t

ARBORICULTURAL REPORT
to BS 5837:2012
at
Nether Mill House
Farm off Barnsley Road
Penistone
South Yorkshire
S36 8AD

Client:
Duchy Homes Ltd.

Client Address:
Pure Offices Ltd
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JCA Ref:
12444/SR

JCA Limited

Arboricultural Consultants

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1. Introduction

1.1 Purpose of the Report

1.1.1 This report is required at **Nether Mill House** to provide detailed, independent, arboricultural advice on the trees present, in the context of potential development.

1.1.2 The purpose of this report is to summarise the findings of an arboricultural assessment of the existing vegetation at the above site; conducted in accordance with the guidelines contained within BS5837: 2012 'Trees in relation to design, demolition and construction – Recommendations'.

1.1.3 This report will outline any tree works which are required within the current context of the site. It will also grade the trees in accordance with the British Standard; which should guide the design in terms of which trees are to be retained and which trees are to be removed.

1.2 Terms of Reference

1.2.1 JCA Ltd has been instructed by **Duchy Homes Ltd.** to survey the site and prepare the findings in a report.

1.2.2 For this purpose a topographical survey has been supplied (**Drawing No. S449-S-1**), which forms the basis for the Tree Constraints Plan at **Appendix 6**. The topographical survey, along with all other documents supplied to JCA, is assumed to be correct. No checking of such documents will be undertaken and JCA cannot be held responsible for incorrect data supplied by other parties.

1.3 Scope of the Report

1.3.1 This report is compiled in accordance with *BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendations'* and is based on an objective assessment of the existing vegetation.

1.3.2 Preliminary recommendations are given with a view to the long-term management of sustainable tree cover and to uphold the interests of health and safety.

1.3.3 All trees within the site boundary with a stem diameter above 75mm are included.

1.3.4 Where applicable trees outside the site boundary, but close enough to be affected by the proposed development, are included.

1.3.5 The specific design of any proposed development is not generally taken into account at this stage.

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1.4 Survey Details

1.4.1 The survey took place during the month of September 2015 and was conducted by Scott Reid *ND (Arboriculture and Forestry)*.

1.4.2 During this survey, all trees were inspected from ground level. Further investigations, such as a climbed inspection or a decay detection survey, have not been undertaken but may be recommended where deemed appropriate.

1.4.3 Measurements were obtained using clinometers, specialist tapes or electronic distometers. Where this was not possible, measurements were estimated to the best ability of the surveyor. JCA endeavour to provide accurate information and will always take measurements unless inhibited by restricted access or other mitigating circumstances. Where measurements have been estimated, they are clearly highlighted at **Appendix 1.**

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2. Site Description

2.1 Land Use

2.1.1 The site currently comprises of farm buildings, access drives, garden areas and areas of open space.

2.2 Topography

2.2.1 The site is approximately level.

2.3 Treescape

2.3.1 The surrounding area is a mix of farm land and residential housing with mature tree cover throughout.

2.3.2 The trees on this site have a moderate impact on the local treescape.

2.4 Visual Amenity Value

2.4.1 Those trees on site located along the frontage (adjacent to Barnsley Road) confer a high level of amenity to the surrounding area. The remaining trees confer little benefits in terms of amenity to the wider area (although may be of good amenity from within the site).

2.5 Age Class Mix

2.5.1 The trees surveyed ranged in age from semi-mature to mature. However, the trees were predominantly semi-mature and early mature.

2.6 Species Diversity

2.6.1 Species surveyed include Sycamore, Elder, Hawthorn, Silver Birch, Common Beech, Wild Cherry, Holly, European Larch, Pear and Apple.

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3. Status of the Trees

3.1 A check was made on the 9th of September 2015 with **Barnsley Metropolitan Borough Council**.

3.2 We are informed that there is no Tree Preservation Order (TPO) in force and that the site is not within a Conservation Area.

3.3 Due to the large potential penalties for illegally carrying out work to protected trees, JCA recommend that a further check is carried out prior to any works being undertaken. This is especially relevant as the Council is able to serve a TPO at any time. We are able to arrange a further check on your behalf.

