



MJC Tree Services Limited

89 Hampton Lane, Blackfield,
Southampton. SO45 1WL

Telephone (02380) 897763

E-mail - mjc@mjctreeservices.co.uk

www.mjctreeservices.co.uk VAT No.-GB 768 8252 78

Principal Consultant – Mark J Carter MICFor. MRICS M.Arbor.A. Dip. Arb. (RFS)

19th November 2011.

Mr Roy Osborne,
41A Bedhampton Hill,
Havant.
PO9 3JN

Dear Mr Osborne,

Re: Sycamore Trees Protected by a Tree Preservation Order

- 1.0 Following our meeting of Friday 18th November 2011, I am able to say the following. I have numbered the paragraphs in this letter for ease of future reference.
- 2.0 Since our meeting, I have made reference to the Soilsdapes online geological mapping service provided by Cranfield University. This service is not a substitute for a detailed soil survey of the site, but it does provide an indication of the soils onsite. Soilsdapes describes the soils on site as '*loamy soils with naturally high groundwater*', with an area of '*loamy and clayey soils of coastal flats with naturally high groundwater*' immediately to the south of the site. Based on this information it is not unreasonable to assume that the subsoil onsite contains a percentage of shrinkable clay. In addition to this information you have informed me that, based on your experience of gardening around the dwelling, the local soils are indeed clay.
- 3.0 The Sycamore trees in question are to the south west of your dwelling. The southern most tree is in your garden, and the northern most one is in your neighbour's garden.
- 4.0 During our meeting, we went to your neighbour's property where we discussed the trees with him.
- 5.0 Any comments regarding structural matters are made as a layman as I have no structural engineering qualifications. I have however worked on many cases of tree root related subsidence of low rise buildings.



Institute of
Chartered Foresters

Registered Consultant

- 6.0 The trees are middle aged and have significant potential for future growth. It is not unreasonable to expect trees of this species in this location to achieve a mature crown spread radius of 10 metres or more. A crown spread of this size would bring the crown edge to the edge of your dwelling's foot print, your neighbour's tree would significantly overhang his dwelling.
- 6.1 As mature specimens, the trees would greatly reduce the usable amenity space in both yours and your neighbour's garden, and would be a significant nuisance to both dwellings as a result of shade, leaf and seed drop, and the growth of seedlings in the gardens, gutters and down pipes.
- 6.2 The future size of trees retained on development sites should be taken into consideration by the Local Planning Authority (LPA) when granting planning permission. In British Standard 5837:2005 'Trees in Relation to Construction – Recommendations' (BS5837:2005) it is stated at section 6.3.1 that: '*A realistic assessment of the probable impact of any proposed development on the trees and visa versa should take into account the characteristics and condition of the trees, with due allowance and space for their future growth and maintenance requirements*'. It seems that insufficient consideration has been given to the future growth of these trees and they will ultimately cause a significant nuisance to both properties. This matter should have been addressed at the planning application determination stage and either the trees removed or the dwellings set further away from them. By approving the existing layout, the LPA has created a future conflict between the properties and the trees that was entirely avoidable.
- 6.3 It could be argued that the trees could be contained by pruning to reduce the scale of this conflict and nuisance, and it was indeed clear that the trees had been pruned and crown lifted in the past. However, BS5837:2005 states at section 6.3.3 that: '*Trees should not be retained on the basis that their ultimate branch spread can be significantly controlled by periodic pruning, unless this is a desired management outcome (e.g. pollarded trees)*'. From this recommendation, it is clear that a reliance on future crown pruning to reduce a proximity or overhanging nuisance is not an acceptable option and trees should not be retained in such a juxtaposition with approved development. Therefore, the trees should not have been retained on the site if planning permission for you and your neighbour's dwellings was to be granted.
- 7.0 You showed me damage to the edge of your paved path to the front of your dwelling. The mortar joints of several paving slabs had broken up leaving the slabs in a loosened state. To my eye, the outer edge of these slabs seemed to have dropped by a small amount. We also saw similar damage to your neighbour's paved patio and path.
- 7.1 The distance at which a tree can reasonably be expected to pose a subsidence risk on shrinkable clay soils is termed the influencing distance, and is defined as follows: '*The distance given in the Kew Root Survey (Cutler & Richardson 1989) that contains 75% of all cases for a given tree species, unless the tree has the potential to grow very large, when the 90% distances will be used*'. The 75% distance has been used at the suggestion of Gasson & Cutler (1998) who considered that to use the 100% distance to define the influencing distance was a misuse of the data'.

- 7.2 The influencing distance for a Sycamore tree is 12 metres. Both you and your neighbour's dwellings are within this distance.
- 7.3 As it is likely that shrinkable clay soils are present on site and the trees are within influencing distance of the paved areas, it can be concluded that the trees may have contributed to the damage of the paved areas. However, shallow structures such as these can also be damaged by water extraction by grass, water loss by soil surface evaporation, and direct root action, so it would be difficult to conclusively say that the trees were responsible for the damage to the paved areas, but it is quite possible that they are contributing to it.
- 8.0 We looked at cracks in the external walls of your neighbour's dwelling. The damaged parts of this dwelling were well within the influencing distance of the trees.
- 8.1 It is possible that this damage has been caused by indirect tree root action and the extraction of soil moisture by tree roots. However, there are many reasons why a building may crack, and the only person qualified to investigate this damage properly would be a structural engineer.
- 8.2 You have informed me that the dwellings were built less than four years ago. If the characteristics of the soils on site and the proximity of the trees was taken into account in the foundation design, then the risk of tree root related subsidence should be low. However, I have no information regarding the suitability of the foundations used, so the risk of tree root related subsidence must still be considered to be present.
- 8.3 In the light of the tree root related subsidence risk and the presence of damage to the external walls, I strongly recommend that your neighbour informs his insurance company of the situation. If his insurers are concerned about the situation, they have the resources to properly investigate the damage and identify the cause. If this investigation identifies subsidence damage caused by localised desiccation of a clay bearing stratum, and the presence of Sycamore roots in that desiccated bearing stratum, then the trees will be blamed for the damage and most likely removed.
- 8.4 The nature of this test for tree root related subsidence damage has been established by the Technical Courts when determining liability for subsidence cases in the past.

9.0 In summary:

- The trees will come into greater conflict with both properties in the future as they grow. This issue should have been considered by the LPA at the planning application determination stage, but this clearly did not happen. The option of repeated crown pruning to reduce this conflict is not an appropriate course of action. Either, the trees should have been removed if the dwellings were to be built in their locations, or the dwellings should have been set further away.
- The trees may be contributing to the damage of the paved areas, but there are several other factors that could equally be responsible.
- The trees pose a subsidence risk to both dwellings, and the damage to your neighbour's dwelling should be reported to his insurers for assessment and further investigation. If, on the balance of probabilities, the trees are shown to be responsible for the damage, they should be removed.

10.0 I trust the above is of interest and assistance to you. If you have any further questions regarding this matter, please do not hesitate to contact me.

Yours sincerely,

Mark Carter

MICFor. MRICS M.Arbor.A. Dip. Arb. (RFS)