

ARBORICULTURAL REPORT
at
27 The Foxgloves
Hedge End
Southampton
SO30 0UG

Client:
360Globalnet

Client Address:
Bramley House
Bramley Road
Long Eaton
Nottingham
NG10 3SX

Client Telephone:
01164781258

Insured:
Ms S Berrett

Claim Number:
LIV-SN-22-005467

JCA Ref:
23439/AJB

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1. Introduction

1.1 Purpose of the Report

- 1.1.1 This arboricultural report is required by our client as part of an investigation into subsidence damage at:

27 The Foxgloves, Hedge End, Southampton, SO30 0UG.

1.2 Terms of Reference

- 1.2.1 We are instructed by **360Globalnet**, to visit the site and carry out an arboricultural survey covering all vegetation within likely influencing distance of the subject property.
- 1.2.2 It has been requested that we only consider vegetation management options for the purpose of this report. However, vegetation management work should only be carried out once all other possible causal factors have first been discounted.
- 1.2.3 We have been supplied with details of the site investigation, which was carried out by **Drainage Repair Company** in December 2022, and have included the salient points in this report. We have applied this information to our knowledge of trees and the arboricultural data we gathered on site and prescribed recommendations for current, or future action, where required.
- 1.2.4 We are to prepare our findings in a report, detailing the vegetation management options available which may be required as part of this claim.

1.3 Scope of the Report

- 1.3.1 The subject property is a two-storey, semi-detached house, with adjoining conservatory which was added in 2011.
- 1.3.2 Damage has occurred to the conservatory. Please see the **360 Globalnet Engineer's Report** for full details of the current damage at the subject property.
- 1.3.3 The distance between the vegetation surveyed and the building is measured from the closest part of the property.

2. Survey Conditions and Methods

2.1 Date of Inspection and name of Inspector

- 2.1.1 The site was most recently surveyed during November 2025 by **Jonnie Setterfield BSc (Hons) MArborA**.

2.2 Data Collection Methods and Explanations

- 2.2.1 The inspection was carried out at ground level using visual assessment of the tree canopy, stem and rooting area. No excavations or drilling was carried out by JCA Ltd.
- 2.2.2 The measurements were made using instruments including clinometers for tree *HEIGHT*, diameter tapes for *STEM DIAMETER* (measured at 1.5m above ground level) and tape measures or electronic distometers for *CROWN SPREAD* and *DISTANCE TO PROPERTY*. Where this was not possible, measurements were estimated.
- 2.2.3 *AGE CLASS* and *LIFE EXPECTANCY* values are estimated based upon our knowledge of trees and the way they grow. No core sampling was carried out on this occasion.
- 2.2.4 '*NHBC WATER DEMAND*' (low, moderate or high) are categories originated by the National House Building Council. The concept was designed to be used as an aid for determining the correct foundation depths for new build situations where there are existing trees present.
- 2.2.5 The term *INFLUENCING DISTANCE* as used in this report is guided from the NHBC's 'zones of influence' formula. It is an estimation of the potential of a tree or a shrub to cause damage to the subject property after due consideration of many factors including soil characteristics, specimen size, vigour, species, likely water uptake and distance from the property.

3. Ground Investigation, Soil & Root Analysis

3.1 Introduction

- 3.1.1 Trees influence soil conditions, and in some soil types root activity can create a soil moisture deficit (S.M.D.), which means that the amount of water being used by the tree and by natural evaporation has exceeded the amount of water entering the ground through precipitation or other means. This deficit can lead to soil shrinkage which in turn can cause a building to move, particularly if its foundations are shallow. The result is *SUBSIDENCE*.
- 3.1.2 The soil's *PLASTICITY INDEX*, *PLASTIC LIMIT*, *MOISTURE CONTENT* and the likely water uptake of the tree/trees in question are key factors in determining whether shrinkage has occurred.
- 3.1.3 On shrinkable soils, damage to buildings can also occur as a result of tree removal. In such cases, re-hydration of the soil beyond that which would ordinarily occur prior to the removal of vegetation can cause an upwards movement of the ground which is known as *HEAVE*. Trees should not, therefore, be removed without due consideration of likely effects.
- 3.1.4 The ground investigation and root analysis at this site have been carried out by others. Results of these investigations are briefly summarised below.

