

Stewart Patrick Esq.
Hailwood House,
Park Avenue,
Wortley, S35 7DR.

April 13th 2021.

Dear Mr Patrick,

Trees and your planning application.

You are seeking planning permission to extend Hailwood House. The project is a relatively minor scheme but nonetheless, Barnsley's Planning Officer has asked for a tree survey. There are two trees on the site, both at the front of the house. The trees are well away from the building works, but a new heating fuel tank is to be positioned beneath one of the trees. This is probably what has provoked the Officer's request. The trees are protected by a Tree Preservation Order.

I shall deal with the various matters below:

The trees.



Photograph 1.

The two trees in question are both Common Limes and both grow at the side of the road (The Flatts) albeit within your garden, a couple of metres from the edge of the highway. When I say "road," it's not a properly surfaced highway. It's a fairly rough road, albeit with a surface that's reasonably weatherproof by the looks of things.

Photograph 1 is a view of the trees as seen from the road looking roughly east. Only the first two trees in this photo are in the garden.



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Both trees are approximately 20 metres tall. Both are in reasonable condition and appear to be fairly typical of Common Lime trees grown in these situations. The trees are part of a uniform row of trees that extends alongside the road. Your driveway runs between the two trees. Your designer has marked the trees on the site plans, T1 is to the east of the driveway, T2 is to the west. T1 is 700 mm diameter and T2 is 750 mm.

Photograph 2 is a view of the two trees taken from the opposite side of The Flatts, looking roughly south.

The trees have both been pruned at least once, seemingly to a height of approximately 14 metres. (I shall discuss the routine management of trees like this below.)



Photograph 2.



Photograph 3.

Photograph 3 is a view of the base of tree 2. It's approximately 1 metre from the side of the drive, which is surfaced with concrete. The scheme does not call for the drive to be widened so all site traffic will be passing on existing surfaces.

Photograph 4 is a view of the base of tree 1. The “basal sprouts” or shoots, often called feathers, that emerge from the base of the trunk are normal on Common Lime trees, and frequently a nuisance requiring regular removal.

This tree is a couple of metres from the driveway, and again there are no plans to alter this situation.



Photograph 4.



Photograph 5.

Photograph 5 is another view of the base of tree 1, which I’ve included to show the space between it and the garage. A heating oil tank is going to be located in this area. I shall

discuss this matter below. The evergreen, Cypress-like tree beyond the garage is in the neighbouring garden.

Photograph 6 is a photo of the only other slightly significant tree in the site; it's an Apple and is widely infected with Nectria Canker. I recommend this is removed. Nectria Canker is extremely common on domestic apple trees. In this case the infection is so widespread that there seems to be little point in trying to manage the disease, so removal and replacement would be most sensible.



Photograph 6.

This concludes my tree-related observations on this site.

Discussion.

There are two matters that need addressing here, firstly how the project might impact upon the two Lime trees, and secondly the future management of those trees. I have seen plans for the project and apart from the positioning of the heating oil tank, the works required will be well away from the trees.

The project, in the greater scheme-of-things is very small. There is no real need or opportunity for the contractors to make use of the sort of large machinery that might inadvertently damage trees. There is sufficient space on the drive for the storage of materials that will be required, which will have to be largely manhandled onto the site. The sort of forklift machine that is used on building sites nowadays, simply will not fit up the drive. Notwithstanding the lack of opportunity, I have appended a tree protection method statement that outlines how damage to trees can be avoided.

The positioning of the oil tank should also not be a problem. Nowadays these are double skinned plastic devices that are much more leaf-proof than the (invariably rusty) old, steel ones (single-skinned) that can still be seen near properties of a certain age. However, it is my understanding that these still have to be positioned on a concrete, impermeable stand. (Presumably to prevent spills or leaks soaking into the soil beneath.)

This oil tank is going to be quite close to tree 1. Fortunately, it is feasible to construct a concrete stand without doing any excavations, so damaging the roots of tree 1 is not necessary.



Photograph 7 shows a no-dig surfacing system being demonstrated at an arboricultural industry event. This “cellular confinement system¹” can be used beneath a concrete or tarmac surface. Different thicknesses are available depending on the loads involved.

Photograph 7.

The principle behind these systems is that they avoid excavation so tree roots are not damaged. Loads are also spread so soil is not compacted and tree roots may continue to garner resources from beneath the surface. Ideally, moisture would still percolate through, although in the case of the oil tank, this would be prevented.

According to *British Standard 5837 2012 Trees in relation to design demolition and construction – Recommendations* a tree the size of tree 1 would have a root protection area of 222 square metres (a circle, tree at the centre, of radius 8.4 metres) so the loss of 7 square metres is insignificant.

On large building sites, BS5837 routinely expects root protection areas (RPAs) to be fenced off to prevent casual incursions into the tree protection zones, but in a small project like this, there is really no necessity to erect fencing at all. That is as long as all site workers are made aware of the importance of not damaging the soils. In this case, as the area is quite clearly garden there is unlikely to be any need to do anything within these RPAs.

