

LJG/223/0588

Mr and Mrs A Bienek
2 Percheron Close
Impington
Cambridge
CB24 9YX

01 June 2023

Dear Mr and Mrs Bienek

Ref: Garage at 2 Percheron Close, Impington, Cambridge CB24 9YX

Further to your request for a structural assessment of the impact of a large pine tree on a detached double garage at the above address, we visited the premises recently and would accordingly advise as follows.

The garage is in a detached block approximately 11.2m long by 5.6m wide, containing two sets of double garage units serving Nos.1 and 2 Percheron Close respectively, with the garaging being built at the same time as the development at this location, in 1994.

The garage has been formed using a mix of 105mm and 215mm thick loadbearing masonry wall construction to support a timber pitched and hipped roof format over, with a solid ground bearing floor slab to both garages.

The building is split down the middle, providing separate garage spaces to serve each of Nos.1 and 2 Percheron Close.

Close to the party wall line of the garage, and positioned just within the front garden space to No.2 Percheron Close, there is a 13.0/14.0m high pine tree set approximately 3.40m off the western elevation to this garage block.

From photographs shown to us at the time of our visit, it is evident that this tree has been planted after the initial construction of the houses and garages on the development. From a visual assessment, we would suggest that the tree was originally planted some 25 years ago, as illustrated in the first photograph below.

The tree has subsequently grown very significantly, extending to its current height of around 13.0/14.0m. Where the tree has been planted some 25 years ago, there remains significant growth potential still for this tree, which could potentially extend up to around 20.0m in height. A current view of the tree is also shown in the photographs below.

Directly adjacent to the base of the tree ground levels are significantly raised and disturbed as a result of root action.

There is also currently significant overhanging from branches onto the side roof slope of the garages serving Nos. 1 and 2. This situation will become more pronounced over time if the tree is allowed to remain.

Around the periphery of the tree at ground level, there is an area of soft planting to include both landscaping and grassed areas respectively, which have suffered very significantly as a result of drying action from the roots of this pine tree.

More significantly, there is evidence of general disturbance to driveway finishes to both Nos.1 and 2. The pine tree is set at approximately 1.0m off the edge of the adjoining driveway finishes to No.2.

We understand that originally there were paved finishes forming this driveway, but damage from roots extending across the driveway became so extensive that it was not safe to leave the paved finishes in position. Accordingly, all of the paved finishes to the driveway of No.1 have been taken up, and replaced with MOT Type 1 hardcore fill, with a gravel dressing over.

Notwithstanding the loose nature of the gravel of the gravel dressing, there is evidence of very significant disturbance to the driveway finishes to No.1, with a concentration of root matter outcropping close to surface level.

There is also associated disturbance to brick paviour edgings to both the southern and western edges of the access driveway leading up to the garage of No.1.

The areas of soft landscaping within the front, south western, section of the garden to No.2 Percheron Close have also suffered significant drying action associated with the roots from the pine tree, with roots spreading across the surface of the lawn finishes, and extending across to disrupt the tarmac driveway finishes leading up to the western door opening on the southern elevation of the garaging serving No.2.

Significant rippling of tarmac finishes can be seen here, set approximately 8.0m away from the tree, with the main disturbance set approximately 2.40m off the front garage door opening. Root disturbance has resulted in corresponding unevenness and misalignment of up to 100mm in the driveway finishes. This has become a significant trip hazard.

Separately, in the driveway to No.1, where roots outcrop close to surface level this results in a very slippery surface finish, which becomes particularly dangerous in periods of wet and/or frosty weather.

At the time of this visit, we did not note any evidence of significant direct structural damage to the walling of the garage. Rather, damage is currently confined to the driveway construction of both Nos.1 and 2, together with disturbance to areas of soft landscaping, overhanging of branches, blockage of gutters with pine needles and so on.

In order to prevent ongoing problems of this nature and, more particularly, anticipated future structural damage to the fabric of the garage, our strong recommendation would be to obtain permission for complete cut down and removal from site of this pine tree.

As noted above the tree currently extends up to some 13.0/14.0m in height, centred approximately 3.4m off the western flank wall of the garage.

The planting of a forest tree of this nature in this setting, so close to part of the main construction of the premises is structurally inappropriate.

In this location, and in consideration of the anticipated subsoil conditions and type of foundation construction for a property built in 1994, where the tree did not pre-date the construction, we would recommend that no trees are set closer than around 5.0-6.0m off the nearest point of external walling to any part of the premises, with retained vegetation beyond this distance seasonally controlled to ensure that the maximum growing height does not exceed the minimum separation distance of the tree off the nearest point of walling to any part of the premises.

Where the tree is only set 3.4m off the walling to the garage, selective cut back would not be possible, or structurally acceptable, in this instance to achieve this height to separation distance recommendation. Rather, in order to address the ongoing problems referred to above, we would advise that the only structurally acceptable solution would be to completely cut down and remove from site all of the existing tree, subject to obtaining the necessary consent from the Local Authority, where we understand that the property is set in a Conservation Area.

This is a relatively young, non-indigenous species, and accordingly in our opinion it does not benefit or enhance the street scene, as illustrated in the attached photographs.

We would recommend that, in conjunction with getting permission for removal of the tree, a proposal is made for provision of a more appropriate ornamental species to be planted in the front garden of No.2, positioned a minimum of 5.0-6.0m off the garage walling, to reflect the spacing recommendations noted above. The chosen species should have a maximum growing height of around 4.0-5.0m.

We would recommend that this report is appended to a Tree Surgeon's application to the Local Authority for the recommended cut down and complete removal from site of this pine tree as referred to above.

We trust that this report is of assistance to you, and that it suitably addresses matters referred to in our recent meeting at the premises. Should any party require further clarification of points noted above, please let us know.

Our Fee Invoice for agreed expenses incurred on this matter to date will be forwarded to you under separate cover.

Yours sincerely



L J Gawn BSc. CEng. MStructE, MICE, MIQA
for and on behalf of Gawn Associates



Front garden to No.2 showing pine tree planted after development completed



Current view of front driveway to No.2



Front elevation of garaging to No.1 Percheron Close



Disturbance to finishes adjacent to base of tree



Cracking to paved finishes



Cracking to paved finishes



Disturbance to tarmac finishes to driveway to No.2 Percheron Close