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Ref: 16042.002

Glossop Land Ltd.
The Baths
56 Grange Road
Bowden
Cheshire WA14 3EY

For the attention of Mr M Ryan

Dear Mr Ryan,

Structural Engineers Inspection and Report
Woods Mill, Milltown, Glossop, Derbyshire

Further to your recent instruction I confirm my structural inspection of this building on the 4th February and report as follows with respect to the current structural stability.

1. Main Observations:

1.1 Main Roof

The roof of the main building is in very poor condition.
Vandalism has removed all the internal cast iron gutters.
Many of the roof tiles have been taken.
The roof truss bearing at the external South East corner has recently collapsed causing the wall to be locally pushed out and leading to local loose stonework at eaves level.
The timber bearings on the external walls are in doubtful strength condition due to wet rot from rain ingress.

1.2 Main Floors

The lower tie bars to the brick arches in the end bays have generally been removed, these prevent spreading of these floors which without them will lead to progressive flattening and collapse of the remaining arch floors which as with other floors of this type are untied.
The central area of the Third Floor adjacent to the North East wall has recently collapsed due to arch spread.

1.3 **Fire Damage**

The Ground and First Floor storeys at the right hand side has been historically damaged by fire with subsequent strengthening by concrete.
The quality of these repairs and damaged remaining structure is unknown and will require significant investigation to verify.

1.4 **Main Walls**

The main walls are in average to poor condition.
The external stone face is of reasonable quality but due to a long period of lack of maintenance requires considerable repointing to prevent water penetration which will cause progressive weathering.

The internal brick faces of the external walls are in poor condition at third and fourth storeys due to rain penetration. At ground, first and second storeys they are still in reasonable condition due to some sheltering from the floors above.

1.5 Vandalism

Recent vandalism has caused removal and destruction of a significant amount of building fabric.
Internal cast iron gutters have been removed which will lead to more rapid rainwater infiltration.
Metal tie bars have been removed which will lead to spreading of floors and walls.
A significant part of the Fourth Floor to the right hand extension has been collapsed onto the floor below probably for removal of stolen material. This collapse will lead to local instability of this floor area.
Nearly all windows and doors have been destroyed which will lead to ingress of weathering

2.Conclusions

2.1 Recent collapses of the building with particular reference to the main roof and the Third Floor indicate the future progression. The further collapse of the roof is inevitable particularly at wall bearings due to wet rot. The further collapse of floors is inevitable as arches progressively flatten due to lack of tie bars.

2.2 Collapse of the roof will lead to instability of the fourth storey external walls which will then be unbraced and unprotected from weathering.

2.3 Collapse of the floors will lead to pushing out and additional instability of the external wall.

2.4 Collapse of the roof could only be prevented by removal and replacement of the existing in the short term.(say during the next 12 months)

2.5 Collapse of the floors could only be prevented by installation of a steel bracing system to the existing floor structure to prevent further spreading. This again should be done in the short term.

2.6 Even if the roof was reconstructed and prevention of the floor spread installed, there would still be significant doubts on stability of the remaining building due to previous fire damage, weathering and vandalism. These doubts would all need to be resolved to obtain building regulation approval for future public safety.

2.7 The building is currently not considered to be a dangerous structure to the public provided they do not enter the site. However it would be recommended that this be reviewed on at least a 6 month basis by a qualified structural engineer or inspector with particular reference to the wall on the side of Milltown Street. where the North East side could be particularly affected by floor and roof collapse at the Fourth Floor.

3. **Recommendations**

3.1 To prevent this mill progressing from a building that is just locally dangerous to a building that is dangerous to the public beyond the boundaries of the site the recommended solution would be to demolish the entire building.

This demolition should be carried out as soon as possible as otherwise the closure of Milltown Street is likely to be required in the next 12 months under the Dangerous Structures Act to prevent the public being affected by falling masonry.

Yours sincerely

PR Graham BSc(Eng), CEng, MICE, MIStructE
For R Rhodes and Partners Ltd

Attached: Client's guide to SER on a commercial property.

CLIENT'S GUIDE TO A STRUCTURAL ENGINEER'S REPORT ON A COMMERCIAL PROPERTY OR A STRUCTURE BY R. RHODES & PARTNERS (CONSULTING) LTD

'The Client' The person or company signing the Instruction To Proceed.

'The Company' R Rhodes & Partners (Consulting) Ltd.

'The Property' The commercial property or structure which the Client has instructed the Company to inspect and report on.

The Report is a written document which describes the results of an inspection of the Property carried out by a Chartered Structural Engineer working for the Company. The Report is prepared on the instructions of the Client and is solely for the use of the Client and their professional advisors (e.g. solicitor, chartered surveyor or architect).

The inspection will be visual and will cover only the structural, load-bearing elements of the Property which are reasonably accessible. Woodwork and roof coverings will not be inspected and neither will any parts of the Property which are inaccessible or in the ground. Services (such as drains, gas, water and electricity etc.) are not included in the inspection.

The Company will not inspect every square inch of the Property otherwise the fee payable by the Client would have to be substantially larger. When instructed by the Client, the scope of the inspection will be limited to faults identified by the Client or identified in a previous survey, in which case the remainder of the Property will only be briefly inspected and reported on by the Company.

It is not always possible to discover defects which are concealed, the Company's Chartered Structural Engineer will use intuition and experience regarding inaccessible areas but does not possess X-ray vision!

The Report will list the structural defects observed and, where practicable, explain what has caused them and provide recommendations regarding the need for remedial work and/or further investigation. No tests or exploratory investigations will be carried out (unless instructed by the Client and/or included in our scope of services) but an informed opinion will be given in the Report as to whether faults may exist and whether tests should subsequently be carried out to obtain further information. The detailed design of remedial works is not included in the Report fee.

When the Company is inspecting a Property which is not owned by the Client, the Company must exercise a degree of care to the Owner. If the occupier of the Property refuses to move obstructions or refuses access to any part of the Property, then the Company must abide by the occupier's decision and will record the occupier's refusal in the Report.

The Report is not an Insurance or a Warranty regarding the condition of the Property; it is a considered professional opinion given by the Company using reasonable skill, care and diligence, based on their experience in such matters.

When the Client instructs us to prepare calculations and details for structural remedial works, these are prepared on the basis that the building work will be directed and undertaken by an experienced, competent building contractor. The submission of a Building Regulations application is the responsibility of the client or his architect unless we have been instructed otherwise.

Our duties will be performed with reasonable skill, care and diligence. In the unlikely event of a breach of duty by ourselves, our liability shall be limited to that proportion of such liability which it would be just and equitable to require us to pay having regard to the extent of our responsibility. This is on the basis that all other consultants and advisors involved are deemed to have provided contractual undertakings to you about the performance of their services which are no less onerous than this agreement; they would also be deemed to have paid to you such a proportion which it would be just and equitable for them to pay having regard to the extent of their responsibility.

Our liability shall be limited to the reasonable cost of repair arising from any defect in the building work by reason of our breach of duty and shall exclude any other economic or financial loss. Liability to third parties for all or any part of our services provided in connection with this agreement is specifically excluded.