3.2 Foundation Types and Depths

- 3.2.1 Please refer to the site plan at **Appendix 2** for an indication of the trial pit/borehole location.
- 3.2.2 **Trial pit/borehole 1** revealed a 300mm concrete foundation at a maximum depth of 600mm below ground level.

3.3 Soil Types

3.3.1 Trial Pit/Borehole 1:

- The soils *plasticity index* ranged from 33% to 42%.
- *Moisture contents* within the soil samples ranged from 27% to 32%.
- The *plastic limit* of the soils ranged from 21% to 24%.
- The *liquid limit* of the soils ranged from 54% to 66%.

The results indicate that the clay soil found within **Trial Pit/Borehole 1** is of medium to high shrinkability and that there is an onset of desiccation between 1.25m and 2.25m below ground level.

3.4 Root Analysis

- 3.4.1 Microscopic examination of tree root anatomy generally enables the GENUS of roots recovered during the ground investigation to be established. However, it rarely identifies individuals to SPECIES level.
- 3.4.2 Certain species, for instance Willows and Poplars, are indistinguishable by these methods and identification can only be made at FAMILY level.
- 3.4.3 The diameter and the depth of the root can be an indication of its significance.
- 3.4.4 To establish whether the root is alive, iodine is used to test for starch which is stored in some cells of living tree roots but is broken down by micro-organisms upon the death of a root in the soil.
- 3.4.5 Live root samples are normally a prerequisite for establishing, on a balance of probability, which vegetation is the most likely cause of any damage noted.
- 3.4.6 Results of the analysis of root material recovered during the ground investigation can be viewed on the following page.
- 3.4.7 The root identification is a family match to **T1**, **T2** and **T4** as identified in this report.



Root identification
Vegetation surveys
Tree/Building investigations
Plant taxonomy

Richardson's Botanical Identifications

The Drainage Repair Company
Suite 15, Leatherline House
71 Narrow Lane
AYLESTONE
Leicester LE2 8NA

07/01/2023

Dr Ian B K Richardson
BSc, MSc, PhD, MRSB, FLS
James Richardson
BSc (Hons. Biology)

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49-51 Whiteknights Road
Reading
RG6 7BB

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E-mail: richardsons@botanical.net
Web: www.botanical.net

Your ref: **LIV-SN-22-005467**

Our ref: 85/0905

Dear Lisa

27 The Foxgloves SO30 0UG

The samples you sent in relation to the above on 08/12/2022 have been examined. Their structures were referable as follows:

TP/BH1, 0.6-1.6m	
3 no.	Examined root: FRAXINUS (Ash).
4 no.	Examined root: could well be QUERCUS (Oak).
1 no.	Although examined microscopically, this was found to be only a section of either twig, stem or sucker - NOT a root. Not identified.
3 no.	Unfortunately all with insufficient cells for identification.

Click here for more information: [FRAXINUS](#) [QUERCUS](#)

I trust this is of help. Please call us if you have any queries; our Invoice is enclosed.

Yours sincerely

Dr Ian B K Richardson

** Try out our web site on www.botanical.net **

Identified with no information on vegetation, on or off site.