4. Tree Descriptions and Recommendations

4.1 Full details of all individual trees surveyed are recorded in the tables at **Appendix 1.** A full explanation of the tables can be found at **Appendix 2**. Please refer also to the Tree Constraints Plan at **Appendix 6** for tree locations.

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5. Discussion Relating to the Existing Treescape

5.1 Tree Condition and Recommended Works

5.1.1 The tree survey revealed a total of **8** items of vegetation (**2** individual trees and **6** groups of trees). Of these, **1** tree and **2** groups were identified as retention category 'B' and **1** tree and **4** groups of trees as retention category 'C'. Please refer to **Appendix 2** for retention category and definition criteria.

5.1.2 Within the survey, tree works have been identified for reasons of public safety, to ensure the long-term health of the trees or for general maintenance purposes. Such recommendations have been made without regard to any projected layout and should be undertaken irrespective of development. These are summarised in the following sections. For full details on all recommendations, please refer to **Appendix 1.** For an explanation of the priority ratings, see **Appendix 2 (A2.2.5).**

5.2 Tree Removals for Arboricultural Purposes

5.2.1 One tree within **G3** had been identified as requiring removal for arboricultural reasons. This is described at **Appendix 1** and should be undertaken as a matter of moderate priority.

5.3 Remedial Tree Works

5.3.1 No specific pruning works have been recommended at this time.

5.3.2 However, those trees which overhang public footpaths or public highways shall require future maintenance in order to maintain clearance heights for vehicular or pedestrian traffic. These heights should be 5.6m above a road and 2.5m above a footpath.

5.3.3 In addition to the remedial works highlighted, all trees to be retained within the site should be re-inspected on a regular basis in the interests of risk management.

5.4 Monitoring/Further Investigation

5.4.1 **T5** was noted to have structural or physiological defects, as detailed at **Appendix 1.** Although this tree was considered to be in an acceptable condition at the time of the inspection, the defects observed may lead to its early demise or render it unsafe in the future. As such, it is recommended that this tree be monitored (re-inspected and assessed) on a biennial (2 yearly) basis to assess if its condition is still acceptable.

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5.5 Existing Site Constraints and General Design Advice

5.5.1 The following is an overview of the constraints on this site to development, along with general design considerations relating to the tree cover. The precise details of a proposed development are not known at present. The specific implications of a proposed design should be assessed within an Arboricultural Implications Assessment (AIA).

5.5.2 The retention categories of the trees surveyed are an indication of their overall values. The category of each item is listed at **Appendix 1** and an explanation of the retention categories is included at **Appendix 2**. As a general rule, those trees listed as retention category 'A' or 'B' are the most valuable items and as such the removal of these is likely to be met with resistance by the Local Planning Authority (LPA). Those items listed as retention category 'C' are of lesser value and the removal of these is less likely to be met with resistance by the LPA. The above information should guide the design in terms of which trees are to be removed and which are to be retained. However, it should be noted that the retention of trees is just one consideration in the design process and each development will be taken for its merits.

5.5.3 The location of each tree is plotted on the associated Tree Constraints Plan at **Appendix 6**. This plan identifies the retention category of each tree (Retention A: green canopy, Retention B: blue canopy, Retention C: grey canopy, Retention U: red canopy), the crown spread, and also the associated rooting zone (Root Protection Area or RPA shown in gold). In order to enable the survival of trees shown to be retained within any proposals, both the canopy of the tree and its RPA should be completely avoided wherever possible. This relates to not just the location of new buildings, but also to the location of new areas of hard standing, proposed utility routes and any ground level changes (both excavations and soil piling).

5.5.4 During development, it is also likely that the entire RPA will require fencing off as a protection measure, and this should be brought into consideration when planning such things as access routes and material storage during development. It is accepted that in some cases it is not entirely possible to completely avoid the RPA or canopy lines within a new development. The consulting arboriculturalist should be made aware of any such incursions to make comment and, where possible, advise on mitigation actions. Such details should be contained within an Arboricultural Implications Assessment (AIA).

