



136 WITHINGTON ROAD,
WHALLEY RANGE

STRUCTURAL SURVEY REPORT

Project No 2011-08
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1.0 INTRODUCTION

This report sets out the findings of a visual structural survey carried to the property located at 136 Withington Road, Whalley Range, on Wednesday 6th January 2021. The weather at the time of the visit was dry and overcast.

The structural survey report includes the following:

- A description of the form of construction and materials used for each part of the building structure and the associated interdependence of the different parts of the structure.
- Identifies and describe obvious structural defects and the identifiable risk of those that may be hidden.
- Identifies any potentially unstable building elements.
- Provides initial commentary on potential structural integrity and retention of various structural elements
- Identifies percentage impact of defects on each element of building.

The purpose of the survey is to provide a general overview of the structural condition of the building structures, drawing attention to significant structural defects and items of disrepair and provide recommendations. The findings of the structural survey presented in this report, are based on a visual appraisal undertaken from ground level externally, and internally within the building where safe access was available. Parts of the structure that were unsafe to access or not visible from ground level, covered, unexposed, or inaccessible, have not been inspected and therefore the condition of such elements is unknown.

Where remedial proposals are given these are indicative and will need to be developed and confirmed following further investigations and assessment. All remedial proposals will also be subject to Consent from the Local Authority Heritage Officer and may develop and change in response to third party feedback and input.

