



ARBORICULTURAL REPORT

& Impact Assessment

To **BS5837:2012** at:

Land at
***Greenside Lane,
Hoyland,
Barnsley,
South Yorkshire,
S74 9PZ***

Prepared for:
White Agus Partnership.
*8 Morston Claycliffe Office Park,
Whaley Road,
Barnsley,
South Yorkshire
S75 1HQ*

Date: *August 2017*

Reference: *AWA1953*



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1. Introduction

1.1 Instructions and Brief

- 1.1.1 We are instructed by Tom Agus of White Agus 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 August 2017.
- 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 author’s 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 on Greenside Lane in Hoyland, a town near Barnsley, South Yorkshire.
- 2.1.2 The site is an area of steep grassland on a residential estate. Residential properties are situated around the site, with a road running along the southern boundary.

3. The Trees

3.1 Legal

- 3.1.1 Due to the large potential penalties for illegally carrying out work to protected trees, before authorising any tree works a check should be made with the Local Planning Authority to see if the trees are covered by a Tree Preservation Order or if they are within a Conservation Area (unless such works are approved by planning permission). If either applies, then statutory permission is required before any works can take place.
- 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. 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 8 items of woody vegetation, comprised of 6 individual trees and 2 groups of trees or shrubs. All of the surveyed trees are retention category 'C' (explanatory details regarding the retention categories are included within Appendix 3).
- 3.2.2 Species diversity at the site is relatively poor. Species at the site include Sycamore, Ash, Elder, Hawthorn and Privet. Most of the trees are semi-mature with occasional early-mature trees.
- 3.2.3 The site's most significant trees are the Sycamore T1 and the Ash T3. Both trees are situated in relatively prominent positions at the top of steep banking along the north-eastern boundary. The Sycamore T1 has numerous old pruning wounds and stubs on its main stems, likely from previous crown reduction works. The Ash T3 was only given a cursory inspection due to dense brambles preventing access around the base.
- 3.2.4 A dense group of shrubby Elder and Hawthorn trees are situated at the site's south eastern corner (G5). Many of the trees in the group are in a poor condition, with considerable crown deadwood and dieback.
- 3.2.5 An adjacent Privet hedge borders the footpath which runs along the site's western boundary (G6). The hedge has been well managed and provides good screening value between the site and the neighbouring residential property to the west.
- 3.2.6 The Ash T7 and Sycamore T8 were only given cursory inspections due to their adjacent locations in a neighbouring garden, yet they appeared in a fair condition with no major visible defects.
- 3.2.7 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.
- 3.2.8 The tree Root Protection Area (RPA) is detailed on the Tree Constraints Plan at Appendix 5. 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.

4. Arboricultural Impact Assessment

4.1 Proposed New Development

- 4.1.1 It is proposed to build 2 new residential properties with associated garages, access 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, 2 trees and a section of one group will require removal as they are situated in the footprint of the structures or their retention and protection throughout the development is not suitable.
- 4.2.2 The trees that require removal are T3 Ash, T4 Ash and a section of the shrub group G5. They are all lower value, retention category 'C' and their removals will have only a negligible negative arboricultural impact at the site.
- 4.2.3 New landscape plantings are proposed as part of the new development which will mitigate for the trees removed, and will improve the site's tree cover in the long term.

4.3 Indirect Impacts

- 4.3.1 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. As such, no significant negative indirect impact impacts have been identified.
- 4.3.2 The design of the new development has considered the tree crown positions in relation to the new dwellings. 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.
- 4.3.3 The buildability of the proposed 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 may 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



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

16th August 2017

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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: Arboricultural Impacts Plan

Appendix 1: Authors Qualifications & Experience

Mr Adam Winson *Chartered Arboriculturist, MSc, BSc (Hons), ND, MICFor, MArborA, ACIEM, 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 and the ICF top student award. 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 Dave Farmer *FdSc (Arb).*

Dave joined AWA Tree Consultants early in 2016, after many years of experience within the tree care profession, including managing teams of Arborists and lecturing in arboriculture at one of the leading land-based colleges in the UK. He has a Foundation Degree in Arboriculture (with Distinction). He is an Associate Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters, working towards becoming a Chartered Arboriculturist. His work focuses on tree risk assessments and undertaking BS5837:2012 tree surveys for development projects; this involves tree inspections, the preparation of Tree Reports, Arboricultural Impact Assessments and Tree Protection Schemes to BS 5837:2012.

Mr James Brown *BSc (Hons) Arboriculture. TechArborA*

James has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Forester's Student award. James joined AWA after working in Europe's largest tree nursery and Local Authority tree officer work, for Tameside Metropolitan Borough Council. He is a Technician Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters, working towards becoming a Chartered Arboriculturist. His main work consists of tree surveys for development projects, involving tree inspections, the preparation of Tree Reports, Arboricultural Impact Assessments and 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 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 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.

Appendix 4: Tree Data

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works
T1	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	11	10	150	No	2	4	4	3.5	5	Soil erosion	Multiple stemmed at base. Vertical. Stubs. Old pruning wounds.	Normal		Fair	Good	>40 yrs	Moderate	C	No works required
T2	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	10	1	170	No	6	1	2.5	2	2	Soil erosion	Single stemmed. Vertical. Stubs. Old pruning wounds.	Slightly unbalanced		Fair	Good	>40 yrs	Low	C	No works required
T3	Ash	<i>Fraxinus excelsior</i>	Semi-mature	12	1	350	Yes	3	4	4	4	4	No visual defects	Single stemmed. Vertical.	Minor deadwood	Dense brambles prevented access at base	Fair	Fair	20 to 40 yrs	Moderate	C	Removal required to facilitate development
T4	Ash	<i>Fraxinus excelsior</i>	Semi-mature	11	1	190	No	2	2	1	1.5	4.5	No visual defects	Single stemmed. Slight lean.	Unbalanced		Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
G5	Elder. Hawthorn.	<i>Sambucus sp.</i> <i>Crataegus sp.</i>	Early-mature	9	10+	150	Yes	1	See plan				Dense group of semi to early mature shrubby Elder and Hawthorn with occasional Ash saplings. Ivy covered. Lots of deadwood throughout. Low value.				Fair	Fair	20 to 40 yrs	Low	C	Cut back as required to facilitate development
G6	Privet	<i>Ligustrum vulgare</i>	Semi-mature	2	10+	50	Yes	0	See plan				Adjacent Privet hedge. Well managed. Good screening value.				Good	Good	>40 yrs	Moderate	C	No works required

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	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works
T7	Ash	<i>Fraxinus excelsior</i>	Semi-mature	11	1	350	Yes	2.5	4	4	4	4	No visual defects	Single stemmed. Vertical. Ivy covered.	Minor deadwood	Situated in adjacent land. No access.	Fair	Fair	20 to 40 yrs	Moderate	C	No works required
T8	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	16	1	500	Yes	4	6	6	6	6	No visual defects	Single stemmed. Vertical.	Minor deadwood	Situated in adjacent land. No access.	Good	Good	>40 yrs	Moderate	C	No works required





Appendix 5:
Tree Constraints Plan
Land at Greenside Lane, Hoyland, Barnsley
Ref: AWA1953

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





**Appendix 6:
Tree Impacts Plan**
Land at Greenside Lane, Hoyland, Barnsley
Ref: AWA1953

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