INNOVATION GROUP

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

Policyholder Name	Mr & Mrs Richard & Therese Hughes	**Date of discovery**	24/08/2021
Risk Address	20 Southwood Road Trowbridge BA14 7BZ	**Our Ref**	IFS-LBG-SUB-21-0096976
		Date of relevant construction	Circa 1960
Location of damage	righthand side of house	**Property Type**	Detached 5 bedroom house
Nature of Damage	Tapering stepped internal and external cracking	**Indicated mechanism of movement**	Downward / outwards rotational movement towards implicated tree.
Crack Widths	Category 3 and would be classified as moderate.	**BRE Classification**	Category 3
Occupiers' Observations	The policyholder noticed damage to the side of the property when parking and notified insurers	**Previous Relevant movement**	Previous claim in 2013. See below for details:
Comments	Previous claim in 2013 (ref: 46069) - cause of damage was 3rd party owned Oak trees with TPO. The implicated tree was not removed, but other trees have been removed since). Property was underpinned that time (righthand side & rear elevation).		

Investigation Evidence

Examination by Building Professional	Yes	Brad Jenkins		BA PgDip Cert CII ICIOB			
Trial Hole/Bore Hole Excavations	Yes	C62809G28262				Date of related SI	21/10/2021
CCTV Drainage survey	Yes	The drains are not implicated in the damage				Date of Drain survey	04/11/2021
Soil Laboratory Testing	Yes	Shrinkable soils	Yes	Desiccated soils	No	Date of related SI	12/11/2021
Root Analysis	Yes	Quercus spp. with abundant starch content				Date of related SI	22/10/2021
Arboriculture Assessment	Yes	SA-249109 - Oak (T2 TPO) implicated				Date of related SI	23/11/2021
Heave Risk after tree removal	No	Assesed By	Brad Jenkins		brad.jenkins@innovation.group		
Building Monitoring	Yes	Crack Width	No	Level/Distortion	Yes	Date of related SI	09/05/2023
Monitoring to date confirms	Significant seasonal movement has been observed. A 25mm difference in readings has been observed seasonally						
Supporting Comments	9 readings have been taken to date demonstrating more than a full cycle of movement. Monitoring is ongoing until a decision on the tree is received.						

Repair Scope

If prompt vegetation removal	Only Superstructure repairs required	Initial likely cost of repairs	£14,880.60
If NO vegetation is removed	Localised piling, mass concrete underpinning or a root barrier	Potential additional costs	£67,2[illegible].00
Supporting Comments	If we are unable to achieve lifting of the tree protection order and/or removal of the implicated tree, stabilisation works will be necessary to enable lasting repairs to be completed to the property. If stabilisation works proceed, we will instruct our solicitors to recover all additional costs associated with these engineering works from the local authority and owner of the trees.		

Conclusions & Recommendations

The damaged property is a 5 bedroom home, purchase by the policyholders in 1989. The property has suffered from subsidence in 2013 due to the same protected Oak tree. Underpinning works were necessary as part of the previous claim as the tree protection order was unable to be lifted.

Damage reappeared affecting the property in August 2021. Over the summer of 2022, downwards movement totalling around 25mm has been observed to the stations along the righthand elevation of the property.

The site investigation has confirmed that the cause of the subsidence is clay shrinkage. The foundations are 600mm deep and bear on a clay soil with adequate bearing capacity. The clay soil is desiccated with roots to a depth of 1.4 metres. The roots were identified as emanating from an Oak tree, which the arborist has identified as T2 and in the ownership of the commercial third party to the rear. The drains of the property have been surveyed and found defects to run A from the front right hand Rainwater Pipe RWP1, repairs have been completed to this run as it was in the area of movement and to ensure we can rule this out as a cause of movement and not prejudice the monitoring and evidence to the third party tree owner. The arborist has confirmed that T2 - Oak is the cause of the damage and has recommended that they is removed. They will liaise with Tingdene 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 evidence.

Report Prepared By	Brad Jenkins	BA PgDip Cert CII ICIOB

Classification: General