It should be noted that BS5837’s RPA assumption is extremely hard to countenance in situations like this; that is the existing house, garage, and highway are all well within the trees’ RPAs so precisely where these trees are garnering resources is a mystery. It’s worth noting that all the research that’s done on tree root architecture, is invariably undertaken in open ground. Most of the evidence as to how tree roots grow around buildings and other obstructions is anecdotal. To put it another way, where your trees have grown roots is something of an imponderable. But following the guidance of the tree protection method statement should reduce the chances of the trees suffering.

The other matter that I need to address is the long-term management of trees like these two Limes. I do not know, but consider it highly likely, that they were protected (with the

¹ <http://www.geosyn.co.uk/product/cellweb-tree-root-protection> This company are regular attendees at arboricultural industry events.

TPO) because they are something of a historical feature relating to the nearby Wortley Hall. Ideally, the whole row, that is the trees that now find themselves in separate gardens, should be pruned at the same time to a similar height. This to preserve the uniformity and integrity of the group.



Photograph 8

Photograph 8 shows 5 of the Lime trees in the next-door-but-one garden to the west. It seems that the integrity of the row is already lost.

Although I accept that these trees have been pruned in this manner for a long time, and could be regarded as traditional, it is not in the best interests of either the trees or the overall landscape.

In my opinion, it would be prudent for you to prune your two Lime trees to reduce the height and spread by approximately 6 metres. Ideally I would prune them by more than this, in an effort to get them in proportion with your house, but this is currently not recommended. There is a best practice document for pruning trees, *British Standard 3998 (2010) Tree Work – Recommendations*, which implies that removing more than 30% of any tree's leaf cover is undesirable. Invariably local planning authorities granting permission to prune protected trees will follow this guidance.

In this case reducing the height by 6 metres would be rather more than BS3998 suggests is ideal, but ought to be tolerable for the Council. This is because it's pruning that is overdue; it should have been done some years ago. Fortunately Common Lime is very tolerant of even quite severe pruning so I don't think the trees will suffer unduly.

One of the problems of the TPO system is that it is purely preventative; it can only stop a tree being pruned or removed. It can't force someone to do something. In this case, it would be best if the whole row of trees were pruned at the same time, which would of course require you and your neighbours to co-ordinate. Ideally the local planning authority would offer some inducement to tree owners, a grant perhaps or maybe a discount on the Council Tax, to persuade them to co-ordinate the management of such tree features. I mean those like this row of Lime trees that reach over several different gardens., which if not managed similarly, would soon cease to be "features."

Conclusions.

1. I consider this proposal unlikely to have any effect on the two Lime trees.
2. Although steps should be taken to ensure that building works are kept away from the two trees, I don't think there is any need to erect elaborate tree protection fences.

3. The proposals in the tree protection method statement should be followed.
4. The stand for the heating oil tank should be constructed using a no-dig system of surfacing, probably similar to the one illustrated in photo 7.
5. I consider the two Lime trees to be overdue for pruning. I suggest they are pruned with the objective of reducing their height considerably, and then managing them in the future to not allow them to get quite so tall. If you could persuade the neighbours to prune their trees similarly, I think this would be welcomed by the Tree Officer and the neighbourhood's landscape would benefit.

I trust you will find this helpful.

Yours faithfully,



W L Anderson. Dip.Arb(RFS). M Arbor A.

Enclosure; Tree protection method statement.



**Proposal at Hailwood House,
Park Avenue, Wortley, S35 7DR.**

April 16th 2021.

Tree protection method statement.

1. Tree works should be undertaken before any other site works commence.
2. If tree protection fencing is required, it should be undertaken after tree work is completed and before any other site works commence.
3. All machinery on site should be operated in a manner to avoid affecting any nearby trees. Exhausts should not be directed towards foliage, and any refuelling activities should be conducted as far away as possible from trees. Spill kits should be available during refuelling operations and used with a view to ensuring that any spillages do not seep or spread into the RPA.
4. If machinery is to be washed on site, the run-off should not be directed towards any trees or rooting areas. If heavy rain is encountered run-off should not be allowed to cause soils to become water-logged where roots might be anticipated.
5. If any roots (larger than 25 mm diameter) are encountered in excavations these should be cut cleanly and covered with clean topsoil as soon as possible. They should not be hacked off with a spade or an excavator. Roots must not be left exposed to dry out or be affected by frost.
6. Trenches should not be excavated close to protected areas, but if unavoidable then any roots encountered should be pruned carefully rather than hacked off. Trenches should not be left open as roots can dry out or be affected by frost. If necessary trenches can be temporarily back-filled with straw or woodchips but if any unanticipated root masses or large roots are encountered, an Arboriculturist should be consulted.
7. If any trenches have to be installed through root protection areas, the project Arboriculturist should be consulted.
8. Operations should be planned to avoid causing soil compaction, especially where there will be future tree planting.
9. If any tree requires further pruning during the contract period, this should be agreed with the project arboriculturist and only undertaken by properly experienced personnel.
10. Tree protection fencing should only be removed once construction work is complete.

Anderson Tree Care Limited

April 2021.



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