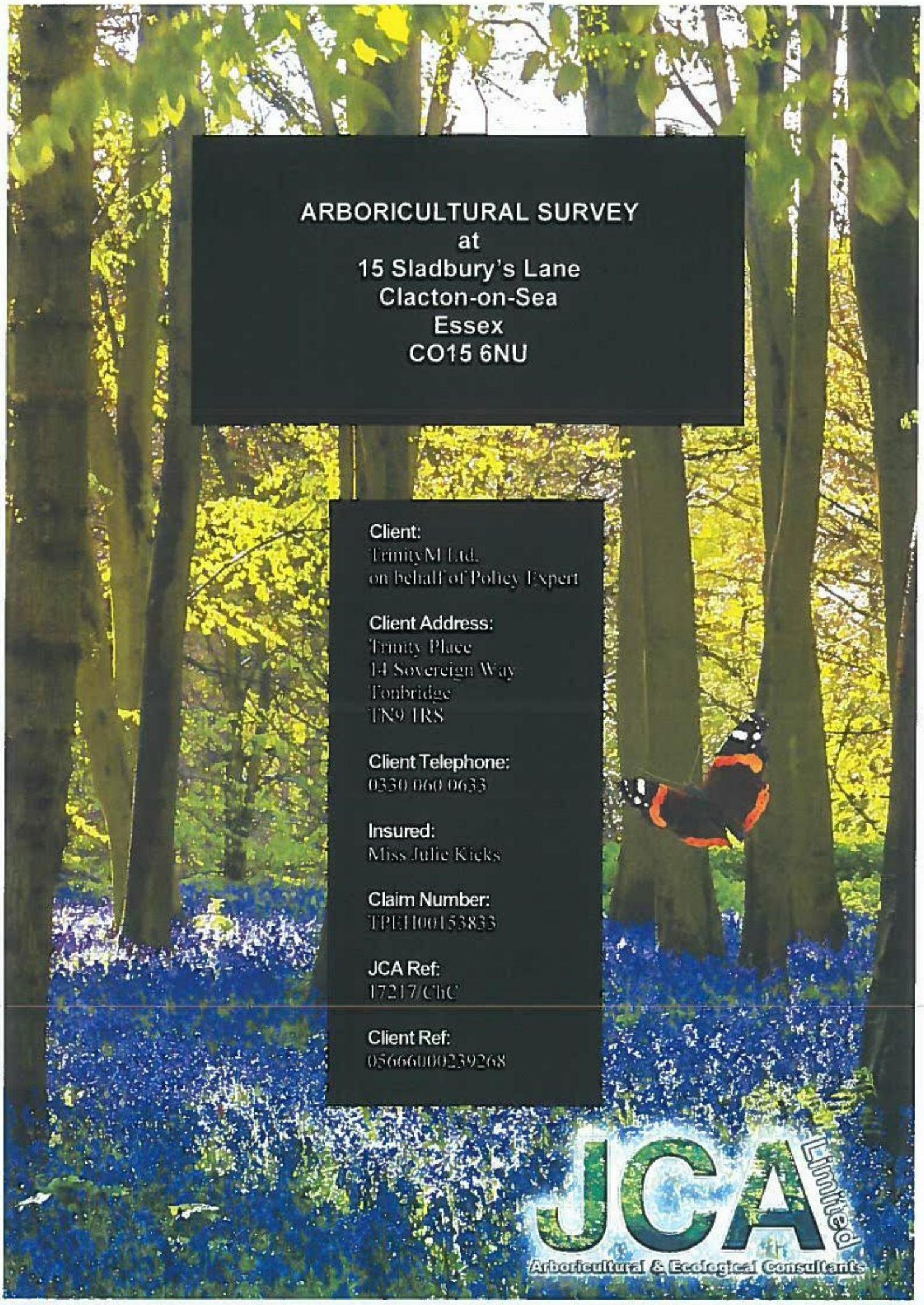

ARBORICULTURAL SURVEY
at
15 Sladbury's Lane
Clacton-on-Sea
Essex
CO15 6NU

Client:
TrinityM Ltd.
on behalf of Policy Expert

Client Address:
Trinity Place
14 Sovereign Way
Tonbridge
TN9 1RS

Client Telephone:
0330 060 0633

Insured:
Miss Julie Kicks

Claim Number:
TPEH00153833

JCA Ref:
17217/ChC

Client Ref:
0566600239268

JCA Limited
Arboricultural & Ecological Consultants

Contents

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:

15 Sladbury's Lane, Clacton-on-Sea, Essex. CO15 6NU.

1.2 Terms of Reference

1.2.1 We are instructed by **TrinityM Ltd** 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.

1.2.2 We have been supplied with details of the site investigation, which was carried out by **Catalyst Claims** 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 in prescribing recommendations for current, or future action.

