SJA trees
ARBORICULTURAL PLANNING CONSULTANTS

THE OLD POST OFFICE
DORKING ROAD
TADWORTH
SURREY KT20 5SA

Tel: (01737) 813058
E-mail: sja@sjatrees.co.uk

Directors: Simon R. M. Jones Dip. Arb. (RFS), FArborA., RCArborA. (Managing)
Frank P. S. Spooner BSc (Hons), MArborA, TechCert (ArborA), RCArborA. (Operations)

ARBORICULTURAL SUPERVISION RECORD

Client:	**Mr and Mrs Cremer**
Site:	**26A Ferncroft Avenue, Camden**

Date. Friday 8th February 2024

Supervisor: Anthony Harte (SJAtrees)

Purpose: Supervision of trial excavations to ascertain the extent of the impact the roots of plane tree (no. 1) are having on the foundations and superstructure of this dwelling; in response to comments from the Council that there is insufficient evidence to conclude that the tree is the cause of the damage and alternative options have not been explored.

Photograph 1: location of tree no. 1 in relation to the rear of the listed building.

1. SJAtrees was requested to attend the trial excavation within the root plate of London plane tree no. 1 to better ascertain the depth, spread and location of the tree's roots in relation to the existing building.

2. A trench (up to 600mm width x 600mm depth) was excavated alongside the face of the extension wall.

3. As anticipated, this revealed significant rooting to the full depth of the trench, consisting mostly of a single structural root leading from the buttress root on the south-west side of the tree's trunk.

4. The structural root grows alongside and significantly close to the extension wall, extending to the wall's full length before terminating at the west-most corner where the root appears to have been historically severed.

5. At its point of origin immediately beneath the soil, the structural root measures 280mm diameter and gradually tapers to 80mm diameter.

6. At its furthest distance, the structural root is located at 400mm from the building wall, and at its closest, presses into the part of the wall adjacent to the extension's west corner resulting in a crack measuring 20mm width x 250mm height within the brickwork directly above.

7. We were also able to partially uncover a seemingly separate root (110mm diameter) located at 1m from the east corner of the extension that was also growing tight against the building wall, but which did not appear to result in any clear evidence of associated damage to the adjacent brickwork directly above.

8. However, it should be noted that due to the density of rooting we were limited in how far we could excavate without the need to sever or damage significant roots (or without using specialist tools such as air lances and a soil vacuum). As such, I would not be surprised if there were additional deeper roots pressing against the building wall and causing further associated damage to the brickwork.

9. It should also be noted that we were able to excavate the upper 200mm of the soil within the narrow gap between the trunk base and extension where we partially exposed the root flare of the trunk base, the edge of which was located at 100mm from

the wall. This is significantly close and it seems unavoidable that, as the tree grows, this root flare will be the first part of the trunk base that will eventually start to push into the wall.

10. Please see a selection of four photographs showing the trial excavation below:

Photograph 2: showing the significant proximity between structural root of tree no. 1 and the rear extension wall of the listed building.

Photograph 3: showing the significant proximity between structural root of tree no. 1 and the rear extension wall of the listed building.

Photograph 4: showing the point at which the structural root grows directly against the rear extension wall; note the crack within the brickwork directly above.

Photograph 5: showing the upper surface of an additional structural root that we were unable to fully excavate due to the density of roots, growing directly against the rear extension wall.

Conclusion – The excavation of a trench within the structural root plate of London plane tree no. 1 revealed the presence of a large-sized structural root growing alongside, and in one place directly against, the wall of the rear extension. Additional structural roots underneath this main root were also partially uncovered and observed to be growing significantly close to and against the wall.

Owing to both the profuse density of structural roots growing alongside the extension and the significant proximity between these and the extension's rear wall, it is almost certain that as the tree grows and its trunk base and structural roots incrementally expand, these will gradually push into the wall thereby causing structural damage that will eventually undermining the fabric of the listed building. Indeed, where the main structural root grows directly against the wall, it would be reasonable to surmise that the cracks observed in the brickwork immediately above the point of contact have been caused by the pressure exerted by the root's growth, indicating that damage to the wall as a result of the tree's rooting activity has already occurred and is likely to get progressively worse as the tree continues to grow.

To satisfy the LPA's objections to the scheme it seems likely it would be looking for a suite of evidence to prove the tree is the cause of the harm such as: soil investigations, level monitoring, crack monitoring, trial excavations and DNA testing of root samples. We have carried out the above trial excavations and there is no doubt that the plan tree's roots are abutting and exerting pressure on the rear elevation of the listed building. The full suite of evidence would not be possible within the time frame available to us and neither do we think it is necessary or reasonable to require this. Principally this is because level monitoring ought to take place for at least 12 months for it to be conclusive.