



**INSURANCE CLAIM: ENGINEERING APPRAISAL REPORT**

Name of Insured: Central & Cecil Housing Trust  
Address of Insured: 2 Cleve Road, LONDON, NW6 3RR  
Situation of Damage: 2 Cleve Road, LONDON, NW6 3RR



This report is prepared on behalf of Broadspire TPA 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: 17/04/2020





## **INTRODUCTION**

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The technical aspects of this claim are being overseen by our Building Consultant Michael Whittington BSc(Hons) MCI0B AssocRICS, in accordance with our project managed service.

The claim is primarily concerned with damage to the rear 3 storey extension. A sketch plan and photographs are attached and all references to the property are as observed facing the front of the building.

## **DESCRIPTION OF BUILDING AND SITE**

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The subject property is a detached house converted into 11 self contained flats. Flats 2, 6 and 10 have been extended into the rear 3 storey extension. The original building is believed to have been constructed in circa 1900.

## **SIGNIFICANT VEGETATION**

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T1 & T4 – Trees located within close proximity to the shared right hand boundary, located in the rear garden of neighbouring property 89 Priory Road,, these trees range from approximately 4m to 12m high and within 6m of the rear elevation / rear extension.

T2 & T3 – Trees located within close proximity to the shared right hand boundary, located in the rear garden of neighbouring property 91 Priory Road, these trees range from approximately 12m to 15m high and within 15m of the rear elevation / extension.

Policyholder vegetation and trees located within the rear garden of neighbouring property No.4 Cleve Road have also been noted, however at this stage due to their size and distance from the apparent zone of damage we do not believe the vegetation and trees located along the shared left hand boundary as being significant.

## **DISCOVERY AND NOTIFICATION**

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Circumstances of Discovery	Tenants reported cracking to policyholder, who then suspected subsidence and notified Insurers. The date cracking was first noted has been confirmed as being within the summer of 2019.
Subsequent action	Insurers have requested for Sedgwick to attend and confirm if current damage is subsidence related
Claim notification	Insurers were notified on 03/02/2020.

## **REPORTS BY OTHERS**

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Surveyors Report, Grove Millican Chartered Surveyors, dated 15<sup>th</sup> August 2019.



**NATURE AND EXTENT OF DAMAGE**

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Description and Mechanism	<p>The main area of damage is to the rear 3 storey extension and takes the form of separation cracking between the original building and extension. This movement has affected the following flats (which all occupy the rear extension);</p> <p>Flat 2 (GFF) – Slight cracking within lounge, rear bedroom, kitchen</p> <p>Flat 6 (1<sup>st</sup> floor) – Slight to moderate cracking within lounge / bedroom area, bathroom and kitchen / dining area</p> <p>Flat 10 (2<sup>nd</sup> floor) – Moderate cracking within lounge / bedroom area, bathroom and kitchen / dining area</p> <p>Externally tapered cracking to the junction between original building and rear extension has been noted, from ground floor level up to the 2<sup>nd</sup> floor.</p> <p>Mechanism of movement has been noted as slight rotational movement between extension and original building towards ground floor level.</p>
Significance	<p>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..</p>
Onset and Progression	<p>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.</p>

**SITE INVESTIGATION**

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Reference to the geological survey map shows the anticipated subsoil as London Clay.

The site investigation has been undertaken by CET Ltd on 20<sup>th</sup> March 2020. For precise details of the trial pit and borehole location, together with test results, please refer to the attached CET 'Site Investigation Factual Report'.

A trial pit was excavated to the depth of 1.40m to the rear elevation of the extension, which revealed a concrete foundation to a depth of 1.20m bearing upon stiff clay, which is classified as being shrinkable. A borehole was sunk within the trial pit to a depth of 5.00m, which confirmed stiff clay (1.40m-3.50m) and very stiff clay (3.50m-5.00m). The borehole was also noted as being dry and open upon completion with no roots observed below 3.00m.

In-situ soil testing was undertaken and a shear vane readings of 108 and 125 (Kpa), were noted to the underside of foundations and to a depth of 3.00m respectively, which confirms the ground conditions as being dry and stiff. Further readings of 150 (Kpa) (which is the maximum reading for this type of vane tester), were also measured at 0.50m intervals from 3.50m down to 5.00m. This would indicate that the soil conditions at these levels are dry and very stiff.

Roots up to 1mm in diameter were noted at the underside of foundations. These roots were analysed and found to be alive and originate from Aesculus spp and a broadleaved species (possibly oak or sweet chestnut). Further roots originating from Quercus spp or Castanea spp were also identified as being alive within the borehole down to a depth of 3.00m.

Such roots are considered to originate from the neighbouring oak and chestnut trees, which are located within close proximity to the subject property.

A CCTV drainage survey was undertaken to the drains within close proximity to the subject property / rear and side elevations. The survey revealed a Condition Grade B (cracks and fractures observed) and confirms that Run's 1, 2 and 4 require repairs including high pressure water jetting and installation of super flexi and structural liners in a localised format.

#### **MONITORING**

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Crack width and level monitoring have been instructed and readings are to be taken as eight week intervals.

Our contractor CET will be attending in due course to setup monitoring and take base readings (this is dependent on current Covid-19 restrictions). We shall provide comment on the monitoring results as soon as we have received and reviewed the data.

#### **CAUSE OF DAMAGE**

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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**

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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 adjoining private Third Party is responsible is contributing toward the cause of damage.

An arborist report will now be obtained to assist with this.

As outlined above the site investigation incorporated a CCTV drainage survey and localised defects were identified. A quotation has been obtained from the Pipeline Division of CET Property Assurance with costs estimated at £2,052.75 plus VAT and we recommend that the contractor be appointed to carry out the highlighted repairs.

The primary cause of movement to the rear of the property is clay shrinkage subsidence; however we consider the proposed localised drainage repairs as being an integral part of the repair process. A drainage repair mandate will be sent to the policyholder to sign and authorise for the drainage repairs to be carried out, on behalf of Insurers.

#### **REPAIR RECOMMENDATIONS**

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We have not decided on the final type of repair required as our investigations have not yet been concluded. This involves undertaking superstructure strengthening, repairs and redecoration. This decision has been taken based on our knowledge and experience of dealing with similar claims. In addition the results of the Site Investigation, laboratory testing and monitoring have been taken into account.

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**PROJECT TEAM DETAILS**

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Michael Whittington BSc(Hons) MCIOB AssocRICS - *Building Consultant Specialist Subsidence Team*  
Emma Weatherley - *Claims Technician Specialist Subsidence Team*

