

**Cunningham Lindsey**

Ground Floor, Fountain Court, 12 Bruntcliffe Way, Morley, LS27 0JG  
Telephone 01924 428691 Facsimile 0345 4251865



Policyholder: [REDACTED]

Subject Property Address:

24 Rochester Square  
London  
NW1 9SA

**INSURANCE CLAIM**

**CONCERNING SUSPECTED SUBSIDENCE**

**ENGINEERING APPRAISAL REPORT**

This report is prepared on behalf of [REDACTED] for the purpose of investigating a claim for subsidence. It is not intended to cover any other aspect of structural inadequacy or building defect that may otherwise have been in existence at the time of inspection.

Date: 24/11/2016

Cunningham Lindsey Ref: 6325584

## INTRODUCTION

Technical aspects of this claim are being overseen by our Project Manager, Gavin Catheline MCIOB in accordance with our Project Managed Service.

## DESCRIPTION OF BUILDING

The subject property is a 3 storey semi detached house constructed c.1890 in a mature residential area on the outskirts of London sited on a plot that is relatively level. To the rear of the property is a 2 storey projection and a conservatory extension.

The claim concerns damage to the property where structural cracking has formed at the junction between the main building and the rear projection and extension.

## CIRCUMSTANCES OF DISCOVERY OF DAMAGE

The policyholder [REDACTED] first discovered the damage in approximately July 2016.

The damage was suddenly discovered in the summer and was seen to get progressively worse over the summer and autumn months.

## NATURE AND EXTENT OF DAMAGE

### Description and Mechanism

The main damage takes the form of vertical and diagonal tapered cracking to walls and ceilings which has formed at the junction between the main 3 storey house and the rear 2 storey projection and conservatory extension.

The indicated mechanism of movement is downwards towards the front of the main house and also downwards of the rear projection and conservatory extension to the rear.

### Significance

The level of damage is moderate, and is classified as category 3 in accordance with BRE Digest 251 - Assessment of damage in low-rise buildings.

### Onset and Progression

[REDACTED] has advised that damage first commenced in summer 2016.

We consider that the crack damage has occurred recently, but that distortions are historic.

It is likely that movement will be of a cyclical nature with cracks opening in the summer and closing in the winter, until the necessary mitigation measures are undertaken to address the cause of damage.

## SITE INVESTIGATIONS

Site investigations were undertaken by CET Structures Ltd on 28<sup>th</sup> October 2016 and comprised the excavation of trial pits extended by hand auger.

They have revealed typical foundation depths of 425mm and 900mm in the case of the main house and a shallower foundation of 300mm in the case of the conservatory extension, bearing onto shrinkable clay subsoil. The subsoil beneath the foundation to the front and rear of the building was seen to be quite dry and was found to contain numerous live roots.

The subsoil to the front and rear of the property is showing signs of desiccation due to the action of the roots which were noted in the subsoil samples taken to a depth of 1.6m below ground level at the front and to a depth of 2.2m below ground level to the rear.

The root samples retrieved have been sent to a laboratory for analysis and have been found to emanate from the various trees and climbers near to the building as follows:

*Laurus* – Bay Laurel and Bay tree

*Prunus* – Cherry

*Leguminosae* – Climber Wisteria

*Pomoideae* – Apple, Cotoneaster, Hawthorn, Pear, Pyracantha, Quince, Rowan, Snowy Mespil & Whitebeam

*Salix* - Willow

## MONITORING

We do not consider that monitoring is required.

## CAUSE OF DAMAGE

Based on the information detailed above, we are of the opinion that damage has occurred due to clay shrinkage subsidence. This has been caused by moisture extraction by roots altering the moisture content of the clay subsoil, resulting in volume changes, which in turn have affected the foundations.

## RECOMMENDATIONS

Our recommendation is that significant vegetation removal measures are undertaken. This will allow the clay subsoil to re-hydrate and stabilise. This in turn will result in stability returning to the building foundations.

### Mitigation

We consider the damage will not progress if appropriate measures are taken to remove the cause. In this instance it is likely that vegetation for which the policyholder and third party neighbour's are responsible is contributing toward the cause of damage.

On this occasion, it will be necessary to obtain expert arboricultural advice to determine the extent of vegetation removal work required. We will therefore be appointing the mitigation centre of Oriel Services and OCA UK Ltd to prepare an Arboricultural Report and negotiate tree mitigation works with the owners.

### Building Repairs

We have not decided on the final type of repair required as our investigations have not yet been concluded. However, the repairs are likely to involve structural crack repairs and redecoration of the affected areas. The final repair decision will be considered once mitigation measures are complete.

For Cunningham Lindsey:

Gavin Catheline MCIOB BDMA Claims Practitioner  
*Building Consultant*

Bridget Speight CertCII  
*Senior Claims Technician*  
Direct dial: 01924 428688  
E-mail: [Bridget.Speight@icare.cl-uk.com](mailto:Bridget.Speight@icare.cl-uk.com)