Delegated Report

Officer	Application Number(s)
Tom Little	2020/2196/T
Application Address	
20 Daleham Gardens London NW3 5DA	
Proposal(s)	
FRONT GARDEN: 1 x Beech (T1) - Fell to ground level.	

Recommendation(s):	**Refuse application for works to trees protected by a TPO**
Application Type:	**Application for works to trees protected by a TPO**

Consultations						
Adjoining Occupiers:	No. notified	**17**	No. of responses	**5**	No. of objections	**5**
Summary of consultation responses:	1. I live at 18 Daleham gardens and mature trees that are over 100 years old are part of the special feel of that the neighbourhood has. It is shocking to me that someone would remove a tree of this importance after all this time claiming that it is damaging their property, it makes no sense at all when it has stood there for 100 years. Camden should be trying to conserve important trees like this and would be a great loss to our road if it were to be removed.					
CAAC/Local groups* comments: *Please Specify	The Heath and Hampstead Society submitted the following objection: I am objecting to this Notice of Intent to fell this TPOed copper beech which has been implicated in a subsidence case at 22 Daleham Gardens. In general the cracks are unimpressive, the movement studies poorly performed if standard and do not indicate the tree is the prime cause, and the technical data presented has not been evaluated. The opinion is the usual cut and-paste effort. Looking at the movement data it is clear that the SW corner of the house and the bay are moving the most. The drains report indicates that visually the drains in general are in reasonable shape apart from the rainwater gully 7 which appears to be blocked (indicating likely failure sufficient to allow roots in, but also allow leaking) but was not surveyed as "MH3 was too deep"! This is the exact place where the movement is occurring - small as it is. This leaking water will be attracting roots, but these will be - if anything - helping the situation rather than hindering. No pressure/hydraulic leakage tests have been performed in any of the drains to rule out leaking. This was considered "not applicable" apparently, yet a visual inspection is completely inadequate for this. The likely cause of leaking drains in this area is indicated in the borehole findings. Crawfords merely refer to the 1:625,000 scale British Geological Survey map OS Tile number TQNW and state that the underlying geology to be London Clay, based on London being a few mms across. The 'British Geological Survey 1:50 000 series North London Sheet 256 Bedrock and Superficial Deposits' map' readily available on-line at http://www.largeimages.bgs.ac.uk/iip/mapsportal.html?id=1001750 indicates 22 Daleham Gardens to be just a few tens of metres below the spring line between the Claygate Beds and unit D of the London Clay Formation, a very diffuse feature. The ground down to 0.4m is described in the Geotechnical Survey Report as "brown sandy clay....containing brick". This is often - as here - described as Made Ground, but in fact is 'Head', a solifluction laid down as a hill wash at the end of the last ice age. It is high in silt and/or sand, relatively unstable and the silt and sand is highly erodible. Crawfords acknowledge that they "cannot rule out the presence of superficial deposits at shallow depth", but since this statement accompanies every single report I've seen from them, it indicates this is merely inserted to					

	avoid come-back and has absolutely no meaning for them whatsoever. This permeable very silty and sandy hill wash is highly erodible, and while less so, the ground below - "Mid brown silty clay containing grey mottle" is also erodible. This erodible silt can be washed out by groundwater on this slope, but also by leaking drains, as is likely here. Confined sand can be immensely resistant to movement but here, mixed in with silts that have also been eroded this leaves it capable of erosion too. (The grey mottle referred to in the clay is likely to be gleying and indicates water table rises or historic watercourse pathways - or both. Either way in this iron-containing soil it is an indicator of a poor oxygen levels due to soil waterlogging of any cause). The loss of silt volume below the drains can cause drains collapse with cracking and broken joints. This is very very frequent in Hampstead, both for private drains and for public drains and mains water pipes, evidenced by the very frequent need to mend mains water bursts and potholes where the roadway foundations have been eroded and washed out. The movement monitoring performed (manual readings taken on-site roughly every 2 months) is particularly useless for determining causation of building movement; constant remote sensing is far more sensitive and in the long term, cheaper. However, comparing the movement monitoring results with rainfall data from the NW3 weather station nearby in Savernake Road tends to indicate that it is rainfall i.e. leaking rainwater gulleys coupled with groundwater that are responsible, not the tree. The Street View of the copper beech in April 2019 (see over), shows it already in leaf flush and in 2020 this was even earlier, yet 8th April 2020 was the highest point of building rise noted. February had been a very wet month - 196% of the 30-year average - and early to mid March was also wet. One can assume that the highest point was around mid-March and that the building is now settling. It cannot be argued that the ground and hence the building is returning from desiccation since there has been no desiccation. The insitu shear vane tests used to determine desiccation indicate compacted stiff ground but in view of the laminated type of ground here, this test is not valid as a proxy for desiccation. The grey mottling in the superficial clay is another indicator that desiccation is most unlikely. Looking back, it is not immediately obvious why suddenly, and despite previous years of even drier summers, cracks should appear in Autumn 2019. The tree has been there for very many years. Why now? I am suggesting that possibilities include silt erosion from the many storms we have had all through 2017 and some in 2018 and 2019. Adding in leaking rainwater gullies and drains would make matters much worse. Please refuse to fell this magnificent tree, and continue to do so until all the leaking drains in the area have been fixed, private and public, causes within the flank wall and bay have been fixed, appropriate more sensitive movement studies have been done across seasons, dry periods and storms, and the cracks have become more impressive. Most of these are very slight and experienced by the vast majority of houses in Hampstead. (Please see the attached objection for the figures) The Belsize Society submitted the following objection: We understand that subsistence has been reported but have been informed that damage has been minor and that the case presented in the application does not justify removing the tree. If it is minor external cracking, then it may not even be subsidence related.

	Would it also be possible to take into account that the tree's owner have been following a professional tree management programme (provided by Wassells Arboriculturalists) which includes reducing the crown of the tree every 4- 5 years, most recently done a few months ago in January? Wassells has also advised that given the age of the tree, it is in an equilibrium state with the buildings and that felling the tree would result in a material risk of heave. We understand that there has been no new subsidence or material movement in a nearby building since then suggesting measures short of felling should be fully explored before this application.

Assessment

The copper beech tree is highly visible for the entire length of Daleham Gardens, approximately 250m in each direction and is visible from Nutley Terrace, Akenside Road and Belsize Lane. It is considered to provide an extremely high level of visual amenity to the public and to make a positive contribution to the character and appearance of the conservation area. According to the Fitzjohn's Netherhall Conservation Area Statement, 'large mature trees have a presence in every view'. The beech is estimated to be around 100 years old has an approximate height and crown spread of 20m and 14m respectively, making it a very significant presence in such views. The tree is among the finest examples of the species in the borough and is something of a landmark tree due to its prominent position in the street. Daleham Gardens is completely lacking street tree planting which further adds to the importance of front garden trees, particularly majestic specimens such as this.

The annual mean NO2 levels for 2016 in Daleham Gardens was between 40 and 43 micrograms per cubic metre (ug/m^3). This fails to meet the mean objective of the London Air Quality Network. According to data from Camden's i-Tree survey, trees of the same species and of a similar size and form as the tree in question were, on average, responsible for approx. 25kg of carbon sequestration per year and removing approx. 612g of air borne particulate pollution per year. As such, the tree in question is a valuable asset in response to pollution and climate change, particularly in this location.

The tree would appear to be in good health with a safe useful life expectancy in excess of 20 years. A CAVAT valuation of the tree has estimated the value of the tree and the amenity services it provides to the public at £195,666.

It is recommended that this application be refused to protect the public amenity the tree provides and preserve the character of the conservation area.