

TREE INSPECTION REPORT

Prepared for: Helen Vassilakas

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1. INSTRUCTIONS

- 1.1. Received from: Mrs Helen Vassilakas; owner and resident at 66 Parkhill Road, London, NW3 2YT.
- 1.2. <u>Terms of reference</u>: to visit the above property and inspect one mature lime tree in the rear garden. To prepare a report detailing the findings of my survey and to make recommendations on future management of the tree as considered appropriate.

2. INTRODUCTION

- 2.1. I am Paul Barton, a professional arboriculturist and urban forester. I have 16 years experience in in arboriculture, including time as a practical arborist, local authority tree officer and consultant. I have a masters degree in Arboriculture and Urban Forestry and am a professional member and registered consultant of the Arboricultural Association.
- 2.2. This report is based upon data collected on a visit to the property made by me on Tuesday 28th January 2020.
- 2.3. I was contacted by Mrs Vassilakas in January 2020 as she has become increasingly concerned about a mature lime tree in her garden. Her concerns are principally the impact the tree is having on two boundary walls, and the level of risk posed by the tree, particularly during high winds.
- 2.4. The tree is protected by a Tree Preservation Order (TPO C988 2011).
- 2.5. Mrs Vassilakas has previously been in contact with Camden Council about the tree and damage it appears to be causing to walls, particularly a retaining wall. I am informed that there have been several visits by chartered surveyors and structural engineers but that no resolution to the issues at hand have been reached.

3. METHODOLOGY

- 3.1. I inspected the tree from ground level, from within two gardens (66 and 64) and a private footpath to the rear of the gardens. I used simple hand tools including a nylon mallet, metal probe and measuring tapes to make my observations.
- 3.2. My inspection was intended to identify distinct defects and other failure-prone characteristics of the tree in question. However, the identification of a 'defect' associated with a tree does not tell us anything about the actual risk that it represents to person or property. In order to make a realistic risk assessment one needs to consider three distinct aspects of the situation, namely:
 - (a) The likelihood that a failure, should it occur, will actually lead to any injury or damage. (i.e. are there vulnerable buildings or other structures within the potential 'target area'? If the



tree is near a road, a driveway or a footpath, what is the frequency of use? How often are people, cars, bicycles etc. actually present in the area immediately around the tree?

- (b) The size of the defective part (or, more specifically, how much damage would it cause were it to fail):
- (c) The likelihood that failure will actually occur (i.e. what is the realistic probability that the dead limb, decayed tree etc. will actually break in the foreseeable future)

4. INSPECTION FINDINGS

- 4.1. The tree is a mature common lime (*Tilia x europaea*) which has a trunk diameter of approximately 60cm and a top of crown height of approximately 21m.
- 4.2. It is growing in the southeast corner of the garden, close to two boundary walls; a brick wall between the gardens of 66 and 64 Parkhill Road, and another brick wall separating the end of the garden of 66 from the private pathway leading to the frontages of 'Mall Studios', a row of terraced residential properties.



Figure 1: snapshot of aerial photograph showing the context of the tree, circled in red. Image copyright of Google Maps.



- 4.3. The crown of the tree overhangs the two gardens, private footpath and the roofs of two dwellings of Mall Studios. The tree's trunk is approximately 3 metres from the front elevation of the Mall Studios.
- 4.4. The tree has been pruned regularly to control the size of the crown. The form of the structural branches indicates that it was previously pollarded at approximately 12 metres height, but since then has been maintained as a secondary pollard by pruning the branches above the original pollard points.



Photo 1: the crown as viewed from the rear windows of no.66. The original pollard points roughly match the height of a pollarded lime in a garden to the south (right of frame).

- 4.5. The trunk, as viewed from within the garden of number 66, has mature ivy stems on it which partially obscured my inspection. However, I could see enough of the base of the tree around the root collar to see that there are no fungal fruiting bodies or abnormalities such as cavities or bulges that would indicate decay. Sounding the lower trunk with a mallet did not indicate any significant changes in resonance.
- 4.6. The crown of the tree has a good density of live buds, and twig extension growth is not noticeably poor. There is very little deadwood in the crown.



- 4.7. From within the garden of number 64, damage to the boundary wall between the two gardens is visible. The end of the wall does not tie in to the rear wall which spans the rear boundary of both gardens and there are loose bricks present in the gap between the walls. Close inspection of the gap between the two walls shows that trunk of the lime tree is touching both walls.
- 4.8. There are also numerous vertical cracks in the the south face of the garden party wall, and an outward bulge in the mid-height.

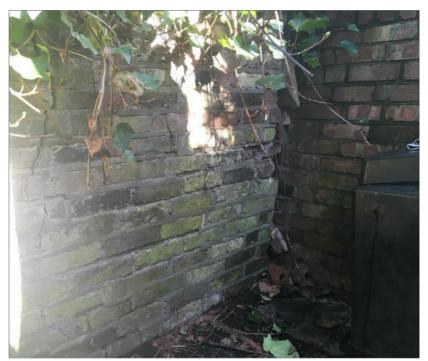


Photo 2: the south face of the garden party wall as viewed from within the garden of 64. The trunk of the lime is directly behind the wall on the left.

