ARBORICULTURAL ASSESSMENT REPORT

For:

Client: Oriel Services Limited
Insurer:

Site: Policyholder:
Risk Address: 15 Fairhazel Gardens, London NW6 3QJ

Refs: OCA Ref: 57572
Client Ref: 7850065
Insurer Ref:

Report By:	Margaret MacQueen		
Title:	Consultant Arborist	Date:	31 December 2014



Consulting Arboriculturists

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CONTENTS

1.0	INTRODUCTION & BRIEF	3
2.0	LIMITATIONS	3
3.0	DISCUSSION AND ANALYSIS	4
4.0	EVIDENTIAL REVIEW AND MATERIAL CONSIDERATIONS	5
5.0	CONCLUSIONS AND RECOMMENDATIONS	6
6.0	STATUTORY CONTROLS	6
7.0	APPENDIX 1: TREE TABLES	7
8.0	APPENDIX 2: SITE PLAN	9
o 0	ADDENINIY 3: SITE DHOTOGRADHS	4.4

1.0 INTRODUCTION & BRIEF

- 1.1 OCA UK Limited has been instructed by Oriel Services Limited on behalf of the building insurers of 15 Fairhazel Gardens, London (the insured property). We have been advised that the insured property has suffered differential movement and damage which is considered to have been caused by trees growing adjacent the property influencing soils beneath its foundations.
- 1.2 We have been instructed to undertake a survey of the vegetation growing adjacent the insured property, to provide our opinion as to whether, based on the available information any of this vegetation is likely to be influencing soil moisture levels beneath the foundations of the property and if so to provide recommendations as to what tree management could be implemented to effectively prevent damage continuing.
- **1.3** The vegetation growing adjacent the risk address has been surveyed from the ground. All distances are measured to the nearest point of the risk address unless otherwise stated

2.0 LIMITATIONS

- 2.1 Recommendations with respect to tree management are associated with the risk address as stated on the front cover of this report and following consultation with investigating engineers. The survey of trees and any other vegetation is associated with impacts on the risk address subject of this report. Matters of tree health, structural condition and/or of the safety of vegetation under third party control are specifically excluded. Third party land owners are strongly advised to seek their own professional advice as it relates to the health and stability of trees under their control.
- **2.2** Recommendations do not take account of any necessary permission (statutory or otherwise) that must be obtained before proceeding with any tree works.
- **2.3** Recommendations do not take account of any requirements for survey or mitigation relating to European or other protected species, e.g. bird nesting or bats. Land owners must obtain their own professional advice in respect of any protected species.

3.0 DISCUSSION AND ANALYSIS

3.1 Soils, soil water and vegetation

All vegetation requires water to live and this water is substantially accessed from the soil within which the plants roots grow.

If the soil is classified as a clay soil then it will hold very much more water than sands, gravels and loam soils. During the summer as plants abstract water from the clay soil then the soil volume will "shrink" and "swell" as water is first removed and then added by summer rainfall.

In years in which rainfall during the summer is less than the total amount of water taken from the soil by plants then shrinkage will occur. This shrinkage may remove support from building foundations leading to cracking in the fabric of the building.

3.2 Vegetation management

The control of trees, shrubs and climbers by removal or pruning as appropriate are proven techniques that can control total soil water loss thereby minimising soil shrinkage and allowing repairs to proceed.

If vegetation management works are carried out promptly then repairs can usually proceed very quickly and the duration and distress associated with the disruption that tree related subsidence brings can be minimised.

3.3 Third party liaison and statutory controls

Tree roots do not respect physical or property boundaries and can travel for many metres beyond the above ground "dripline" of the canopy of the vegetation.

The purpose of this report is to ascertain which vegetation is the most likely substantial and/or effective contributory cause of the damage witnessed to allow for liaison with third parties or with local administrative Councils as necessary.

You can learn more about tree related subsidence of low rise buildings by visiting:

www.oca-arb.co.uk/whatisSubsidence.htm

4.0 EVIDENTIAL REVIEW AND MATERIAL CONSIDERATIONS

4.1 Engineering Summary

Report dated 01 December 2014

The engineer has described the damage to the property, its location and the likely mechanism of movement, and has concluded that the building failure is related to differential subsidence damage caused as a result of the action of vegetation.

This is a new subsidence claim and we are unaware of any previous history of subsidence at the property.

4.2 Foundations, geotechnical, and root identification

Report dated 11 November 2014

A factual geotechnical report has described the below ground foundation design, soil and geotechnical conditions..

Foundations are described as being 300mm below ground level.

Trial pit / borehole samples have been subject to laboratory analysis and the results of these tests indicate soils have a plasticity index ranging from 38% to 52%.

4.3 Monitoring results and other engineering evidence or advice.

Monitoring has been set up but there are currently insufficient readings to review

The Engineer has made no comment in relation nto drainage or whether there is any risk of heave in the event of being able to remove the implicated vegetation

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Results of the field survey and evidential review

We can confirm that vegetation exists on or near the insured property that is considered to be causing or contributing to the current subsidence damage.

5.2 Recommendations

On the basis of our findings we have considered a practical vegetation management specification. This specification will assist in reducing the impact of the adjacent vegetation on soil moisture levels, thereby potentially stabilising foundations of the affected area of the building.

Where felling has been proposed, this will be on the basis that the vegetation in question would not respond well to a severe reduction in leaf area that would inevitably lead to decay, the development of potential hazards, and an annual or other on-going management commitment and cost. If pruning is recommended, the specification will be designed to allow continual ease of re-pruning with a reasonable prospect of a reduction in soil water use.

5.3 Recommended vegetation management to address the current subsidence:

Tree No:	Species	Works Required
T1	Lombardy Poplar	Fell and treat stump
T2	London Plane	Fell and treat stump

6.0 STATUTORY CONTROLS

We are currently waiting for confirmation from Camden Borough Council as to whether any of the implicated vegetation is subject to a Tree Preservation Order or Conservation Area controls.

7.0 APPENDIX 1: TREE TABLES						
•	7.0 APPENDIX I: TREE TABLES					
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	YO – Young. SM – Semi-Mature.EM – Early Mature. MA – Mature. FM – Fully Mature. OM – Over Mature	Ownership	PH – Within boundary of risk address. P3P – Within boundary of third party properties.
	G – Good. F – Fair. P – Poor. D – Dead, Dying or Dangerous]	LA – Within land owned by a Local Authority. C3P – Commercial third party.
Stem Diameter	MS – Multi-stemmed tree		U – Within land of indeterminable ownership.



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Tree No	Common Name	Age Class	Condition	Height (m)	Crown Spread (m)	Stem diam. (mm)	Dist to bldg (m)	Pruning history	Recommendation	Tree work constraints	Notes	Owner address	Owner
T1	Lombardy Poplar	ОМ	Р	14	3	800	8	Pollard. 2 years' regrowth.	Fell and treat stump.	None	Topped out at 12m	15 Fairhazel Gardens, London, NW6 3QJ	PH
T2	London Plane	МА	F	18	10	600	0.25	Reduced >5 years ago	Fell and treat stump.	None	Past topped out at 10m	70 Aberdare Gardens, London, NW6 3QD	РЗР
Т3	London Plane	МА	F	18	10	600	3	Reduced >5 years ago	No work required.	N/A		70 Aberdare Gardens, London, NW6 3QD	РЗР
T4	London Plane	МА	F	18	10	600	5	Reduced >5 years ago	No work required.	N/A		70 Aberdare Gardens, London, NW6 3QD	Р3Р
T5	London Plane	МА	F	18	10	600	8	Reduced >5 years ago	No work required.	N/A		70 Aberdare Gardens, London, NW6 3QD	РЗР
Т6	London Plane	МА	F	18	10	600	12	No significant past tree works	No work required.	N/A		70 Aberdare Gardens, London, NW6 3QD	РЗР
T7	London Plane	MA	F	18	10	600	14	Reduced >5 years ago	No work required.	N/A		70 Aberdare Gardens, London, NW6 3QD	РЗР

	8.0 APPENDIX	K 2: SITE PLAN	
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	9.0 APPENDIX 3	: SITE PHOTOGRAF	PHS
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Site Photographs



1. T1 Lombardy Poplar



2. T2 London Plane to right



3. T1 Lombardy Poplar and T2 London Plane to right



4. T2 to T7 looking north

.

Report Photos No: 57572



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