INITIAL TECHNICAL REPORT

Retained

DATE OF ISSUE:	26th August 2022
OUR REFERENCE NO:	77770003
YOUR REFERENCE NO:	Not advised
Ageas	133 Morley Avenue, London, N22 6NP

General view of property

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INTRODUCTION

The technical and insurance aspects of this claim are being overseen by our Regional Technical Manager, Douglas Johnson FdSc MCIOB Cert.CII BDMA Tech (Ins), in accordance with our Project Managed Service.

DESCRIPTION OF PROPERTY

The risk address is a 2-bedroom mid-terraced domestic dwelling comprising mainly of brick elevations beneath a pitched tiled roof.

The property is arranged over 2 storeys, a bungalow and is believed to have been constructed in the mid-1950s. It has been well maintained.

The property benefits from a single storey, flat roofed rear addition constructed in 2004.

TOPOGRAPHY & GENERAL LOCATION

The property is located on a level site and adjacent to a quiet residential road. The surrounding properties are of the same age and design.

GEOLOGY

The precise geology in the immediate area can only be established by undertaking localised site investigations. However, published geological data suggests that the property is underlain by soils from the London Clay Formation. Superficial geology is not recorded.

Our own knowledge and experience of the area would suggest that the property sits in a location where incidences of subsidence are relatively high.

VEGETATION

The following describes the major items of vegetation that are within influencing distance of the property and could therefore be implicated in the current damage:

Type of tree	Eucalyptus
Approx. height	15m
Approx. distance	7m
From where	Rear Addition
Ownership (PH or TP?)	TP
If TP - Name of TP	Unknown
If TP – Address of TP	152 Moselle Avenue
TPO (if known)	Unlikely

CIRCUMSTANCES

During the course of our discussions with the policyholder , we were advised of the following circumstances which led to the claim being presented:

The policyholder advised that minor cracking had occurred within the tile grout approximately 2-3 years ago, however but dismissed as wear and tear. It was during the recent heatwave that significant cracking occurred which has continued to develop since the claim was notified to insurers.

DESCRIPTION OF DAMAGE

We would draw attention to the photographs attached as Appendix 1.

EXTERNAL DAMAGE
It is likely that cracking in the brickwork and brickwork mortar has occurred to the left- and right-hand elevations, however due to access limitation this could not be confirmed or documented.

INTERNAL DAMAGE
The internal damage is limited to the kitchen and consists of tile cracking to,

- The right-hand wall at the inside of the return and towards the rear.
- The left-hand wall adjacent to the extractor.
- To the left and right of the window.
- Within the floor tile grout adjacent to the external door

- The external door is binding.

CATEGORY OF CRACKING

In accordance with Table 1 of BRE Digest No.251, (as reproduced below), the cracking in the property would be described as category 3.

Category 0	Negligible	Less than 0.1mm
Category 1	Very slight	0.1-1.0mm
Category 2	Slight	1mm to 5mm
Category 3	Moderate	5mm to 15mm
Category 4	Severe	15mm to < 25mm
Category 5	Very severe	> 25mm

CAUSE OF DAMAGE

From our initial visual inspection, we would confirm the following:

It is our considered opinion that the damage is attributable to clay shrinkage subsidence, which has been exacerbated by the moisture extraction influence of the surrounding vegetation. The primary vegetative influence is considered to be the neighbour's garden.

DISCUSSION

Clay soils typically undergo changes in volume when the water content is changed. When clay soils are dried, shrinkage occurs. If rewetting occurs subsequent to drying, swelling occurs. If the volume change is uniform, it is not easily observed, and considerable vertical soil movements may occur without being recognised.

In this situation we believe that the nearby Eucalyptus tree has caused excessive shrinkage to the rear of the rear addition resulting in an uneven movement to the clay under the addition. The result of this is the cracking noted above.

If vegetation management is undertaken the clay will swell by absorbing natural rainfall and it will recover back to its equilibrium. The amount of re-swelling depends primarily upon the clay minerals present in the soil and the level of rainfall. Clay soils containing montmorillonite show an almost reversible swelling and shrinking on rewetting and re-drying, whereas clays containing kaolinite or illite show an initial large volume decrease on drying with only a limited swelling on rewetting. The terms "high-swelling" and "low-swelling" are applied to the former and latter types of clay soils.

RECOMMENDATIONS

We now recommend that site investigations are undertaken to confirm our initial opinion as to the cause of the damage; with the required investigations consisting of:

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- 1 Trial holes / bore holes to the rear right corner the property to confirm the depths of the foundations and condition of the bearing soils beneath the foundations.
- A crack and / or level monitoring exercise for an initial period of 12 months.
- To obtain an arboriculturalist report to obtain advice on the vegetation management works required, and confirm if there are any restrictions in place, regarding the removal of the implicated vegetation.

