Ref: DMS603-LETREP01-A

09<sup>th</sup> December 2016

Carpenter Investments The Haigh Building Back Maryland Street Liverpool L1 9DE



## MUIR

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## RE : Hardman House, Hardman Street, Liverpool, L1 9AS

- 1.0 Introduction and Limitations
- 1.0.1 Muir Associates UK Ltd were appointed by Carpenter Investments to undertake an initial Structural Condition Appraisal of the building referred to as Hardman House, located on Hardman Street, Liverpool L1 9AS.
- 1.0.2 The inspection of the building was carried out on 8th November 2016 and comprised a visual inspection and no opening up works have been carried out during this survey. The weather on the day of the inspection was dry with light cloud cover.
- 1.0.3 The purpose of the inspection was to assess the current condition of the structure as the building has been unoccupied for many years and has a number of issues with water ingress and many cracks found across many areas of the building.
- 1.0.4 Atlantic House is a Victorian red brick building which has since been renamed to Hardman House to which it is known today.
- 1.0.5 The buildings referred to occupies the land between the gable of the "Fly In The Loaf" and South Hunter Street and extends back to Back Maryland Street. From the inspection of the elevations it appears to have been added to with varying forms of structure historically.
- 2.0 Building Form
- 2.0.1 The existing building is made up of a number of additions which have been constructed and generally take the form of loadbearing masonry with timber floors and timber trussed roof with section of the building having a concrete floor and flat roof which is believed to have been a latter addition to the building.
- 2.0.2 There are a significant number of level changes internally at all levels which will make providing accessibility across floor levels extremely problematic if not practically impossible.

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- 2.0.3 The majority of the building is built over 3 floors above ground level with part of the building having a varying basement which extends below the footpath level in line with the main Hardman Street façade.
- 2.0.4 The buildings are not listed structures.
- 3.0 External Envelope
- 3.0.1 An initial inspection of the building was undertaken from ground level by way of a walk around the perimeter to review any obvious defects which may be present. A high level visual inspection of the external elevations to assess any defects has not currently been undertaken.
- 3.0.2 It is apparent that a number of unsympathetic elevational alterations have been undertaken during the previous year's predominantly to the ground floor main frontage on Hardman Street, which is likely to have been following changes in retail occupiers.



Image 1 - Hardman Street Elevation





Image of Back Maryland Street

- 4.0 Internal Inspection
- 4.0.1 The building was accessed from Back Maryland Street with temporary lighting and torches used to undertake the inspection.
- 4.0.2 The inspection of the upper floors was carried out with caution as the persistent water ingress which has been occurring for a number of years, has had a detrimental effect on the condition of the building as it currently stands.
- 4.0.3 A significant number of ceilings have collapsed due to water ingress exposing the existing roof structure above, with upper floors being unsafe and deflecting significantly. The floors are generally out of level across the building, which is likely to be due to rotting timber and or settlement of the structure.
- 4.0.4 The basement area of the building has a serious damp problem and has some structural propping evident showing longstanding structural issues with the ground floor.
- 4.0.5 The ground floor construction is mainly suspended timber with a basement storey beneath. As the photographs indicate excessive damp issues with the basement and the ground floor structure is generally unsuitable for reuse.
- 4.0.6 Dry rot within the building structure is widespread and clearly evident which is also a serious cause for concern.

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Image of Ceiling at 3rd floor level



Image at 3rd Floor Level



Directors: J.R. Gray Bsc. C Eng. MI Struct. E MICE, M.D. Jones BEng (Hons)



Image at 3rd Floor Level



Image of collapsed ceiling at 3rd floor level



Directors: J.R. Gray Bsc. C Eng. MI Struct. E MICE, M.D. Jones BEng (Hons)



Image of 3rd Floor Window Cill Hardman Street Elevation



Image of 3rd Floor Window Cill Hardman Street Elevation

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Image of window head structural problems



Image of Internal wall cracking

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Image of structural cracking of internal loadbearing walls



Image of structural cracking of loadbearing walls

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Image of Basement Damp Issues



Image of Basement Damp Issues



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Image of Existing Propping

- 5.0 Roof Inspection
- 5.0.1 An inspection of the roof was undertaken from a single tower scaffold located to the light well adjacent to the "Fly In The Loaf".
- 5.0.2 The slate roof is of varying pitches across the whole building with one section being flat roof construction where it is believed to have been an extension which is more recent than the original building form.
- 5.0.3 The roof coverings show signs of disrepair in a number of areas with missing roof slates, and significant vegetation growth coming from within the building which appears longstanding, with patch repairs being evident throughout.
- 5.0.4 The area of skylights within the roof are seriously damaged, which is not only dangerous, with the resulting ingress of water causing significant damage throughout the building for a number of years in addition to the number of missing and or damaged rainwater goods which have exacerbated the problems.

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Image showing roof issues



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Image showing existing roof issues



Image showing roof issues

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- 6.0 Summary & Conclusions
- 6.0.1 The building is currently is an extremely poor state of repair and appears to have been in this condition for some time now based on the evidence witnessed during the inspection.
- 6.0.2 Serious damp problems and significant widespread dry rot within the structure pose serious issues with the integrity of the building.
- 6.0.3 An asbestos survey has been carried out and all identified asbestos has been removed.
- 6.0.4 The building will not satisfy a variety of contemporary standards of construction and performance criteria set out in the current building regulations such as, thermal insulation, damp proofing etc. In addition to this the current changes in level across the building will render the upper floors unsuitable for DDA Accessibility.
- 6.0.5 In our professional opinion the building as it currently stands we believe to be beyond reasonable economic repair for reuse.
- 6.0.6 We would therefore in our professional opinion recommend the building is considered for demolition as the condition of the building in its current state poses a significant risk.

We trust the above will assist in your current review of the building and should you require any further information please do not hesitate to contact us.

Kind Regards

Mark Jones

Mark Jones Director For Muir Associates UK Ltd

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