



11<sup>th</sup> March 2019

Ref:ha/letrpt1/millfieldcot

Your Ref:

Mrs J Sinclair  
Millfield Cottage  
Millfield Lane  
London  
N6 6JH

Dear Mrs Sinclair

**Horse Chestnut trees at Millfield Cottage, Millfield Lane London N6 6JH**

Further to your instructions, I have inspected two Horse Chestnut trees in the rear garden of your property (above) on 14<sup>th</sup> February 2019. The primary purpose of the inspection is to assess the condition of the trees and to make recommendations for any appropriate tree management, with safety as the primary objective.

I have carried out a basic tree assessment (see Level 2 below) from ground level.

I have marked the approximate position of the trees upon a sketch plan attached herewith and I refer to them as T1 and T2. The trees are protected by growing within a conservation area but I am not aware of any tree preservation orders applied to the trees.

**T1 Horse Chestnut**

**Description of Proposed Tree Works:**

Tree ID/Name*	Dimensions**	Tree Works Specification (Sp#)	Summary Reasons	Risk
T1 Horse Chestnut	22 x 7 x 850	Crown reduce by 2m (Sp1) Crown clean (Sp3)	Lighten loading upon spreading lateral branches; reduce risk of failure; improve tree structure	<b>Low</b> ; pruning prudent

\*refer to plan \*\*Tree Dimensions are height in metres x radial canopy spread in metres x trunk diameter in millimetres

- 1) The tree is poisoned near to the house, well within striking distance of falling branches or if the whole tree were to fall. I have paid particular attention to canopy branch form, the tree's trunk and the area around its base.
- 2) The canopy of branches is one that has developed following pollarding (removal of all branches and stems to a given height above ground) many years ago and the new 'spars' that currently provide the structure of the canopy may be around thirty years old,



possibly more. These are the main stems growing out from the pollarding site at around 8m from ground level.

- 3) The unions of the spars to the parent trunk/stem appear to be sound, where I could see no obvious signs of decay or weakness. The canopy although quite dense is normal and I could see evidence of previous pruning work (small pruning scars) to thin out that density in the past.
- 4) The lateral branches grow out north and east, toward the rear of the house and those that are horizontal are quite heavy, carrying many sub-lateral branches. Such branches place high stress throughout their length and at their union with the parent stem or trunk. It is not unreasonable to lighten their load by shortening the branches.
- 5) Upon the trunk below the previous pollarding is an area of reaction wood development and some slime fluxing, which is liquid from cells within the wood of the stem normally caused by bacteria. This is probably an area of some internal decay but I note the compensatory wood production, by the tree, around this wound is robust and strong. On the basis that there is no large area of open, decaying cavity for example and the tree is growing vigorous reaction wood around this area, I am confident that the slime fluxing is only aesthetically rather unpleasant rather than the symptom of significant internal decay and trunk weakness. Specialist, diagnostic equipment might be able to further assess any internal decay but I do not believe that this additional expense is warranted at this stage.

Fig.1 Slime flux (blackened area) and areas of robust reaction wood arrowed



- 6) The remainder of the trunk and importantly the base of the trunk where it meets the ground shows no signs of structural defect and consequently, there is nothing to



suggest that the tree is anything other than well anchored into the ground by a normally-functioning and sound root system.

- 7) In conclusion the tree appears in good order with no significant structural defects. There may be a degree of internal decay in the main trunk behind an area of slime fluxing. There is evidence of effective wood growth having developed to compensate for some additional flexing in the trunk, which is a sign of normal tree vitality and response. The canopy spreads out laterally and it will be sensible tree management to lightly reduce the canopy spread evenly throughout, which will reduce wind loading upon the canopy in stormy conditions and thus reduce the risk of branch breakage. It is always sensible to remove weak, dead and broken branches as a matter of general tree husbandry.

