

Contents

1. In	ntroduction	3
1.1	Purpose of the Report	
1.2	Terms of Reference	
1.3	Scope of the Report	3
2. Su	urvey Conditions and Methods	4
2.1	Date of Inspection and name of Inspector	4
2.2	Data Collection Methods and Explanations	4
3. G	round Investigation, Soil & Root Analysis	5
3.1	Introduction	5
3.2	Foundation Types and Depths	5
3.3	Soil Types	6
3.4	Root Analysis	8
4. St	tatus of the Trees	10
5. Ti	ree Descriptions & Recommendations	10
6. D i	iscussion	11
7. Su	ummary of Tree Specific Recommendations	12
8. G	eneral Recommendations and Observations	13
Appei	ndix 1: Tree Descriptions and Recommendations	15
Apper	ndix 2: Site Plan	16
Apper	ndix 3: Author Qualifications	17

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 suspected soil shrinkage subsidence damage at:

Kiln Cottage, Scures Hill, Nately Scures Hook, Basingstoke, Hampshire, RG27 9JS.

1.2 Terms of Reference

- 1.2.1 We are instructed by **Claims Consortium Group** to visit the site and carry out an arboricultural survey covering all vegetation within likely influencing distance of the subject property. 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.
- 1.2.2 We have been supplied with details of the site investigation, which was carried out by **CET**, 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.
- 1.2.3 We are to prepare our findings in a detailed report, making specific recommendations as to any arboricultural management which may be required.

1.3 Scope of the Report

- 1.3.1 The subject property is two-storey, detached house.
- 1.3.2 Damage, in the form of cracking, has occurred to the south-eastern corner of the house. Please see the **Claims Consortium Preliminary 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 surveyed during November 2022 by **Richard Daubeny** Level 3 Arboriculture.

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 digging 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 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.
- 2.2.5 '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.

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.

32 Foundation Types and Depths

- 3.2.1 Please refer to the site plan at **Appendix 2** for an indication of the trial pit/borehole locations.
- 3.2.2 **Trial pit/borehole 1** revealed a 150mm thick concrete foundation at a maximum depth of 450mm below ground level.
- 3.2.3 **Trial pit/borehole 2** revealed a 150mm thick concrete foundation at a maximum depth of 400mm below ground level.
- 3.2.4 **Trial pit/borehole 3** revealed a 300mm thick concrete foundation at a maximum depth of 1500mm below ground level.

3.3 Soil Types

3.3.1 Trial Pit/Borehole 1:

Hole Number	Sample Depth (m)	Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)
TP/BH 1	0.45	33	65	29	36
	1.00	27			
	1.50	30	68	29	39
	2.00	31			
	2.50	30	66	29	37
	3.00	31			
	3.50	31	68	30	38
	4.00	30			
	4.50	30	67	29	38
	5.00	30			

The results indicate that the clay soil found within **Trial Pit/Borehole 1** is of moderate shrinkability and that there is an onset of desiccation between 1.5-4.5m.

3.3.2 Trial Pit/Borehole 2:

Hole Number	Sample Depth (m)	Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)
TP/BH 2	0.40	32	65	28	37
	1.00	29	69	30	39
	1.50	31			
	2.00	31	67	29	38
	2.50	31			
	3.00	30	68	29	39
	3.50	29			
	4.00	29	68	30	38
	4.50	30			
	5.00	28	69	31	38

The results indicate that the clay soil found within **Trial Pit/Borehole 2** is of moderate shrinkability and that the soil is desiccated between 4-5m.

3.3.3 Trial Pit/Borehole 3:

Hole Number	Sample Depth (m)	Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)
TP/BH 3	1.50	31	67	29	38
	2.00	30			
	2.50	29	65	28	37
	3.00	29			
	3.50	30	66	31	35
	4.00	28			
	4.50	28	69	31	38
	5.00	26			

The results indicate that the clay soil found within **Trial Pit/Borehole 3** is of moderate shrinkability and that the soil is desiccated between 3.5-4.5m

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.