1.2.3 We are to prepare our findings in a detailed report, making specific recommendations as to any arboricultural management required to prevent further damage.

1.3 Scope of the Report

1.3.1 The subject property is a detached residential dwelling.

1.3.2 Damage has occurred to the front of the house.

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 June 2021 by **Peter Wilkins** *BA (Hons) MArborA MIEnvSc.*

2.2 Data Collection Methods

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 on this occasion.

2.2.2 The measurements were made using instruments including clinometers for tree *HEIGHT*, stem diameter tapes for *DIAMETER* (measured at 1.5m above ground level) and tape measures or electronic distometers for *CROWN SPREAD* and *DISTANCE TO PROPERTY.*

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 not derived from the NHBC's 'zones of influence' formula. It is merely an estimation of the potential of a tree or 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 falling naturally through precipitation. 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 causes 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 Foundations 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 concrete foundation at a maximum depth of 650mm below ground level.

3.3 Soil Types

3.3.1 **Trial Pit/Borehole 1:**

- The soils *plasticity index* ranged from 41% to 51%.
- *Moisture contents* within the soil samples ranged from 22.1% to 37.1%.
- The *plastic limit* of the soils ranged from 31% to 38%.
- The *liquid limit* of the soils ranged from 72% to 89%.

These results indicate that the clay soil found within **Trial Pit/Borehole 1** is of high shrinkability and that the soil is desiccated.

3.4 Root Analysis

Richardson's Botanical Identifications

Root identification
Vegetation surveys
Tree/Building investigations
Plant taxonomy

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
[redacted]
Web: www.botanical.net

Catalyst Claims Management Ltd.
Gatehead Business Park
Delph New Road
OLDHAM
OL3 5DE

Your ref: **5000-21380**

Our ref: **BQ 8614**

05/11/2020

Dear Sirs

15 Sladburys Lane, Clacton-on-Sea CO15 6NU

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

BH1, F.L.-1.0m		
4 no.	Examined root: QUERCUS (Oak).	Alive, recently*.
3 no.	Sections of either twig, stem or sucker only - NOT roots. Although examined in our laboratory, they were not identifiable.	
3 no.	Unfortunately all with insufficient cells for identification.	

Click here for more information: QUERCUS

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

Yours faithfully

[redacted]

Dr Ian B K Richardson

* Based mainly on the iodine test for starch. Starch is present in some cells of a living woody root, but is more or less rapidly broken down by soil micro-organisms on death of the root, sometimes before decay is evident. This result need not reflect the state of the parent tree.

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

4. Status of the Trees

4.1 A check was made in May 2021 with Tendring District Council.

4.2 We are informed that **T2** (as identified in this report) is protected by an individual Tree Preservation Order (TPO).

4.3 Before any tree works are undertaken to **T2**, 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 T2 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. Conclusions

6.1 Having made a detailed survey of the site and having given due consideration to the other information supplied, we are satisfied 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 **T2** to be the primary cause of the damage observed at the subject property. We have therefore recommended that this tree be removed to ground level, and that the stump be treated to prevent regrowth.

6.3 We consider the vegetation identified as **T1, T3** and **H4** to be of possible future concern to the subject property, if left unmanaged. We have therefore recommended that these items of vegetation be maintained at their current size over the forthcoming years. These works are only recommended as a precaution and are not considered a priority to resolve the damage observed at the subject property.

6.4 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	Planning Restriction
T1	Blue Atlas Cedar	Maintain at current size over the forthcoming years.	Subject Property	None
T2	Oak	Remove to ground level and treat the stump to prevent regrowth.	Third Party – Unknown Ownership	Yes - TPO
T3	Oak	Maintain at current size over the forthcoming years.	Third Party – Unknown Ownership	None
H4	Mixed	Maintain at current size over the forthcoming years.	Subject Property/Third Party	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 work recommended in this report must be carried out to BS 3998: 2010 - '*Recommendations for Tree Work*'.

8.3 All the work as specified in this report 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 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.