TREE CONSULTANTS

ARBORICULTURAL REPORT
& Impact Assessment
to BS 5837:2012 at:

232 Higham Common Road,
Barnsley,
S75 1PF

Prepared for:
WhiteAgus Partnership

Date: *January 2022*

Reference: *AWA4076*

Institute of Chartered Foresters
Registered Consultant

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1. Introduction

1.1 Instructions and Brief

1.1.1 We were instructed by WhiteAgus Partnership 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 December 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 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, Principle and Director of AWA Tree Consultants Ltd. The tree survey data collection was carried out by Mr David Miller BA (Hons), PGCE (Education) L4 Dip. Arboriculture, 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 in Higham, a village in the Metropolitan Borough of Barnsley.

2.1.2 The site comprises a residential property with front and rear garden. To the north, east, south and west are further residential properties and gardens.

2.1.3 The approximate area of the survey is highlighted in the image below (Google Earth, 2020):

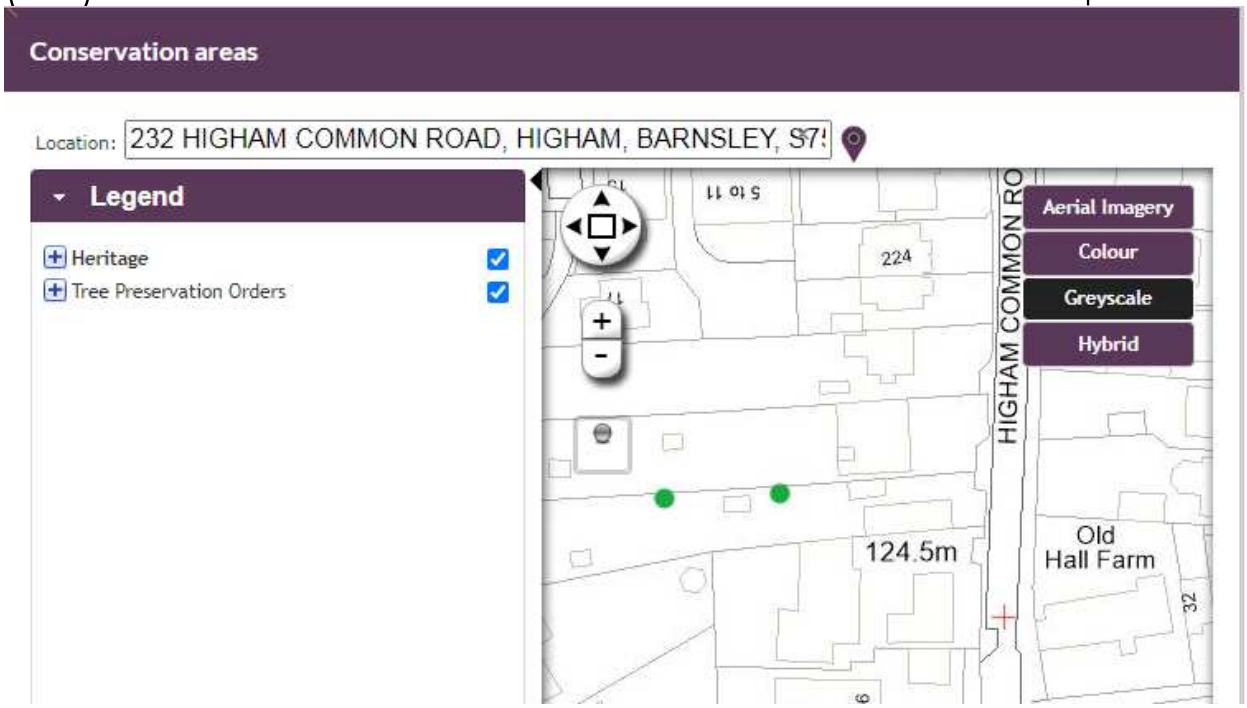


3. The Trees

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 has been carried out with Barnsley Metropolitan Borough Council on 20/12/21 to ascertain whether any trees at the site are located within a Conservation area or are protected by a Tree Preservation Order (TPO). The site contains one TPO tree as shown in the map below.



3.1.3 Before carrying out any works to protected trees the permission of the local planning authority must be sought. There are large potential penalties for illegally carrying out work to protected trees. Statutory permission is not required for the removal of deadwood.

3.1.4 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.

3.1.5 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.

3.1.6 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 3 individual trees and 2 groups of trees or shrubs or hedges.

3.2.2 Of the surveyed trees: 1 tree is retention category 'B', and the remaining 4 trees and groups are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).

