



**TECHNICAL REPORT ON A SUBSIDENCE CLAIM**



**129 West End Lane Management  
Flat 1  
129 West End Lane  
London  
NW6 2PE**

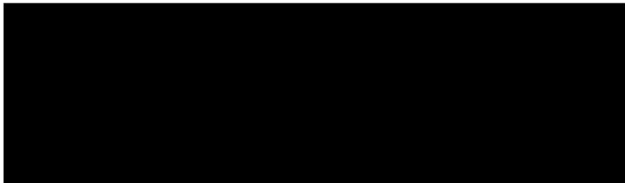


Prepared for:

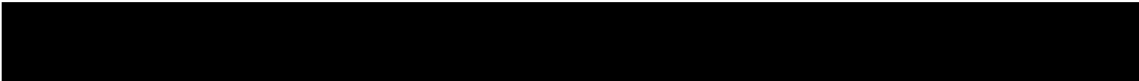
**Allianz Commercial**

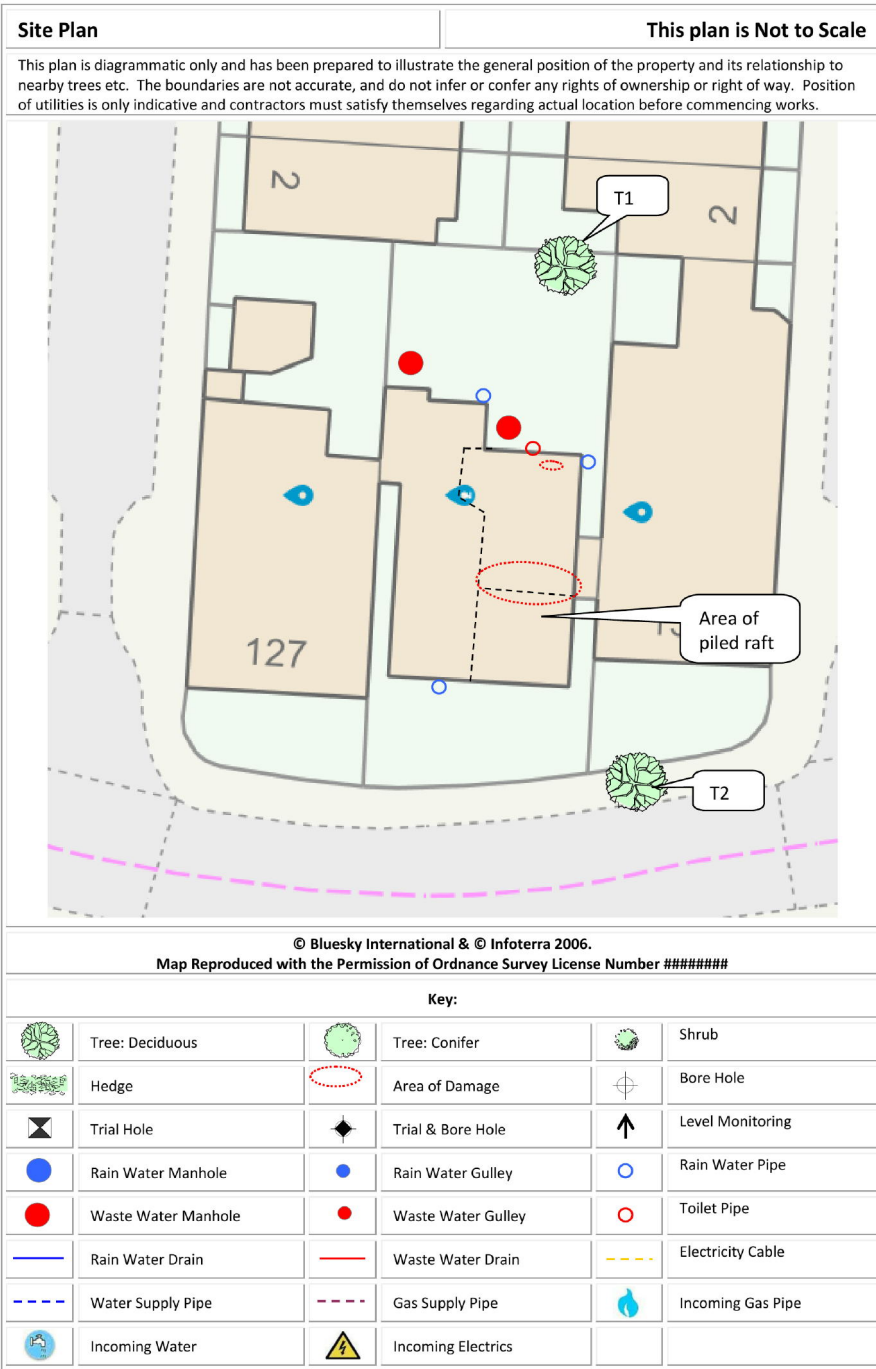


**SUBSIDENCE CLAIM**



Chartered Loss Adjusters





**INTRODUCTION**

We have been asked by Allianz 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 Insured advised they have been aware of issues gradually occurring over the last 6-7 years but were not overly concerned. The damage has recently increased and when the Insured went to the first floor landing to change batteries to an alarm, they noted a crack in this area. This then raised their concerns that something may be occurring to the property given there had been a previous subsidence claim where the property was underpinned in 1998.

They obtained a Surveyors Report and on receipt of this they notified Insurers of a potential subsidence claim.

**PROPERTY**

The Insured's property is a ground floor flat in a three storey large detached building which was converted into several flats in the 1970-1980s. The property is of traditional construction with brick walls surmounted by a pitched tiled roof.

**HISTORY & TIMESCALE**

Date of Construction .....	Circa 1890
Purchased .....	1983
