



ARBORICULTURAL REPORT

to BS 5837:2012 at:

Land adjacent to

Westfield Street,

Barnsley,

South Yorkshire

Prepared For:
FDA Landscape Ltd
Westleigh Hall,
Wakefield Rd,
Huddersfield,
HD8 8QJ

August 2015



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1. Introduction

1.1 Instructions and Brief

- 1.1.1 I am instructed by Sue Farmer of FDA Landscape Ltd, to visit the site and prepare my 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 2015 by Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons) MICFor, AIEEM (the author's qualifications and experience are included within **Appendix 1**).
- 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 (explanatory details regarding the survey methodology are included within **Appendix 2**).
- 1.2.3 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** and for detail on the impact of the development on the trees refer to **Appendix 6**.

2. The Site

2.1 Location & Description

- 2.1.1 The site is located in the town of Barnsley, within the Metropolitan Borough of Barnsley, South Yorkshire.
- 2.1.2 The site currently consists of a strip of land next to former industrial units.

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. 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 Summary of Results

- 3.2.1 The tree survey revealed 6 items of vegetation, comprised of 5 individual trees and 1 group of trees.
- 3.2.2 All of the surveyed vegetation is moderate value, retention category 'B' (explanatory details regarding the retention categories are included within Appendix 3).
- 3.2.3 All of the surveyed trees are situated beyond the main development site, yet are potentially close enough so that they could have an effect on a new development design and so have been included in the tree survey parameters.

- 3.2.4 The trees are all early mature planted Cherry trees, situated alongside a footpath that runs beyond the northern boundary of the site. Collectively the trees form a reasonable landscape feature and have the good amenity value to the surrounding area.
- 3.2.5 A significant stone and brick wall structure runs along the northern boundary of the development site area, to the south of the trees. It is likely this wall forms a physical barrier to the roots of the surveyed trees. Due to this, the detailed Root Protection Areas (RPAs) it is likely to be a somewhat crude representation of the trees actual rooting areas, with few significant roots encroaching beyond the wall structure to the south, into the development site area.

3.3 Arboricultural Impact Assessment

- 3.3.1 It is proposed to demolish the existing structures and build new residential dwellings.
- 3.3.2 The proposals for the new development have been provided by my client and inform this arboricultural impact assessment and the tree impact plan at **Appendix 6**.
- 3.3.3 From assessing the new development proposals, all of the surveyed trees can be retained and incorporated as part of the new development.
- 3.3.4 The footprint of one proposed dwelling encroaches into the detailed Root Protection Area (RPA) of T2. The tree is situated adjacent to a significant wall structure and so it is likely that roots within the area that is encroached will be minimal. As such, the retained tree should remain largely unaffected by the new dwelling, provided care is taken during construction. Trial pits could determine the amount of roots within the RPA area and, if required, the dwelling could employ special foundation design such as mini/micro pile and suspended beam or a cantilevered foundation.
- 3.3.5 New parking encroaches slightly into the RPA of the T3. The tree is situated adjacent to a significant wall structure and so it is likely that roots within the area that is encroached will be minimal. Construction of hard surfaces, for car-parking and drives within the retained trees RPA, can have negative impacts on tree roots. Trial pits could determine the amount of roots within the RPA area and, if required, potential negative impacts can be overcome or minimised by employing a 'no-dig' type construction method with a porous final surface.

- 3.3.6 The design of the new development has considered the trees crown positions in relation to the new dwellings. The design proposals avoid shading, and give adequate provision for future tree growth. The crowns of most of the surveyed trees are overhanging into the proposed gardens of the new dwellings.
- 3.3.7 The trees do not appear to have had any pruning management in the past, and suitable crown pruning would alleviate any potential conflict with the new development (as detailed in appendix 4). The trees would tolerate this work well and it would have little negative visual impact.

3.4 Protection of the Retained Trees

- 3.4.1 The retained trees may require protection by fencing during the demolition and development phase.
- 3.4.2 If required by the Local Planning Authority, an associated Arboricultural Method Statement, detailing protective fencing specifications and construction methods near to the retained trees can be provided.

4. Signature

I trust this report provides all the required information.

Signed



.....