3.2.3 The significant tree cover within the site consists mainly of a single large boundary tree and several low value trees and boundary groups.

3.2.4 The central area of the site contains little of arboricultural significance, consisting of a lawn area.

3.2.5 Species diversity at the site is limited. Ash, Cherry, Holly, Privet and Sycamore are present on site.

3.2.6 Most of the trees are early mature with a single mature tree.

3.2.7 The site's most significant tree is T4, a mature Ash on the north boundary of the site. T4 is subject to a Tree Preservation Order (see section 3.1). The tree has multiple minor structural defects, and minor damage from past pruning and historic branch losses. However, T4 is a large old tree providing good arboricultural and landscape value.

3.2.8 Many of the Ash trees in the local area show symptoms consistent with Chalara or Ash dieback disease. Once a tree is infected, the disease is usually fatal, either directly or indirectly. No obvious symptoms of Ash dieback were noted to T4 at the time of survey, and the tree may continue to provide landscape and wildlife benefits for some time, however, its long-term prospects are likely to be limited because of Ash dieback disease.

3.2.9 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.

3.2.10 Some trees were inaccessible (as detailed in Appendix 4). In such cases measurements were estimated and the condition values are indicative only.

3.2.11 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.

3.2.12 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.

3.2.13 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: T1 with epicormic regrowth from lopped top and overall poor health



Photo 2: Adjacent tree T2



Photo 3: The rear garden showing T2, T4 and G5 and an adjacent Oak.



Photo 4: Detail of T4 stem showing occasional large deadwood



Photo 5: T4 showing crown and pruned overhanging branches

4. Arboricultural Impact Assessment

4.1 Proposed New Development

4.1.1 It is proposed to build a new extension to an existing residential dwelling. 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, 1 tree will require removal as it is situated in the footprint of the development.

4.2.2 The tree that requires removal is T1. This tree has been identified in red on the attached Tree Plan and detailed at Appendix 4.

4.2.3 The tree that requires removal is lower value, retention category 'C'. T1 is a semi-mature Sycamore with poor past management and pruning wounds that limit its value and prospects.

4.2.4 Due to the low value of the tree to be removed the removal will have only a negligible negative arboricultural impact.

4.2.5 The retention of the remaining trees including T4 on the northern boundary will minimise the loss of visual amenity from the surrounding areas. The trees selected for retention will ensure the continuation of green infrastructure on the site, provide visual amenity and complement the new development.

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 Potentially damaging activities are proposed in the vicinity of retained trees. The new development encroaches into the RPA of T4. Construction within the RPA can have negative impacts on tree roots. However, the proposed new extension does not impinge beyond the footprint of existing foundations and hard surfaces, and the detailed RPA for the tree is likely to be a slightly exaggerated representation of the trees actual rooting area. As such, it is unlikely that significant roots will be within these areas.

4.3.3 Provided care is taken during construction, within the RPA of T4, the

retained tree should remain largely unaffected by the works.

4.3.4 The design of the new development has considered the trees crown position in relation to the new extension. 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.

4.3.5 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 Protection of the Retained Trees

4.4.1 The retained trees will require protection by fencing in accordance with BS 5837: 2012, during the development phase.

4.4.2 If required by the Local Planning Authority, an associated Arboricultural Method Statement, detailing protective fencing specifications and construction methods close to the retained trees can be provided.

5. Signature

I trust this report provides all the required information.

Signed



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

4th January 2022

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Appendices

Appendix 1: Authors Qualifications and Experience
Appendix 2: Survey Methodology and Limitations of Report
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 *FdSc Arboriculture, Cert Arb L3, TechArborA, 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 a Distinction in the Foundation Degree in Arboriculture, while working at AWA, and has previously achieved Distinction Star, and was recognised as the student of the year, in the Extended Diploma in Forestry and Arboriculture. 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.

