

Briefing Note on the impact on trees of the proposed UK Holocaust Memorial and Learning Centre at Victoria Tower Gardens, Westminster



Summary

The mature plane trees around Victoria Tower Gardens are a unique, historic, valuable, and irreplaceable living environmental asset, of national importance and unmatched in the adjacent London area. From the limited information published so far relating to trees and their protection, the integrity of this feature is likely to be compromised through adverse impacts on tree health, life expectancy, and visual amenity. Further clarification on the extent of investigation and the proposed protective measures is needed to fully assess the impact on these important landmark trees.

Purpose

I have prepared this Briefing Note to provide a preliminary and independent expert opinion on the possible adverse impact on trees from the construction of the proposed UK Holocaust Memorial and Learning Centre at Victoria Tower Gardens, Westminster, as published online by the UK Holocaust Memorial Foundation (UKHMF). I base my opinion on what I have seen from the UKHMF website and a recent visit to the Gardens, but I may need to update my position as further information and clarifications emerge.



Statement of independence

I am a tree expert specialising in managing trees in a development context, and more details of my credentials can be found from the links at the end of this Briefing Note. I am acting in the capacity of an independent expert and not as a paid advisor to any party. My interest in this project is of a professional nature because the trees that may be affected are of national importance and I am prepared to volunteer my expertise in the national best interest. I confirm that I have not taken any fee for my time and I have no connections or personal relationships that I am aware of with any of the parties involved in this project, although I may know some individuals through my professional activities.

Detailed tree survey

I understand that a tree survey and root excavations down to a depth of about 1m have been carried out by Bartlett Tree Experts, but I have not seen any documentation. There is no obvious necessity for me to repeat that work at this stage and I would prefer to see the Bartlett survey results when they become available, assess the credibility of the content, and agree as much of the basic tree details as possible. For that reason, at this stage, I have not carried out any detailed calculations relating to tree value, or investigations on the depth of tree roots, although it is likely that such detail will form part of my future submissions relating to the pending planning application.

The importance of the trees

I plan to articulate the detail of the importance and value of the trees in my comments on the planning application, but in overview, I summarise that tree importance and value can be assessed in the following ways:

- **Heritage importance:** The relative importance of heritage trees can be assessed using a method called TreeAH (http://www.treeaz.com/tree_ah/), which adopts similar terminology to that used by Historic England to classify historic architectural assets. In summary, heritage trees can be classified as Grade II (trees of special interest), Grade II* (trees of more than special interest), and Grade I (trees of exceptional interest). Individual trees and groups can have heritage importance for three main reasons, visual, cultural, and scientific, and the more heritage attributes they possess, the higher they sit within the overall hierarchy. In this instance, the trees are part of a large and visually prominent group in central London in an area where there are no other similar features, and I assess that they have heritage value for visual reasons. Additionally, they abut the UNESCO Westminster World Heritage Site in their location directly adjacent to the Palace of Westminster, and as such, I assess that they have heritage value for cultural reasons. I doubt if they have heritage value for scientific reasons, primarily because they are not quite old enough. In summary, my assessment is that they have two out of three heritage

characteristics, which makes them Grade II* environmental assets, comparable in importance to Grade II* Listed Buildings.

- **Structural replacement value:** There are several methods of assessing the financial value of trees as they stand at a point in time. An appropriate approach in this instance would be the CAVAT method endorsed by the London Tree Officers Association and now widely used in the UK.
- **The annual value of tree benefits:** i-Tree is an international peer-reviewed approach to quantifying the annual benefits that trees deliver, in addition to their structural replacement value.

Once the dimensions of the trees are published and any adverse impacts of the proposal on trees can be properly assessed, I plan to prepare a summary of the heritage and financial impact to assist Westminster City Council in assessing the planning submission.

Root protection area (RPA) adjustments

British Standard 5837 (2012) *Trees in relation to design, demolition and construction – Recommendations*, sets out the approach to estimating the location of RPAs. That guidance clearly sets out that the nominal radial RPA can and should be adjusted if there are obvious features that will have influenced the growth of tree roots. The internal edge of the river wall adjacent to the row of trees along the eastern boundary with the River Thames is roughly 2–3m from the centre of the tree trunks and will have prevented any root growth beyond its physical location below ground. The precise extent of the lost RPAs on the river side will depend on where the below ground boundary of the wall sits, but all that lost RPA can only be found on the Park side of the trees. Similarly, the highway beyond the western Millbank boundary is also likely to have restricted root growth out under the highway for the trees along that boundary, and the RPA adjustment can only be found within the Park.

More specifically, although the precise calculations will depend on the tree data once that is released, my observations are that most of the trees are around 1m trunk diameter, which equates to a nominal RPA radius from the centre of their trunks of about 12m. This indicates that the RPAs will have to extend much further than 12m on the Park side, and possibly up to 20m for each side for the proposal to comply with the BS, although the final extent will depend on the verified tree data.

Depth of rooting

My experience working in the subsidence and planning sectors in London, backed up by photographic and documentary evidence, is that plane can and often do root down to depths of 4–6m, and sometimes deeper, especially in places where there are soil voids created from backfilling. For that reason, a proper and reliable assessment of the impact of excavations in

terms of roots that will be cut must be based on roots present within the excavation envelope, not just those near the surface.

Assessment of the impact of the proposal on trees

From what I have seen from the images on pages 1, 2, and 5–13 of the website, and specifically page 12 showing the tree protection, I have the following concerns:

1. **Excavation within nominal RPAs:** There is significant excavation of between 3–10m below ground level within the nominal RPA radii of important trees, some of which seems to be as close as 3–4m to the trunks.
2. **Excavation within adjusted RPAs:** No account seems to have been taken to adjust RPAs, with the only place to locate the lost RPA because of the Thames wall and the road along Millbank, being within the Park.
3. **Roots deeper than 1m:** No investigations seem to have been carried out to establish if there are any significant roots below 1m in depth within the proposed excavation area.
4. **Ground protection of RPAs outside of protective fencing:** The construction phase plan on page 12 does not show any ground protection within RPAs that are outside protective fencing.
5. **New hard surfacing:** The extent of new hard surfacing within RPAs seems to significantly exceed the BS 5837 recommendations.

For these reasons, based on the most recent information published on the website and what I have seen on site, my assessment is that this proposal is likely to have significant adverse impacts on trees of national importance. Those impacts are likely to include reduced health, increased instability, and reduced life expectancy.

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