



Engineer's Report

Our Reference	IFS-AVI-SUB-13-0046234
Claim Reference	13NU602531
Prepared for	Aviva

Claim Details:

Report Date	15 October 2013
Policyholder	Mrs Megarry
Address	43 Woodsome Road, London, NW5 1SA

SITE PLAN NOT TO SCALE

This plan is diagrammatic only and has been prepared to illustrate the general position of the property and its relationship to nearby drains and trees etc. The boundaries are not accurate, and do not infer or confer any rights of ownership or right-of-way. OS images provided by Marishal Thompson Group. © Crown Copyright 2009. All rights reserved. Licence number 100043218

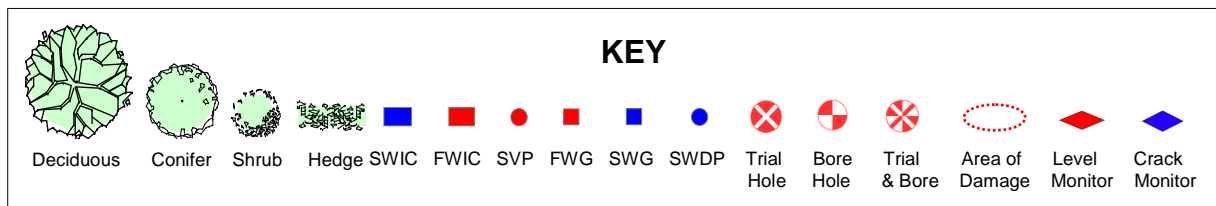
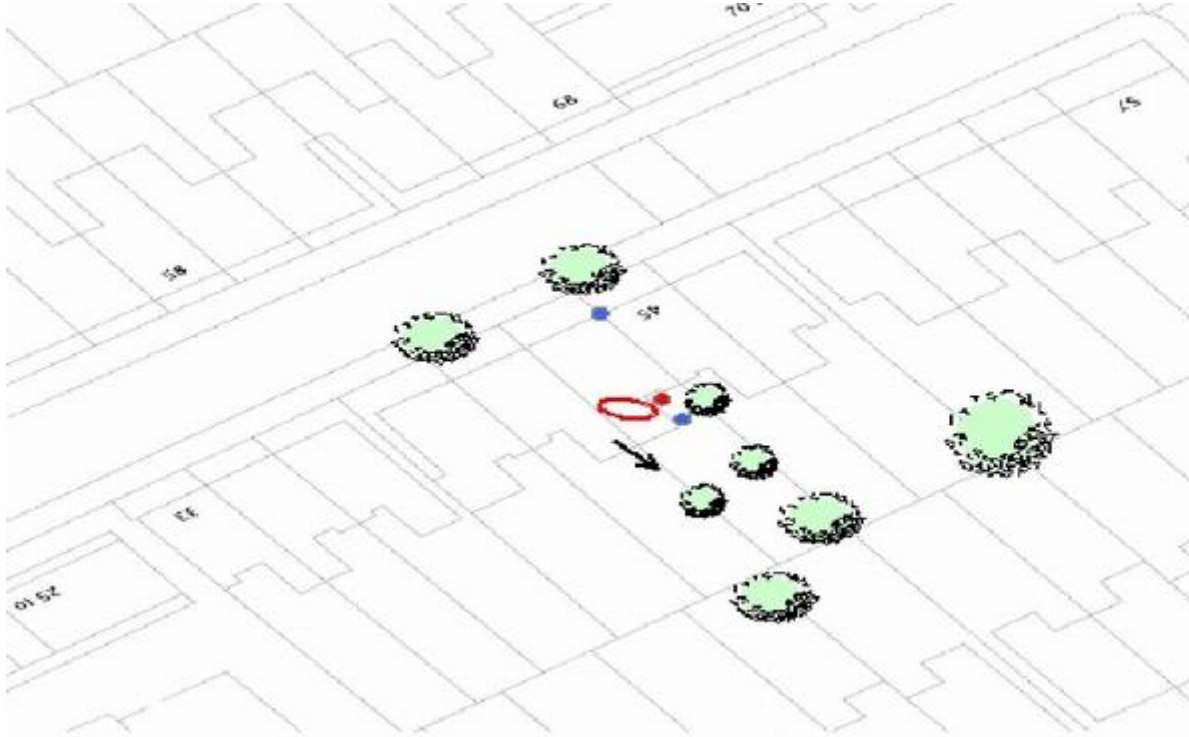


FIGURE 1 Site Plan

INTRODUCTION

We have been asked by your building Insurers to comment on suspected subsidence damage to the above property. Our report briefly describes the damage, identifies the cause and gives recommendations on the required remedial measures.

Our report should not be used in the same way as a pre-purchase survey. It has been prepared specifically in connection with the present insurance claim and should not be relied on as a statement of structural adequacy. It does not deal with the general condition of the building, decorations, services, timber rot or infestation etc.

Investigations have been carried out in accordance with the guidance issued by The Institution of Structural Engineers. All directions are given relative to an observer facing the front of the property. We have not commented on any part of the building that is covered or inaccessible.