Fig. 3



## T2 Horse Chestnut

### Description of Proposed Tree Works:

Tree ID/Name*	Dimensions**	Tree Works Specification (Sp#)	Summary Reasons	Risk
T2 Horse Chestnut	21 x 5 x 800	Fell and remove stump by grinding (sp6)	Tree is becoming hazardous; reduction work is unlikely to be tolerated by the tree's low resistance	<b>Moderate;</b> felling justifiable

\*refer to plan \*\*Tree Dimensions are height in metres x radial canopy spread in metres x trunk diameter in millimetres

- 8) This mature Horse Chestnut is not in sound structural or physiological condition. Taking the tree's vitality first, I note that the tree has been pruned to remove a large limb in the recent past and that large diameter dead branches have developed since the pruning was conducted. This is an indication of progressive decline in condition. I also note tarry spots on the trunk and quite significant bark death and loss. Fungi that grow on dead wood emanate from cracks in the bark throughout the main trunk. The tree has contracted Bleeding Canker, which causes dark exude to emanate from lesions and leads to tree death and breakage.
- 9) This tree too has been pollarded to around the same height as t1 and I estimate around the same period of time ago. Again, primary regrown spars grow up and outward from the points of pollarding. However, instead of the unions between the base of the spar/re-grown stem and the parent trunk wood being sound, quite extensive decay has developed, which is not surrounded by robust wound wood. Such unions are weak and the associated stem/spars or branches are at quite high risk of breaking off in stormy conditions.



Fig. 4 Circled – a weak and decayed union between the relatively new stem/spar (arrowed) and the parent stem/trunk

Fig. 5 Extensive decay has developed at an historic pollarding location (arrowed); circled weak spar/stem union under high stress.



- 10) Owing to the depleted physiological condition of the tree, pruning the branches to reduce the risk of failure in stormy weather, is likely to significantly affect the tree's ability to respond and bring about the tree's demise. Access to the tree is limited and operatives would be required to rely upon the tree's branching structure for anchorage during a pruning treatment and I am not confident that this is a safe working environment. Under such circumstances, I cannot recommend the tree for retention with pruning and I recommend that the tree should be removed entirely, removing the stump by grinding out the roots.
- 11) Re-pollarding the tree would remove the risk of large spar/stem failure but I am not confident that the tree would recover from such work and it would only be a matter of having a team to return to remove the dead stump. This is illogical. The stump should be removed because leaving it in the ground presents a source of nourishment to the pathogenic Honey Fungus, which may be present already in the garden. This could then spread onto T1.
- 12) For garden sustainability, it is commonly preferable to replant where mature trees have been removed. The garden is, in this case well-stocked with trees and although it is not essential, replacement tree species suited this location could include Italian Alder or Norway Maple varieties or more unusual trees could include Handkerchief Tree (*Davidia involucrata*) or Hop Hornbeam (*Ostrya carpinifolia*).
- 13) In conclusion and having given all considerations to tree management options and practicalities, I recommend the tree is removed entirely and that resources are better

directed to re-planting than to pruning, with a low proposed of successful tree preservation.

- 14) Finally, I was asked to review the stump of a small tree in the southern end of the garden, which had died in dry summer 2018. This tree appears to have been a Lawson Cypress variety, which are particularly susceptible to drought stress, in my experience. The stump should be removed to avoid colonisation by Honey Fungus, which is aggressive. Suitable replacement trees could include Variegated Holly, Snowbell Tee (*Styrax japonica*), Snowdrop Tree (*Helisa moniticola*); Honey Locust (*Gladitsia triacanthos*). These trees have tolerance to Honey Fungus and may be successful where others are not.

#### **Specifications for recommended tree works:**

##### General

All work is to conform to BS 3998:2010 'Tree work – Recommendations' and with current arboricultural best practice. Tree works are to be undertaken by a professional and specialist arboricultural contractor, who carries the appropriate experience and insurance cover, equipment and PPE. All works and processes are to comply with all relevant Planning, Wildlife, Environmental, Conservation and Health and Safety legislation.

Sp1. Crown reduction will include reducing the height and spread of a tree's canopy (branching structure) whilst retaining the tree's natural tree form (species determined). The amount of reduction is described in linear metres e.g. 2m (from 6m to 4m radial spread) or 3m (from 15m to 12m tree height). Crown reduction work will be undertaken for a specific purpose, which may include containing tree growth in a given location or reducing wind purchase and stress.