2.0 OVERVIEW OF BUILDINGS & HERITAGE SIGNIFICANCE

Heritage Category: Local Historic Interest Building

National Grid: SJ 82959 95003

Address: 136 Withington Road, Whalley Range, Manchester M16 8EE

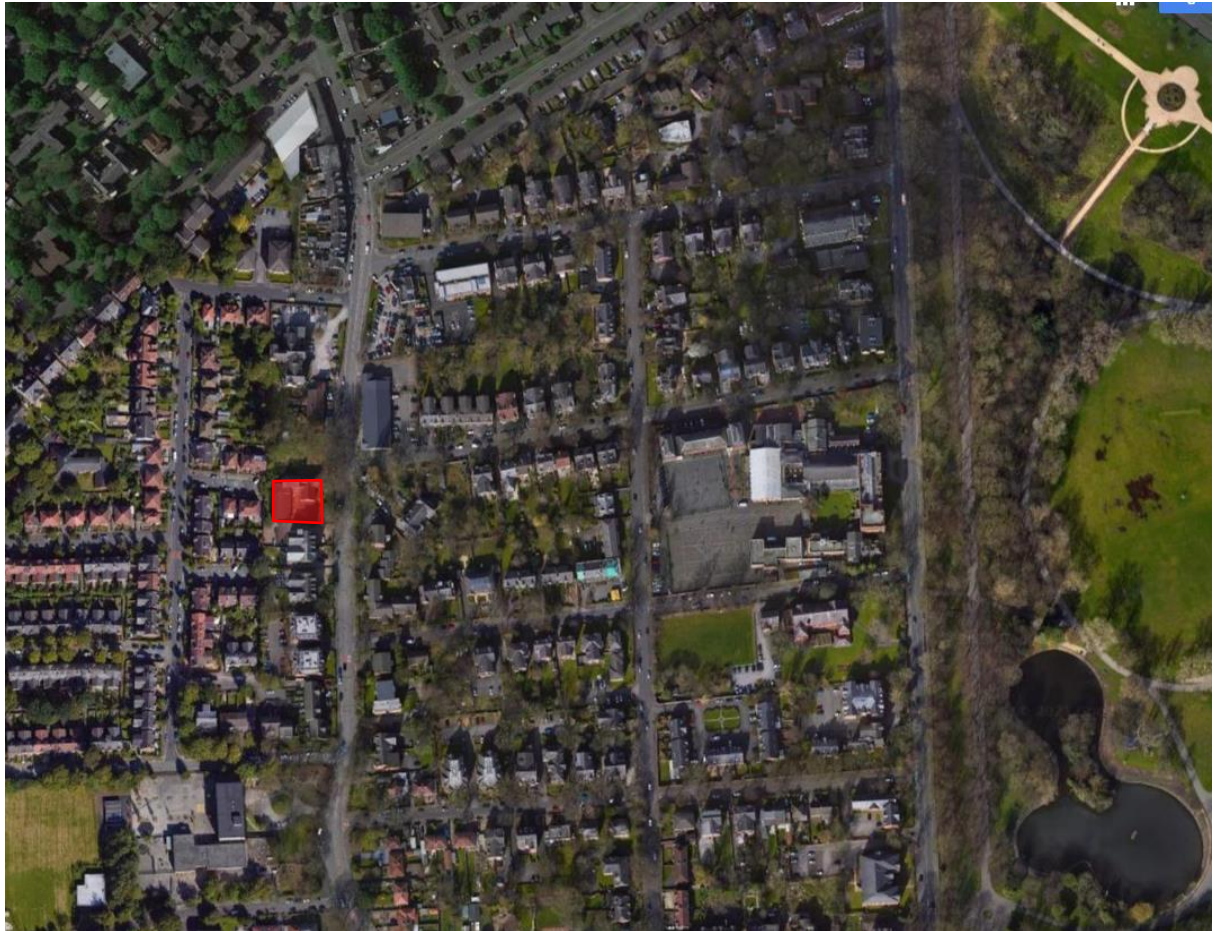


Figure 2.1: 136 Withington Road, Location Plan

The “L” shaped building appears to consist of three distinct phases of development. The first two phases of development face Withington Road with the southern half (Building 1) appearing to be earlier than the northern half (Building 2). The third phase of development (Building 3) connects to the rear extension to Building 2. Access to the building was limited due to its poor condition and areas of structural concern. However, the following structural overview was ascertained during the site visit.

2.1 Building 1 (Withington Road Southern Half)

2.1.1 Structural Overview

The building is two storeys with no basement. The structure is load-bearing masonry with timber floors and roof. The perimeter walls are circa 230mm solid brick with lime mortar and external cement render. The southern gable wall appears to have been rebuilt with the chimney stack removed above roof level. The internal arrangement is cellular with masonry and timber stud walls. Safe access to the first floor and roof space was not possible due to the condition of the building.

2.2 Building 2 (Withington Road Northern Half)

2.2.1 Structural Overview

The building is two storeys with a semi-basement as the ground floor level is elevated. There is a projecting double height bay window facing Withington Road. The structure is load-bearing masonry with timber floors and roof. The building appears linked to Building 1 and 3. The perimeter walls are circa 230mm solid brick with lime mortar and external cement render.

The internal arrangement is cellular with generally solid masonry walls. Safe access to the front section of basement, first floor and roof space was not possible due to the condition of the building.

2.3 Building 3 (Rear Section)

2.3.1 Structural Overview

The building is also two storeys with a semi-basement as the ground floor level is elevated at the same level as Building 2. The structure is load-bearing masonry with timber floors and roof. The building appears linked to Building 1 and 3. The perimeter walls are circa 230mm solid brick perimeter with cement rendered. Internally the floors are open plan and would have provided halls as part of the buildings previous use. Due to restricted access, it was not possible to view the roof space.

Based on the site observations no structural elements were observed that would indicate that any of the buildings were original of timber frame construction that have been later clad in masonry. The elements of the building appear to be of solid, load-bearing masonry construction throughout with timber floors and roof structure.

3.0 OBSERVATIONS & COMMENTARY

This section should be read in conjunction with the selection of survey photographs presented in Appendix A.

3.1 Building 1 (Withington Road Southern Half)

3.1.1 General Structural Condition

The building is generally in a poor state of repair with localised areas of water ingress and deterioration. Localised areas of rising damp are also evident.

The exterior of the building has been cement rendered which will be potentially trapping moisture within the wall which can lead to deterioration of the original brickwork.

Localised cracking is evident externally, however, this does not appear to be structurally significant and is likely to be associated with historic movement and ongoing thermal cyclic movement of the buildings.

The condition within the current building would indicate that wet and dry rot will be present although this would need to be confirmed by a Timber Specialist.

3.2 Building 1 (Withington Road Northern Half)

3.2.1 General Structural Condition

The building is in very poor state of repair with extensive areas of water ingress throughout and rising damp evident at ground floor level.

The exterior of the building has been cement rendered which will be potentially trapping moisture within the walls which can lead to deterioration of the original brickwork.

At ground and first floor levels ceiling finishes have extensively collapsed and the timber floors are heavily deteriorated with extensive rot and are at risk of full collapse. It is likely that that roof structure is in a similar or worst condition. Collapse of the floors or roof is likely to result in collapse of the supporting walls, and the structure should be considered as unsafe and the client advised to implement necessary actions to protect the safety of people that may enter the site or building.