Report commissioned by



Address: 27 THE FOXGLOVES, HEDGE END, SOUTHAMPTON, SO30 0UG

4. Status of the Trees

- 4.1 A Tree Preservation Order (TPO) and Conservation Area check was made in
- 4.2 We are informed that there is a Tree Preservation Order (TPO) in force on this site which afford protective status to the trees detailed as **T1** and **T2** within this report.
- 4.3 Before any tree works are undertaken to protected trees, written consent from the Local Authority must first be obtained. An application for tree works form must therefore be completed and submitted to the Local Authority outlining all the proposed works along with a suitable justification. A waiting period of eight weeks is then required.
- 4.4 ***No work must be done to protected trees until permission has been granted.***

5. Tree Descriptions & Recommendations

- 5.1 Descriptions of the surveyed vegetation and all recommended work are detailed in the tables at **Appendix 1**.
- 5.2 Please refer to the site plan at **Appendix 2** for the locations of the vegetation surveyed and all the relevant site features.

6. Discussion

- 6.1 Having made a detailed survey of the site and given due consideration to the other information available, it is likely that subsidence damage is still occurring as a result of drying shrinkage caused by vegetation within influencing distance of the property.
- 6.2 This follows the partial removal of **T1** and the complete removal of **T2**, as identified by these tree numbers in the JCA Arboricultural Report Ref: **20603/AJB**. It should be noted that **T1**, detailed as **T2** within this report, was not removed completely and it has regrowth, indicating that the tree was not treated to prevent regrowth.
- 6.3 We have therefore recommended that **T1**, **T2** and **T4** be removed to ground level and that the stumps be treated to prevent regrowth.
- 6.4 As these are Third Party owned trees, the owner will require sufficient proof that the trees are contributing to the damage. In this case we have evidence of:
- The trees being within influencing distance of the damaged property.
 - The soils being confirmed as being shrinkable and desiccated.
 - Roots matching these species found in the Trial Pits below foundation level.
 - Cracking damage to the subject property.
- As Third-Party owned trees, the owner may also require the following:
- Crack/Level monitoring indicating cyclical movement.
- 6.5 We consider the vegetation identified as **H3** to be of possible future concern to the subject property, if left unmanaged. We have therefore recommended that **H3** be maintained at its current height and spread over the forthcoming years. This work is only recommended as a precaution and is not considered a priority to resolve the damage observed at the subject property.
- 6.6 We have summarised our recommendations in **Section 7** and made general recommendations in **Section 8**.
- 6.7 Please note that vegetation removal work should only be carried out once all other possible causal factors have first been discounted.

