

Arboricultural Appraisal Report

Damage Investigation at:

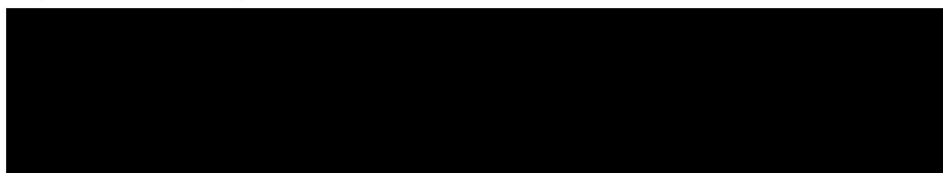
28 Park Village East
London
NW1 7PZ



CLIENT:	Crawford & Company
CLIENT REF:	[REDACTED]
MWA REF:	[REDACTED]
MWA CONSULTANT:	Giles Mercer (BSc Hons)
REPORT DATE:	17/03/2021

SUMMARY

Statutory Controls		Mitigation (Current claim tree works)	
TPO current claim	No	Policy Holder	Yes
TPO future risk	No	Domestic 3 rd Party	No
Cons. Area	Yes	Local Authority	No
Trusts schemes	No	Other	No
Local Authority: -	London Borough of Camden		



1.0 Introduction and Background

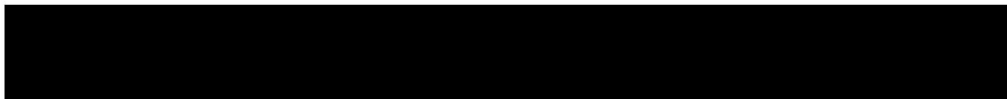
- 1.1 Acting on instructions from Crawford & Company, the insured property was visited on the 2nd of March 2021 to assess the potential role of vegetation in respect of damage to the boundary / retaining wall to the front of 28 Park Village East, London NW1 7PZ.
- 1.2 The wall has suffered displacement over several years and it is alleged that trees within the curtilage of the property are responsible for the damage.
- 1.3 This is an initial appraisal report and recommendations are made with reference to the technical reports and information currently available and may be subject to review upon receipt of additional technical information.
- 1.4 This report does not include a detailed assessment of tree condition or safety. Where indications of poor condition or health in accessible trees are observed, this will be indicated within the report. Assessment of the condition and safety of third-party trees is excluded and third-party owners are advised to seek their own advice on tree health and stability of trees under their control.

2.0 Property Description

- 2.1 The subject property is a three-storey semi-detached house of traditional construction (built circa 1837) with rendered walls surmounted by a hipped, slated roof.
- 2.2 There are gardens to the side and rear. Along the front boundary is a brick-built boundary / retaining wall.
- 2.3 The site is slightly elevated from the roadside although generally level with no adverse topographical features.
- 2.4 To the rear of the retaining wall is a fence area containing mature shrubs and trees.

3.0 Damage Description

- 3.1 The damage under investigation relates to the front brick-built boundary wall. The wall has been rebuilt in the past with expansion joints to allow for movement. Several sections of the wall display a noticeable lean and there are also sections which display vertical displacement. Where the boundary wall adjoins the wall by the garage (which is perpendicular to the boundary wall) there is considerable cracking and separation.
- 3.2 Noticeable undulations were observed to the adjacent footpath.
- 3.3 We are not aware of any investigations being undertaken to expose the wall foundation or tree roots.



4.0 Appraisal

- 4.1 T1 is a fully mature Horse Chestnut growing adjacent to the boundary wall.
- 4.2 There is some evidence (Bark Staining) of Bleeding Canker of Horse Chestnut (*pseudomonas syringae* pv *aesculi*). Forest Research identifies Bleeding canker as '*a disease that affects European horse chestnut trees (Aesculus hippocastanum) in Great Britain. It is characterised by the appearance of 'bleeding cankers', or lesions, on the stems (trunks) and branches. These cankers ooze, or bleed, dark fluid. In most cases diagnosed since the year 2000 the cause has been the bacterium Pseudomonas syringae pathovar aesculi. It can kill affected trees, although some do recover from infection, and some appear to be resistant to it.*' The staining was not extensive and there was no evidence of significant lesions or large necrotic areas of bark. Accordingly, we do not consider that the disease is significant (at this stage) in terms of the tree being classified as Dead, Dying or Dangerous however, disease progression can be rapid (in some instances) so the tree should be inspected regularly.
- 4.3 At the time of our inspection (winter) the absence of leaves prevented foliar assessment however the owner advised that the tree is infested with Horse Chestnut Leaf Miner (*Cameraria ohridella*). Forest Research states that '*at high population densities, HCLM caterpillars can destroy most of the leaf tissue on an individual at the natural autumn leaf fall. The caterpillars can cause severe damage to horse chestnut leaves on an annual basis*'.
- 4.4 Forest Research also identifies that '*HCLM does not significantly impair the trees' overall health, and the effect is mostly aesthetic. Research has shown that HCLM can attack up to 75% of the total leaf area on the trees, but that the loss of subsequent photosynthetic leaf tissue only reduces the total carbon assimilation by, at most, an estimated 30-40 per cent over the growing season. The reduction is much less than the total leaf area affected, because the majority of damage caused by HCLM occurs late in the season, after the tree has completed most of its photosynthesis for the year. As such, the general tree condition and stem radial growth are not affected by HCLM, even over repeated annual attacks.*'
- 4.5 Forest Research states that '*HCLM might exacerbate any decline and eventual death triggered by one or more other threats. These can include bleeding canker of horse chestnut*'.
- 4.6 T2 is an early mature lime which has been the subject of historic pruning (crown reduced circa 4-5 years ago).
- 4.7 No significant defects were observed and the tree appears to be in good health.
- 4.8 Both the Horse Chestnut (T1) and the Lime (T2) are located in very close proximity to the boundary wall and the deflection / distortion and cracking noted to the boundary wall is the result of direct damage caused by the incremental growth of the tree stem and by the secondary thickening of the tree roots.

