



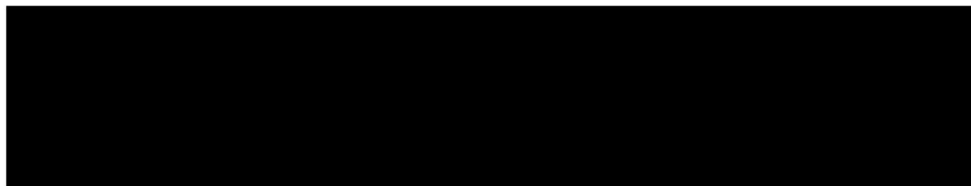
TECHNICAL REPORT ON AN ALLEGED SUBSIDENCE CLAIM



Origin Housing  
Flat 1  
Trevithick House  
York Rise  
London  
NW5 1DR



Prepared for

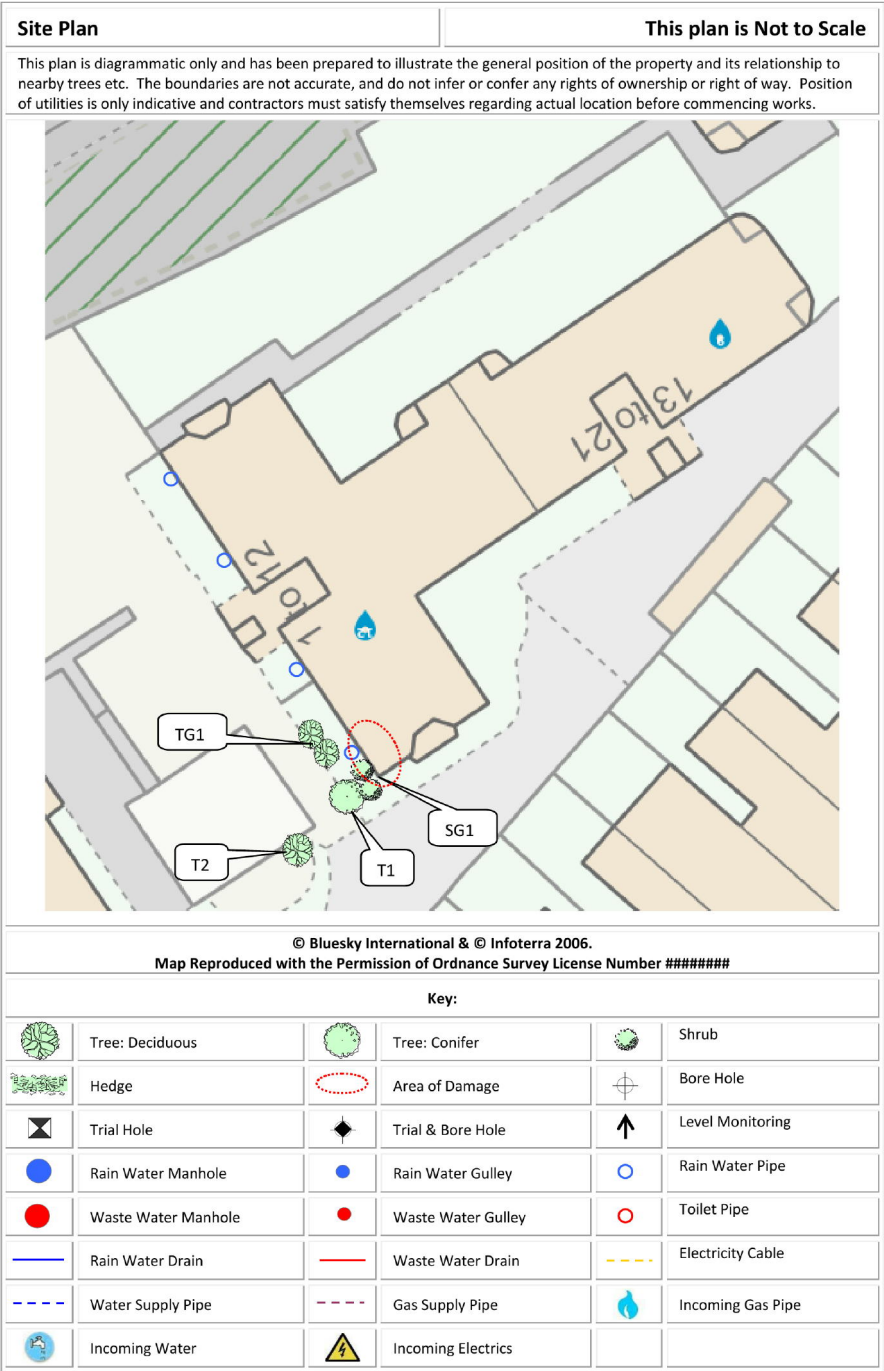


DATE 1<sup>st</sup> February 2021



Chartered Loss Adjusters





**INTRODUCTION**

We have been asked by Aviva - Commercial to comment on movement that has taken place to the above property. We are required to briefly describe the damage, establish a likely cause and list any remedial measures that may be needed.

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, timber rot or infestation etc.

The report is made on behalf of Crawford & Company and by receiving the report and acting on it, the client - or any third party relying on it - accepts that no individual is personally liable in contract, tort or breach of Statutory duty. Where works address repairs **that are not covered** by the insurance policy we recommend that you seek professional advice on the repair methodology and whether the works will involve the Construction (Design & Management) Regulations 2015. Compliance with these Regulations is compulsory; failure to do so may result in prosecution. We have not taken account of the regulations and you must take appropriate advice.