7. Summary of the Vegetation Management Recommendations

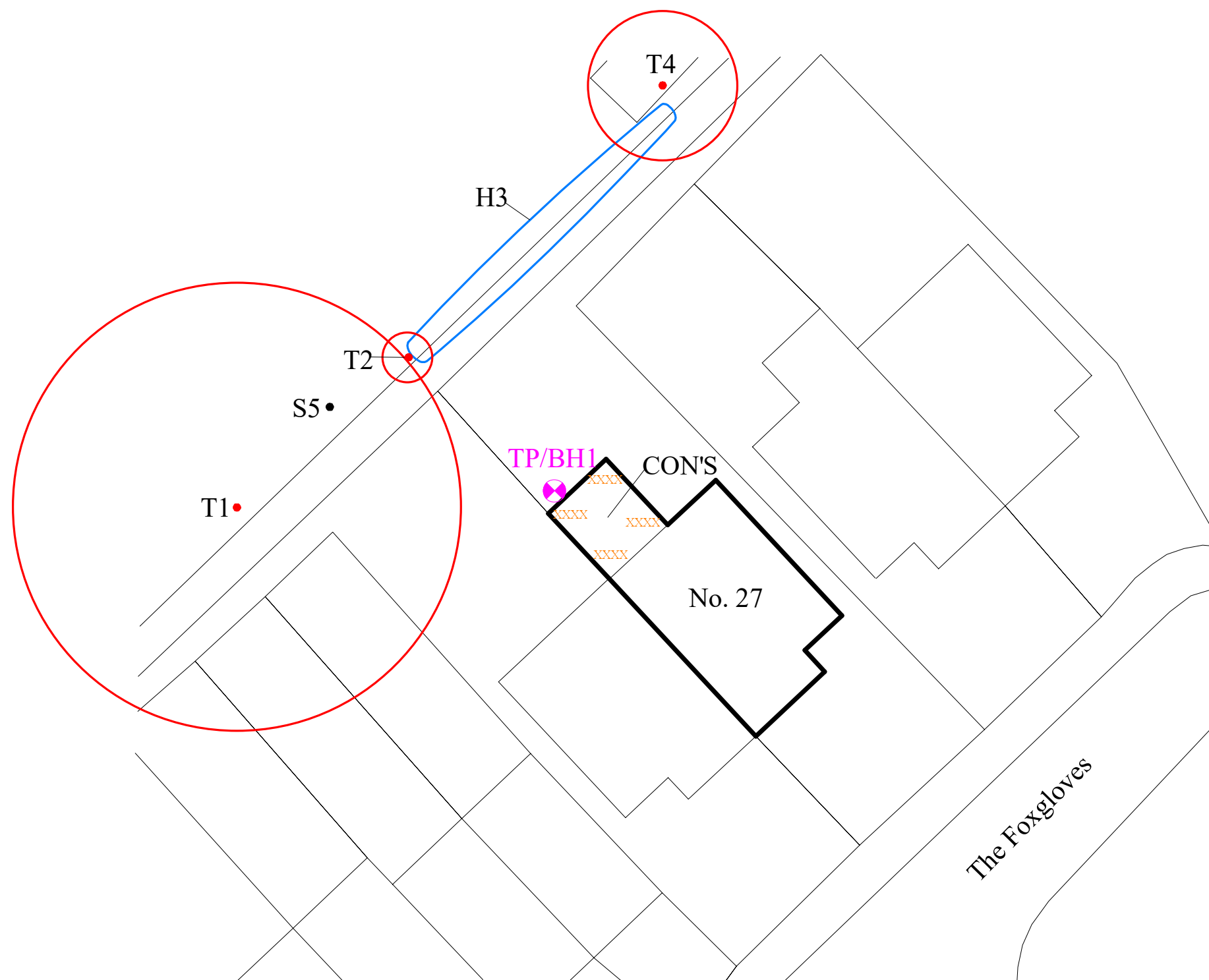
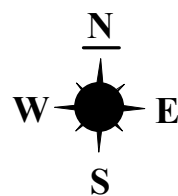
Item	Species	Vegetation Management	Location/ Ownership	Planning Restriction
T1	English Oak	Remove to ground level and treat the stump to prevent regrowth.	Third-Party: 76 Freegrounds Road	TPO
T2	English Oak	Remove to ground level and treat the stump to prevent regrowth.	Third-Party: 76 Freegrounds Road	TPO
H3	Leyland Cypress	Maintain at current height and spread over the forthcoming years.	Third-Party: 76 Freegrounds Road	None
T4	Common Ash	Remove to ground level and treat the stump to prevent regrowth.	Third-Party: 76 Freegrounds Road	None
S5	Ash	No action required.	Third Party - 76 Freegrounds Road	None

8. General Recommendations and Observations

- 8.1 This report is based upon a visual inspection. JCA Limited 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 in this report.
- 8.2 All tree work must be carried out to BS 3998: 2010 - '*Recommendations for Tree Work*'.
- 8.3 Any tree work should be carried out by qualified, experienced and skilled arboricultural contractors covered by adequate *public liability and employers liability insurance*. 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.
- 8.4 That the project engineer considers all possible solutions which may not involve vegetation works, if there is a wider public or ecological interest in retaining the trees influencing the property.
- 8.5 The property and the damage should be monitored by the project engineer on a regular basis after the recommended tree works are complete.
- 8.6 If, after the works have been carried out, there is little improvement, this may mean that the situation cannot be rectified by arboricultural means alone. If this point is reached the situation must be reassessed in conjunction with other experts.
- 8.7 No liability can be accepted by the consultant in respect of the trees unless the recommendations of this report are carried out under their supervision and within their timescale.
- 8.8 That the project engineer considers the possibility of heave, if the vegetation requiring removal pre-dates the construction of the damaged structure.

