Alexandra Villa, 3 Victora Avenue
Harrogate HG1 1EQ
01423 582350
office@claimstech.co.uk
www.claimstech.co.uk

Preliminary Technical Report: Subsidence Investigation



Front Elevation

Property Address	55 Hulmes Road, Clayton, Manchester M40 1GP
Client	[redacted]
Client Reference	84804
Consultant	Paul Clifford BSc CEng MIStructE ACILA
Date of Inspection	23rd September 2025
Date of Report	24th September 2025

1. Introduction

Claimstech are instructed by James Fairbairn of Solace Loss Adjusting to comment on potential subsidence at the above property.

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 damage and should not be relied on as a statement of structural adequacy. It does not deal with the general condition of the building, decorations, services, timber rot or infestation etc.

All directions are given relative to an observer facing the front of the property from the public road. Slopes and leans are measured over the length of a 1m digital spirit level. Given the number of cracks within the property the following is a summary of the key damage rather than a detailed list of all damage present. We have not commented on any part of the building that is covered or inaccessible.

2. Property Description

The property is a three storey end of terrace with partial cellar under the front reception room. The policyholder has drawings dating to 1879 and so it is assumed that the actual construction was in around 1880.

The house is of traditional construction with mostly solid brick external walls and masonry internally. There are some lightweight construction walls present in the attic. It is assumed that the foundations will be traditional corbelled brick. The roof is pitched and slate covered.

The property fronts onto road with a public park on the opposite side. The surrounding area is level and of residential use.

There are a number of trees present with extensive shrubs in the gardens of the policyholder to the front and left. The main trees belong to the policyholder and run along the front left boundary where cherries were noted and also a young Poplar tree. There are a couple of other trees of unknown species. Further away in the garden of the property to the left is an ash tree, but this is a distance where it is unlikely to influence the foundations. There is a small Sycamore tree to the rear in third party gardens at a distance of around 10 metres from the main house rear elevation.



Reference to geological maps indicates that the property is underlain by glacial till overlying sandstone. Online borehole records in the locality show ground varying from very stiff clay to soft clay and sands. This matches the description of glacial till.

We have also checked online mining records published by the coal authority. There are no known or possible shallow mine workings or development high risk areas anywhere near the risk premises. However, it is reported that there was mining underneath the property and this must therefore have been at quite a depth. The reference of the geological record to the presence of sandstone points away from the presence of any mining at all because coal seams are not associated with layers of sandstone. Therefore, there is no reason to believe that the property is affected by mining.

3. Circumstances of Discovery

It is understood that the policyholder became particularly concerned regarding the onset of damage in around June 2025. Damage seemed to worsen fairly rapidly and consequently a structural engineer’s report was commissioned. This was prepared by Healey Consulting and is dated 11th September 2025. It is not particularly conclusive as to any cause of damage but does recommend subsidence investigations.

It is noted that the policyholder has owned the property for approaching 50 years. They have not noted any particular movement and damage to the property in the past.

On the advice of the engineer a claim was submitted to the buildings insurance company.

4. Description of Damage

The front elevation did not exhibit much damage and brick coursing generally appeared to be reasonably level. There is approximately 2mm wide cracking from the top right of the front door arch running up to the bedroom window. There is a 3mm wide vertical separation crack up the right side of the bedroom window with a crack running off up to roof eaves level. Separation was noted in the boarding supporting the gutter.



To the centre of the gable there are three windows directly above one another. There is diagonal cracking that starts below the ground floor window and runs up between each set of windows to roof level. The brick arch over the first floor window has dropped to create wider cracking at its rear end due to the movements of the brickwork.



Below the large picture window at the rear of the elevation there are cracks present of up to 1mm width under the bottom rear. The joint of the window frame at the rear bottom has separated and glass has shattered as a consequence of the movement. There is a shear crack through the front end of the concrete lintel over the window with cracking running up to the first floor window above.



The rear elevation is largely clear of damage with the exception of a slight diagonal crack of up to 2mm width from the door up to the left. The door to enter the house slopes down to the left by around 13mm.



