Langland Mansions
228 Finchley Road,
London NW3 6QA

BRIEFING NOTE
(23/02/2016)
Ref: 966

1.0 Introduction

We have been instructed to assess the subject trees/shrub (T1-T5) on the site's boundary with Finchley Road. See the attached plan for their indicative location. These trees are within a Conservation Area. Due cracking to the adjacent brick (1.4-1.6m high) boundary wall, that runs alongside T1-T5, our client made a 211 Notification (December 2015) to have these trees removed. This was to rebuild this wall that is in danger of imminent collapse (see section 4).

On 26th January and in order to afford T1-T5 statutory protection from the threat of bad management Camden Council made these subject to a (provisional) Tree Preservation Order. The Council's view is that T1-T5 provide a high level of visual amenity within the streetscape and make a positive contribution to the character of this part of the Conservation Area. The Council further believe that T1-T5 have a significant safe useful life expectancy (SULE).

2.0 Assessment Brief

Specifically we have been requested to:

2.1 Survey the subject trees in terms of their crown form, SULE and public visual amenity (PVA).
2.2 In regard to the above survey, assess the *expediency* of Camden Council in making T1-T5 subject to this provisional TPO.
2.3 Record observations on the boundary wall damage: believed by our client to be associated with the T1-T5.

3.0 Survey of T1-T5

We agree that on first viewing T1-T5 provide an attractive landscape feature on this treeless stretch of Finchley Road. However, as detailed below on closer assessment we question the TPO *suitability* of T1-T5.

3.1 Fatsia T1: Although the law does not strictly define a tree, in our opinion in contrast to the trees T2-T5, T1 is merely a large C-grade shrub that provides only limited (not "a high level of") PVA (see photo no. 1 and 2). Looking at the Camden Council TPO informative No. 2 is difficult to see how pruning works to this large shrub could be (a) carried out in line with BS:3998 (2010) and moreover (b) how these works (quality of) could be enforced by Camden Council.

3.2 Norway maple T2: It is agreed that whilst only a C-grade tree, T2 does provide significant PVA. This tree is bordered to the east by the mansions block (under which there would be limited tree-rooting) and to the west by a 1.4-1.6m drop to street level (the boundary wall). The tree is developing a slight (but likely progressive) lean towards the busy Finchley Road and an unbalanced crown again over the busy Finchley Road. Such maple trees can reach heights (albeit in ideal growing conditions) of 26m* and ages in excess of 80-100 plus years. As T2 matures in height and crown spread - and given the restricted rootplate growing conditions, progressive lean and unbalanced crown (over/towards Finchley Road) – in our opinion T2's SULE is limited at an estimated 15-20 years. Moreover in the

medium-term T2 will have to be risk assessed every 16 months to review the above factors in regard to potential tree failure on to the adjacent high risk target: Finchley Road (see photo no. 5). In this sense we differ from Camden Council's view that the SULE of T2 is "significant". We would also suggest that the pending tree risk assessment requirement would place an unfair burden on our client.

3.3 Hawthorn T3, Whitebeam T4 and Elderberry T5: These C-grade trees are part of a linear group that provides significant PVA. In terms of the SULE of T3 and T4 it can be seen from photos no. 3 and 4 that these trees are leaning away (growing toward light) from the adjacent mansion block. Such trees can reach heights (albeit in ideal growing conditions) of 15m* and 20m* respectively. As with T2, in our opinion the SULE of these trees is limited to an estimated 15-20 years and these trees will similarly have to be risk assessed in regard to the adjacent high risk target: Finchley Road (see photo no. 5). In this sense we differ from Camden Council's view that the SULE of T3 and T4 is "significant". Again we would also suggest that the pending tree risk assessment requirement would place an unfair burden on our client.

* *Tree Guide* O. Johnson & D. More, Harper Collins (2004)

4.0 Wall Damage

During the survey we noted wall cracking adjacent to trees T2-T5. See photos appended to the Tree Survey. To interpret these cracks in relation to the subject trees we consulted with the client's Civil and Structural Engineers: Michael Chester & Partners (8 Hale Lane, London, NW7 3NX). See answers to questions posed with their response in italics.

