Confidential

A briefing note prepared on Insurance Claim 191021/62486 - Alexandra Gardens London Plane trees and alleged damage to 13 Holland Street.

Plan 1 – Site Plan of Alexandra showing Trees T1 to T5

1.0 Background

1.1 The claimants' representative wrote to the Council in 2008 advising that there was damage to the property and furthermore they have implicated some London Plane trees growing under the City Council's ownership in contributing to, or causing the subsidence damage.

1.2 The damage would currently be classified at Category 1-2 (slight) in accordance with BRE Digest 251[1]. The primary relates to hairline cracks along the left hand external wall and internal partition wall.

[1] The BRE is a scientific organisation that focuses on all aspects of the built environment. The research that is undertaken is published in a variety of documents of which, the Digests form a principal source of information for surveyors, engineers, architects and contractors. Digest 251 Assessment of damage in low-rise buildings is essentially the yard stick by which the seriousness of cracking and distortion in houses is measured

1.3 Externally there is a 1mm vertical crack through the brickwork where the rear extension joins the original house. There are also 1mm cracks below the ground floor kitchen window and below the first floor bedroom window, above the conservatory. There is also 1mm wide vertical crack at the junction of the conservatory wall and the gable wall of the house. This crack has previously been repointed and it is evident that Helibars[2] have been installed in this repair.

1.4 It is understood that previous damage was discovered in or around May 2004 and that the occupier submitted a claim to their own Insurers who instructed Loss Adjusters to deal with the matter.

1.5 We believe that repairs totalling approximately £13,000 were undertaken during the Summer of 2006 although shortly thereafter further cracking damage appeared.

1.6 The original house was built in 1894, with significant extension in 1980-82. The back extension to the original house was extended by 100% with a further section and garage added to that.

1.7 The trees are mature London plane trees planted in 1905 when Alexandra Gardens were laid out. (T1 to T5 on the plan 1). The surrounding streets of terraced properties had been built in the late nineteenth century. The old brickworks had closed in 1887 and it was decided to convert the site into an amenity space.

1.8 London plane trees were planted in a line on the boundary fronting Carlyle Road and in an avenue following the rear boundaries of properties on Alpha Road. Ten trees front Carlyle Road and eight face Alpha Road with an additional three around the play area. They have matured to provide an effective and impressive boundary feature to the open space. As such the trees are a highly valued and significant public resource.

1.9 All the trees appear to be in good health; dead wood is removed routinely. The trees measure 20-25m in height and

[2] Trade name of a product used to distribute loads and overcoming various problems caused by foundation movement

have a radius of 8-10m. As individual plants each tree is a fine specimen, collectively they create an impressive and statuesque feature.

1.10 The Alexandra Gardens and Holland Street are not part of a designated conservation area.

1.11 There are smaller trees growing adjacent and beneath the London plane trees. None of these trees are implicated in the structural damage and there has been no request to prune any of these trees.

2 Chronology

2.1 The trees reached their maturity size in approximately 1960. They will not get significantly larger than their current state.

2.2 The house was extended in 1980-82.

2.3 Cracking was first noticed after the dry summer of 2003 and the owners made an insurance claim in May 2004. The insurer's concluded that the trees in Alexandra Gardens were responsible.

2.4 In October 2004 agents for the insurers wrote to the Council suggesting the trees were a possible issue but did not supply any information to link the trees with structural damage. The Council replied advising that the information did not implicate the trees and outlined the data required to do so, meanwhile the trees would be managed in accordance with the Arboricultural Strategy. No further reports or information was received from the insurers or their agents.

2.5 Superstructure repairs were completed in the early summer of 2006 at a cost in excess of £13,000. Cracks reappeared within months and the owner notified the insurance company.

