TREE CONSULTANTS

ARBORICULTURAL REPORT

& Impact Assessment

to **BS5837:2012** at:

Lakeside View,
Blacker Green Lane,
Silkstone,
Barnsley
S75 4NF

Prepared for:
White Agus Partnership
Office One,
34 Victoria Road,
Barnsley
S70 2BU

Date: *July 2020*

Reference: *AWA3248*

Institute of Chartered Foresters
Registered Consultant

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1. Introduction

1.1 Instructions and Brief

1.1.1 We have been instructed by White Agus Partnetship 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 2020.

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.

1.2.6 The tree survey data collection was carried out by Mr Patrick Rowntree, Cert Arb L3, TechArborA, PTI (Lantra), 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 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 south of Silkstone, a village and civil parish in the Metropolitan Borough of Barnsley, South Yorkshire.

2.1.2 The site comprises a section of garden associated with the private residential dwelling on site. A stone stable and adjoining barn are central to the area surveyed, with several trees situated either side of the beck along the eastern site boundary.

2.1.3 The approximate area of the survey is highlighted in the image below (Google Earth, 2019):



3. The Trees

3.1 Legal

3.1.1 An online search has been carried out with Barnsley Metropolitan Borough Council on 10/07/20 to ascertain whether any trees at the site are located within a Conservation area or are protected by a Tree Preservation Order (TPO). The check indicated that a number of the site's trees are protected by virtue of an Area Tree Preservation Order.

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

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

3.1.4 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 4 items of woody vegetation, comprised of 4 individual trees.

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

3.2.3 The tree cover within the wider site consists of numerous trees situated either side of a beck. Those situated east of the beck are situated in the adjacent property. Additionally, one single amenity planting was located north of the barn at the centre of the site.

3.2.4 The dominant species is Sycamore, with an individual Oak. Most of the trees are early-mature with one semi-mature tree within the surveyed area.

3.2.5 The sites most visually significant tree is T4, an early-mature Sycamore situated to the north of the area surveyed. This was the largest of those trees identified and is prominent throughout much of the site providing a good level of amenity value.

3.2.6 The Oak T2 and Sycamore T3 are situated east of the beck, in the adjacent land. Due to their location, access to the base of the trees was unavailable and as such, measurements are indicative only. No major defects were noted, and the trees have reasonable long-term prospects.

3.2.7 Sycamore T1 is situated along the site boundary, atop the banking leading to the beck. This tree was in fair condition and provides a reasonable level of amenity value to the site. Dense ivy was preventing a full and detailed inspection of the stem and beginning to spread into the tree's canopy. It is advisable to sever the ivy at the base of the tree, taking care not to damage the tree's stem.

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 The RPA for each tree has been plotted as a polygon centred on the base of the stem. Due to the presence of structures and topography 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.

4. Arboricultural Impact Assessment

4.1 Proposed New Development

4.1.1 It is proposed to convert the existing stable into a residential dwelling, with the remaining structure remaining in-situ and with only cosmetic and internal changes made to the building. 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 Impacts

4.2.1 From assessing the new development proposals, all trees can be retained with no negative arboricultural impact.

4.2.2 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. As such, no significant negative indirect impacts have been identified.

4.2.3 The design of the new development has considered the trees crown position in relation to the dwelling. 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.

4.2.4 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.

4.3 Protection of the Retained Trees

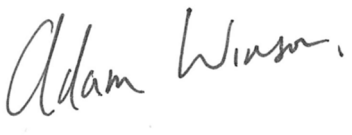
4.3.1 It is suggested that the retained trees will be adequately protected by the existing fencing on site and will not require additional protection by fencing in accordance with BS 5837: 2012, during the development phase.

4.3.2 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.*

20th July 2020

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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

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 previously worked 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.

Mr Dave Farmer *FdSc (Arb), MArborA, PTI (Lantra)*
Dave has a Foundation Degree in Arboriculture (with Distinction) and is qualified in Professional Tree Inspection. He is a Professional Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters. Dave has many years of experience within the tree care profession, including lecturing in arboriculture. His work focuses on diagnosing potential tree risk problems, and recommending appropriate treatments and work programmes.