Construction Testing Solutions 4 Oak Spinney Park Ratby Lane Leicester Forest East Leicestershire LE3 3AW Intec Parc Menai, Bangor, Gwynedd, North Wales LL57 4FG Tel: 01248 672652 Fax: 01248 672601

ROOT IDENTIFICATION

Kiln Cottage

Client Reference: 722311

Report Date: 11 October 2023

Our Ref: R55300

Sub Sample	Species Identified	Root Diameter	Starch	
TP1:				
USF	Leguminosae spp.	1	1 mm	Abundant
BH1:				AND 21
to 1.1m	probably Leguminosae spp.	2	<1 mm	Moderate
TP2:	20 1 20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
USF	probably Quercus spp.	3	1 mm	Low
BH2:	9777777	****		
to 1.3m	Quercus spp.		1.5 mm	Abundant

Comments:

- 1 Plus 2 very juvenile roots, probably the same.
- 2 Plus one other the same. Both very juvenile.
- 3 Plus one other the same. Both rather juvenile.

Leguminosae spp. include laburnum, Robinia (false acacia or locust), broom, the pagoda tree and the climber wisteria. Quercus spp. are oaks (both deciduous and evergreen).

Signed: R. Shaw

Unless we are otherwise instructed in writing, the above sample material will normally be disposed of 6 years after the date of this report.





3.4.7 The root identification is a genus match to **T1**, **T2**, **T3**, **T4**, **T8** and **T12** and a family match to **C11** as identified in this report.

4. Status of the Trees

- 4.1 A Tree Preservation Order (TPO) and Conservation Area check was made in October 2023 with Basingstoke and Deane Borough Council.
- 4.2 We are informed that there is a Tree Preservation Order (TPO/BDB/0708) in force on this site affecting **T1**, **T2**, **T3**, **T4**, **T8** and **T12** as identified in 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.
- 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 having given due consideration to the other information supplied, it is likely that in this case some subsidence damage has occurred as a result of drying shrinkage caused by vegetation within influencing distance of the property.
- 6.2 We consider the vegetation identified as **T1**, **T2**, **T3**, **T4** and **C11** to be contributing to the damage observed at the subject property. We have therefore recommended that these be removed and the stumps treated to prevent regrowth.
- As protected trees, the Council will require sufficient proof that the trees are contributing to the damage. In this case we have evidence of:

The tree being within influencing distance of the damaged property.

The soils being confirmed as being shrinkable and desiccated.

Roots matching this species found in the Trial Pits at/below foundation level.

Cracking damage to the subject property.

Level monitoring indicating cyclical movement.

- 6.4 We consider the vegetation identified as **G5**, **G6**, **G9**, **G10** and **S13** to be of possible future concern to the subject property, if left unmanaged. We have therefore recommended that these be maintained at their current dimensions moving forward. These works are only recommended as a precaution and are not considered a priority to resolve the damage observed at the subject property.
- 6.5 We have summarised all our tree specific recommendations in **Section 7** and made general recommendations in **Section 8**. The effect of these recommendations should be to prevent further damage by reducing the moisture uptake close to the problem areas.

7. Summary of Tree Specific Recommendations

Item	Species	Recommended Action	Location/ Ownership	Planning Restriction
T1	English Oak	Remove to ground level and treat stump to prevent regrowth.	Policy Holder	TPO
T2	English Oak	Remove to ground level and treat stump to prevent regrowth.	Policy Holder	TPO
Т3	English Oak	Remove to ground level and treat stump to prevent regrowth.	Policy Holder	TPO
Т4	English Oak	Remove to ground level and treat stump to prevent regrowth.	Policy Holder	TPO
G5	Mixed Species	Maintain at current height and spread.	Policy Holder	No TPO. No conservation area.
G6	Lawson Cypress	Maintain at current height and spread.	Policy Holder	No TPO. No conservation area.
G7	Mixed Species	No action required.	Policy Holder	No TPO. No conservation area.
Т8	English Oak	No action required.	Third Party - Baredown Brae, London Road	ТРО
G10	Mixed Species	Maintain at current height and spread.	Policy Holder	No TPO. No conservation area.
G10	Rose	To be maintained at current height and spread by request of policy holder.	Policy Holder	No TPO. No conservation area.
C11	Wisteria	Remove to ground level and treat stumps to prevent regrowth.	Policy Holder	No TPO. No conservation area.
T12	English Oak	No action required.	Policy Holder	TPO
S13	Rose	To be maintained at current height and spread by request of policy holder.	Policy Holder	No TPO. No conservation area.
G14	Mixed Species	No action required.	Policy Holder	No TPO. No conservation area.

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 The influence of trees on the soil and on buildings may change as they grow, as climate varies, or as other changes occur in the local environment. It is therefore advisable to have trees inspected by JCA Limited annually.
- 8.5 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.
- 8.6 The property and the damage should be monitored by the project engineer on a regular basis after the recommended tree works are complete.
- 8.7 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.
- 8.8 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.
- 8.9 That the project engineer considers the possibility of heave.

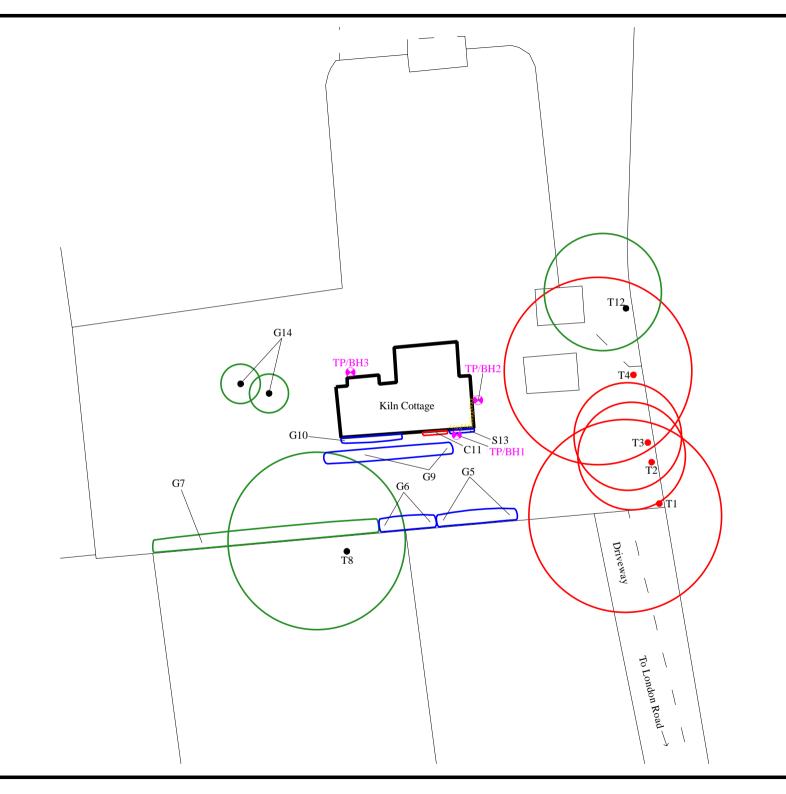
Appendices

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	Root Identification Match	Contributing to Damage	Vegetation Management Option
T 1	Mature English Oak Quercus robur	24	140	20	Policy Holder Multi-stemmed at 1.4m. No recent management noted.	GOOD	21	HIGH	40+	Yes	Yes	Likely	Remove to ground level and treat stump to prevent regrowth.
Т 2	Mature English Oak Quercus robur	19	50	11	Policy Holder No recent management noted.	FAIR	18.9	HIGH	40+	Yes	Yes	Yes	Remove to ground level and treat stump to prevent regrowth.
Т 3	Mature English Oak Quercus robur	18	45	11	Policy Holder No recent management noted.	FAIR	18	HIGH	40+	Yes	Yes	Yes	Remove to ground level and treat stump to prevent regrowth.
Т 4	Mature English Oak Quercus robur	24	100	19	Policy Holder No recent management noted.	FAIR	16.9	HIGH	40+	Yes	Yes	Yes	Remove to ground level and treat stump to prevent regrowth.
G 5	Mature Mixed Species Details in Observations	6	Avg. 17	3	Policy Holder Hawthorn, Pittosporum and Laurel. No recent management noted.	FAIR	10	MOD - HIGH	20+	Yes	No	Unlikely	Maintain at current height and spread.
G 6	Mature Lawson Cypress Chamaecyparis lawsoniana	18	To 35	4	Policy Holder 6 trees in group, some multi-stemmed. No recent management noted.	FAIR	10	HIGH	40+	Yes	No	Unlikely	Maintain at current height and spread.
G 7	Mature Mixed Species Details in Observations	18	To 35	4	Policy Holder 8 trees in group. Laurel - regularly maintained spread. Lawson Cypress - no recent management noted.	FAIR	10.3	MOD - HIGH	40+	Yes	No	No	No action required.
Т 8	Mature English Oak Quercus robur	23	90	18	Third Party - Baredown Brae, London Road No recent management noted.	FAIR	15	HIGH	40+	Yes	Yes	Unlikely	No action required.
G 9	Mature Mixed Species Details in Observations	3	To 10	3	Policy Holder Hydrangea, Honeysuckle and Lilac. 9 shrubs in group. No recent management noted.	FAIR	2.2	NO DATA	20+	Yes	No	Unlikely	Maintain at current height and spread.