We have not commented on any part of the building that is covered or inaccessible.

**TECHNICAL CIRCUMSTANCES**

The tenant confirmed that she reported cracking to the Insured in 2018 and the Insured attended the property in March 2019 and repaired the cracks, but these then reopened again in September 2019. The tenant again reported the damage to the Insured and a claim has subsequently been notified to Insurers in January 2021.

**PROPERTY**

The property is a ground floor flat in a purpose built block of 21 flats of traditional construction with solid brick walls surmounted by a mansard roof.

**HISTORY & TIMESCALE**

Please can Insurers refer to our underwriting and fraud referral letter and confirm how you wish to proceed with this claim.

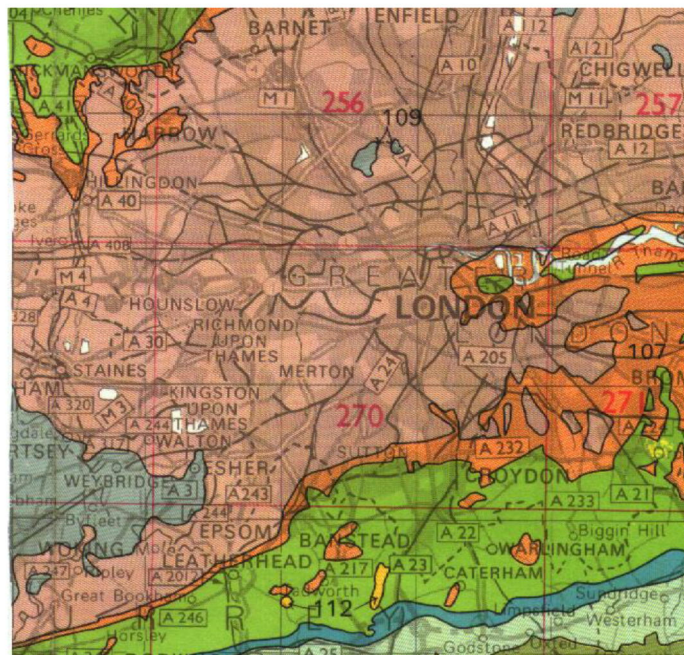
Date of Construction .....	Circa 1930
Purchased .....	NA
Policy Inception Date .....	30/10/2020
Damage First Noticed .....	Sept/Nov 2018
Claim Notified to Insurer.....	08/01/2021
Date of our Inspection.....	25/01/2021
Issue of Report .....	01/02/2021
Anticipated Completion of Claim .....	January 2022

**TOPOGRAPHY**

The property occupies a reasonably level site with no unusual or adverse topographic features.