2.6 In May 2008 another company newly appointed to act for the insurers, wrote to the Finance Department to advise the Council that investigations carried out by their engineer confirmed damage to the property to be "indicative of subsidence" and that nearby vegetation owned by the

Council “may be a significant influencing factor”. Further investigations were to be undertaken “to confirm if a nuisance is occurring.” The Council replied outlining the information required to implicate the trees in any structural damage to include: -

- A plan of the location showing the property and the tree or trees and other vegetation nearby;
- Plan of the property showing where the damage occurs and the position of trial holes and bore holes;
- Samples of soil, their analysis, content and desiccation to at least 3-5m;
- Root sample analysis;
- Details of level monitoring;
- Details of crack monitoring;
- Photographs.

2.7 In February 2009 this further information was received and the report provided linked three trees (T2, T3 & T4) to structural damage. The trees were reduced by 30% of their volume in March 2009. The Council stated the work would be repeated bi-annually. The Council asked the agent if this would be sufficient to satisfy the client. In May 2009 the agent was still awaiting clarification from the client.

2.8 In November 2009 the agent wrote to the Council to advise that continued monitoring over the summer and autumn had shown further seasonal movement and recommended removing the trees. Failure to do so would require an engineering solution and the insurers would seek to recover costs.

2.9 The Council due to staff absence on long-term illness did not address the matter and a delay occurred.

2.10 In February 2010 the latest 2009 information was assessed and the Council sought the professional advice and expertise of independent structural engineers, who advise the Council on structural engineering problems and related insurance claims.

2.11 Peter Dann associates were provided with all the data available and carried out a site visit. They concluded based

on the information provide to them by the third party, that the trees were implicated in structural damage to the property and advised three options to minimise the risk to the property.

1. to remove one tree and reduce two others,
2. underpin the property, costs to be recovered, or
3. enter a strict regular and agreed tree management regime which would maintain stability within the property.

2.12 The agents advised in a letter dated May 2010 that if the trees remained the property would be underpinned, if the trees removed no underpinning would be necessary and any vegetation management option would need to be reviewed.

2.13 A meeting was held in June 2010 with the owners, the insurance broker, engineers and arboriculturalists from both parties. It is the arboricultural officers interpretation of that meeting that whilst the engineers and arboriculturalists were prepared to negotiate a regime of regular tree management, the owners and insurance broker would only consider either the removal of one tree and substantial reduction of two adjacent trees which would not require the property to be underpinned or the retention of the trees and the underpinning of the property, the costs of which would be recovered.

2.14 Tree works where suggested and consulted on using the Tree Protocol. The suggested tree works including the felling of one tree and crown reduction of two others. A report to September 2010 Planning Committee was withdrawn, to allow members of the public further time to comment on the proposed tree works, and for further investigatory work to be completed.

2.15 A public meeting was held on the 15th October 2010. The meeting outlined the City Councils approach and allowed opportunity for concerns to be raised. The Council outlined that in accepting any claim that the tree is deemed ‘on balance of probabilities be the casual factor creating the movement. The meeting raised questions around the City Councils challenge of evidence and the need for tree works.

2.16 The Council appointed GAB Robins as their Loss Adjusters in conjunction with their insurers Zurich Municipal. The Loss Adjuster has visited the property, and was asked to review and challenge where necessary the level monitoring and lab analysis. The GAB Robins report is attached as Appendix A and in summary states that:-

- The extent of the severity of the damage does not warrant underpinning;
- It is believed that if the size and proximity of the trees remain at their current size there is a probability that the property will suffer further subsidence in the event of a dry, warm summer;
- The law of nuisance has been established by the case of *Solloway v Hampshire County Council*;
- It is likely that liability will attach to the Council.

2.17 The Council requested that the Loss Adjusters appoint an independent Arboricultural expert to verify the findings of their report. GAB Robins appointed Dr Giles Biddle as the independent Arboricultural expert. Dr Biddle's report is attached as Appendix B and in summary states that:-

- Recognises the high value of the trees;
- The soil investigations are of limited value;
- The level monitoring, although intermittent, is useful in determining causation;
- The distribution of movement, soil desiccation and the presence of Plane roots, confirms that the trees were the cause of the damage.