G 10	Mature Rose Rosa sp.	3	Avg.	1.5	Policy Holder No recent management noted.	FAIR	0	NO DATA	20+	Yes	No	Unlikely	To be maintained at current height and spread by request of policy holder.

JCA Limited 2022 # Dimension Estimated

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	Root Identification Match	Contributing to Damage	Vegetation Management Option
C 11	Mature Wisteria Wisteria sp.	3	Avg.	4	Policy Holder Regularly maintained height and spread.	GOOD	0	NO DATA	40+	Yes	Yes	Likely	Remove to ground level and treat stumps to prevent regrowth.
Т 12	Mature English Oak Quercus robur	18	48	12	Policy Holder Crown weighted to the west. No recent management noted.	FAIR	15.1	HIGH	40+	Yes	Yes	Unlikely	No action required.
S 13	Mature Rose Rosa sp.	2	2	1.5	Policy Holder No recent management noted.	FAIR	0	NO DATA	20+	Yes	No	Potentially	To be maintained at current height and spread by request of policy holder.
G 14	Mature Mixed Species See observations for further details.	4	To 11	4	Policy Holder Gilder Rose and Lilac. 2 shrubs in group. No recent management noted.	FAIR	6.6	NO DATA	20+	No	No	No	No action required.

JCA Limited 2022 # Dimension Estimated





Appendix 2: Site Plan

ADDRESS: Kiln Cottage, Scures Hill, Nately Scures Hook, Basingstoke, Hampshire, RG27 9JS. JCA REF: 19561-Rev.3/AM

NOT TO SC	ALE	PAPER SIZE: A4					
SURVEYED BY: RD	DRAWN	I BY: AM	APPROVED BY: LV				
	CANOPY OF TREE/SHRUB/GROU TO BE RETAINED; NO ACTION REQUIRED						
	CANOPY OF TREE/SHRUB/GROU TO BE RETAINED; CURRENT OR FUTURE MANAGEMENT REQUIRED						
0	CANOPY OF TREE/SHRUB/GRO TO BE REMOVED STEM OF TREE/SHRUB TO BE RETAINED						
•							
•		F TREE/SF REMOVED	IRUB				
1	OUTLIN	ECT PROPERTY					
XXXX	APPROX OF THE	OCATION					
•	BOREHOLE/TRIAL PIT LOCATION						



JCA Ref: 19561-Rev.3/AM Page 17 of 20

Appendix 3: Author Qualifications

Principal Consultant and Managing Director

Jonathan Cocking F.R.E.S., Tech. Cert. (ArborA), 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 Arboricultural list and an Expert Witness with much experience of litigation work.

Technical Director

Toby Thwaites BSc (Hons), HND (Arboriculture), 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), 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.

Consulting Staff: Arboriculture

Andrew Bussey. 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, is QTRA qualified and is a LANTRA Accredited Professional Tree Inspector.

