

Engineers Addendum Report

This Report sets out in concise terms the nature of the evidence collected and the consultant's conclusions and recommendations

Policyholder, Property & Event Details

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|-------------------------|--|---------------------------------|---|
| Policyholder Name | Mr Amit Karia | Date of discovery | 09/08/2022 |
| Risk Address | 16 Deerings Drive, Pinner, HA5 2NZ | Our Ref | IFS-AVI-SUB-22-0101567 |
| Location of damage | walls of the garage and to the bedroom to the rear | Date of relevant construction | <<Enter>> Date |
| Nature of Damage | Vertical, diagonal and stepped cracking to the walls of the areas noted above. There is also | Property Type | Two storey |
| Crack Widths | 3 and would be classified as moderate. | Indicated mechanism of movement | The damage is indicative of downward and rotational movement to the right hand side, relative |
| Occupiers' Observations | August 2022, PH builder noticed damage to the areas noted above and recommended the PH notify their insurer as possible subsidence | BRE Classification | Category 3 |
| Comments | The site investigation has confirmed that the cause of the subsidence is clay shrinkage due to the moisture demand of the vegetation in your neighbour's garden and your garden. We do not consider that there is any risk of heave damage occurring to your property following the removal of the vegetation. | Previous Relevant movement | None noted |

Investigation Evidence

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|--------------------------------------|---|---|--|
| Examination by Building Professional | Yes | Ian Domigan | PhD MFor Sci BSc Me CPEng (Structural) IntEng CERT CII |
| Trial Hole/Bore Hole Excavations | Yes | C65362G29518 | Date of related SI 18.10.22 |
| CCTV Drainage survey | Yes | The drains are not implicated in the damage | Date of Drain survey 28.09.22 |
| Soil Laboratory Testing | Yes | Shrinkable soils Yes | Date of related SI 31.10.22 |
| Root Analysis | Yes | R45917 - Cupressaceae spp. include Lawson cypress, western red cedar, M | Date of related SI 11.10.22 |
| Arboriculture Assessment | Yes | SA-250316 - Remove Red Oak (T3 & T4), the Horse Chestnut (T1) and the m | Date of related SI 26.09.22 |
| Heave Risk after tree removal | No | Assesed By Ian Domigan | ian.domigan@innovation.group |
| Building Monitoring | Yes | Crack Width | Level/Distortion Yes Date of related SI 08.22 to date |
| Monitoring to date confirms | 25mm recovery | | |
| Supporting Comments | All relevant investigation data has been obtained and this confirms root induced clay shrinkage | | |

Repair Scope

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|------------------------------|--|---|
| If prompt vegetation removal | Only Superstructure repairs required | Initial likely cost of repairs £29,374.92 |
| If NO vegetation is removed | Poss root barrier/substructure stabilisation required | Potential additional costs £55,000 |
| Supporting Comments | <<Enter>> Details for stabilisation if tree removal cannot be undertaken | |

Conclusions & Recommendations

The property is a two storey, 5 bedroom, detached property which derives benefit from a double garage.

The site investigation has confirmed that the cause of the subsidence is clay shrinkage. The foundations are 800mm deep and bear on a very stiff orange-brown/light grey silty clay with rare gravel. The gravel is fine with adequate bearing capacity. The clay soil is desiccated to a depth of 1700mm with roots to a depth of 1700mm. The roots were identified as emanating from Cupressaceae.

The drains are damaged but these are not deemed to be having an impact on the damage noted at the property based on the tested soil characteristics, although we do recommend that the defects are repaired. The cost of the repairs cannot be accepted under the subsidence claim however, you should contact your insurers to see whether there is cover under a different peril.

Given the above factual evidence we conclude that the vegetation noted above is the cause of the damage and we require removal to arrest the current episode of subsidence. The Arborist will liaise with the local authority to request removal of the tree. In order to provide the level of evidence that will be required, we will arrange for the property to be monitored. This may take in excess of a year to obtain the necessary supporting information.