



ARBORICULTURAL REPORT

to BS 5837:2012 at:

***73 Park Street,
Wombwell,
Barnsley
S73 0HJ***

Prepared for:
Karl Leatham

Date: *January 2022*

Reference: AWA4190



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1. Introduction

1.1 Instructions and Brief

- 1.1.1 We were instructed by Karl Leatham 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 January 2022.
- 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 Tom Readman FdSc Arboriculture, Cert Arb L3, VALID Tree Risk-Benefit Validator, 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 please refer to the Tree Constraints Plan at **Appendix 5**.

2. The Site

2.1 Location and Description

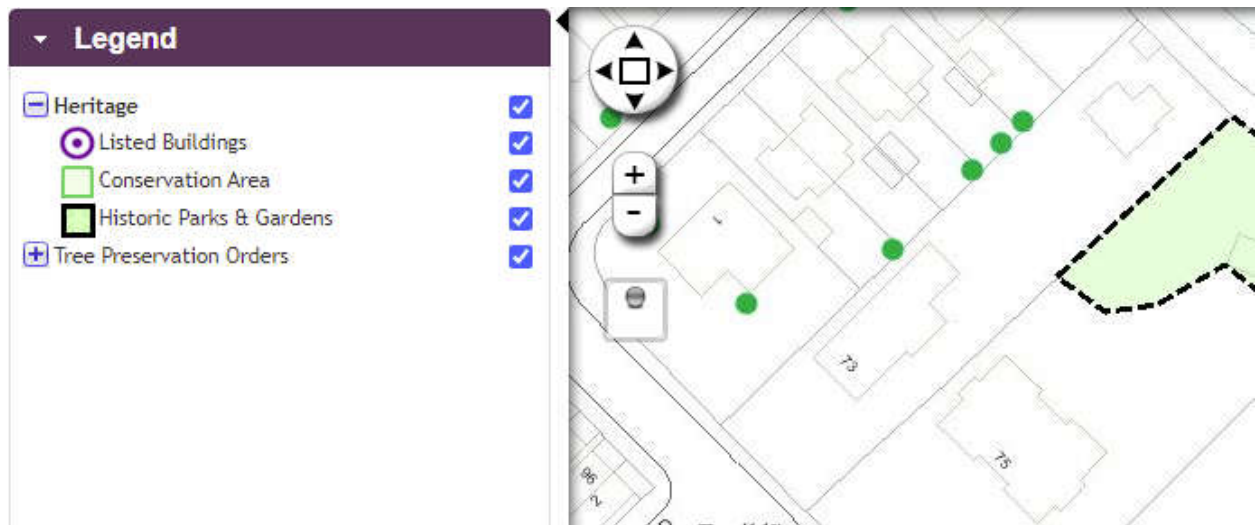
- 2.1.1 The property is located in Wombwell, a town in the Metropolitan District of Barnsley, in South Yorkshire.
- 2.1.2 The surveyed area comprises 73 Park Street, a detached house with front and rear gardens, with an additional bungalow close to the northern boundary. To the north is a disused canal, with woodland along the northern banking. To the east, south and west are neighbouring residences.
- 2.1.3 The approximate area of the survey is highlighted in the image below (Google Earth, 2021):



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 District Council on 27/01/22 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 is not in a Conservation Area, however there are three individual Preservation Orders on the Poplar trees in the neighbouring properties. This is illustrated in the image below (Barnsley Metropolitan District Council, 2022):



- 3.1.3 From the available data, T4 to T6 are protected by a TPO.
- 3.1.4 Before carrying out any works to trees with a TPO, the permission of the local planning authority must be granted. There are large potential penalties for illegally carrying out work to protected trees. Statutory permission is not required for the removal of deadwood.
- 3.1.5 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.

- 3.1.6 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.
- 3.1.7 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 and 3 groups of trees, shrubs or hedges.
- 3.2.2 All surveyed trees are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).
- 3.2.3 Along the north-west boundary of the property, situated in adjacent gardens, are managed hedge G1 and mixed tree and shrub group G3. These groups have low arboricultural value but provide good screening value at the boundary.
- 3.2.4 In the front garden is Ash T2. The tree is regularly managed, with the crown shaped into a neat ball. There are some signs of Ash dieback in the centre of the crown. Once a tree is infected, the disease is usually fatal, either directly or indirectly, which will limit the trees prospects.
- 3.2.5 Situated in the adjacent gardens, to the north-west, are Poplar trees T4 to T6. These are large, mature trees with moderate amenity value in the context of the site. At time of inspection, the trees appeared to be in good condition, with only occasional minor deadwood or hanging branches, and only occasional signs of previous minor branch loss. However, species characteristics of Poplar can lead to increased likelihood or severity of failure compared to other tree species, which can make them unsuitable for retention in built environments.
- 3.2.6 At the northern extent of the property, between the garden and the disused canal, is Willow group G7. Comprised of a mix of young and semi-mature self-set stems, the group has negligible value in the context of the site and wider landscape, being obscured by built structures or other vegetation at all aspects.
- 3.2.7 T4, T5 and T6 have deadwood and hanging branches that should be removed regardless of any new development (as detailed in Appendix 4).
- 3.2.8 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.