Policy Inception Date.....	27/11/2011
Damage First Noticed .....	Circa. 6-7 years ago
Claim Notified to Insurer.....	26/11/2021
Date of our Inspection.....	10/01/2022
Issue of Report.....	17/01/2022
Anticipated Completion of Claim .....	Winter 2023

**TOPOGRAPHY**

The property occupies a reasonably level site.



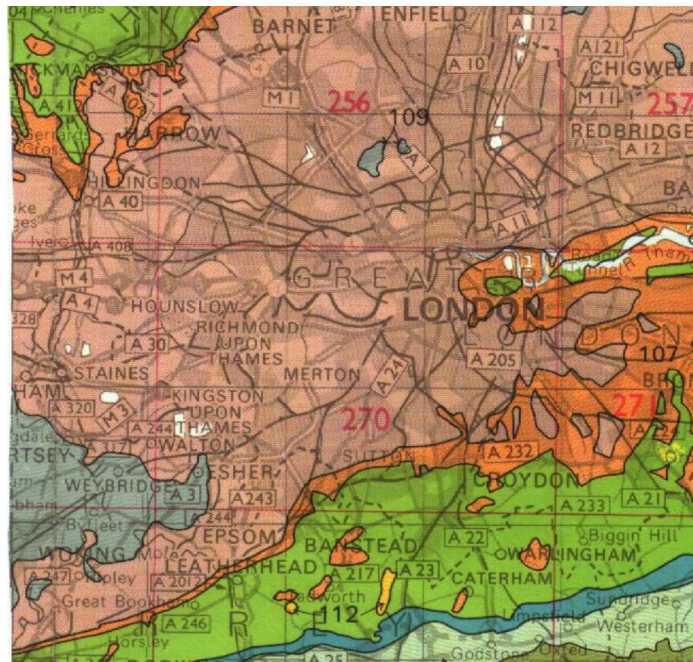
## GEOLOGY

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.

London Clays are marine deposits characterised by their silty, sandy composition. They are typically stiff, dark or bluish grey, weathered dark to mid-brown superficially with fine particle size (less than 0.002mm). Tomlinson<sup>1</sup> describes it as a 'fat' clay with high loadbearing characteristics due to pre-consolidation pressures in its geological history.

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.

The solid geology appears to outcrop in this location, although we cannot rule out the presence of superficial deposits at shallow depth.



Geology. Reproduced with consent of The British Geological Survey at Keyworth.  
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<sup>1</sup> Tomlinson M.J. (1991) "Foundations Design & Construction" Longman Scientific Publishing.

<sup>2</sup> B.S. 5930 (1981) "Site Investigations"

<sup>3</sup> Driscoll R. (1983) "Influence of Vegetation on Clays" Geotechnique. Vol 33.