There are numerous cracks present in the rear morning room. Cracks are present of up to 3mm width either side of the doorway to the hall and the door head clearly slopes down to the left side with a slope of 30mm. The door is binding on the carpet. Cracks continue into the chimney breast and generally around the wall and ceiling junctions. There are cracks off the corners of the large picture window with some crushing of the plaster at the top rear end of the lintel. There is a historic slope of the ceiling down to the left side but the floor is level suggesting some past levelling works have been undertaken. There is a 3mm wide separation gap between the ceiling and the party wall on the right.





In the cellar the ceiling of the left chamber has pulled away from the right wall to leave a gap of around 3mm width. Separation cracking appears around the wall at the head of the stairs where there are cracks of up to 4mm width. The stairs themselves sloped down to the right.

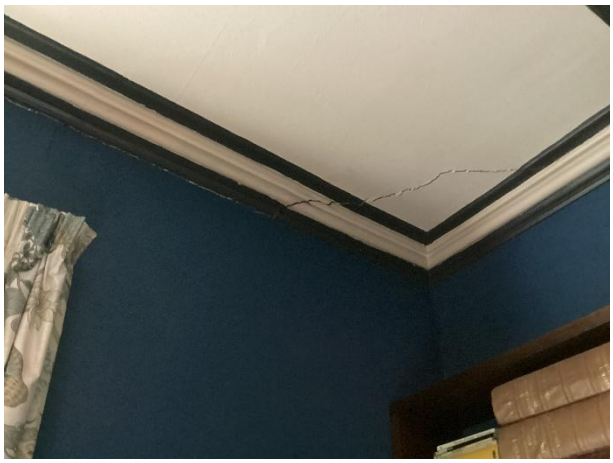


There are cracks present within the hall with suggestions that there is some cracking underneath wallpaper this is not yet shown through. There is a crack off the top right of the front door arch matching that externally. Cracks appear off the top rear of both the reception room doors. The reception room doorheads sloped down by 11mm and 30mm to the rear respectively.



The reception rooms have had the dividing wall mostly removed at some point in the past. There are cracks at each end of the lintel of up to 2-3mm width. Similar size cracking appears around the infill to the rear reception doorway. There is cracking underneath the rear left window that then appears off the top rear and running around the corner of the ceiling and coving at up to 4mm width. The rear reception floor slopes to the rear at a rate of up to 12mm and 17mm to the left.





The master bedroom runs across the full width of the front of the house. There are old deflections to the floor that are particularly apparent as a maximum in line with the left side of the external bay window. This is shown by the difference in height of the skirting across the width of the front wall. There is general separation cracking between the front and rear walls and ceiling at junctions with the party wall. These cracks are between 2 to 3mm wide with around 4mm gap at the wall and ceiling junction. There has possibly been some previous repair of this junction. There is some general cracking in the corners of the room and at wall and ceiling junctions.



The staircase to the second floor has pulled away from the party wall by around 8mm. There is stressed wallpaper running up the junction of the front wall of this stairwell with the party wall. Distortion of wallpaper in the rear section of the corridor indicates that the ceiling is pulling away from the party wall in the rear parts. There are cracks of up to 3mm width running down to the bedroom doorheads. There is some separation and disturbance of skirtings on the landing at the head of this stairs from the ground floor.



In the middle bedroom there is around 3mm wide cracking running up to the rear underneath the side window. Slight cracking appears above the top of the window at the rear and runs along the wall and ceiling junction and across the rear wall ceiling junction. There's a fine diagonal crack running down the rear wall to the entrance door head. The floor slopes down to the rear left at a rate of up to 20mm from front to rear and 15mm from right to left.



In the third bedroom there are cracks and stressed wallpaper generally at the four wall junctions. Cracks appear above the ends of the doorhead. Slight cracking appears across the ceiling. Diagonal cracks underneath the side window with a 1mm wide crack off the top front of the lintel. The floor slopes at a rate of up to 11mm down to the left.



The second floor consists of attic rooms built into the roof pitch. There is a tapered separation gap between the front bedroom doorway and the doorway to the rear bedroom. This is up to 4mm wide. There is some separation of skirtings at the head of the stairs from the party wall with a degree of cracking up the right side of the rear bedroom door access.