5.5.5 Where information is available, the water demand of each tree is provided at Appendix 1, in accordance with NHBC Standards 2014 chapter 4.2. 'Building near trees'. The water demand of trees can affect adjacent structures and this is therefore included to inform foundation design, depth and the proximity of proposed structures to trees.

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5.5.6 Retained trees will require adequate protective measures during development. Such measures typically entail temporary protective fencing, installed to the full extent of the RPA. Where this is not entirely possible, ground protection may also comprise part of the protective measures. This includes a compaction reducing construction detail which enables a degree of construction traffic over/within the RPA.

5.5.7 No material storage is permitted within the RPA of retained trees unless confirmed to be acceptable by the consulting arboriculturalist. The exact details and location of protective measures should be included within an Arboricultural Method Statement (AMS).

5.5.8 The position of the site compound is a major consideration. It is recommended that this, which typically includes the site office, facilities, toilets, storage of materials and parking, is located away from trees and outside the RPA.

5.5.9 The shade that will be cast by the retained trees must also be considered. Where buildings are to be positioned within the shade cast area of trees, these should be designed in order to maximise light levels. If required, JCA can provide a shade cast prediction plan.

5.5.10 Many development sites contain areas of nature conservation interest. Trees and hedgerows, in particular, can provide an important habitat for birds, bats, invertebrates and fungi and appropriate attention needs to be paid to preserving habitats throughout the development process. JCA can provide Ecological Surveys and Bat Surveys where required.

5.5.11 Where a landscape planting scheme is proposed, consideration must be made at the planning stage as to where this is to be implemented on site. Such locations should be protected in order to prevent soil compaction and/or contamination and should therefore form part of the Construction Exclusion Zone. JCA can provide Tree Planting Schemes where required.

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6. Conclusions

6.1 The trees surveyed were generally found to be in good condition.

6.2 **One** tree within a group has been recommended for removal for arboricultural reasons. This is discussed in **Section 5.2** and is detailed at **Appendix 1**.

6.3 **One** tree has been recommended for monitoring, due to the presence (or suspicion) of physiological or structural defects. This is discussed in **Section 5.4** and detailed at **Appendix 1**.

6.4 Existing site constraints and general design advice has been provided in **Section 5.5**. Upon provision of specific proposals, site-specific advice can be given with regards to the impact on trees. In accordance with **Section 5.4** of **BS 5837: 2012**, the next stage on this site should be the preparation of an **Arboricultural Impact Assessment (AIA)**, which will illustrate and discuss the impact of the proposals on the trees and vice versa, to help to inform good design.

6.5 The data gained during the survey provides an indication of the health of the trees. However, it does not enable a comprehensive assessment of their condition over time. Trees are living organisms which are affected by many factors including weather conditions, diseases/disorders, light levels and human activities. Because of this, this report is only valid for a period of 1 year from the date of issuing. Should an update or revision of this report be required outside of this time period, JCA may require a further site visit to ensure that the condition of the trees has not significantly changed. It is advised that the trees are inspected regularly, in the interests of risk management.