Sp2.1 Any branch shortening work, (including as part of crown reduction work) will be conducted by pruning back to a suitable growing point, e.g. a shoot or smaller branch, which can continue to support branch growth.

Sp3. Crown Cleaning involves the removal of all dead wood small and large diameter, stubs and broken branches. Some small, densely arranged shoots (including epicormic shoots) will be thinned out or removed as recommended.

Sp6. Felling involves the careful removal of a tree to ground level (or other specified height), either in sections or in one unit (straight felling). The method of felling will be suited to the constraints of the site and judged by the competent operator undertaking the task. Removing the stump may be part of the requirements and this will be carried out using a mechanical stump grinder where accessible.

**Note: the tree work recommendations are to be undertaken as soon as practicable from the date of this report and having first obtained all necessary authority.**



### Limitations

No assessment of the soils or wood tissue has been sent for laboratory analysis unless specifically stated. Our assessments are based on professional experience and expert observation at the time of the inspection. Tree inspection is carried out from ground level unless otherwise stated. No liability can be assumed to rest with ACS (Trees) Consulting should conditions alter after our inspections.

No attempt has been made us to ascertain the presence of any legal protection that might be afforded to the trees in the form of either a Tree Preservation Order of Conservation Area. Prior to the implementation of any works I strongly recommend that the Local Authority be consulted to obtain any necessary consent.

We recommend that your trees should be inspected regularly by professionals as part of prudent tree management programme. We recommend that all trees be re-inspected within 3 yrs. maximum or the specific time scale provided within the report. Following inspection recommendations are to be carried out within the timescale provided, which should be treated as a maximum.

This report has been prepared for the sole use and benefit of the client. Any liability of ACS Consulting shall not be extended to any third party.

Any Herbicides or Pesticides will need to be applied in line with the manufacturer's directions of use. Be reminded that herbicides can kill other local plants than the target vegetation and precautions to safeguard precious or edible plants in the area will be needed.

Tree Risk Assessment used by ACS: The International Society of Arboriculture (ISA) Tree Risk Assessment Qualification (TRAQ) takes a qualitative rather than quantitative approach to risk assessment. It uses matrices (enclosed) to compare the likelihood of failure of a tree or tree part, the likelihood that it will impact the target and the potential consequences of failure. Unless stated otherwise the risk assessment assumes the risk offered over the next year. The tree risks are assessed as Severe; High; Moderate and Low. Intervention is normally prudent where trees are assessed as being an Extreme, High or Moderate hazard.

#### Tree Inspections

**Level 1** – Limited visual inspection to identify trees with obvious defects and determine the need for higher level inspections.

**Level 2** – Basic tree assessment includes a ground level visual inspection, assessment of site factors and tree condition. Some hand tools and visual aids may be used.

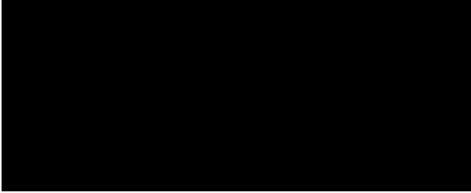
**Level 3** – Detailed inspection and assessment, which may include the use of diagnostic equipment, aerial inspections and root excavations together with some more detailed assessment of the site and its usage.

Note: Assessment of trees considers risks presented by trees subject to normal weather conditions, which include occasional strong winds and heavy snow. The consideration of trees exposed to extreme or exceptional wind or storm conditions, is beyond the capability of the surveyor.



I hope that the above is clear and helpful but if I can be of any further assistance, please do not hesitate to contact me.