- 4.9. The rear boundary wall (on the right in the above photo) leans to the east (away from the garden) of 6 degrees.
- 4.10. Viewing the rear boundary wall from the private footpath (access for Mall Studios) reveals that the ground level behind the wall is approximately 1.2m lower than the gardens, therefore the wall is a retaining structure. The wall has been significantly damaged in line with the trunk of the lime; at the top the bricks have been displaced completely and there is a gap through which the trunk can



be seen. Lower down, below the ground level in the gardens, there is a pronounced bulge in the wall and numerous cracks in the mortar as the brick positions have been distorted.



Photo 3: the lime trunk and top of the retaining wall as viewed from the footpath.



Photo 4: view of the below-ground section of the retaining wall, viewed through a timber storage shed on the footpath.



5. DISCUSSION

- 5.1. The tree is protected by a TPO, served in 2011. This was served after a request for protection was submitted by Mrs Vassilakas. This indicates that she values the tree highly, or at least did at that time, and wished for it to be given statutory protection to ensure its longevity.
- 5.2. The tree has some visual amenity value, as required for protection by a TPO. It is visible from the south end of the private footpath (from Tasker Road), although a view of the tree is partially obstructed by other trees. Despite its size, the tree cannot actually be seen from Parkhill Road itself due to the large size of the properties and location of the tree behind them.
- 5.3. Regardless of its visual amenity and the way in which it contributes to the local character of the area, the tree also provides other benefits, common to all urban trees including habitat for wildlife, rainfall interception, carbon storage and sequestration and cooling of the urban heat island. Decisions over how to manage the tree in the future should consider these benefits carefully, as it is now widely accepted that large trees have an important function in urban settings.
- 5.4. At the same time as providing numerous benefits, this lime is also having some negative impacts, or 'disbenefits'. My observations of the damage to the walls in relation to the tree's struck indicate that the tree is clearly the cause of the damage to both walls. This has been progressing for some time, and will only worsen over time unless extensive re-building of the walls is carried out.
- 5.5. In addition to the structural damage, Mrs Vassilakas has advised me that occupants of the adjacent dwellings in Mall Studios are also troubled by the shade that the crown casts over the properties, and anxious during high winds due to the close proximity of the tree.
- 5.6. Shade, seasonal leaf drop and anxiety about harm or damage due to tree or branch failures during poor weather are common concerns in urban areas. The severity of these issues depends largely on the perceptions and attitudes of the affected parties, as some people are happy to accept negative impacts due to placing more weight on the other positive impacts of urban tree cover.
- 5.7. The lime tree appears to be in good condition, being free from any significant structural or physiological defects. Therefore, I do not perceive there to be a high risk of failure or damage through the loss of branches or uprooting.
- 5.8. In my opinion, the main consideration for this tree is the current damage to the walls and the potential for damage to worsen over time. The displacement of the walls is being caused by the annual, incremental thickening of the trunk and the direct pressure that it is placing on the walls.
 Even by regular and heavy pruning of the crown, this gradual enlargement of the trunk will



- continue, and therefore more direct pressure will be applied. Therefore, future damage is inevitable and at some point, the retaining wall could collapse.
- 5.9. Repairs to the retaining wall, including re-alignment of a section of wall around the trunk may be considered. However, in my experience, the removal and rebuilding of a retaining wall normally requires excavation of the ground behind the wall in order to create a battered slope to give access to both sides of the wall as it is rebuilt. In this case, such excavations would most likely cause significant root damage or loss, and would therefore be counterproductive in an effort to prolong the trees life.
- 5.10. When evaluating a tree's potential suitability for protection using a TPO, it is common (although not strictly required under the TPO regulations) to consider whether the tree is causing actual damage, or the likelihood that it could be reasonably foreseeable. This is in order to prevent trees with short retention spans from being protected because it would normally be unreasonable.
- 5.11. In my opinion, the retention span of this tree is significantly reduced, probably to less than 10 years, as a result of the damage that it is causing to the walls.

6. CONCLUSIONS AND RECOMMENDATIONS

- 6.1. My inspection of the lime tree, and the environment that it is growing in, lead me to conclude that the longevity of the tree is curtailed by the ongoing damage to the walls and the difficulty in repairing them.
- 6.2. Although a TPO was served in 2011, the tree has only moderate public visual amenity due to its location behind buildings and other trees.
- 6.3. I recommend that in order to enable repairs to the walls and prevent further damage occurring to them in the future, the lime tree should be removed and the stump ground down as far as possible with a stump grinder.
- 6.4. I recommend that a new, replacement tree is planted within the garden, set back from the rear boundary and party wall by at least 1.5 metres. The new tree should be a species suitable for a small, urban garden in order to prevent a repeat of the current issues experienced. A small list of suitable trees are provided for guidance:
 - Himalayan birch (Betula utilis)
 - Grignon hawthorn (Crataegus x grignonensis)
 - Japanese tree privet (Ligustrum japonicum)
 - Most Rowan (Sorbus) species



6.5. A formal application for works to a protected tree will need to be submitted to Camden Council to gain consent for the proposed tree removal. This can be done by using the proforma application form supplied by the council or via the online 'Planning Portal' (https://www.planningportal.co.uk). The application will need to be accompanied by evidence to justify the works; a copy of this report should suffice.

Paul Barton

13th February 2020