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

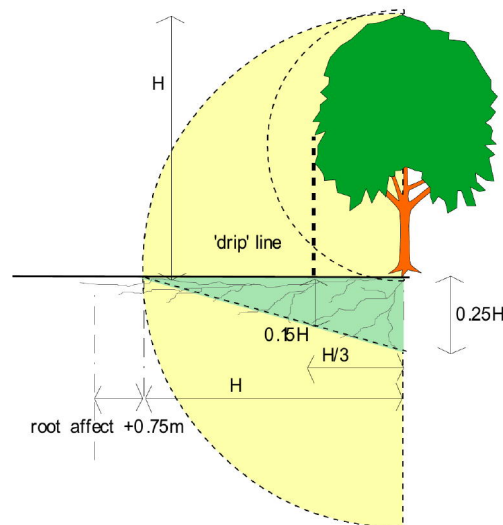
**VEGETATION**

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 Plane	9 m	11 m	Insured
T2 Plane	7 m	10 m	Local Authority

Planes (Platanus) are deciduous and can reach heights in excess of 30m depending on health, environment and soil conditions. They have a medium growth rate of around 300mm per year and medium root activity<sup>4</sup>.

Maximum tree-to-damage distance recorded in the Kew survey was 15mtrs, with 50% of all cases occurring within 5.5mtrs<sup>5</sup>. Planes are moderately deep rooted, and are predominantly street trees.



Typical proportions of a Plane tree, showing the potential root zone.

Life expectancy > 100 years and both young and old trees tolerant of pruning and crown thinning. Urban trees are prone to infection by anthracnose, a fungal foliage disease, which can be disfiguring, if not lethal. There is also concern about canker stain disease, which can also be lethal, spreading from Europe into Britain.

<sup>4</sup> Richardson & Gale (1994) "Tree Recognition" Richardson's Botanical Identifications

<sup>5</sup> Cutler & Richardson (1991) "Tree Roots & Buildings" Longman Scientific

**OBSERVATIONS**

Flat 1 on the ground floor and communal landing on the first floor are 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**

Tapered cracking above door frame

Vertical cracking between the wall junctions

**Lounge**

- 1mm slight diagonal crack radiating from the top left corner of hall door up to left hand wall. This crack is reflected in the hall.
- Approximately 1mm vertical crack at junction of kitchen division wall and right elevation.
- The door scrapes on the floor and has been planed three times in the past five years to avoid it getting stuck on the wooden floor.
- The floor slopes from the entrance hallway, up into the living room and then falls towards the front right corner of the lounge.

**Hall**

- Slight cracking appears to be forming from top right corner of entrance door

**Kitchen/Dining Room**

- Vertical cracking at junction of lounge division wall and right hand pier with the plaster being pulled off the pier face.
- Slight cracking to the rear wall that separates the bedroom/corridor and the kitchen.

**Rear Right Bedroom**

- The wooden floor in front of the rear door is springy and flexing.

**Communal Areas**

- A crack on the first floor landing ceiling was noted to run from the right hand side and across to the top right corner of the door to Flat 2. This damage has recently been filled.

**EXTERNAL**

- There was no cracking evident to the external elevations

**CATEGORY**

In structural terms the damage falls into Category 2 of Table 1, Building Research Establishment<sup>6</sup> Digest 251, which describes it as “slight”.

Category 0	"negligible"	< 0.1mm
Category 1	"very slight"	0.1 - 1mm
<b>Category 2</b>	<b>"slight"</b>	<b>&gt;1 but &lt; 5mm</b>
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.

**DISCUSSION**

The pattern and nature of the cracks is indicative of an episode of subsidence. The cause of movement appears to be either clay shrinkage or subsoil softening/erosion due to drains leakage.

Further site investigations will be required. Typically, these would involve trial pit(s) to determine the nature of the footings and subsoil and a localised drainage survey.

**RECOMMENDATIONS**

We will refer to your Insurers to confirm how to proceed with your claim. Once we have received a response, we will be in touch.

**Lou Tickle**  
**Crawford & Company**  
**Subsidence Division**



<sup>6</sup> Building Research Establishment, [Redacted]  
Chartered Loss Adjusters





**PHOTOGRAPHS**



Insured owned Plane tree.



Local Authority Plane tree.



Cracking above door frame.



Sloping floor.



Cracks underneath lining paper.