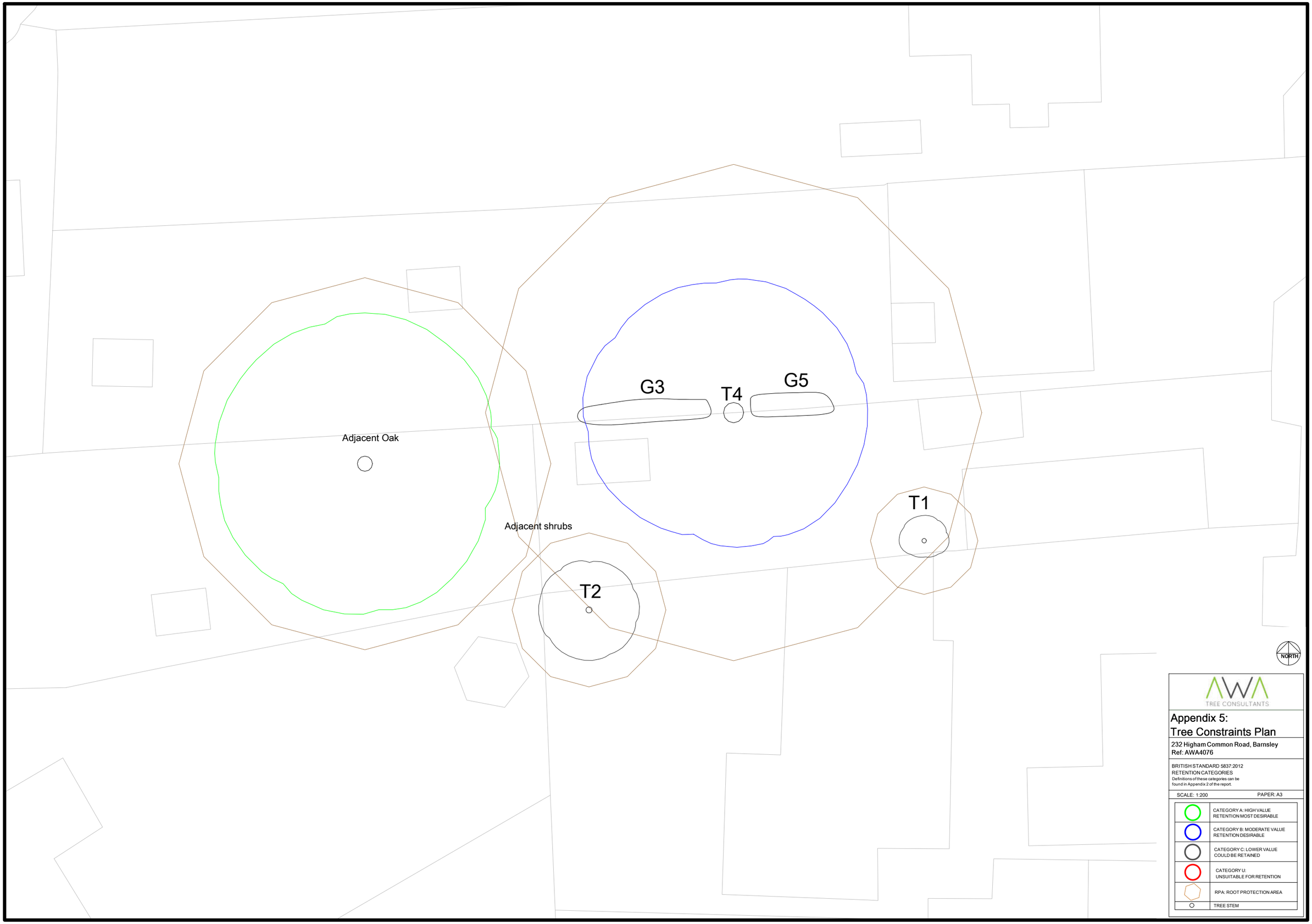
C (marked in grey on Appendix 5) = trees which could be retained. These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

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

TREE DATA

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T1	Sycamore	*Acer pseudoplatanus*	Semi-mature	5	1	260	No	2	1.5	1.5	1	1.5	No visual defects	Single stemmed. Vertical. Epicormic growths. Old pruning wounds. Stubs. Tight union. Minor cavities	50% dead / absent. Low vigour. Old pruning wounds. Minor deadwood	Small pollarded tree. Limited long-term value.	Poor	Poor	10 to 20 yrs	Low	C	Removal required to facilitate proposed development
T2	Cherry	*Prunus avium*	Early-mature	10	2	300, 220	Yes	3	3	3	3	3	Limited access around base	Twin stemmed at base. Vertical. Epicormic growths. Old pruning wounds. Stubs	50% dead / absent. Low vigour. Old pruning wounds	Adjacent tree. Access prevented detailed inspection. Lopped crown. Epicormic crown regrowth.	Fair	Fair	10 to 20 yrs	Low	C	No works required
G3	Holly	*Ilex aquifolium*	Early-mature	4	10+	150 avg.	Yes	0	See plan				Adjacent linear group.				Fair	Fair	>40 yrs	Low	C	No works required
T4	Ash	*Fraxinus excelsior*	Mature	20	1	1200	No	7	8	8	8	9	No visual defects	Single stemmed. Vertical. Epicormic growths. Stubs. Old pruning wounds. Bark damage. Minor cavities. Minor decay	Normal. Moderate deadwood. Minor deadwood. Major deadwood. Well developed crown	Large boundary tree. Many minor areas of decay at sites of branch loss.	Good	Fair	20 to 40 yrs	Moderate	B	No works required
G5	Privet	*Ligustrum sp.*	Early-mature	2	10+	100 avg.	Yes	0	See plan				Clipped hedge managed at 2m.				Fair	Fair	20 to 40 yrs	Low	C	No works required

