



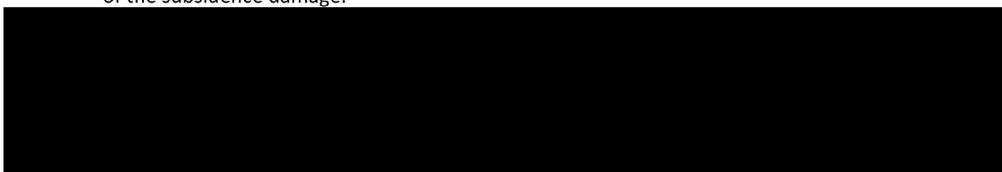
TREE PRESERVATION ORDER	Unknown – was served following submission of S211 Notification 2023/3260/T
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TREE(S) - as referenced in the MWA Arboricultural Report	WORKS
T4 False Acacia	Remove (fell) to near ground level and treat stump to inhibit regrowth.

Reason: The above tree is considered to be responsible for root induced clay shrinkage subsidence damage to 138 Haverstock Hill, London NW3 2AY

Investigations in to the damage have been conducted and the following information/evidence obtained:

1. Engineering opinion is that damage is due to clay shrinkage subsidence. Details of the damage are included in the technical report submitted.
2. Foundations are bearing on to clay.
3. The clay subsoil has a medium to high volume change potential (NHBC Guidelines) susceptible to undergoing volumetric change in relation to changes in soil moisture.
4. A comparison between moisture content and the plastic and liquid limits suggests moisture depletion in both TP/BH1 and TP/BH2 (February 2023).
5. Roots were observed to a depth of 1.5m bgl in TP/BH2 and recovered samples have been positively identified (using anatomical analysis) as Leguminosae spp. the origin of which will be T4 False Acacia confirming the influence of this tree on the soils below the foundations.
6. Level monitoring for the period 09/02/2023 to 11/08/2023 has recorded a pattern of movement indicative of the effects of seasonal soil drying by the subject tree below foundation level.
7. A drainage investigation has not been undertaken, however the trial pit/ borehole investigations did not reveal any suggestion that leakage from drainage is adversely affecting the property. There are no drains in vicinity of the damage.
8. No tree works have been carried out during the period of the claim or in the recent past in relation to the damage to the building.
9. No recent structural alterations or building works have been carried out. The property has not been underpinned.
10. A root barrier has been considered as an alternative to tree removal. This is unlikely to be a viable option due to the proximity of the trees to the building and the potential for destabilising the tree and building.
11. The evidence confirms that on the balance of probabilities the subject tree is a material cause of the subsidence damage.





12. Superstructure repairs and decorations are currently estimated to be [REDACTED] should the tree works be undertaken. Costs for underpinning in the event the tree works do not proceed are currently estimated to be [REDACTED]
13. Replacement planting of standard size tree with agreement of Local Authority.

SUBSIDENCE CHECK LIST

- A description of the property, including a description of the damage and the crack pattern, the date that the damage first occurred/was noted, details of any previous underpinning or building work, the geological strata for the site identified from the geological map.
Technical Report and Site Investigation Report provided.
- Details of vegetation in the vicinity and its management since discovery of the damage. Include a plan showing the vegetation and affected building.
MWA Arboricultural Report provided.
- Measurement of the extent and distribution of vertical movement using level monitoring. Where level monitoring is not possible, state why and provide crack monitoring data. Data provided must be sufficient to show a pattern of movement consistent with the presence of the implicated tree(s).
Level Monitoring provided.
- A profile of a trial/bore hole dug to identify foundation type and depth and soil characteristics.
Site Investigation Report provided.
- The sub-soil characteristics including soil type (particularly that on which the foundations rest), liquid limit, plastic limit and plasticity index.
Site Investigation Report provided.
- The location and identification of roots found. Where identification is inconclusive, DNA testing should be carried out.
Site Investigation Report provided.
- Proposals and estimated costs of options to repair the damage.
Addendum Technical Letter provided.