Emily Wilde FdSc (Arboriculture). 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*). 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). Dan joined JCA with nearly 30 years' experience in arboriculture. 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.

Luke Wickham FdSc (Arboriculture and Urban Forestry), TechArborA. 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.

Hazel Irving FdSc (Arboriculture and Urban Forestry). Hazel joined JCA in 2022 after obtaining her Foundation Degree in Arboriculture and Urban Forestry at Askham Bryan College. She has previously worked in the horticulture industry, volunteered with the National Trust and Yorkshire Arboretum and completed the 2021 student research internship at the RHS Wisley Plant Health Centre.

Andrew McPhaden *BSc (Hons), TechArborA.* Andrew joined JCA in 2022 having spent 5 years working as an Arborist for various private companies in both the UK and Germany. During his time abroad he obtained the European Tree Worker Certification along with a tree inspector certification from the Forschungsgesellschaft Landschaftsentwicklung Ladschaftsbau.

Patrick Gibson *Nch Arb*, *Lantra PTI*. Patrick joined JCA in 2023 having worked in Arbonicultural industry for over 20 years. He has worked for various private companies and was a supervisor/manager at Ealing Council. He has various NPTC qualifications and is a LANTRA Accredited Professional Tree Inspector. Patrick has also been a field ecologist since 1995

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.

JCA Ref: 19561-Rev.3/AM Page 18 of 20

Jonnie Setterfield BSc (Hons) MArborA. / Richard Daubeny Level 3 Arboriculture / Peter Wilkins BA (Hons) MArborA MIEnvSc. Jonnie, Richard and Peter 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, PTI Certified. Ben is based in the south-west of the UK and assists JCA by undertaking surveys in the south-west of the country.

Administrative Staff

Catherine Cocking Accounts Manager. **Kelly Saunders** Accounts Assistant.

Lorraine Spink Administrative Assistant. **Adie Gray** IT Officer.

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.





Andrew McPhaden BSc (Hons), TechArborA.

24th October 2023

For and on behalf of JCA Ltd

Registered Office

Unit 80
Bowers Mill
Branch Road
Barkisland
Halifax
HX4 0AD

Tel: 01422 376335 Fax: 01422 376232 Email: info@jcaac.com

www.jcaac.com

JCA Ltd. Arboricultural and Ecological Consultants Professional Tree and Ecology Advice nationwide

ARBORICULTURAL SERVICES

Guidance for Architects and Developers

- British Standard 5837 Tree Surveys
- Arboricultural Implication Assessments (AIA)
- · Arboricultural Method Statements (AMS)

Tree Advice for the Legal Profession

- Subsidence Litigation
- · Personal Injury and Accident Investigation
- · Expert Witness, Planning Inquiries and Appeals

Advice for Engineers, Loss Adjusters and Insurers

- Tree Surveys for Subsidence
- · Heave Assessment
- Tree Root Identification

Veteran Tree Management

- · Ancient Woodland Management
- · Veteran Tree Management

Advice for Local Authorities and Social Housing

- Tree Safety Surveys
- · Specialist Decay Detection
- · Landscape and Orchard Design

Tree Health and Pest and Disease Management

- · Pest and Disease Surveys
- · Tree Health Checks
- · Disease Mitigation and Control

ECOLOGICAL SERVICES

Ecological Pre-Planning Services

- · Phase 1 Habitat Surveys
- · Great Crested Newt eDNA Sampling
- · Protected Species: Bat, Wintering and Nesting Bird, Badger, Amphibian, Otter, Water Vole, White-Clawed Crayfish, Dormice and Reptile Surveys.
- · Preparation for Environmental Impact Assessment (EIA)
- · Invasive Species Surveys
- · Code for Sustainable Homes

Ecological Post-Planning Services

· Biodiversity Enhancement Plans

· Protected Species Mitigation

· Ecological Management (Bat and Bird box installation and inspection)

HEAD QUARTERS:

Unit 80 Bowers Mill, Branch Road, Barkisland, Halifax, HX4 0AD.

Tel: 01422 376335 Email: info@jcaac.com Website: www.jcaac.com

Company Reg No. 05005041 VAT No. 686 4674 78