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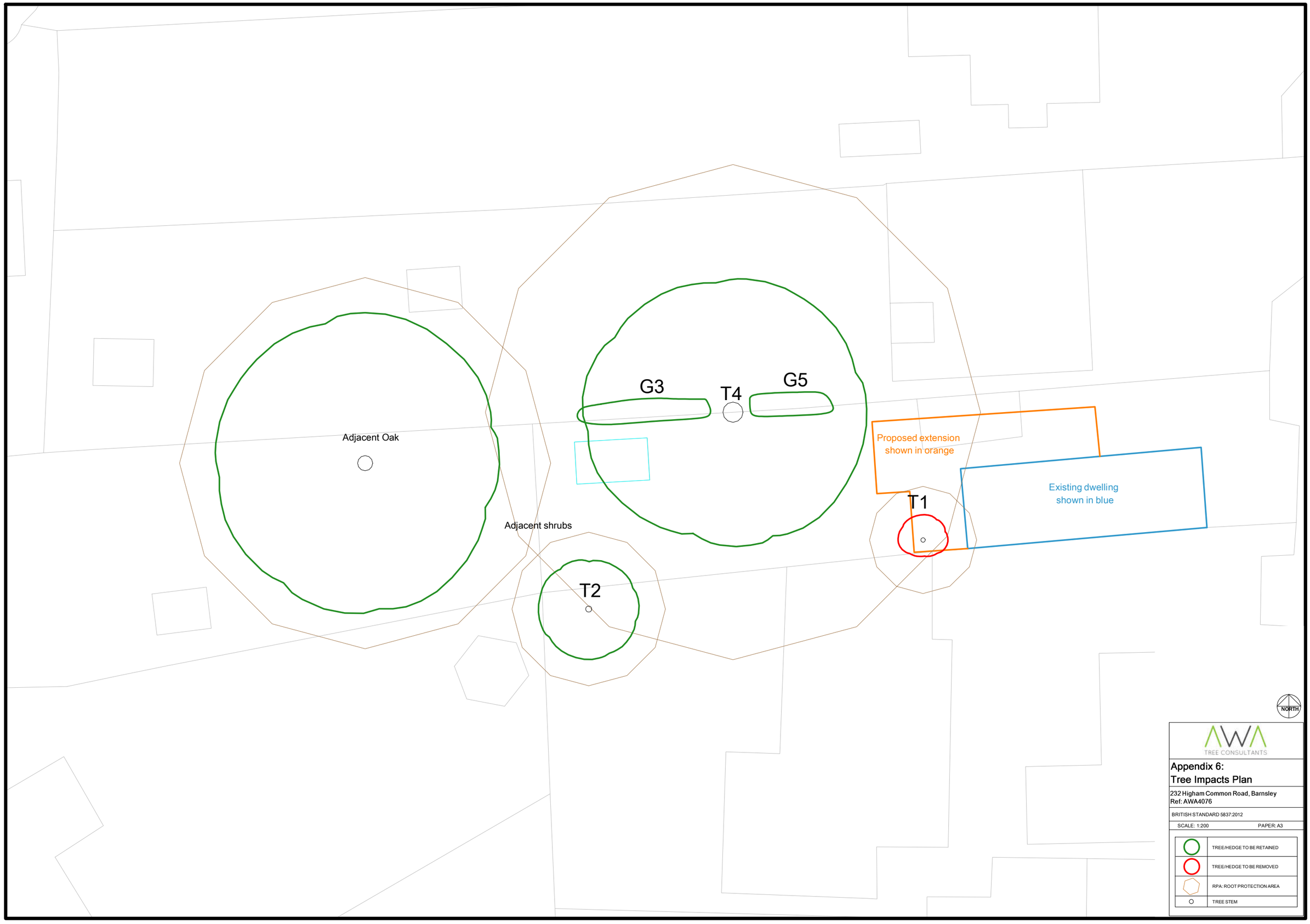
Appendix 5: Tree Constraints Plan

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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



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Appendix 6:
Tree Impacts Plan

232 Higham Common Road, Barnsley
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BRITISH STANDARD 5837:2012

SCALE: 1:200 PAPER: A3

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