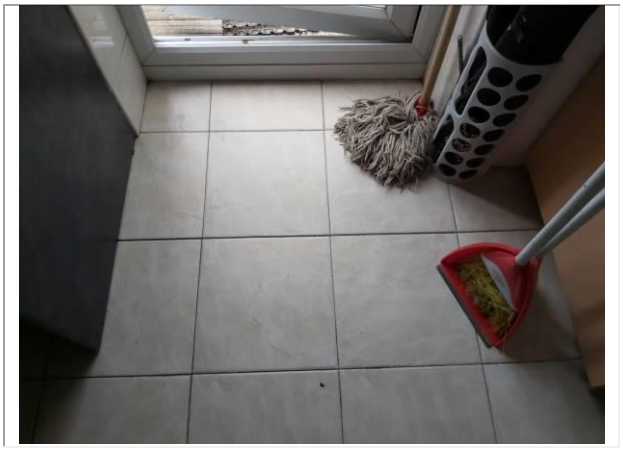
APPENDICES

Appendix 1: Photographs
Appendix 2: Site Plan

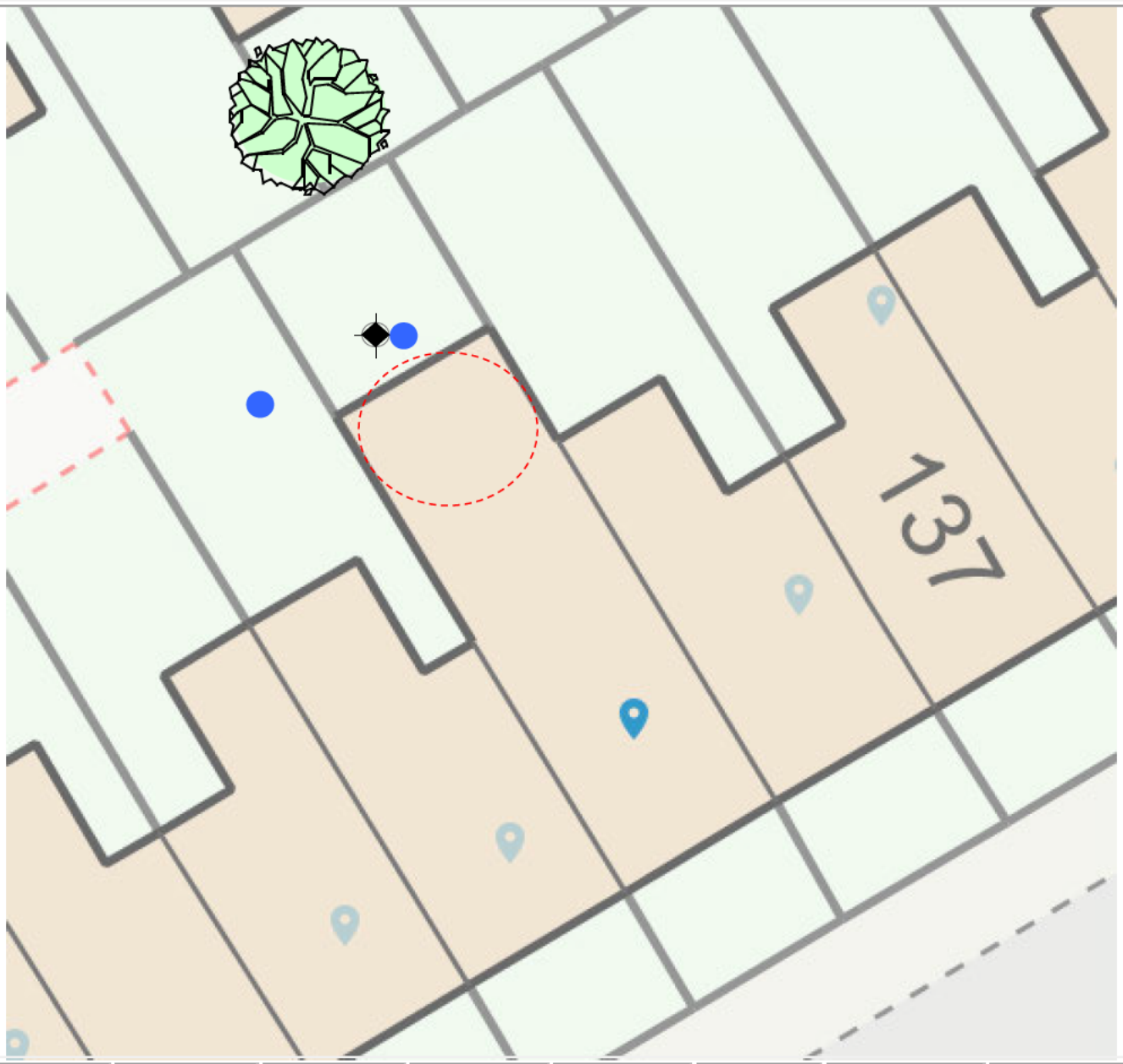
APPENDIX 1: PHOTOGRAPHS

	Rear
	Right flank
	Left flank

	Eucalyptus
	Looking left
	Looking right
	Looking rear

	Inside return right hand wall
	Right hand wall
	Left hand wall
	Open tile grout

APPENDIX 2: SITE PLAN



Foul Drain	SW Drain	Foul IC	SW IC	Foul DP Gulley	SW DP Gulley	SVP	Area of Damage
Broad leaf tree	Shrubs	Hedge	Conifer	Trial Hole	Borehole	Trial/BH	Level monitoring point