Wet rot is evident and the condition within the current building would also suggest that dry rot will be present. This should be confirmed by a Timber Specialist.

Localised cracking is evident externally, however, this generally does not appear to be structural significant and is likely to be associated with historic movement and ongoing thermal cyclic movement of the buildings. Cracking is evident between the main building and bay window and should be addressed within any refurbishment proposals.

There is vegetation growth at roof level adjacent to the chimneys which are also in a deteriorated condition.

3.3 Building 3 (Rear Section)

3.3.1 General Structural Condition

The building is in a poor state of repair albeit in a better condition when compared to Building 1 and 2.

Localised areas of water ingress are evident with only minor deterioration of the adjacent building fabric.

The basement is relatively dry, however, the walls are lined with timber studding and plaster board so there is a risk of concealed wet and dry rot. There is also a risk of rot due to the localised areas of deterioration and adjacent building.

Localised cracking is evident externally and internally. This generally does not appear to be of structural significant and is likely to be associated with historic movement and ongoing thermal cyclic movement of the buildings.

The rear kitchen extension is in a very poor state of repair. However, this is a later addition so is not commented on further as it is assumed to be removed within any redevelopment proposals.

4.0 SUMMARY & RECOMMENDATIONS

Based upon the above observations, the approximate scope of structural repairs works, and associated loss of fabric would be as outlined below.

4.1 Building 1 & 2 (Withington Road Southern & Northern Sections)

- Rebuild the existing chimney stacks.
- Carefully remove the cement render, repoint the masonry walls with hot-lime mortar and re-rendering with a lime-based render to allow the solid masonry walls to breath.
- Undertake localised crack stitch repair as required.
- Investigation and locally underpin the bay windows to building 2 to prevent further movement.
- Undertaken extensive replacement of the roof, first and ground floor timber elements. Based on the observation it is unlikely that no more than 25-30% of the original timber fabric could be retained with 70-75% replacement.
- Removal of finishes to allow for treatment of dry rot where present.
- Re-roof the building with strengthening and/or replacement of roof timbers as required to support additional loadings from insulation etc.

4.2 Building 3 (Rear Section)

- Rebuild the existing chimney stacks.
- Carefully remove the cement render, repoint the masonry walls with hot-lime mortar and re-rendering with a lime-based render to allow the solid masonry walls to breath.
- Undertake localised crack stitch repair as required.
- Undertaken localised timber repairs to the roof, first and ground floor timber elements. Based on the observation it is unlikely that circa 90% of the ground and first floor timber elements could be retained with rotten ends within the wall replaced as required. The roof is likely to require circa 25-30% replacement and the central timber truss may require strengthening to support increased roof loadings.
- Removal of finishes to allow for treatment of dry rot where present.
- Reroof the building with strengthening and/or replacement of roof timbers as required to support additional loadings from insulation etc.

The above scope is indicative at this stage based on the observations to accessible areas within the building. However, it is based on our experience of similar building in a similar condition and the full extent and scope of works would be developed in detail following making safe of the building and further visual inspection and intrusive investigation works. As the building is not listed upgrades will also be required to the fabric which are likely to be detrimental to the structural fabric long-term or require strengthening of existing elements. This will include items such as roof elements will need strengthening or replaced to carry the additional loads associated and the breathability of walls being compromised that can lead to moisture being trapped within the structural fabric.

Given the age of the buildings any refurbishment works should be undertaken using compatible materials to the original form of construction that would have allowed the building to 'breath' and prevent moisture being trapped within the fabric. External and internal renders should be lime based and insulations should be breathable. Injection of remedial DPC's should be avoided as this leads to accelerated deterioration of the brickwork and mortar below and over time can compromise the structural stability of the building.

4.3 SUMMARY

In summary, any proposed remedial works to the building will result in only the external and internal walls to Buildings 1 and 2 being retained with the loss of most of the internal fabric, including the floors and roof, and associated existing finishes. The majority of Building 3 could be retained structurally, however, re-roofing works and removal of internal finishes to treat wet and dry rot are likely to result in the loss of most of the internal finishes.

Given the extensive works required and significant loss of fabric resulting from the structural stabilisation works there is limited benefit in retaining the buildings structurally. Based on the observations made on site, the form of construction, (traditional masonry and timber), is not of significance and should therefore not be a consideration regarding the retention of the buildings.

APPENDIX A – SITE PHOTOGRAPHS