

Your ref: Camden Planning Applications - 1965, 1966 and 1967 - 29 Maresfield Gardens

Planning ref: 2022/1967/P Our ref: 29MFL/29MFD/LOS/01

> Louis Brewer Stuart Minty Planning 80 – 83 Long Lane London EC1A 9ET

16th November 2022

Dear Louis,

RE: Erection of single storey outbuilding with green roof in rear garden (Retrospective) 29 Maresfield Gardens, London NW3 5SD

- Impact of concrete slab in proximity to Tree of Heaven

I write in support of your retrospective planning application for the above works, further to the request from Camden's Planning Team for more details about the concrete slab and the potential impact on the nearby Tree of Heaven which we had previously considered in our arboricultural impact assessment report 29MFL/29MFD/AIA/01b (submitted in connection with your rear extension application 2020/1418/P). In particular, it is understood that Ewan Campbell, the Planning Officer, has raised concerns that "the impact on the tree has not been assessed or described as it stands....You will need to demonstrate that the impact of the scheme on the tree is of an acceptable level in accordance with BS5837:2012....."

I trust the following information is of assistance and assuages the Planning Officer's concern.

As set out in our report 29MFL/29MFD/AIA/01b, as Landmark Trees' arboricultural consultant, I surveyed the trees on site on 29th November 2019, recording relevant qualitative data in order to assess both their suitability for retention and their constraints upon the site, in accordance with British Standard 5837:2012 Trees in relation to design, demolition and construction – Recommendations [BS5837:2012]. The relevant tree, Tree of Heaven (reference T6 in the report) was assessed as being a mature BS5837 B Category (moderate quality) tree of 15 metres in height and 650mm stem diameter, of normal growth vitality and good structural condition; it was observed that the tree was ivy clad and severance thereof was recommended.

It should be noted that when I surveyed the trees at the site at that time, there was an area of hard surfacing close to the base of the Tree of Heaven T6 on which a concrete bench was standing. Whilst the

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depth of the hard surfacing and any sub-base on which it stands are unknown, their presence would have meant that the tree roots would have been somewhat deeper than if surrounded by soft landscaping - in the soil at the interface with and beneath the sub-base where growing conditions were more conducive. The surfacing and dwarf wall are visible in the photograph extracted below from the SUDS report submitted with the same application:



Extract from LBHGEO Surface Water Drainage Assessment & Outline SUDS Strategy

The concrete slab that has been constructed subsequently has, at least in part, been laid on top of this pre-existing hard surfacing. The following photograph shows the new slab in relation to the extant surfacing and bench.



Photograph showing new slab in relation to extant hard surfacing and bench

Due to the presence of the pre-existing hard surfacing on which the slab has been laid, it is difficult to excavate a trial hole to demonstrate the depth of new concrete on the eastern side without risking damaging the tree roots (the roots are likely to proliferate at and just below the soil interface), so a trial investigation pit has been dug on the side away from the tree where there is a shrub bed. The new slab is slightly raised and, as the photographs below show, is some 150mm deep (only approx. 90mm below ground level).



Photograph showing position of trial investigation and depth of new slab



Photograph showing new slab to be just under 150mm depth, of which 90mm below ground level

It is also evident that the soil structure still appears reasonable (e.g. not smeared / puddled due to working with heavy equipment in wet conditions), indicating that compaction and associated deterioration in growing conditions is unlikely.

Given the retention of the existing hard surfacing; the limited lowering of levels otherwise within the root protection area; and the apparent lack of damage to soil structure, it seems unlikely that significant roots from the Tree of Heaven have been damaged - the tree currently appears to be unaffected by the construction of the new slab and in good health. However, in the circumstances, it would be prudent to monitor the tree as it comes into new growth in the coming year, with further assessment in the summer to check whether any mitigation measures would be appropriate (such as terraventing to improve soil aeration).

To maintain the health of existing trees, it is important that the surrounding area allows for adequate infiltration of water and free gas exchange, reduction of water evaporation and the retention of an open soil structure to encourage root growth. In accordance with BS5837: 2012, on the basis of a stem diameter of 650mm, the Tree of Heaven would have a root protection area of 191 m² - equivalent to a nominal circle protection radius of 7.8 metres. The Standard also notes at 7.5.3 that "Where a slab for a minor structure (e.g. shed base) is to be formed within the RPA, it should bear on existing ground level, and should not exceed an area greater than 20% of the existing unsurfaced ground". The cumulative impact of the construction of the slab / outbuilding together with the extant hard surfacing mean that, even if the original hard surfacing was somewhat permeable, the ground surrounding the Tree of Heaven now has a reduced area for water infiltration and gaseous exchange. Measures should therefore be put in place for the longer term to ensure that appropriate infiltration and exchange are possible – these could include routing surface water landing on impervious surfacing towards the tree's roots and improving soil aeration, as well as mulching the unsurfaced RPA.

To conclude, I consider that the information available suggests that significant roots from the Tree of Heaven have not been damaged by the construction of the new concrete slab; and the potential impact on the tree has been considerably lessened when the extant hard surfacing and limited amount of excavation are taken into account. However, as indicated, I would recommend that the condition of the tree is monitored next year and appropriate mitigation measures are put in place to ensure the ongoing health of the Tree of Heaven.

Please let me know if I can be of further assistance.

Yours sincerely

Adam Hollis

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Registered Consultant

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