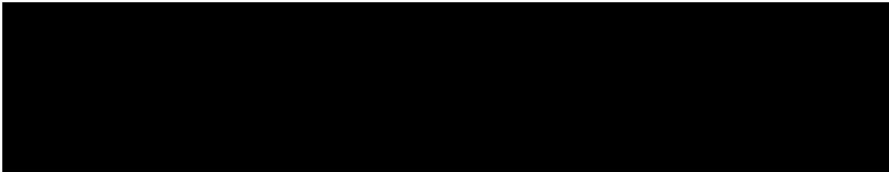
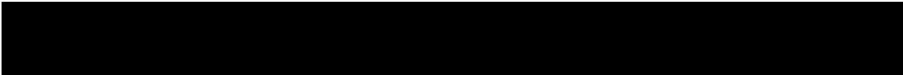


**INSURANCE CLAIM: ENGINEERING APPRAISAL REPORT**



This report is prepared on behalf of Deacon Insurance Brokers for the purpose of investigating an insurance claim. 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: 06/02/2023



Continuation / 2





## **INTRODUCTION**

---

The technical aspects of this claim are being overseen by our Building Consultant Vicki BaxterBaxter, in accordance with our project managed service.

The claim is primarily concerned with damage to the rear extensions. All references to the property are as observed facing the front of the building.

## **DESCRIPTION OF BUILDING AND SITE**

---

The subject property is a Conversion to flat/s constructed in Circa 1900, in a urban on a plot that is level.

## **DISCOVERY AND NOTIFICATION**

---

Circumstances of Discovery	Ther Policyholder noticed the cracking to the kitchen and asked her builder to repair, he identified more significant external damage.
Subsequent action	A claim was submitted to Insurers
Claim notification	Insurers were notified on 25/08/2022.

## **NATURE AND EXTENT OF DAMAGE**

---

Description and Mechanism	The main area of damage is to the rear of the property and takes the form of Tapered cracking within the kitchen extension and dining room extension.
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	We consider that the damage has occurred recently. It is likely that movement will be of a cyclical nature with cracks opening in the summer and closing in the winter.

## **SITE INVESTIGATION**

---

The site investigation has been undertaken by CET Ltd on 26<sup>th</sup> October 2022 and for precise details of the results please refer to the attached Site Investigation report.

The contractor was instructed to excavate trial holes to the rear elevations of both single storey extensions.

The trial hole to the left-hand extension extended to a depth of 1.4m and established that the rear elevation of the left-hand extension has a 1m thick concrete strip foundation founded 1.1m below ground level bearing upon a stiff silty, sandy clay.

A hand augered borehole was sunk to a depth of 5m, the underlying subsoil of a stiff silty sandy clay remained consistent to a depth of 3m where it changed to a very stiff silty sandy clay which then remained consistent to completion of the borehole at 5m. Laboratory testing has shown that the clay content of the soil to be of a high to very high plasticity.

Roots were found at the underside of the foundations and were identified as Platanus species (Plane) and are therefore thought to emanate from the Plane trees to the rear left-hand side of the garden.

The trial hole to the right-hand extension extended to a depth of 1.5m and established that the rear elevation of the right-hand extension has a 1.1m thick concrete strip foundation founded 1.35m below ground level bearing upon a stiff silty, sandy clay.

A hand augered borehole was sunk to a depth of 5m, the underlying subsoil of a stiff silty sandy clay remained consistent to the completion of the borehole at 5m. Laboratory testing has shown that the clay content of the soil to be of a high to very high plasticity.

Roots were found at the underside of the foundations and were identified as Monocotyledon species (Bamboo) and are therefore thought to emanate from the Bamboo plant within the neighbours garden.

#### **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.

#### **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 private owners are responsible is contributing toward the cause of damage.

As the property is situated within a Conservation Area, permission from the Local Authority as well as the owners of the implicated vegetation will need to be sought and as such an Arboricultural Report and period of monitoring is required to gather the evidence required.

#### **MONITORING**

---

As the property is situated within a Conservation Area a period of Level monitoring is required. We will instruct CET to undertake readings at eight-week intervals and readings will be sent to all parties upon receipt.

#### **REPAIR RECOMMENDATIONS**

---

We have not yet decided on the final type of repair required, but have produced an outline of the most likely requirements. This involves undertaking superstructure strengthening, repairs and redecoration. This decision has been taken based on our knowledge and experience of dealing with similar claims.

#### **PROJECT TEAM DETAILS**

---

Vicki Baxter BSc (Hons) Cert CII BDMA Ins. Tech - *Building Consultant Specialist Subsidence Team*  
Anthony Thomas - *Claims Technician Specialist Subsidence Team*