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 Patrick Rowntree *Cert Arb L3, TechArborA, PTI (Lantra)*
Patrick is a trained arborist with 5 years of experience in both the private and commercial sectors and is a technician member of the Arboricultural Association. Having travelled the world, both working as an arborist and playing professional rugby, Patrick was awarded a Distinction in the Extended Diploma in Forestry & Arboriculture and is qualified in Professional Tree Inspection. Patrick now uses his work and education experience at AWA, focusing on accurate tree data collection for tree surveys for development projects and assisting the team in the preparation of tree reports and tree plans to BS 5837:2012.

Mr Drew Leeper *Cert Arb L3, TechArborA*
Drew has over 10 years' experience within the arboricultural sector and was awarded Distinction in the Extended Diploma in Forestry & Arboriculture. From working abroad in Canada as a climbing arborist and returning home to running his own tree care firm. Drew has also been fortunate enough to gain valuable experience working at the Royal Botanical Gardens of Kew. He now uses his work and education experience at AWA, focusing on accurate tree data collection for tree surveys for development projects and assisting the team in the preparation of tree reports and tree plans 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 BS5837 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 and includes information of the first significant branch and direction of growth.

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*	Early-mature	11	2	460 540	No	4.5	5.5	6	5	5	Soil erosion	Twin stemmed at base, Slight lean, Stubs, Epicormic growths, Ivy covered, Old pruning wounds, Bark damage, Wire / rope girding southernmost stem at base.	Minor deadwood, Snapped / hanging branches, Previously crown lifted - wounds generally occluding well with only occasional minor decay.	Situated atop banking down to adjacent beck. Slight eastern lean. Dense ivy preventing detailed inspection of stems, and spreading into crown. Western aspect beginning to encroach on adjacent barn - may require pruning in longer term.	Fair	Fair	>40 yrs	Moderate	**B**	No works required.
T2	Oak	*Quercus robur*	Early-mature	15	1	600	Yes	4	3.5	5.5	5	6	No visual defects, Limited access around base	Single stemmed, Vertical, Stubs, Epicormic growths, Bark damage	Normal, Moderate deadwood	Situated across beck in adjacent land with limited access. Measurements indicative only. Occasional moderate dead limb liable to fail into low target area.	Fair	Fair	>40 yrs	Moderate	**B**	No works required.

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	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*
T3	Sycamore	*Acer pseudoplatanus*	Semi-mature	11	1	350	Yes	2.5	2.5	2	3.5	4	No visual defects, Limited access around base	Single stemmed, Slight lean, Stubs, Epicormic growths, Bark wounds to stem from historic occlusion of barbed wire at 1m	Slightly unbalanced, Minor deadwood	Situated across beck in adjacent land with limited access - measurements indicative only. Northern aspect suppressed by adjacent Oak. Smaller Ash situated at base.	Fair	Fair	>40 yrs	Moderate	**C**	No works required.
T4	Sycamore	*Acer pseudoplatanus*	Early-mature	18	1	850	No	2.5	6	6	4	6.5	No visual defects	Twin stemmed at 1.5m, Vertical, Old pruning wounds, Epicormic growths, Tight union, Partially included bark, Bark damage	Normal, Minor deadwood	Bifurcates at 1.5m forming long, tight compression fork with included bark - limited "ears" of reactionary growth.	Fair	Fair	>40 yrs	High	**B**	No works required.

T4

T2

T3

T1

NORTH

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Appendix 5:
Tree Constraints Plan

Lakeside View, Silkstone S75 4NF
Ref: AWA3248

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

T4

Existing post and rail fencing

T2

T3

T1

EXISTING GARAGE

Existing palisade fencing

NORTH

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Appendix 6:
Tree Impacts Plan

Lakeside View, Silkstone S75 4NF
Ref: AWA3248

BRITISH STANDARD 5837:2012

SCALE: 1:200 PAPER: A2

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