Reference to the 1:625,000 scale British Geological Survey Map (solid edition) OS Tile number TQNW suggests the underlying geology to be London Clay.

The upper horizon is often encountered at shallow depth, sometimes just below ground level. They have high shrink/swell potentials<sup>2,3</sup> and can be troublesome in the presence of vegetation.



Geology. Reproduced with consent of The British Geological Survey at Keyworth.  
Licence IPR/34-7C CSL British Geological Survey. ©NERC. All rights Reserved.

<sup>3</sup> Table 1, Chapter 4.2, Para. 2.3 of N.H.B.C. Standards, 1986.

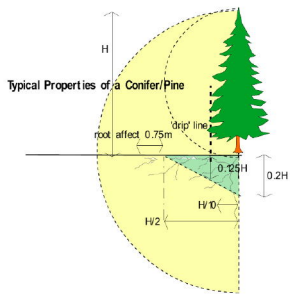
VEGETATION

There are several trees and shrubs nearby, some with roots that may extend beneath the house foundations. The following are of particular interest:-

Type	Height	Distance	Ownership
T1 Conifers	8 m	2 m	Owners
TG1 Deciduous	5 m	2 m	Owners
SG1 Shrubs	1 m	1 m	Owners
T2 Deciduous	5 m	7 m	Owners

See sketch. Tree roots can be troublesome in cohesive (clay) soils because they can induce volumetric change. They are rarely troublesome in non-cohesive soils (sands and gravels etc.) other than when they enter drains, in which case blockages can ensue.

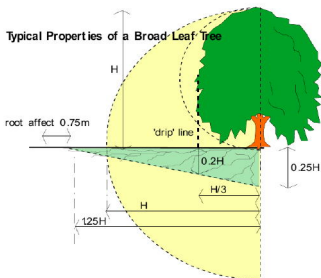
Conifers ~ The term is usually used to refer to cypresses and close relatives, but in the broader sense includes any trees that bear cones and nearly all of them have simple needle or scale like leaves, sometimes arranged into fronds as in the cypresses.



Typical tree proportions showing the root zone. This is a conservative estimate, as the zone can equal the height of the tree.

Generally they have less invasive roots and lower water demands than broadleaved species, but cypresses are often associated with subsidence as they are very fast growing, popular hedge plants that are frequently planted near houses.

Broadleaf trees typically have wider spreading roots and higher water demands than coniferous species and many are better adapted to growing on heavy clay soils. Some are capable of sprouting from cut stumps or bare wood and most will tolerate pruning better than conifers.



Typical proportions of a broadleaf tree. Note the potential root zone. It must be noted that every tree is different, and the root zone will vary with soil type, health of the tree and climatic conditions.

However heavy pruning of any tree should be avoided if possible, as it stimulates the formation of dense masses of weakly attached new branches which can become dangerous if not re-cut periodically to keep their weight down.

Shrubs. Sometimes even small shrubs can cause localised subsidence damage. In the Kew Garden Survey data was collected between 1979 - 86 to record the number of roots of each species received for identification. Of the 1009 roots identified, 367 (36%) belonged to the family *Rosoideae* or Rose. Next came the family *Oleaceae* (Forsythia, Jasmin, Privet and Lilac) with 354 (35%) enquiries.

*Berberis*, *Viburnum*, *Hedera* (ivy), *Hydrangea* and *Pyracanthus* are also regularly associated with foundation movement, the latter having surprisingly large roots on occasions.



**OBSERVATIONS**

The ground floor flat number 1 is the focal point of the Insured's concerns

The following is an abbreviated description. Photographs accompanying this report illustrate the nature and extent of the problem.