Appendices

Tree Ref.	Age Common Name Botanical Name	Height (m)	Stem Diameter (cm)	Canopy Spread (m)	Owner / Occupier Observations	Condition	Distance to Property (m)	NHBC Water Demand	Life Expectancy (yrs)	Within Potential Influencing Distance when Mature	Root Identification Match	Contributing to Damage at Current Size	Vegetation Management
T 1	Mature English Oak <i>Quercus robur</i>	25	100#	18	Third-Party: 76 Freegrounds Road Reasonable form. This tree was previously detailed as T3 in the JCA report Ref: 20603/AJB .	GOOD	15	HIGH	40+	Yes	Yes	Potentially	Remove to ground level and treat the stump to prevent regrowth.
T 2	Mature English Oak <i>Quercus robur</i>	7	100#	2	Third-Party: 76 Freegrounds Road A topped Ivy clad tree. This tree, previously detailed as T1 in the JCA report Ref: 20603/AJB was recommended for removal. The recommendations given were not carried out in full.	FAIR	6.2	HIGH	20+	Yes	Yes	Yes	Remove to ground level and treat the stump to prevent regrowth.
H 3	Early-mature Leyland Cypress <i>X Cupressocyparis leylandii</i>	To 5	To 20#	See plan	Third-Party: 76 Freegrounds Road A hedge which has been reduced in the past. This hedge was previously detailed as H4 in the JCA report Ref: 20603/AJB .	FAIR	7.3+	HIGH	20+	Yes	No	Unlikely	Maintain at current height and spread over the forthcoming years.
T 4	Early-mature Common Ash <i>Fraxinus excelsior</i>	9	90#	6	Third-Party: 76 Freegrounds Road Recently reduced. Ash Dieback noted. This tree was previously detailed as T5 in the JCA report Ref: 20603/AJB .	FAIR	13.1	MOD	10+	Yes	Yes	Potentially	Remove to ground level and treat the stump to prevent regrowth.
S 5	Semi-mature Ash <i>Fraxinus excelsior</i>	0	25	0	Third Party - 76 Freeground Road The stump remaining from a now removed tree which was detailed as T2 in the JCA report Ref: 20603/AJB .	Dead	8.5	MOD	Dead	No	Yes	No	No action required.



Appendix 2: Site Plan

ADDRESS: 27, The Foxgloves,
Hedge End, Southampton, SO30 0UG.
JCA REF: 23439/AJB

NOT TO SCALE PAPER SIZE: A3

SURVEYED BY: JS	DRAWN BY: AJB	APPROVED BY: CC
	CANOPY OF TREE/SHRUB/GROUP TO BE RETAINED; NO ACTION REQUIRED	
	CANOPY OF TREE/SHRUB/GROUP TO BE RETAINED; CURRENT OR FUTURE MANAGEMENT REQUIRED	
	CANOPY OF TREE/SHRUB/GROUP TO BE REMOVED	
	STEM OF TREE/SHRUB TO BE RETAINED	
	STEM OF TREE/SHRUB TO BE REMOVED	
	OUTLINE OF SUBJECT PROPERTY	
	APPROXIMATE LOCATION OF THE DAMAGE	
	BOREHOLE/TRIAL PIT LOCATION	

Appendix 3: 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 Director

Toby Thwaites *BSc (Hons), HND (Arboriculture), LANTRA Accredited PTI, MArborA.* 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 is now Technical Director and oversees all office and on-site activities at JCA and is on hand to offer technical support and advice.

Operations Director

Charles Cocking *FdSc (Arboriculture), LANTRA Accredited PTI, MArborA.* Charles joined JCA in January 2014 having previously worked for the company on a part time basis during 2013. Charles obtained his Foundation Degree in Arboriculture at Askham Bryan College, York, and is a Professional Member of the Arboricultural Association. Charles now oversees all internal operations for the company.

