Initial Technical Report

Date of Issue:	10 October 2016
Our Ref:	71690687
Your Ref:	100-01-166605
LV= LVHI Subsidence Bournemouth County Gates Bournemouth Hampshire BH1 2NF	Mr Nigel Cooksley Four Oaks Maiden Street,Weston Hitchin SG4 7AA



Policyholder Home tel.:	01462 790 203
Policyholder Work tel.:	
Policyholder Mobile tel.:	07850 602 364
VAT registered: *if yes give details*	Standard 20%
Claim Information, History and Timescales:	
Policy number:	21842801124
Policy wording:	LVHI Subsidence
Date of construction:	1960
Date of purchase:	Not advised
Date of policy inception:	25 March 2014
Date damage first noticed:	09 September 2016
Date claim notified to insurers:	09 September 2016
Supposed cause:	Subsidence
Date of our initial inspection:	4th October 2016
Start date of main remedial works (est.)	29 September 2017
Date of claim finalisation (est.)	30 November 2017

Introduction

The technical and insurance aspects of this claim are being dealt with by our Regional Technical Manager Steven Wilkinson BSc (Hons) MCIOB, in accordance with our project managed service.

This report has been prepared specifically in connection with the current insurance claim and is not a structural survey. As such, this report should not be relied upon as a statement of structural adequacy. It does not deal with the general condition of the building, decorations, services, timber rot, infestation or the like and does not include any part of the building that is either covered or inaccessible.

Description of property

For the purpose of this Report, unless otherwise stated, the front elevation is considered to be that which faces the public road or path on which access to the property is given, and all references to the left and right are given as if viewing a plan of the property with the front elevation located to the bottom and the rear elevation located to the top of the plan.

The property was constructed during the 1960's.

The main house is a 2 storey detached house of traditional construction with external cavity brickwork walls surmounted by a pitched tile covered roof.

The property has 5 bedrooms.

Topography of site and general location

The site is gently sloping down from front to back.

The house occupies a large plot in a residential rural area containing other residential properties.

Geology

Reference to the British Geological Survey Map suggests the superficial geology is not recorded and the solid geology of London clay.

Vegetation

The following trees and shrubs were noted on the site. The existences of tree preservation orders (TPO) have been indicated where known.

Species	*Oak*	*Oak*	*Broad-leafed*	*Oak*
Height	14	10	4	10
Distance	6	3	1	3
From where	Front Elevation	Left hand Elevation	Garage	Rear Elevation

Ownership	Policy holder	Policy holder	Policy holder	Policy holder
Name of owner	Mr Nigel Cooksley	Mr Nigel Cooksley	Mr Nigel Cooksley	Mr Nigel Cooksley
Address of owner	Four Oaks Maiden Street,Weston Hitchin SG4 7AA	Four Oaks Maiden Street,Weston Hitchin SG4 7AA	Four Oaks Maiden Street,Weston Hitchin SG4 7AA	Four Oaks Maiden Street,Weston Hitchin SG4 7AA
Removal date	Subject to site investigations	Not required	Not required	Not required
TPO	Yes	Yes	No	Yes

Technical Circumstances

Over the course of September 2016 the policy holder had recorded internal and external cracking to the front elevation. The damage has worsened since discovery and concerned the cracking may be attributable to structural movement a claim was submitted for Insurers consideration.

Description of damage

The following is a summary of the damage relating to the insurance claim, including any damage noted in the same vicinity, with supporting photographs where appropriate. This report and damage description should not be used in the same way as a pre purchase survey and should not be relied on as a statement of structural adequacy or general condition of the property.

Kitchen:

Tapering vertical cracks in excess of 2 mm was recorded to the front wall, commencing from the ceiling and continuing until reaching the skirting boards.

Slight distortion and unevenness was recorded to the flooring within the kitchen, this was most apparent to the front wall and internal load bearing wall.

Front Elevation:

A tapering vertical crack in excess of 8 mm was recorded at the abutment of the main house and the front extension completed in 1983.

Cause of damage

The general diagonal and vertical aspect of the cracks to the main external walls of the property is indicative of subsidence.

The cause of the movement needs to be further investigated, but appears to be most likely as a result of shrinkage of the clay subsoil due to the moisture extracting influence of the Oak tree positioned within the front

garden of the risk address.

There is the possibility that leakage from underground drains running in close proximity to the garage may be contributing to the movement.

Water escaping from drains (or from other sources) in non-cohesive soils can cause localised erosion as the finer particles of the soils are washed away. It can also soften cohesive soils by reducing their shear strength.

We shall shortly instigate the level monitoring to assess whether the crack damage is progressive, and to assess when the property becomes stable following mitigation.

Category of cracking

The category of cracking in accordance with Table 1, BRE Digest No.251 (as reproduced below) would be category 3.

Category 0	Negligible	Less than 0.1mm
Category 1	Very slight	0.1-1.0mm
Category 2	Slight	1mm to 5mm
Category 3	Moderate	5mm to 15mm
Category 4	Severe	15mm to < 25mm
Category 5	Very severe	More than 25mm

Discussions

We have reported to Insurers and recommended that they accept liability for the cost of repairs to the property under the subsidence section of the policy. We will need to await their approval.

Recommendations

To confirm the cause of damage and provide full mitigation measures, a site investigation is recommended.

The site investigation will include the excavation of a 1 no. trial holes to expose the foundations to the load bearing wall of the front elevation. The trial holes will be extended by bore hole to a minimum depth of 4 metres below the surrounding ground level (if the soil condition allows this) and soil samples will be collected and tested to confirm whether the clay is desiccated. Any collected roots will be submitted for laboratory analysis to identify which trees/vegetation are the primary causes of the subsidence.