2.18 A meeting was held on the 30th December when local residents presented their research and findings to the Executive Councillor and Council officers. The report is attached as Appendix C and in summary states that:-

- Something in years closer to 2003 must explain the sudden cracking to the property;
- There is widespread settlement and cracking in the neighbourhood;
- There is evidence that root growth is poor near the property with one bore hole showing no roots;
- There is no net subsidence, just seasonal movement and that the cracking may well be due to a cause inherent in the building rather than an external one;

- The movements around the wall of the building clearly show the house is moving up an down in three articulate sections. The cracking is centre on the joins;
- The 1980s extension is on different foundations and therefore the buildings move in different ways.

2.19 A further meeting was held on the 5th January with claimants not included. Present at this meeting where Dr Giles Biddle, Deborah Hall – GAB Robins (Loss Adjuster), Executive Councillor for Arts and Recreation, Director of Customer and Community Services, Head of Legal Services, Head of Streets and Open Spaces, Support Services Manager, Green Space Manager, and the authors of the residents report.

2.20 Dr Biddle outlined his recommendations for tree work and answered questions.

2.21 Dr Biddle reiterated his early recommendation that '*the distribution of movement, soil desiccation and the presence of Plane roots, confirms that the trees were the cause of the damage.'*

2.23 Dr Biddle also stated '*that he was confident that if the claimant went to court, the Council would be held fully liable for all costs.'*

2.24 A further discussion took place with the Executive Councillor for Arts and Recreation, Officers, Dr Biddle and GAB Robins to discuss how to progress the decisions required.

3 Other Claims of Subsidence

3.1 Fisher Street

3.1.1 In similar circumstances a claim of subsidence damage was made against the Council relating to London Plane Trees on Alexandra Gardens and 3 Fisher Street (neighbouring property) in May 2000.

- The evidence submitted detailed highly shrinkable clay sub soils;
- The roots could not be identified as belonging to London Plane;

- The property was underpinned;
- The claim was settled with no costs to the Council.

3.2 **Alpha Road**

3.2.1 There are two further subsidence claims being considered by our insurers relating to 20 and 22 Alpha Road. These claims relate to London Plane trees growing on Alexandra Gardens. Early indications would suggest that these trees are also the cause of subsidence to the properties.

4 **Summary of findings**

4.1 Insurers acting for the owners of nearby properties have alleged structural damage from trees on Alexandra Gardens

4.2 Some London Plane trees in relation to 13 Holland Street have had their volume reduced by 30% in March 2009. Despite this reduction the prolonged drought of the autumn 2009 further movement was shown on the monitors fixed on the property.

4.3 Expert evidence has detailed that the trees close to 13 Holland Street as the cause of subsidence.

4.4 Expert evidence is likely to detail the trees close to Alpha Road as the cause of subsidence.

5 **Options**

5.1 Independent professional advisors have concluded that trees in Alexandra Gardens are implicated in the structural damage at 13 Holland Street and potentially at Alpha Road.

5.2 The following solutions can be considered.

1. The retention of all of the trees and continued monitoring of the property;
2. The retention of all of the trees, with tree management to the trees implicated opposite 13 Holland Street and continued monitoring of the property
3. Tree management of all trees on Carlyle Road
4. Tree management of trees at Carlyle Road on Alpha Road

5. Tree management of all trees.

5.3 **No work to the Trees**

5.3.1 **Cost implications:**

- The insurers of Holland Street could seek to recover the costs of underpinning, estimated at £60,000. Alpha Road costs are not yet known.
- The occupants of Holland Street would be re-housed whilst the building works were being undertaken. The insurers could be expected to seek to recover the £20,000 relocation costs.
- It is understood, but not confirmed, that the adjoining property at 13 Holland Street is also experiencing some structural damage. Any underpinning would require a party wall agreement with this neighbour and it is possible that the neighbour's insurer may also lodge a claim.
- Litigation defence costs would apply

5.3.2 **Insurance implications:**

If the Council's insurers accept that on a balance of probabilities the trees are the primary cause and liability would attach but we choose not to abate the nuisance, the Council would no longer be covered by the insurance policy.