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Appendices

Appendix 1: Tree Descriptions and Recommendations

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Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 1	Semi-mature Sycamore *Acer pseudoplatanus*	8	0	2 SE	8 15	2 2 2.5 2	Epicormic growth at the base. Squirrel damage noted within the crown. A self-set specimen of little arboricultural value. A tight union noted at the base with some included bark.	No action required. n/a	FAIR	FAIR	LOW	MOD	≥20	C 1
G 2	Early-mature Group *Details in observations*	13	0	0 n/a	21	See plan (av. 4m spread)	A group of self-set trees comprising 4 early mature Sycamore, 1 semi mature Elder and 1 semi mature Hawthorn, all growing around existing structures. Two of the Sycamore have extensive bark wounding at the base (likely due to fire damage). Trees within are in acceptable condition at this time.	No action required. n/a	FAIR	FAIR	LOW	HIGH	≥20	C 1
G 3	Mature Group *Details in observations*	17	4	0 S	48	See plan (av. 6.5m Spread)	A group of trees to the frontage of the site which provide good amenity value to the surrounding area. Species include Sycamore, Elder and Silver birch. A small Elder in the group has decay at its base and is leaning towards the adjacent footpath. Some deadwood noted, though no major visible defects found in the remaining trees.	Remove the leaning Elder in the group with decay at the base. Moderate	GOOD	GOOD	HIGH	MOD	≥40	B 1
G 4	Semi-mature Group *Details in observations*	4	0.5	0.5 n/a	13	See plan (av. 2m Spread)	Possibly remnants of a hedgerow or alternatively self-set trees. Of little arboricultural value but in acceptable condition at this time. Species include Elder and Hawthorn.	No action required. n/a	FAIR	FAIR	LOW	HIGH	≥10	C 1
T 5	Early-mature Common Beech *Fagus sylvatica*	17	2.5	3.5 N	48, 45	8.5 5 8 5	An off-site tree, twin-stemmed from ground level and vertical. Extensive bark wounding to the main stems and branches in lower crown; most likely due to fire damage. Minor deadwood noted. Good vitality in the remainder of the crown.	Monitor condition biennially (every 2 years). Low	FAIR	FAIR	LOW	MOD	≥20	B 1
G 6	Early-mature Group *Details in observations*	16	3	0 n/a	45	See plan	An off-site group of trees within influencing distance of the proposed site. In overall good condition. Limited access prevents a detailed inspection. The trees provide good amenity value to the surrounding area. Species include Beech, Wild Cherry, Holly, European Larch and Pear.	No action required. n/a	GOOD	GOOD	HIGH	MOD	≥20	B 1
G 7	Semi-mature Common Beech *Fagus sylvatica*	12	2	1 n/a	20	See plan (av. 4.5m spread)	A lapsed hedgerow; now a linear group of 'drawn-up' specimens. All in acceptable condition, though thinning would ensure specimen trees in the future.	No action required. n/a	GOOD	GOOD	LOW	MOD	≥20	C 1
G 8	Early-mature Group *Details in observations*	12	2	2 n/a	26, 42	5.5 7 5.5 6	Two specimens (1 Apple and 1 Wild Cherry) in close proximity, located off-site but overhanging the boundary. They are out-growing their location and growing towards the adjacent building. The Cherry has a sparse crown. In an acceptable condition but of limited arboricultural value.	No action required. n/a	FAIR	FAIR	LOW	MOD	≥10	C 1

Appendix 2: Explanation of Tree Descriptions

A2.1 Measurements/ Reference Information

A2.1.1 *REF NUMBER.* All items surveyed are allocated a reference number preceded with a letter, identifying the type of vegetation surveyed: T = individual tree, G = group of trees or an area of vegetation, W = woodland, H = hedgerow.

A2.1.2 *SPECIES: COMMON AND BOTANICAL NAME*. The common and botanical names of the species present are noted. If the species is not clear or identifiable, then a general common name and genus will be noted.

A2.1.3 *AGE CLASS* of the tree is described as young, semi-mature, early-mature, mature, over-mature, veteran or dead.

A2.1.4 *HEIGHT* of the tree is measured from the stem base in metres.

A2.1.5 *CROWN HEIGHT* is an indication of the height at which the crown begins above ground level.

A2.1.6 *STEM DIAMETER* is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; diameter measurements are taken for each stem. If more than five stems are present, an average stem diameter is taken. If for whatever reason it is not practical to measure multiple-stemmed trees in this way, the diameter is measured close to ground level, just above the root buttress.

A2.1.7 *CROWN SPREAD* is measured from the centre of the stem base to the tips of the branches to all four cardinal points.

A2.1.8 *HEIGHT AND DIRECTION OF LOWEST BRANCH.* The height and direction of the lowest significant branch is noted because of potential issues relating to clearances and the need for tree pruning.

A2.1.9 *NHBC WATER DEMAND.* The water demand of each tree, as listed in NHBC Standards 2010 Chapter 4.2 ‘Building near trees’. This is included to aid structural engineers, architects and other members of the design team as it determines foundation depth and other considerations with regard to trees.

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A2.2 Evaluations

A2.2.1 *PHYSIOLOGICAL CONDITION* is classed as good, fair, poor, or dead. This is an indication of the health and vitality of the tree and takes into account vigour, presence of disease and dieback.