- 3.2.9 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.
- 3.2.10 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.
- 3.2.11 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: 73 Park Street, as viewed from the highway to the south



Photo 2: Managed tree and shrub group G3, situated close to the existing garage



Photo 3: The rear garden of the property, with large adjacent Poplars T4 to T6, all with minor deadwood and occasional small hanging branches



Photo 4: Crown of T4, overhanging the existing hard standing parking area

3.4 Arboricultural Development Advice

- 3.4.1 Where suitable, those category 'C' trees and groups with reasonable future prospects (as detailed at Appendix 4) should be retained as part of any new development. However, care should be taken to avoid misplaced tree retention. Attempts to retain too many or unsuitable trees on a site can result in excessive pressure on the trees during demolition or construction work, or post-completion demands for their removal.
- 3.4.2 If required by the development proposals, occasional lower value, retention category 'C' trees and groups could be removed, and replacement planting would largely mitigate their losses.
- 3.4.3 The tree Root Protection Area (RPA), detailed on the Tree Constraints Plan at Appendix 5, should be 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.
- 3.4.4 If construction of new buildings is required within the RPA of retained trees it may be possible to employ special foundation design such as mini/micro pile and suspended beam or a cantilevered foundation.
- 3.4.5 Construction of hard surfaces, for drives and paths, within the RPA can have negative impacts on tree roots. However, the potential negative impacts can often be overcome or minimised by employing a 'no-dig' type construction method with a porous final surface.
- 3.4.6 The design of the new development should consider tree crown positions in relation to any new dwellings. The dappled shade of a tree is more pleasant than the deep shadow of a building, and some shade from trees may be beneficial. In particular, deciduous trees give shade in summer but allow access to sunlight in winter. Whilst either shade or sunlight might be desirable, depending on the potential use of the area affected, the design should avoid unreasonable obstruction of light and should give adequate provision for future tree growth.

3.5 Protection of the Retained Trees

- 3.5.1 The retained trees may require protection by fencing in accordance with BS 5837:2012, during the development phase.
- 3.5.2 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.

4. Signature

I trust this report provides all the required information.

Signed



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

28th 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 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, 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 within the public and private sector. By achieving a Distinction Star in the Extended Diploma in Forestry and Arboriculture, James was able to use his knowledge to inform and carry out appropriate maintenance that ensured the long-term wellbeing of trees across the UK. During his time at Darlington Borough Council, James provided on-site assessment and the management of the remedial works required to ensure safe and suitable retention of trees that provide a multitude of benefits to the urban environment. 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.

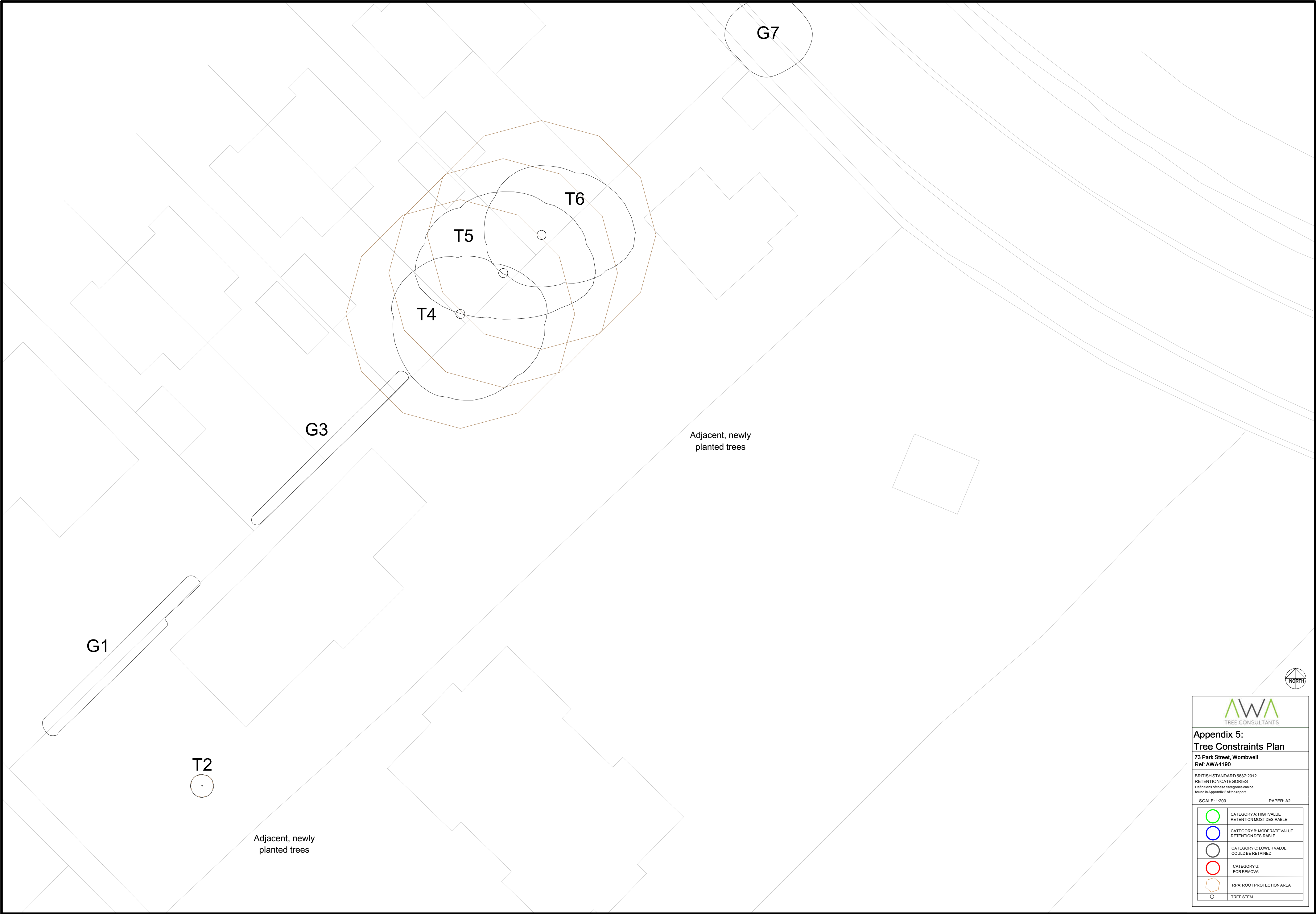
B (marked in blue on Appendix 5) = retention desirable. These trees are of good quality and value with a significant life expectancy.