- 4.9 It also possible that there may be an indirect damage (subsidence) component (Clay shrinkage caused by water removal from shrinkable clay soils) although there is no site investigation data (or monitoring) to support this and in any event the dominant cause is considered to be direct damage rather than indirect.

5.0 Recommendations

- 5.1 In this instance removal of the trees would appear to be the only arboricultural solution which would provide ongoing stability to the boundary wall. Direct damage caused by incremental growth is progressive and any mitigation proposal would need to withstand future growth.
- 5.2 Given the proximity of the tree to the wall root pruning and/or root barrier installation would not be possible. An engineered solution such as cantilevered support over the roots or lintel installation is not possible as the trees are in an elevated position since the wall is both a boundary and a retaining wall. Removal of sections of the wall to allow for continued growth of the trees would not be practical due to the retaining function of the wall.
- 5.3 In the event the wall is to be retained, in order to provide a durable solution, we recommend that the two trees are removed. Should replanting be considered we would advise that adequate space is allowed for future growth and that a root barrier is installed if the wall is to be rebuilt.

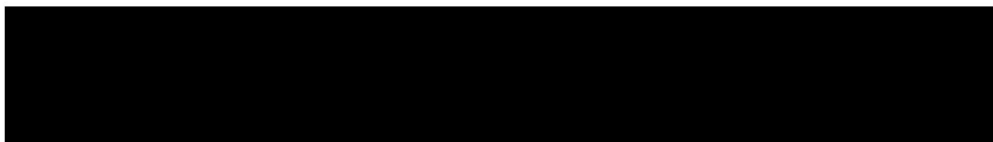


Table 1 Tree Details & Recommendations

Tree No.	Species	Ht (m)	Dia (mm)	Crown Spread (m)	Dist. to building (m)	Age Classification	Ownership
T1	Horse Chestnut	17	800	12.4	0	Younger than Property	Policy Holder
Management history		No significant recent management noted. Evidence of Phytophthora Bleeding Canker. PH advises Horse Chestnut Leaf Miner infestation.					
Recommendation		Remove (fell) to near ground level and treat stump to inhibit regrowth.					
T2	Lime	14.3	500 *	8	0.2	Younger than Property	Policy Holder
Management history		Subject to past management/pruning - previously crown reduced (regrowth appears circa 4yrs age)					
Recommendation		Remove (fell) to near ground level and treat stump to inhibit regrowth.					