A2.2.2 *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.

A2.2.3 *LIFE EXPECTANCY* is classed as; 0, less than 10 years, 10+ years, 20+ years, or 40 + years. This is an indication of the minimum number of years before removal of the tree is likely to be required.

A2.2.4 *AMENITY VALUE.* A general indication is given in respect to the amenity/landscape value of the tree/group within the surrounding area.

A2.2.5 *PRIORITIES.* A priority rating is given concerning the time periods in which the recommended works should be undertaken. LOW priority works should be undertaken within 12 months of the survey, MOD (moderate) priority works should be undertaken within 6 months and HIGH priority works should be completed as soon as practically possible. If no works are recommended, N/A (not applicable) will be used.

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A2.3 Retention Categories

A2.3.1 ***A (marked green on the plan) = High quality.***

A2.3.2 ***B (marked in blue on the plan) = Moderate quality.***

A2.3.3 ***C (marked in grey on the plan) = Low quality.***

These trees are of low quality and value with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 15cm.

A2.3.4 Trees categorised as retention category 'A', 'B' or 'C' are then justified by being further divided into 3 subcategories:

1 = Mainly arboricultural qualities.

2 = Mainly landscape qualities.

3 = Mainly cultural values, including conservation value.

A2.3.5 ***U (marked in red on the plan) = unsuitable for retention: trees for removal.***

These trees are in such a condition that they cannot be realistically retained as living trees in the context of the current land use for longer than 10 years. This may be due to any of the following:

1) Failure is likely due to serious, irredeemable, structural defects.
2) Removal of other category U trees will render them exposed and unstable.
3) They are in serious, overall decline or are dead.
4) They are of low quality and suppressing adjacent trees of better quality.
5) Diseases are present which may affect the health of adjacent trees.

These trees should be removed or treated in such a way as to make them safe where they have high ecological value, such as in a woodland setting.

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Appendix 3: General Guidelines

A3.1 All tree work should be undertaken to BS 3998: 2010 '*Recommendations for tree work'* or other recognised industry practice.

A3.2 Staff carrying out the work must be qualified, experienced and ideally be Arboricultural Association approved contractors. They should be covered by adequate public liability insurance.

A3.3 This report is based upon a visual inspection. The consultant 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 the guidelines and the terms listed therein.

A3.4 Any defects seen by a contractor or the employer that were not apparent to the consultant must be brought to the consultant's attention immediately.

A3.5 No liability can be accepted by JCA in respect of the trees unless the recommendations of this report are carried out under the supervision of JCA and within JCA's timescale.

A3.6 It is advisable to have trees inspected by an arboricultural consultant on a regular basis. In this instance it is recommended that these inspections are made on a biennial basis (every 2 years).

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Appendix 4: Glossary of Terms & Abbreviations

Arboriculture The cultivation of trees in order to produce individual specimens of the greatest ornament, for shelter or any primary purpose other than the production of timber or fruit.

Canker Disease damaged area of a tree, usually caused by fungus or bacteria affecting the bark.

Co-dominant stem A stem which has grown in direct competition to the main stem and which has formed a substantial size influencing the appearance of the tree.

Crown lift The removal of the lowest branches, usually to a given height. It allows more residual light and greater clearance underneath for vehicles etc.

Crown reduction The reduction of a tree's height and spread while preserving its natural shape.

Crown thin The removal of some of the density of a tree's crown**,** usually 5-25% allowing more light through its canopy and reducing wind resistance.

Deadwood Either dead branches, or a procedure involving the removal of dead, dying and diseased branches.

Dieback Where branches are beginning to show signs of death usually at the tips in the crown.

Epicormic shoots Small branches that grow in clusters around the base of the stem of a tree or within the crown. This is usually as a result of bad pruning or some other stress factor, although can be a natural growth pattern for some species of tree (eg Lime species).

Formative pruning The pruning of a tree to remove weaknesses and irregularities which may lead to future problems. The formative pruning operation is aimed at reducing the potential for future weaknesses or problems within the tree's crown and to encourage an optimal canopy shape.