It is likely that the significant cause of the subsidence is a number of trees within the rear garden of the risk address and possibly the neighbouring gardens.

If the investigations confirm that trees/vegetation are affecting the subsoil, initially in order to promote stability of the property and to reduce the risk of further damage occurring, the primary cause of the movement needs to be removed, with initial vegetation management being required. Given that we are likely to be pursuing works to various policyholder and third party trees, it is likely that subsequent DNA testing of the root samples may be required, and this will be reflected in additional site investigation costs if required.

It is often the case that to support our view regarding vegetation management and to confirm what vegetation

management is actually required, it may be necessary to appoint an Arboricultural specialist to produce a report. The Arboricultural specialist will have the details of any site investigation report and any crack monitoring data available to support their investigation.

If the damage is confirmed as relating to a failed underground drainage system, then drain repairs may be required to stabilise the building. Once all of the drain defects are repaired, the building will quickly become stable allowing superstructure only repairs to be made.

As both of the above scenarios constitute subsidence of the site, Insurers, subject to the applicable policy excess will meet the cost of repairs and decorations to the superstructure of the building.

The claim shall be reviewed with the benefit of the site investigation results and insurers will be presented with a comprehensive update in due course.

Attachments

Photographs
Site Plan

Photographs:



Front Elevation and Oak tree



Abutment to the front extension



Rear Elevation

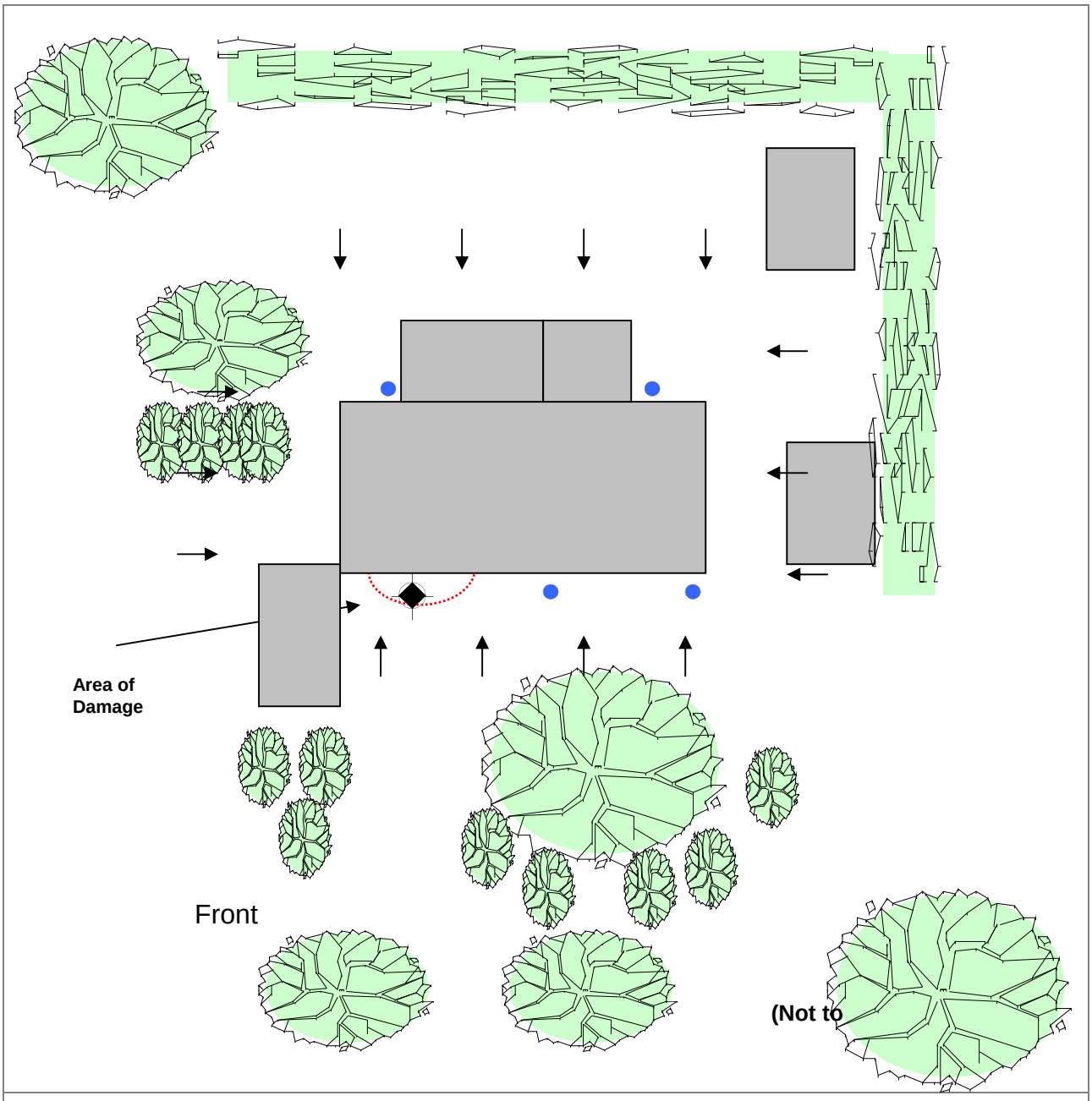


Enclosed porch to main frame house



Front kitchen abutment

Site Plan:



Key:

