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30 January 2017

Mr R Osborne Whymark and Moulton 20 North Street Sudbury CO10 1RB

our ref 14004 your ref

Dear Mr Osborne

Re Denyer House, London NW5
Tree immediately beyond North Boundary wall

I refer to our site meeting at Denyer House on 25th January 2017 and our subsequent discussions regarding the safety of the Ash tree immediately adjacent to the boundary wall. This is partly in light of the excavations for the new wall and the realisation of there being a void between the cast concrete block exposed in the excavation and the underside of the bole

As you are aware, I have already given my opinion about potential instability of the tree based on what we could see before the new wall foundations were excavated. For clarity, I include a copy of an excerpt from the October 2015 letter:

There is a further factor which I think supports the tree removal option. The pattern of structural root growth has clearly been heavily influence by the old boundary wall - indeed this very probably accounts for a good deal of the damage that the old wall suffered. It appears that the roots on this side of the tree have been consequently diverted from their natural radial habit and instead occupy a very narrow margin along the wall. I am not an arboroculturalist but I could not see any obvious sign of structural roots growing vertically down to potentially compensate for this unnaturally constricted of the root system. Thus, instead of developing a natural 360 degree root system this tree has developed a seriously curtained asymmetric root system rendering it particularly prone to southerly gales.

At our site meeting last week, we were able to establish the mass concrete filling is older than the tree and large roots immediately above have grown down-to, but <u>not</u> actually penetrated, the surface of the concrete. I suspect that the void has most probably been caused by the cumulative effect of wind load causing the tree to sway about a point immediately above the concrete block - the roots having tended to arch above the obstacle over which it has partially grown. Thus, there appears to be no apparent possible additional root structure to feasibly compensate for the seriously curtailed 180 degree radial system.

To the best of my non-specialist knowledge, large 'structural' roots rarely penetrate to any great depth, but nevertheless the realisation that the mass concrete block immediately below the bole has clearly curtailed any potentially compensatory vertical main root growth only serves to increase my concern. For this reason I now reiterate my warning for the safety of the tree and recommendation that the relevant tree authorities are consulted with a view to felling.

Yours sincerely



Michael Smith BSC CEng MICE

For LESLIEDREW