Included bark Where the bark on two adjoining branches or stems is growing tight together, forming a joint with limited physical strength.

Pollarding A method of tree management in which the main trunk and principle branches of the tree are cut to the same height, and the resulting branches are then cropped on a regular basis.

Remedial pruning The removal of old stubs, deadwood, epicormic growth, rubbing or crossing branches and other unwanted items from the tree's crown. Sometimes referred to as crown cleaning.

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RPA Root Protection Area – Theoretical rooting area of a tree as defined in BS 5837:2012 '*Trees in relation to design, demolition and construction – Recommendations'*.

Topping Topping is a form of pruning that removes terminal growth leaving a 'stub' cut end. Topping can cause serious health problems to a tree.

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Appendix 5: Author Qualifications

Principal Consultant and Managing Director

Jonathan Cocking *F.R.E.S., Tech. Cert. (Arbor.A), PDipArb (RFS) FArborA CBiol MSB. MICFor.* Jonathan is a Registered Consultant and Fellow of the Arboricultural Association and sits on its Professional Committee. He has 31 years experience in the Arboricultural profession and served for eight years as Senior Arboriculturist with a large local authority before establishing JCA in 1997. Jonathan has since developed JCA's portfolio of services and its extensive client base. He is a Chartered Biologist, a Chartered Arboriculturalist and an Expert Witness with much experience of litigation work.

Technical Coordinator

Toby Thwaites *BSc (Hons), HND (Arboriculture).* Toby joined JCA in 1998 after graduating in Ecology at the University of Huddersfield and has since graduated in Arboriculture at the University of Central Lancashire. A former JCA team leader and Consulting Arboriculturist, Toby was promoted to Technical Coordinator and now oversees all office and on-site activities at JCA and is on hand to offer technical support and advice.

Consulting Staff: Arboriculture

Andy Bagshaw *FdSc (Arboriculture).* Andy joined JCA in 2005 having gained several years experience in tree surgery and landscaping. He is trained in aerial rescue and is JCA's principal first aid person. Andy has obtained a foundation degree in Arboriculture at the University of Central Lancashire, is QTRA qualified and is a JCA team leader who manages an office of Consulting Arboriculturists.

Toby Parsons *Cert. Arb. (RFS), Tech. Cert. (Arbor.A).* Toby joined JCA after spending 6 years working as a senior climber for various Arboricultural contractors in the East Midlands and the South-West. He has gained the Level 2 Certificate in Arboriculture (RFS) and an Arboricultural Technicians Certificate. Toby is LANTRA certified in Professional Tree Inspection.

Scott Reid *ND (Arboriculture and Forestry)*. Scott joined JCA after working with other consultancy companies in the south of England. He specialises in trees in relation to development and holds a National Diploma, various NPTC qualifications and is currently studying for his Level 4 Diploma in Arboriculture.

Andrew Bussey Andrew joined JCA having spent 12 years working as a tree surgeon for various private companies and a Local Authority. He has various NPTC qualifications, is QTRA qualified and is currently studying for his Arboricultural Technicians Certificate.

Phil Humeniuk *FdSc (Arboriculture).* Phil joined JCA having spent 3 years working for various tree surgery companies and as a Tree Officer for a Local Authority. He also has several years experience working as a consultant both for JCA and for another consultancy. Phil obtained his foundation degree in Arboriculture at the University of Central Lancashire and has various NPTC's and is LANTRA certified in Professional Tree Inspection.

Emily Wilde *FdSc (Arboriculture*). Emily has recently joined JCA, having previously worked for various private tree surgery and consultancy companies over the past 8 years. She initially obtained a ND in Forestry & Arboriculture, followed by a FdSc in Arboriculture at Askham Bryan College, York. Emily has various NPTC certificates and is QTRA qualified.

Charles Cocking. Charles joined JCA in January 2014 as an Apprentice having previously worked for the company on a part time basis during 2013. In between his roles at JCA, Charles will be studying at Myerscough College, Preston, undertaking a one year RFS course which will be followed up by a further two year course, in order to obtain a Foundation degree in Arboriculture – FdSc (Arboriculture).