Ms: multi-stemmed * Estimated value



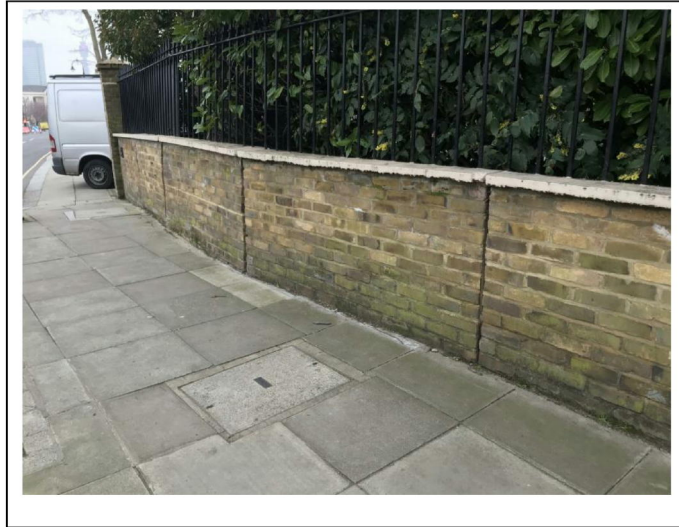
Site Plan



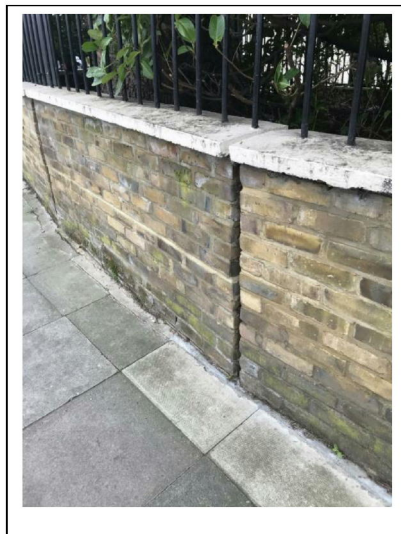
Plan not to scale – indicative only

 Approximate areas of damage

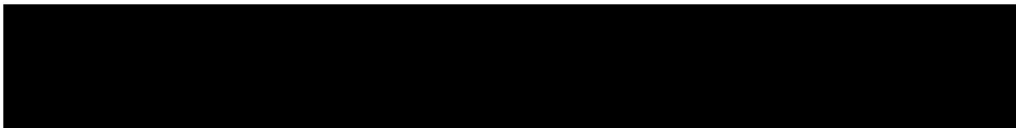
Images



View of distorted wall



View of distorted wall



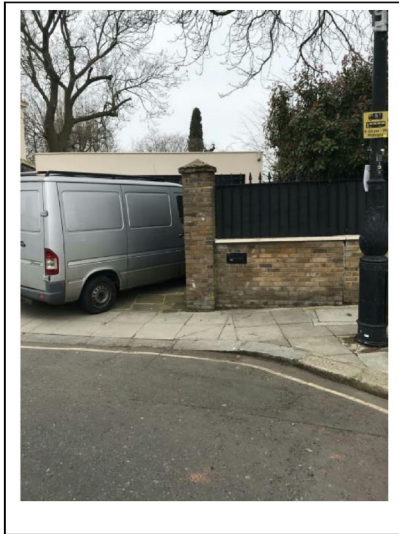


View of crack displacement

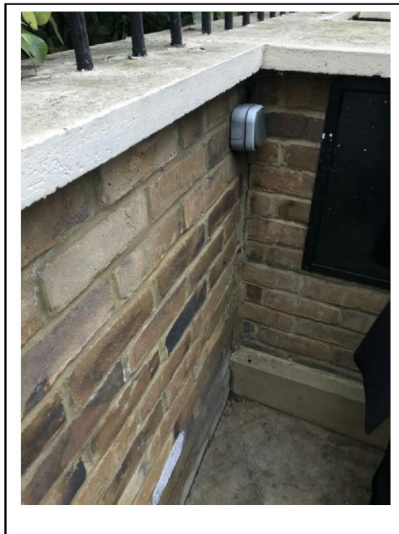


View of crack displacement





View of deflected (leaning) pillar



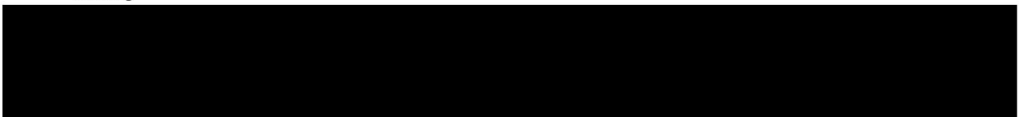
View of crack damage

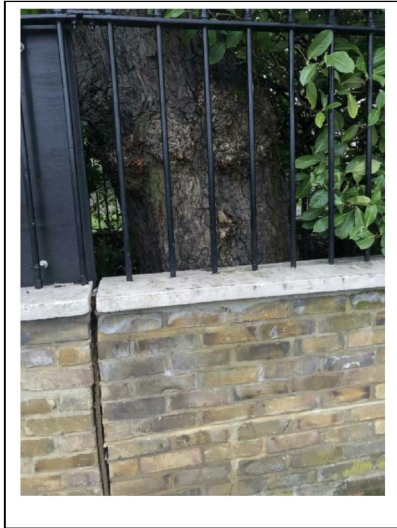


View of Horse Chestnut trunk (T1) showing bark staining

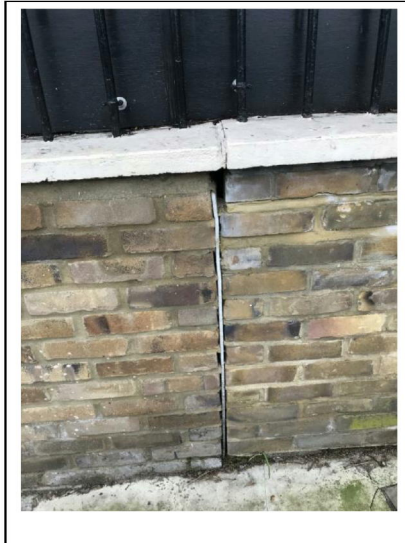


View of Lime (T2) trunk





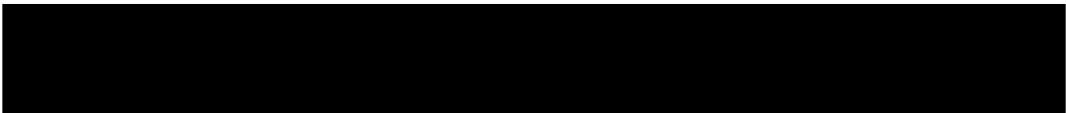
View of Horse Chestnut (T1)



View of wall displacement



View of Horse Chestnut (T1)





View of Lime (T2)



View of fenced off section to rear of boundary (retaining) wall showing T1 and T2.

