

REPORT ON TREE ROOT INVESTIGATION at 18 Redington Road, London, NW3 7RG

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On the instructions of Mr and Mrs Midgen

26 September 2014



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1 Introduction

- 1.1 Planning permission (references 2010/5099/P and 2010/5113/C) has been granted on appeal (APP/X5210/A/11/2161172 and APP/X5210/E/11/2161175) for demolition of the existing building and construction of a new build detached family house at 18 Redington Road, London NW3 7RG.
- 1.2 A Tree Survey and Arboricultural Method Assessment report prepared by Martin Dobson Associates dated 6 September 2010 was submitted in support of the application.
- 1.3 The appeal decision stated at Annex B (3) that ‘All trees on the site, or parts of trees growing from adjoining sites, unless shown on the approved drawings as being removed, shall be retained and protected from damage in accordance with the protection measures set out in the submitted Tree Survey and Arboricultural Method Assessment dated 6 September 2010’.
- 1.4 The approved drawing is reproduced here at Appendix **MD1** and shows that three trees were scheduled for removal, namely, T5 Pagoda tree (*Sophora japonica*), T11 Oak and T12 Crab apple. Trees to be removed are indicated by a dashed canopy outline. However, only two of the trees (T11 and T12) are marked by annotation as being removed. There is therefore a degree of ambiguity as to whether T5 is approved for removal or not.
- 1.5 A meeting with the London Borough of Camden’s tree officer Nick Bell took place on 19 September 2014 in order to clarify this issue. Concern was raised by the appointed building contractors that if the tree were to be retained it would potentially be destabilised by piling works very close to the trunk. It was therefore agreed that trial pits would be dug to determine where the main structural roots were to see if it would be possible to retain the tree.
- 1.6 Trial excavations were undertaken by B&G under the supervision of Martin Dobson on 23 and 24 September 2014.

2. Tree root investigation

- 2.1 There is an existing basement garage at street level which, following demolition, will form the access for construction of the approved basement level parking. The side wall of the garage is shown on the approved plans as being less than 1 m away from the trunk of T5.
- 2.2 The purpose of the root investigation was to establish where the main structural roots were located and to determine how far away from the tree the roof slab and side wall of the garage were.
- 2.3 The investigation was carried out by hand digging so that the main structural roots were retained undamaged.
- 2.4 It was discovered that the edge of the roof slab of the garage was 600 mm away from the trunk of the tree (Figures 1 and 2). There was a depth of 500 mm of soil above the garage roof. Within this soil depth, and typically less than 10 mm below ground level, there were five woody roots radiating out from the trunk with diameters ranging from 40 – 120 mm diameter. A further two roots (70 – 90 mm diameter) grew parallel with the roof slab for some distance before growing over it, one of which was at a depth of 400 mm. Thus, piling adjacent to the tree would necessitate cutting seven main anchoring structural roots within about 600 mm of the trunk. In my opinion this would result in T5 becoming hazardous, especially as anchorage on the other side of the tree is restricted since there is a 1.3 m high retaining wall 1.7 m away from the trunk (Figure 3). The tree cannot therefore safely be retained as in all probability it would fall over – especially as the main weight of the tree is on the side away from the roots to be cut.

Figure 1. Exposed structural roots of T5. The edge of the roof slab of the existing underground garage is level with the right hand edge of the clipboard, i.e. 600 mm away from the trunk.



Figure 2. The edge of the garage roof slab is marked by the position of the spade and is 600 mm away from the trunk



Figure 3. Retaining wall 1.3 m high and 1.7 m away from the trunk of T5 restricting root growth



3. Conclusions and recommendations

- 3.1 An investigation of the rooting of Pagoda tree T5 has been carried out by hand digging soil from around the roots.
- 3.2 It has been established that the roof slab of the existing basement garage is 600 mm away from the trunk of the tree and that there is 500 mm of soil above the garage roof.
- 3.3 Seven main structural roots grow over the roof slab (40 – 120 mm diameter) and would need to be cut in order to implement the planning consent. Cutting these roots would render the tree hazardous and liable to collapse.
- 3.4 The tree cannot therefore safely be retained and should be felled as shown in the approved drawing.

APPENDIX MD1

Approved ground floor plan. The trees scheduled for removal (T5, T11 and T12) are marked with a dashed canopy outline