**INTERNAL**

Cracking to middle bedroom



Cracking to lounge

**Lounge**

- There are signs of 1mm - 2mm diagonal cracking within the front wall and within the central wall which divides the lounge from the middle small bedroom.
- There is cracking along a majority of the ceiling and wall junctions with a width up to 1mm.

**Middle front (small) bedroom**

- There are signs of 2mm cracking along the central dividing wall to the lounge and cracking along the other walls.
- There is cracking along the ceiling with cracking widths up to 2mm.



**EXTERNAL**

Stepped cracking to front elevation



Stepped cracking to right hand side elevation

**Right Elevation - Front corner**

- 1-2mm stepped diagonal was noted commencing 17 courses above the brick on edge course and radiating down to the brick on edge course. The crack was previously repaired in circa 2018
- 1mm diagonal crack was noted below DPC level adjacent to the ground floor balcony

**Front Elevation - Right corner**

- 1mm stepped diagonal was noted commencing 17 courses above the brick on edge course.

**CATEGORY**

In structural terms the damage falls into Category 2 of Table 1, Building Research Establishment<sup>4</sup> Digest 251, which describes it as "slight".

Category 0	"negligible"	< 0.1mm
Category 1	"very slight"	0.1 - 1mm
Category 2	"slight"	>1 but < 5mm
Category 3	"moderate"	>5 but < 15mm
Category 4	"severe"	>15 but < 25mm
Category 5	"very severe"	>25 mm

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

<sup>4</sup> Building Research Establishment, [REDACTED]



### **DISCUSSION**

The pattern and nature of the cracks is indicative of an episode of subsidence. The cause of movement appears to be clay shrinkage.

The damage occurred in 2018 and therefore predates the policy inception/renewal date of 30/10/2020. The policy excludes damage that occurred before the period of insurers therefore we need to seek further information from insurers to determine when they were on cover for the property and whether they consider any underwriting issues arise due to non-disclosure/late notification.

It may be that the claim needs to be referred to a previous insurer.

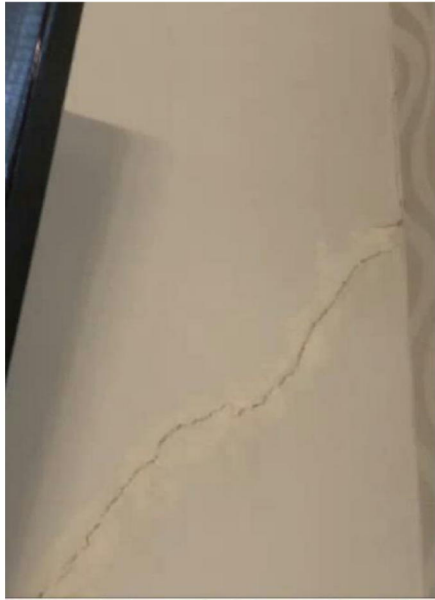
### **RECOMMENDATIONS**

This claim has been referred back to Insurers for their further advices. We will advise further once we have heard from your Insurer.

**Matthew Legge BA (Hons), MSc Building Surveying, ACABE**  
**Crawford Claims Solutions – Subsidence**



**PHOTOGRAPHS**



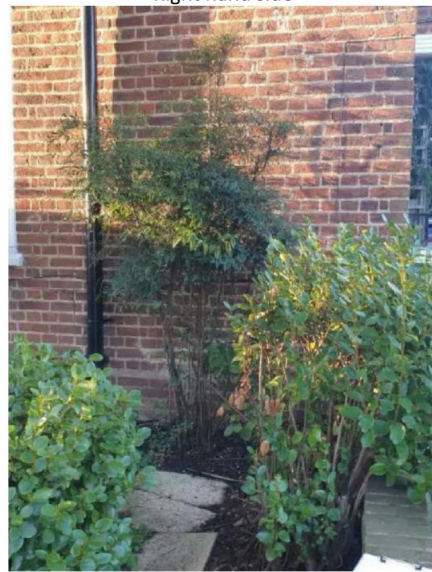
Cracking to middle bedroom



Right hand side



Cracking to right hand side



Front planting



Front planting



Front planting

