projects and preparing Tree Protection Schemes to BS 5837:2012.

## Appendix 2: Survey Methodology and Limitations of Report

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.

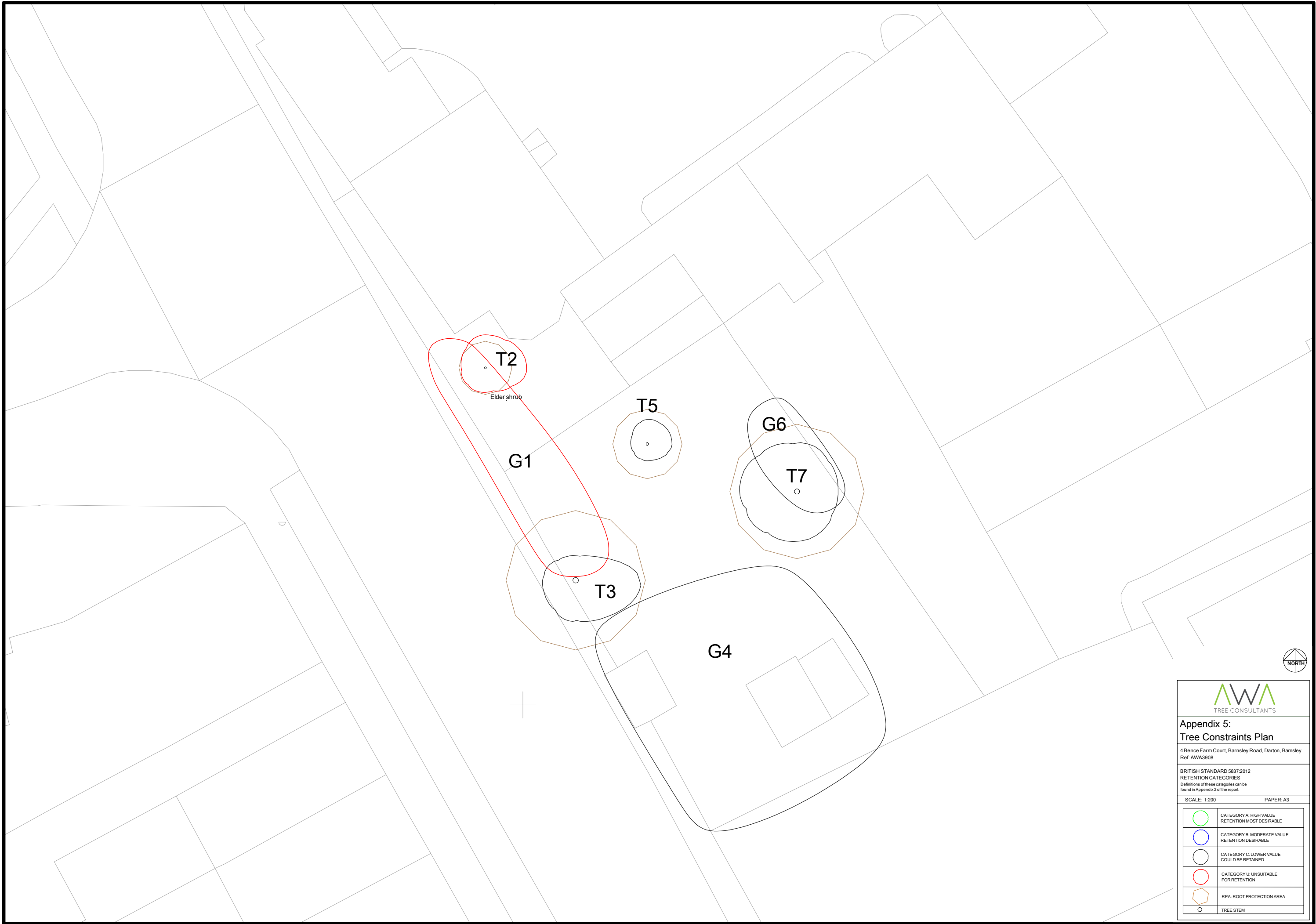
**B (marked in blue on Appendix 5) = retention desirable.** These trees are of good quality and value with a significant life expectancy.