Issues:

1. Are trees alone the casual agent of wall damage (on a balance of probability)? *Trees (T1) to T5 are the predominant cause of the damage to the Finchley Road retaining walls and entrance steps walls.*

2. If left unattended how long before wall would collapse? *The wall could fail at any time.*

3. The wall could be repaired or it has to be re-built? *I doubt that repair of the retaining wall is practical or even possible with the trees in place. It might be repaired / locally rebuilt if the trees were first removed.*

4. Would it be possible to repair/replace the wall without causing tree root damage? *It would not be possible to repair or replace the wall without damaging the tree roots.*

In regard to the appended (Michael Chester & Partners) plans and photographs photos the additional information was also kindly supplied:

> "The drawing shows the verticality of the walls at the point measured. Please note that the worst out of plumb section of wall is under the trees T3,T4and T5 where the wall is 100 mm out of plumb immediately behind the bus shelter. The wall appears to be one brick thick at the top and might thicken lower down, never the less 100mm out of plumb is excessive and cause for immediate concern. I have no doubt that the failure of this wall is due to physical pressure from these trees…….. As the trees get bigger they will push the wall out further and the trunks will lean more. It is my opinion that the present outward movement of the retaining walls must not be allowed to continue."

As can be seen from above the information provided by Michael Chester & Partners clearly demonstrates the nuisance caused by the subject trees to the boundary wall along Finchley Road.

5.0 Expediency in Making TPO

With our on-site observations and the information kindly supplied by Michael Chester & Partners, we considered the TPO *suitability* of T1-T5. To aid this assessment we used the:

(a) Barrell Tree Care *Tree AP* system
(b) Forbes-Laird Arb. Consultancy *TEMPO* system
(c) Tandridge District Council tree preservation survey system

See appended sheets 1-15.

NB When employed at Harrow Council (London) as the Tree Preservation Officer (1997-2001) I used *Tree AP* in assessing the TPO suitability of trees.

Using the above TPO *suitability* systems our findings are set out below:

5.1 T1 (see appended sheets 1-3): In our opinion using the above systems it would not be expedient to make T1 subject to a TPO. In any event how could this large shrub be managed in line with BS:3998 (2010) and to comply with Camden Council's informative No. 2.

5.2 T2-T5 (see appended sheets 4-15): In our opinion and using the above systems, due to the structural nuisance to the boundary wall along Finchley Road and the progressive tree risk management issue (associated with a high target: Finchley Road) it would not be expedient to make T2-T5 subject to a TPO.

In using these three independent systems it has been demonstrated that T1-T5 are not suitable for a TPO.

6.0 Recommendations

Replace T1-T5 with:

4.1 A feathered-whip planted double-staggered beech hedge managed at 1.5.m high that would be clearly visible from Finchley Road and provide a semi-evergreen screen and biodiversity habitat.
4.2 A line of up to ten Snowy Mespils (*Amelanchier lamarckii*) that would provide an attractive linear tree group (and also a biodiversity habitat in terms of flowers (nectar source and berries). Planted as standard trees with a girth of 12-14cm girth (see appended tree planting information). This smaller tree species would be more suited to the restricted, narrow tree-rooting soil-strip.
4.3 Camden Council could make these new trees subject to a TPO by way of T1-T5 replacements.

7.0 Conclusions

7.1 T1: A large shrub the removal of which would not impact on the immediate locale and is unlikely to be successfully managed using BS:3998. In our opinion therefore it was not expedient to make T1 subject to a TPO.

7.2 T2-T5: With the clearly demonstrated tree-related damage to the boundary wall along Finchley Road and pending tree risk management issues it would not be expedient to make T2-T5 subject to a TPO.

7.3 Tree Replacement: T1-T5 could be replaced with a valuable biodiversity uniform screen that would be better suited to the narrow land-strip at the subject site. The latter is a more sustainable landscape.