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

18th August 2015

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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), ND, MICFor, AIEEM.*

Experience

I have worked within the tree care profession for 18 years. I am a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters. My work ranges from individual expert tree inspections to managing trees on major multimillion pound housing and park developments and highway and infrastructure projects. My work often involves trees with Preservation Orders, insurance claims, subsidence claims and litigation. In 2010 I obtained an MSc in Arboriculture and Urban Forestry (with distinction), also gaining the top student award, and have had articles published in industry magazines and have original research published by the UK Forestry Commission.

Membership of Professional Bodies

Professional Member and Registered Consultant of the Institute of Chartered Foresters

Associate of the Institute of Ecology and Environmental Management

Education and Qualifications

MSc Arboriculture and Urban Forestry (Distinction) University of Central Lancashire - Myerscough College. 2006 -2009

BSc (Hons) Environmental Conservation 2:1. Sheffield Hallam University. 2002 2005

National Diploma in Arboriculture University of Lincoln/ Riseholme. 1996-1998

Previous Experience

Consulting Arboriculturist at JCA Ltd. Halifax, Yorkshire 2005 to 2012

Freelance Arborist for various companies. Sheffield, South Yorkshire 2002 - 2005

Arborist for AAA Arbor /Sydney City Council Australia 2001- 2002

Arborist for The Tree Surgeon, Brisbane, Australia 2000- 2001

Groundsman/Climber at Lindsey Tree Services, Grimsby, Lincolnshire 1998 -2000

Groundsman/Climber at Freelance Baumpflege, Frankfurt, Germany 1998

Freelance Groundsman/Climber for various companies, Lincoln Area 1996-1998

Training, Awards & Qualifications

MSc Top Student Award University of Central Lancashire 2010

Bats and Bat Surveys- a foundation course for ecological consultants. BCT 2007

Arboriculture & Bats: A Guide for Practitioners BCT and AA 2007

CPRE: Prize for best BSc dissertation on the theme of land management 2006

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, 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 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 Species		Measurements				Crown (m)						Tree Condition							Value		Management		
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	First branch	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works	Priority (Mths)
T1	Cherry	Prunus avium	Early-mature	13	1	440	No	5s	4.5	3	4	5	5	No visual defects; Exposed roots	Single stemmed; Multiple stemmed at 3m; Vertical	Normal; Overhanging into site	Adjacent tree	Good	Good	20 to 40 yrs	Mod	B	Overhanging crown could be lifted to 6m from ground level and reduced back by up to 2m.	N/A
T2	Cherry	Prunus avium	Early-mature	13	1	460	No	5s	4	4	3	5	4	No visual defects; Exposed roots	Single stemmed; Twin stemmed; at 3m; Vertical	Normal; Overhanging into site. Minor deadwood	Adjacent tree	Good	Good	20 to 40 yrs	Mod	B	Overhanging crown could be lifted to 6m from ground level and reduced back by up to 2m.	N/A
T3	Cherry	Prunus avium	Early-mature	15	1	460	No	7s	6	5	4	5	4	No visual defects; Exposed roots	Single stemmed; Ivy covered	Normal; Overhanging into site. Minor deadwood	Adjacent tree	Good	Good	20 to 40 yrs	Mod	B	Overhanging crown could be lifted to 6m	N/A
T4	Cherry	Prunus avium	Early-mature	15	1	460	No	5s	4	4	4	5	4	No visual defects; Exposed roots	Single stemmed; Vertical; Old pruning wounds	Normal; Overhanging into site. Minor deadwood	Adjacent tree	Good	Good	>40 yrs	Mod	B	Overhanging crown could be lifted to 6m	N/A
T5	Cherry	Prunus avium	Early-mature	15	1	550	No	5s	3	5	6	5	5	No visual defects; Exposed roots	Single stemmed; Vertical	Normal; Overhanging into site. Minor deadwood	Adjacent tree	Good	Good	>40 yrs	Mod	B	Overhanging crown could be lifted to 6m	N/A
G6	Cherry	Prunus avium	Early-mature	13	1	350	No	4n	4	4	3	2	3	No visual defects	Single stemmed	Normal	Line of 6 trees forming one feature - clear of development	Good	Good	>40 yrs	Mod	B	No action	N/A





Appendix 5:
Tree Constraints Plan
Westfield Street, Barnsley
Ref: AWA1407

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

SCALE :1:500 PAPER: A3

	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



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**Appendix 6:
Tree Impacts Plan**
Westfield Street, Barnsley
Ref: AWA14074

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

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