Arboricultural Projects Director

Luke Wickham *FdSc (Arboriculture and Urban Forestry), LANTRA Accredited PTI, MArborA.* Luke joined JCA in 2021 after obtaining his Foundation Degree in Arboriculture and Urban Forestry at Askham Bryan College. Having previously worked within the industry for the past 4 years, running his own small business and sub-contracting for local firms, Luke brings a sound knowledge and understanding of the practical and academic sides of the industry.

Consulting Staff: Arboriculture

Andrew Bussey *LANTRA Accredited PTI, TechArborA.* Andrew started working in consultancy at JCA in 2006 having spent 12 years working as an arborist for various private companies before joining a Local Authority forestry team. He has various NPTC qualifications and is QTRA qualified.

Emily Wilde *FdSc (Arboriculture), LANTRA Accredited PTI, TechArborA.* Emily 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.

Mick Eltringham *ND (Forestry), LANTRA Accredited PTI, TechArborA.* Mick joined JCA after spending 12 years working in the industry for various private companies in the north and south of England. He has also spent the last five years working as a consultant for two canopy research projects in the Amazon Rainforest, working with Oxford University and the University of Arizona. He has various NPTC Qualifications.

Dan Kemp *FdSc (Arboriculture), BTEC Dip (Arb), LANTRA Accredited PTI, MArborA.* Dan joined JCA in February 2019 with nearly 30 years' experience in arboriculture with extensive Botanical and Mycological expertise. He worked as a London Tree Officer for 12 years and in several arboricultural and horticultural management posts, specialising particularly in tree risk assessments and tree related subsidence.

David de Peña *BSc (Hons) Ecology and Conservation, LANTRA Accredited PTI, TechArborA.* After earning his degree from Manchester Metropolitan University, David worked as an ecologist at various consultancies, contributing to a wide range of projects, including major infrastructure projects across the UK. More recently, David transitioned to arboriculture and served as a surveyor for Manchester City of Trees, where he participated in a project to quantify the value of Greater Manchester's woodlands and trees.

Matt Large *DipArb L4 (ABC) TechArborA.* Matt is based in Northampton and assists JCA by undertaking surveys in the south of the country. He has been involved in the arboricultural sector since 1996 and obtained a Level 4 Diploma in Arboriculture in 2011. Matt is a LANTRA Accredited Professional Tree Inspector.

Jonnie Setterfield *BSc (Hons) MArborA.* / **Richard Daubeny** *Level 3 Arboriculture* / **Peter Wilkins** *BA (Hons) MArborA MEnvSc.* / **Arthur Cullen** *FdSc (Arb), MArborA* / **Andrew Saunders** *NC & ND Arboriculture, LANTRA accredited PTI.* Jonnie, Richard, Peter and Arthur are based in the south-east of the UK and assist JCA by undertaking surveys in the south of the country.

Ben Watkins *Dip Arb L4. TechArborA, LANTRA PTI Certified* / **Peter Wharton** *BSc. (Hons) Arboriculture, LANTRA PTI certified.* Ben and Peter are based in the south-west of the UK and assist JCA by undertaking surveys in the south-west of the country.

Administrative Staff

Catherine Cocking Accounts Manager.
Kelly Saunders Credit Control Manager.
Adie Gray IT Officer.

Lorraine Spink Administrative Assistant.
Alannah Chapman Administrative Assistant.

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

The contents of this report are true to the best of our knowledge and belief.

Signed



.....
Andrew Bussey *LANTRA Accredited PTI, TechArborA.*

23rd January 2026

For and on behalf of **JCA Ltd**

Registered Office

**Unit 80
Bowers Mill
Branch Road
Barkisland
Halifax
HX4 0AD**

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Professional Tree and Ecology Advice nationwide

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