Russell Ball BSc. (Hons.), P.G. Dip. LM, CBiol., MSB.
Technical Director: Arbol EuroConsulting Ltd.
Institute of Biology ***Chartered Biologist***

LANTRA Approved ***Professional Tree Inspector*** *(Ref: HO00178227 504187)*
International Society of Arboriculture ***Qualified Tree Risk Assessor*** *(ID: 2148)*

REFERENCES

- *BS 3998; 2010 'Tree Work Recommendations'* British Standards Institute, London
- *'Tree Roots in the Built Environment'* 2006 - Dept. for Communities & Local Government (DCLG).
- *'Up by Roots: healthy soils & trees in the built environment'* 2008 James Urban, International Society of Arboriculture.
- *Tree Risk Assessment Manual* Dunster, Julian A., E. Thomas Smiley, Nelda Matheny, and Sharon Lilly. (2013).. Champaign, Illinois: International Society of Arboriculture.
- *Body Language of Trees - A Handbook for Failure Analysis. HMSO, London.* Mattheck, C. (1994).
- *Best Management Practices. Tree Risk Assessment.* E. Thomas Smiley, Nelda Matheny, and Sharon Lilly. (2011). Champaign, Illinois: International Society of Arboriculture.

APPENDIX
PLANTING & AFTER-CARE (PRINCIPLES) OF CONATINER-GROWN STANDARD TREES

Planting:

1. Excavate a **square tree-pit** to a depth of 450mm and at least 750mm across (i.e. enough space into which to place the root-ball with a wide gap around it into which soil can be back-filled). The excavated soil must be kept for back-filling with the exception of sub-soil or inferior material that should be discarded. Unless soils are in extremely poor condition, added fertilisers are unnecessary. When the correct depth is reached (see point 4 below), the bottom of the tree-pit should be lightly broken up to aid root penetration and drainage. All glazed (clay) sides must be loosened. Tree pits must not be left open over night.
2. Before planting, all young trees should be pruned to remove all dead wood and weak or crossing branches to encourage the development of a well-shaped/developed crown. All damaged roots must be cleanly removed. All branch pruning cuts should conform with the natural target pruning methodology and in accordance with **BS 3998 (2010) 'Tree Work-Recommendations'**.
3. Remove the tree from its container. If roots are coiled around the shape of the pot they should be gently loosened to prise them out. Any trees that are pot-bound (i.e. with thick girdling roots running around the shape of the pot) should be rejected and returned to the supplier.
4. Trees must be planted so that the joint of root and stem (***nursery mark***) is level with the finished planting height. Backfill should consist of the excavated top-soil (no sub-soil or inferior material).
5. Use only a short (no more than 1/3 height of the tree) single/double tree-stake to allow trunk movement and trunk-base thickening. To prevent chaffing, the tree-tie(s) should form a figure of eight or have a spacer between the tree and the stake. **IMPORTANT:** Remove tree-stakes after 2-3 years.
6. Tread gently to firm the root-ball into position.
7. Immediately water the tree to saturate the soil to the full depth of the roots.
8. To control weed growth and keep moisture in the soil add mulch: a 10cm deep layer of wood-chips/bark-chippings around the tree base. This should cover an area at least 1m dia. See strimmer/mower damage in section 9 below. **NB** Keep mulch away from the trunk base or fungal rot may result.

9. In order to avoid mower/strimmer damage to tree trunk bases (i.e. bark stripping), grass seed/turf ***should not*** be laid within a 0.5m (min.) radius around trees.
10. **IMPORTANT:** Remove tree-stakes after 2-3 years.

After Care:

The after-planting maintenance period for container-grown standard trees is twenty-four months after first bud-break. During this period such after-care works must include the following:

- Watering during dry summer months.
- Checking stakes and adjusting tree-ties at least twice per year (**NB** tree-ties are a *temporary* measure and should ideally be removed after three years).
- Weed control preferably by mulch reapplication (see point 8 above).
- Stake removal ideally after 3-4 years. Before the stake is removed completely gently rock the tree from side to side to check that the root-ball is firmly anchored in the ground. If this lifts out of the ground then re-tie the tree and carry out this procedure the following year.

Photo No 1. To show the small insignificant Fatsia T1 contrasting with the larger more significant trees (T2-T5).

Photo No 2. To show the small insignificant Fatsia T1 contrasting with the larger more significant trees (T2-T5). Note the unbalanced crown on T2 growing away from the mansion block and towards/over Finchley Road

Photo No 3. To show leaning trunks on T3 and T4 (looking south)

Photo No 4. To show leaning trunks on T3 and T4 (looking north)

Photo No 5. To show how the crowns of T2-T4 are growing away from the mansion block and out over the (high target) Finchley Road coupled with a restricted space for radial root-plate development is likely to cause a future hazard feature for these trees.