Yours sincerely



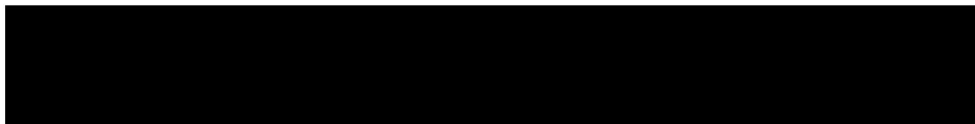
Hal Appleyard  
Dip. Arb. (RFS), F.Arbor.A, MICFor. RCarborA  
Arboricultural Association Registered Consultant  
Chartered Arboriculturist



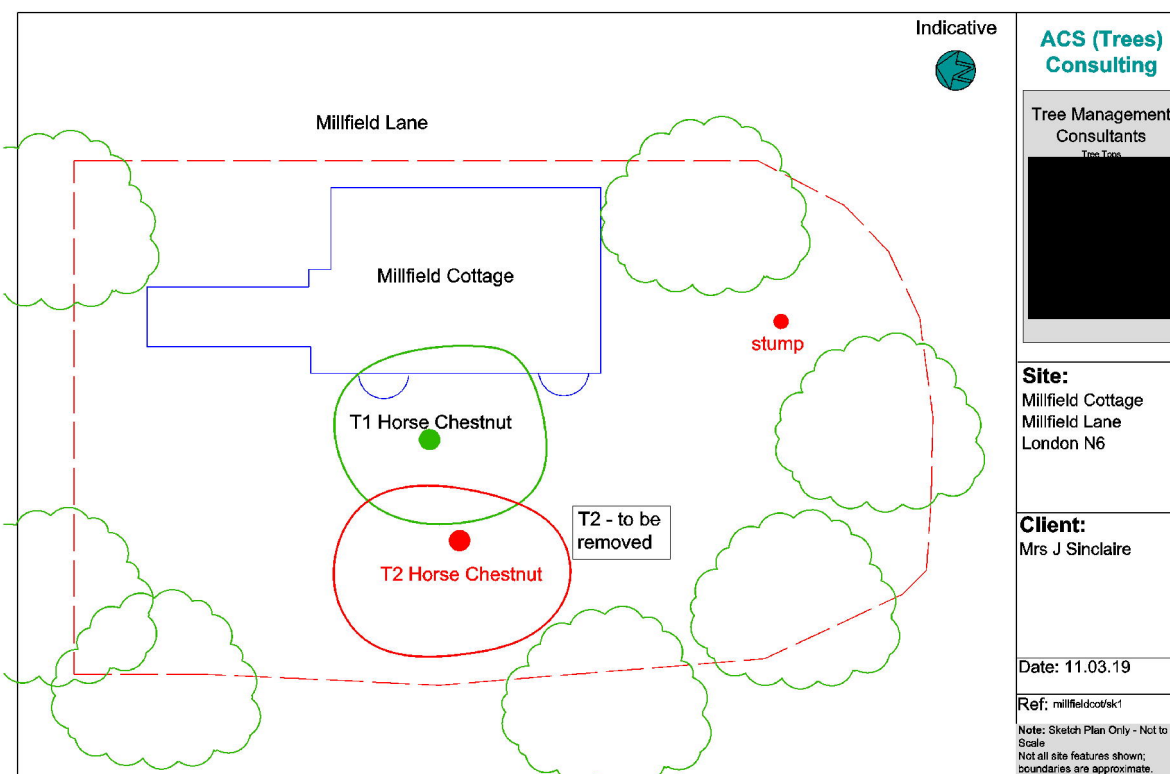
Institute of  
Chartered Foresters  
Registered Consultant

cc. Treecare Ltd

enc.  
Sketch  
Assessment Matrices







**Tree Risk Assessment - International Society of Arboriculture (ISA) Tree Risk Assessment Qualification method. The use of words (qualitative method) rather than figures (quantitative), helps to realise the assessment process and consequences. Normally, the assessment PERIOD is over one year unless it is stated otherwise.**

Likelihood of Failure	Likelihood of Impacting a Target			
	Very Low	Low	Medium	High
Imminent	Unlikely	Somewhat Likely	Likely	<b>Very Likely</b>
Probable	Unlikely	Unlikely	Somewhat Likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat Likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely



Likelihood of Failure & Impact	Consequences of Failure			
	Negligible	Minor	Significant	Severe
Very Likely	Low	Moderate	High	<b>Extreme</b>
Likely	Low	Moderate	High	High
Somewhat Likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

**Note: Intervention (tree management) is normally prudent when there is, at least, a 'Moderate' risk that a tree or tree part might fail and that there would be consequences of that failure.**