**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				Physiological	Structural	Life Expectancy	Value		Management	
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown				Comments	Amenity		Category
G1	Cypress	<i>Cupressus sp.</i>	Semi-mature	7	10	100	No	0.5	See plan				Soil erosion. Exposed roots. Trenching. Root damage. Root loss	Single and Multiple stemmed. Tight unions. Bark damage	Minor deadwood	Unmanaged Cypress hedge. 1m stem spacings. Trenching at base to east with root damage and root loss. Limited future prospects.	Fair	Fair	<10 yrs	Low	U	Removal required to facilitate development
T2	Plum	<i>Prunus sp.</i>	Semi-mature	6.5	1	130	No	1.5	2	2.5	1.5	1.5	Soil erosion. Exposed roots. Trenching. Root damage. Root loss	Single stemmed. Vertical. Old pruning wounds	Old pruning wounds. Minor deadwood. Previously topped	Trenching at base to west with root damage and root loss. Likely previously topped at approximately 2.5m. Limited future prospects.	Fair	Fair	<10 yrs	Low	U	Removal required to facilitate development
T3	Cypress	<i>Cupressus sp.</i>	Semi-mature	8	4	120, 150, 200, 200	No	0.5	1.5	4	2.5	2	No visual defects	Multiple stemmed at 1m. Vertical. Tight unions	Minor deadwood	Larger tree at end of G1	Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
G4	Cherry Laurel. Elder. Cypress. Holly. Privet. Garrya.	<i>Prunus sp.</i> <i>Sambucus sp.</i> <i>Cupressus sp.</i> <i>Ilex sp.</i> <i>Ligustrum sp.</i> <i>Garrya sp.</i>	Semi-mature	6	10	50	No	0	See plan				No visual defects	Single and Multiple stemmed. Tight unions. Bark damage	Minor deadwood	Shrubby tree group. Limited access.	Good	Good	10 to 20 yrs	Low	C	Removal required to facilitate development
T5	Cherry	<i>Prunus sp.</i>	Semi-mature	8.5	1	170	No	1	1.5	1.5	1	1	Soil compaction. Ground disturbance	Single stemmed. Vertical. Old pruning wounds	Minor deadwood	Old pruning wound at base from removed stem. Extensive ground disturbance and soil compaction around base.	Good	Good	10 to 20 yrs	Low	C	Removal required to facilitate development

Tree ID	Tree Species		Maturity	Measurements				Crown (m)				Tree Condition				Value		Management				
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
G6	Elder. Cypress. Juniper. Holly. Maple.	<i>Sambucus sp.</i> <i>Cupressus sp.</i> <i>Juniperus sp.</i> <i>Ilex sp.</i> <i>Acer sp.</i>	Young	6	10	60	No	0.5	See plan				No visual defects	Single and Multiple stemmed. Tight unions. Bark damage	Minor deadwood	Shrubby tree group	Good	Good	10 to 20 yrs	Low	C	No works required
T7	Birch	<i>Betula pendula</i>	Semi-mature	1	330	No	1.5	3	2.5	3	3.5	Soil compaction. Ground disturbance. Exposed roots	Single stemmed. Slight lean north. Old pruning wounds. Stubs. Bark damage	Minor deadwood	Extensive ground disturbance, soil compaction and exposed roots around base to south and west. Screws in stem.	Good	Good	10 to 20 yrs	Low	C	No works required	



**Appendix 5:  
Tree Constraints Plan**

4 Bence Farm Court, Barnsley Road, Darton, Barnsley  
Ref: AWA3908

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



**Appendix 6:**  
**Tree Impacts Plan**  
 4 Bence Farm Court, Barnsley Road, Darton, Barnsley  
 Ref: AWA3908

BRITISH STANDARD 5837:2012  
 SCALE: 1:200 PAPER: A3

	TREE/TREE GROUP/HEDGE TO BE RETAINED
	TREE/TREE GROUP/HEDGE TO BE REMOVED
	RPA: ROOT PROTECTION AREA
	TREE STEM