The front bedroom is the attic was generally free of damage. There is some slight cracking to the ceiling, but these cracks follow previous repairs and the ceiling is evidently quite old and long standing without any renovation. The oddity in this room is that the floor and window sills sloped noticeably down to the rear yet the fit of the patterned wallpaper to the ceiling suggests the latter is sloping down to the front.

In the rear bedroom there is cracking of up to 5mm width to the top left of the entrance door with stressed wallpaper present at the wall junction above the top right of the door. There are signs of a separation of the ceiling from the right party wall with a 5mm wide crack to the top right of the rear window running into the ceiling as well. There is slight cracking above the top front of the left hand side window.



5. Possible Causes

The policyholder has mentioned possible vibration from the road as a cause of damage. However, this would be an extremely unusual event and it is noted that the worst damage is at the rear of the property rather than the front that is closer to the road. Even with significant potholes vibration from vehicle traffic should not cause subsidence to a house and therefore this can be eliminated as a cause.

As discussed above, our desktop surveys rule out the possibility of mining. Deep mining is unlikely to affect a property given that the mines ceased working many years ago. Mining subsidence damage from redundant mines tends to arise from shallow workings and records clearly indicate that there are no shallow coal seams in the vicinity.

The policyholder reports rapid onset of damage starting in the early summer. This summer has been particularly hot and dry which can cause clay subsoils to dry out and consequently shrink. It is noted that there are comparatively young trees the front left including a high water demand tree in the form of a young Poplar. These trees will take increasing amounts of moisture from the ground on that side of the property as they become larger year on year. Hence clay will dry more towards the vegetation causing uneven foundation movement and damage.

The policyholder also reports that the top lock on the rear door was impossible to use at the end of the summer. It is now noted that this lock is functioning following the onset of heavy rains in September. This therefore suggests that clay subsoils are rehydrating and swelling lifting the building back into its former position.

Therefore, there can be little doubt that the damage in the property arises from uneven clay shrinkage during the dry summer. The key facts pointing to this diagnosis are the likely presence of shrinkable clay soils from our desktop studies, a dry summer where there has been a noted

increase in subsidence claims, the presence of young trees that will increasingly affect the property and finally the policyholder noting rapid onset of damage and giving us some evidence that there has been a reversal and recovery in the wetter start to the autumn.

It should be noted that there are other factors that have led to historic distortions in the property and particularly slopes to floors, ceilings and door and window heads. The main factor that will be the cause of this distortion is differential foundation depths between the deeper foundations for the cellar under the front reception and staircase associated with it and running to the rear compared with what are inevitably shallower foundations to the rear reception and rear morning room. It is common to see differential settlement between such foundations due to their difference in depth and therefore bearing in different soil strata. Given the long term ownership by the policyholder without reported prior damage it is safe to assume that these effects are old and long standing and will have happened early in the life of the building.

There is an odd deflection of the master bedroom floor to align in conjunction with the left end of the bay window. Again, it seems this is an old and long standing defect. It is speculated that it arises from a past problem with a bay window lintel or possibly rot of timber joist ends in the front elevation that are assumed to have been dealt with by previous owners.

There is some evidence of a degree of general historic differential foundation movement. This will have a risen with the construction of foundations on ground of varying quality across the footprint.

6. Recommendations

It is recommended that at least one trial pit and borehole be excavated to establish the nature of the foundation and subsoil. Samples should be recovered for laboratory testing to assess moisture content and shrinkage potential of any clay soils found. Root samples should also be recovered and tested to confirm their origin. A camera survey is recommended of the drainage system to assess its integrity and any possible involvement in the damage.

It is anticipated that the results of the investigations will clearly indicate that the problem relates to clay shrinkage as particularly affected by the growth of vegetation around the property. Therefore, once results are available it is likely to be necessary to consult an arboriculturist to advise regarding the extensive vegetation around the property. This is with a view to undertaking a sensible vegetation management to prevent damage returning in future summers.

We anticipate that ground will recover during the autumn and winter as it rehydrates. Given the level of damage in the property it is believed that it is appropriate to install some crack width monitoring to establish any rate of recovery or in the worst case scenario continued movement. This will give a better indication as to when to repair the property. We presently anticipate that a successful system of tree management will allow structural repairs without recourse to underpinning.

Paul Clifford BSc CEng MIStructE ACILA
Chartered Structural Engineer