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 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
G1	Cotoneaster, Cypress, Photinia	Cotoneaster sp., Cupressus sp., Photinia sp.	Semi-mature	2	10+	50 avg	Yes	0.5	See Plan				Managed boundary hedge				Good	Good	>40 yrs	Low	C	No works required in current site context
T2	Ash	Fraxinus excelsior	Young	2.5	2	80	No	1.5	1	1	1	1	No visual defects	Single stemmed, Vertical	Minor dieback	Crown managed as small ball. Early Ash dieback indicators in centre of crown	Fair	Fair	10 to 20 yrs	Low	C	No works required in current site context
G3	Cypress, Dogwood, Elder, Lilac, Maple	Cupressus sp., Cornus sp., Sambucus sp., Syringa sp., Acer sp.	Semi-mature	6	10+	80 avg	Yes	2	See Plan				Access prevented detailed inspection. Adjacent group of trees and tall shrubs. Managed with regular boundary pruning				Good	Fair	20 to 40 yrs	Low	C	No works required in current site context
T4	Poplar	Populus sp.	Mature	26	1	800	Yes	7.5	5	7.5	7.5	6	Limited access around base	Single stemmed, Vertical, Epicormic growths, Natural stubs, Small branch tears	Overhanging into the site, Hanging branches at south aspect, Minor deadwood	Access prevented detailed inspection. Adjacent tree. Bird box at north-east aspect	Good	Fair	20 to 40 yrs	Moderate	C	Remove hanging branches and deadwood, regardless of development
T5	Poplar	Populus sp.	Mature	26	1	800	Yes	7.5	7	8	4	7.5	Limited access around base	Single stemmed, Vertical, Epicormic growths, Natural stubs, Small branch tears	Minor deadwood, Overhanging into the site, Slightly unbalanced	Access prevented detailed inspection. Adjacent tree. Bird box at north-east aspect	Good	Fair	20 to 40 yrs	Moderate	C	Remove deadwood, regardless of development

	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
T6	Poplar	Populus sp.	Mature	26	1	800	Yes	5	6	8	4.5	5	Limited access around base	Single stemmed, Vertical, Ivy covered, Epicormic growths, Natural stubs	Unbalanced, Overhanging into the site, Minor deadwood	Access prevented detailed inspection. Adjacent tree. Dense ivy prevented detailed inspection. Long, low deadwood over adjacent garden	Fair	Fair	20 to 40 yrs	Moderate	C	Remove deadwood, regardless of development
G7	Willow	Salix caprea	Semi-mature	12	10+	100 avg	Yes	1.5	See Plan				Mix of young semi-mature stems situated beyond boundary fence, between summer house and stream. Occasional stubs, bark damage, epicormic growth and tight unions. Bramble understory				Fair	Fair	20 to 40 yrs	Low	C	No works required in current site context





Appendix 5:
Tree Constraints Plan
73 Park Street, Wombwell
Ref: AWA4190

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

SCALE: 1:200

PAPER: A2

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