Consulting Staff: Ecology

David Ryder. David has recently joined JCA as our in-house ecologist. He brings with him over 8 years experience in the field of ecological consultancy. David holds a Natural England Licence to disturb and handle bats and is currently undergoing assessment for Chartered Institute of Ecology & Environmental Management (CIEEM) membership.

Josie Collier: *BSc (Hons) Ecology.* Josie has recently joined JCA as part of our expanding ecology department. She brings with her a degree in Ecology and Environmental Biology from the University of Leeds. Josie has gained experience from working with a local authority and is seeking to become a member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

Administrative Staff

Sue Guest Administrative Team Leader.
Simeon Haigh *BSc (Hons).* IT Officer.
Lorraine Spink Administrative Assistant.
Yasmin Shahzad Administrative Assistant.
Catherine Cocking Accounts Manager.

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Appendix 6: Tree Constraints Plan

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Root Protection Area: RPA

THE ROOT PROTECTION AREA (RPA) INDICATES THE LIKELY ROOTING ZONE OF A TREE. THE RPA SHOULD IDEALLY REMAIN UNDISTURBED IF A TREE IS TO BE RETAINED.

THE DEVELOPMENT PROPOSALS SHOULD THEREFORE BE DESIGNED TO AVOID THE RPA OF ANY TREE WHICH IS TO BE RETAINED.

IF IT IS NECESSARY FOR THE DEVELOPMENT TO ENCROACH INTO THE RPA OF A TREE WHICH IS TO BE RETAINED THEN SPECIALIST CONSTRUCTION TECHNIQUES AND MATERIALS MUST BE CONSIDERED.

Appendix 6: Tree Constraints Plan

ADDRESS: Nether Mill House, Farm off Barnsley Road, Penistone, S36 8AD.
JCA REF: 12444/SR.

SCALE : 1:1000	PAPER SIZE : A3

SURVEYED BY: SR	DRAWN BY: SR	APPROVED BY: TT

BRITISH STANDARD 5837:2012: 4.5 RETENTION CATEGORIES

Detailed definitions of these catagories are at Appendix 2 of our report. N.B. These categories do not necessarily represent or correspond to recommendations for action made in this report.

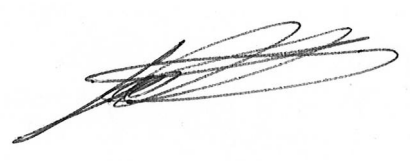
	CATEGORY A: 'RETENTION MOST DESIRABLE'
	CATEGORY B: 'RETENTION DESIRABLE'
	CATEGORY C: 'TREE WHICH COULD BE RETAINED'
	CATEGORY U: 'TREE FOR REMOVAL'
	STEM OF TREE TO BE RETAINED
	STEM OF TREE TO BE REMOVED
	ROOT PROTECTION AREA

JCA Limited

Arboricultural & Forestry Consultants

I hope that this report provides all the necessary information, but should any further advice be needed please do not hesitate to contact the author.

Signed



.....

Scott Reid *ND (Arboriculture and Forestry)*.

21st September 2015

For and on behalf of ***JCA Ltd***

Registered Office:

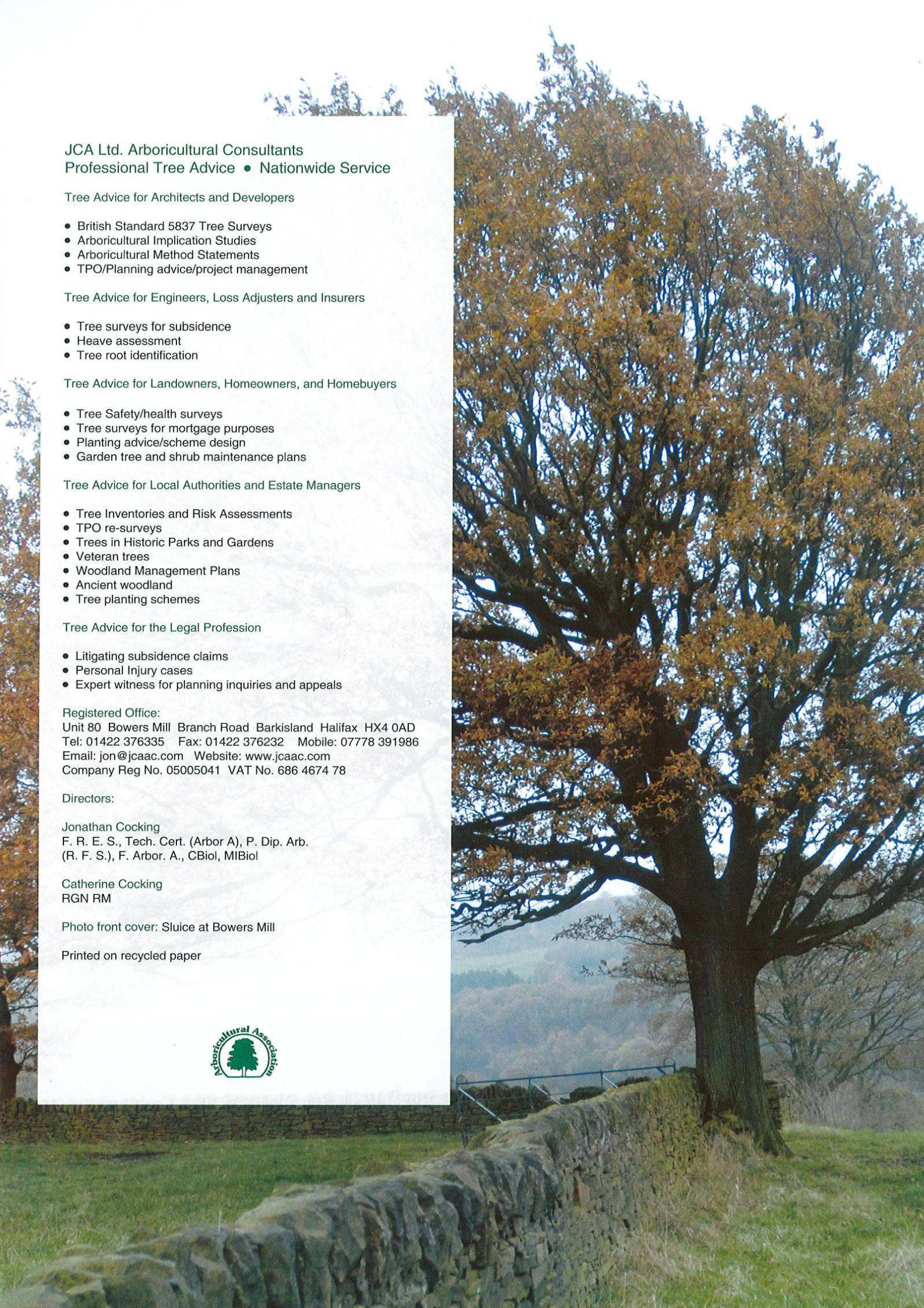
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JCA Ltd. Arboricultural Consultants
Professional Tree Advice • Nationwide Service

Tree Advice for Architects and Developers

- British Standard 5837 Tree Surveys
- Arboricultural Implication Studies
- Arboricultural Method Statements
- TPO/Planning advice/project management

Tree Advice for Engineers, Loss Adjusters and Insurers

- Tree surveys for subsidence
- Heave assessment
- Tree root identification

Tree Advice for Landowners, Homeowners, and Homebuyers

- Tree Safety/health surveys
- Tree surveys for mortgage purposes
- Planting advice/scheme design
- Garden tree and shrub maintenance plans

Tree Advice for Local Authorities and Estate Managers

- Tree Inventories and Risk Assessments
- TPO re-surveys
- Trees in Historic Parks and Gardens
- Veteran trees
- Woodland Management Plans
- Ancient woodland
- Tree planting schemes

Tree Advice for the Legal Profession

- Litigating subsidence claims
- Personal Injury cases
- Expert witness for planning inquiries and appeals

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Photo front cover: Sluice at Bowers Mill

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