CIRCUMSTANCES

The property was subject to a previous claim in 2004 and handled by Cunningham Lindsey. Structural damage was recorded to the front entrance steps and to the two storey rear addition. Upon completion of mitigation measures, the property was monitored until stability was achieved. Super-structural repairs and redecorations were carried out and the claim finalised in January 2007. The insured discovered cracking to the rear addition in September 2013 and concerned this may be considered further structural movement notified his Insurers.

PROPERTY

The property is a three storey terrace property of traditional construction with solid brickwork walls surmounted by a ridged slate covered roof.

The property has 3 bedrooms. The property benefits from a two storey rear addition.



FIGURE 2 Front Elevation

HISTORY

Date of Construction	1895
Purchased	1981
Policy Inception Date	02 April 2004
Damage First Noticed	01 September 2013
Claim Notified To Insurer	01 October 2013
Date of our Inspection	11 October 2013

ADEQUACY OF BUILDING SUM INSURED

The current building sum insured is considered adequate

TOPOGRAPHY

The site is level with no adverse features.

GEOLOGY

Reference to the 1:50,000 scale British Geological Survey Map (Drift Edition) suggests the drift geology of the site is No drift geology recorded overlying a solid geology of London Clay.

VEGETATION

The following vegetation was recorded as being within potential influencing distance of the property:-

Type	Height	Distance	Owner
Broadleaf	9m	6m	Local Council
Broadleaf	4m	6m	Local Council
Broadleaf	18m	14m	Neighbour
Broadleaf	18m	14m	Neighbour
Shrubs	4m	1m	Policyholder
Broadleaf	6m	2m	Policyholder
Broadleaf	6m	4m	Policyholder
Broadleaf	12m	9m	Policyholder

DAMAGE RELATING TO THE CLAIM

The following is a summary of the damage relating to the Insurance claim, including any unrelated damage in the same vicinity, with supporting photographs where appropriate.

INTERNALLY

FIRST FLOOR LANDING:

Vertical and horizontal cracks in excess of 1 mm were recorded at the abutment between the main frame house and two storey rear addition.

BASEMENT HALL:

Vertical and horizontal cracks in excess of 1 mm were recorded at the abutment between the main frame house and two storey rear addition.

TOILET:

Tapering vertical cracks in excess of 2 mm were recorded to the surrounds of the singular window, commencing from the wall ceiling junction and continuing for roughly one meter.

EXTERNALLY

REAR ELEVATION:

At the abutment between the main frame house and two storey rear addition, tapering vertical cracks in excess were recorded, commencing from high level and continuing for roughly one meter.

Vertical tapering cracks in excess of 1 mm were recorded above and below the first floor toilet window. This damage was mirrored internally.



FIGURE 03 Tapered cracking recorded to ground floor toilet



FIGURE 04 Horizontal and vertical cracking recorded at abutment to main frame house



FIGURE 05 Cracking recorded above and below toilet window



FIGURE 06 Rear Elevation

DAMAGE CATEGORY

It is common practice to categorise the structural significance of the damage in accordance with the classification given in Table 1 of Digest 251 produced by the Building Research Establishment. In this instance, the damage falls into Category 2 (Slight).

Category 0	Negligible	<0.1 mm
Category 1	Very Slight	0.1 - 2mm
Category 2	Slight	>2 but < 5mm
Category 3	Moderate	>5 but < 15mm
Category 4	Severe	>15 but < 25mm
Category 5	Very Severe	>25mm

Extract from Table 1. B.R.E Digest 251
Classification of damage based on crack widths

INVESTIGATIONS

SITE EXCAVATIONS

Site investigations will shortly be undertaken by a specialist contractor.

DRAINS

Drainage investigations in the vicinity of damage will shortly be undertaken by a specialist contractor.

MONITORING

2 crack width visits will be undertaken at 8-week intervals.

DISCUSSION

The diagonal aspect of the cracks, together with the fact that they increase in width with height is indicative of subsidence as a result of shrinkage of the clay subsoil due to the moisture extracting influence of insured and third party vegetation.

The indicated mechanism of movement is a downwards rotational movement of the two storey rear addition.

REQUIREMENTS

In view that the damage to the property is considered to be as a result of an insured event, a valid

claim arises under the terms of policy cover, subject to the applicable excess (confirmation from Insurers required).

In order to stabilise the property and prevent further damage occurring in the future, the cause of the movement needs to be addressed, with site investigations being required.

Following completion of tree management works, the property will then be monitored to confirm stability.

Provided the property stabilises as expected, no foundation stabilisation works are considered necessary, with structural repairs of the superstructure being required only, together with internal redecoration of the damaged rooms.

Generally cracks 1 mm wide or less will be filled (internal) or re-pointed (external). Internally, where the cracks are wider than 1 mm, but less than 5 mm the underlying brickwork or blockwork will be exposed and prior to making good the plaster finishes the cracking will be covered with expanded metal lath. Where cracks are 5 mm across or wider, some form of bed joint reinforcement will be introduced.

Steven Wilkinson

Engineer

InFront Innovation Subsidence Management Services