5.3.2.1 The claimant has to prove causation and foreseeability, the report from GAB Robins indicates that it is likely that these can be proven as a consequence:-

- The Council's insurers would not meet any expenses incurred because the costs do not fall within the scope of the insurance policy.
- The Council's insurers would not meet any future claims against these three trees because the trees are known to have caused structural damage.

5.4 **Tree Management**

5.4.1 This may lead to some heave of the underlying ground as the clay recovers. The period over which this recovery takes place can be extensive and is weather dependent. The building would be monitored until such time as it becomes

sufficiently stable for any remedial works to be limited to the superstructure only. In the worst scenario the building could be underpinned to resist any heave forces that occur as a result of the tree removal/management.

5.4.2 **Cost implications:**

- The insurers could be expected to seek to recover the costs of any remedial works.
- The cost of tree works, approximately £1,500 for crown reduction.
- The road may need to be closed in order to undertake the works, at a cost of £850.
- The London plane trees have been identified as causing structural damage to a neighbouring property. The Head of Legal Services has advised that now they have been identified as posing a “high risk” the Council owes a Duty of Care to manage these trees and those adjacent responsibly. The Council’s insurers may require all the London plane trees on Alexandra Gardens that could influence a neighbouring property to be managed to minimise the risk of movement to a property.
- Regular tree maintenance on this scale could cost £27000 every two years. Pruning is estimated at £1500 per tree every two years and there are 18 London plane trees surrounding Alexandra Gardens
- The Council’s cover would remain intact and unaffected.

5.4.3 Insurance implications

The loss adjuster and the independent arboricultural expert both indicate that the trees are the cause of the nuisance (subsidence).

5.4.3.1 They also state that if the trees remain at their current size there is a high probability that the property will suffer further subsidence in the event of a dry, warm summer.

5.4.3.2 If we follow the Loss adjuster and Arboricultural advice our insurance cover will remain in place.

6 Conclusion

6.1 The trees are a contributory factor in subsidence and related structural damage; there is evidence that the trees are the causative agent or the prime cause.

6.2 The claimant has provided information that can successfully make the case that the trees are causing nuisance and a factor which should be material to the Council's evaluation is the extent to which other claims (Alpha Road) have been made, or successfully made, by other property owners in the vicinity who would be expected to suffer the same sort of problems.

7 Recommendation: -

7.1 To avoid liability for underpinning it essential the Council carry out tree management as detailed below, and detail to the insurer that the Council does not believe underpinning is necessary and ask the claimants insurers to continue monitoring to confirm efficiency of the treatment

7.2 It is recommended to shorten all of the main branch structure, removing all of the foliage to create a significantly smaller crown size. (T2, T3, & T4) see appendix C. NB Dr Biddle uses different numbering and these have been change to reflect the claim numbering as detailed in Plan 1.

7.3 Plane trees will respond to this treatment by the production of a mass of new shoots around the cut surfaces and along the remaining branches. After 2 years 50% of the new shoots should be removed and the remainder reduced in length by 50%. After a further 2 years the shoots, which were previously reduced in length, should be entirely removed, and all new shoots reduced by 50%. This treatment should be repeated every 2 years, possibly increasing to every 3 years once the rate of new growth has declined as the trees readjust to the smaller crown size.

7.4 Examples of the method of management can be seen on Maids Causeway see appendix D.

8 **Next Steps** **Action By**

Hold meeting with claimants	Liz Bisset
Diary a Special Planning Committee	Alistair Wilson
Draft a tree management proposals	Complete
Consult using the Tree Protocol	w/c 14th Feb
Arrange a public meeting	w/c 28th Feb
Draft the Planning Committee Report	w/c 7th March

9 **Timeline**

Public Consultation Start Date	14th Feb
Public Consultation Close Date	28th Feb
Date of Public Meeting	TBC
Date of Planning Committee	TBC