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Our Ref: SW599

Date: 01 March 2023

STRUCTURAL SURVEY REPORT

THE HAYLOFT, RYES FARM, PETTAUGH LANE,

GOSBECK, IP6 9SF

1.0 INTRODUCTION

1.1. The Brief

- 1.1.2 On the instructions of Mr Owens, I have been engaged to review The Hayloft, which is a detached, timber framed structure and prepare a report on its structure and its capability of being converted to domestic use.
- 1.1.3 This report has been prepared as the result of a single visit to the property where a visual survey was carried out on 21st February 2023.

1.2 <u>Methodology</u>

1.2.1 Prior to visiting the site, desk studies were carried out which were the review of geological maps of the area to ascertain the subsoil conditions. This was followed by a visit to the property where a walk round was carried out to assess the topography and any external influences which might affect the building, completed with an internal survey. This report has been compiled as a result of the findings of all of the above.

2.0 DESCRIPTION

- 2.1 The property is a detached, two storey, timber framed structure. The description is as viewed from the car parking area in front of the property.
- 2.2 It is rectangular with a steep pitched roof covered in clay pantiles with the ridge line running parallel the length of the property, as viewed from the front. The building has a timber upper floor structure which is constructed within the roof zone which is a steep pitched tiled roof.
- 2.3 The lower walls are timber framed, the building is split into four bays with two larger bays to the right-hand side which are open and two smaller bays to the left-hand side which have doors to access them. The left and right-hand ends are gables, timber framed and the rear elevation is a fully enclosed timber framed structure.
- 2.4 The surrounding area is laid to hardstandings with a public accessway and driveway to the rear and driveway and parking to the front with small sections of grass to the left-hand gable.

3.0 DESK STUDIES

3.1 A study of the British Geological Society's 1/50,000 maps for the area shows that this is an area of Lowestoft Till sub-category Diamicton. These soils were formerly classified as boulder clay and typically have a low to medium classification for shrinkage and volume change potential with respect to trees and desiccation.

4.0 EXAMINATION

4.1 <u>EXTERNAL INSPECTION</u>

- 4.1.1 The roof structure on the front elevations is in good condition with no serious deformation or sags in the roof or ridge profile. The timber frame front elevation, as stated, is open to the right-hand side and appears in good condition and the left-hand side end is also in reasonable condition and useable and functional.
- 4.1.2 The left and right gables are boarded but the right-hand gable has an open access through from the first-floor level outwards, otherwise a lower section is boarded and the rear section is boarded and all in good condition along with the plinth. The rear wall is 225 mm thick, soft red brick masonry and is in good condition.

4.2 INTERNAL INSPECTION

- 4.2.1 The two left-hand cart lodges have material stacked inside but the timber first floor stud walls, where visible, are in reasonable condition. There are individual timbers, studs and floor joists which have beetle infestation and two are cracked floor joists will require replacement. This is a small percentage of the overall timber frame.
- 4.2.2 The two left-hand side areas which have doors to the front, the inner room has timber stud with wattle and daub between the studs. The studs are in good condition. There is one ceiling/floor joist which is cracked and will require replacement. The left-hand end room has a staircase up to the first floor. The timber studs in this end room are in good condition. There are signs on the left-hand gable that there has been an historic fire and we understand that historically there may

have been a significant extension off of this side which was burnt down perhaps confirmed by the condition of this large timber post. The timber itself is structurally stable but would benefit from being strengthened for aesthetic purposes and confidence in its size. There is one floor joist which will require replacement.

- 4.2.3 The upper floor level which was in the roof zone is boarded over. There is a drop in floor level to the back right-hand corner in the floor level but the floor is structurally sound. The roof structure is mainly exposed and is sound. There is a timber ashlar wall along each side which supports the rafters. The rafters have, at high level, a horizontal brace at approximately 1.7m height.
- 4.2.4 The timber rafters generally are in good condition. On close examination there are on six rafters which have beetle attack and are of a soft wood and will require replacement, but the majority of the timbers are satisfactory. The roof structure, as noted from the external examination, has a good profile.

5.0 CONCLUSIONS AND RECOMMENDATIONS

- 5.1 This is a timber framed building of historic nature and is in an overall good condition. There are local areas which require repair, but these are minor. The structure itself has typically undergone during its life damage and repairs but overall the current structure is suitable for conversion.
- 5.2 There are minor timber members which will require to be replaced along with a new ground floor and several of the first floor joists will require local replacement as noted in the report.

- 5.3 The roof structure is sound with only a few rafters which will require replacement or new timbers along the side, but essentially the roof structure is in a satisfactory condition.
- 5.4 Therefore, we can state that this building is suitable for conversion to a habitable use.

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PHILIP STROUD BEng CEng MICE MIStructE

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Enc: Appendix A Limitations

Photographs

Appendix A

Limitations

- The report is prepared with respect to the structural elements of the building and
 does not include comment on fitments and fittings, unless considered that any such
 would have an impact on the structural elements.
- Note that we have not inspected any part of the structure that is covered, unexposed or inaccessible and we are, therefore, not able to report that any such part is free from defect.
- Photographs are included at the end of this report to indicate the damage discussed.

 Note that these photographs are included to show the nature of any damage discussed and are not intended to portray the full extent of any problem.
- Note that any comments made within this report are with respect to the structural elements of the property and are not intended to indicate or imply any financial valuation.
- During a single visit of a property, it is generally not possible to gauge whether cracks are progressive or have ceased movement. If possible, the cracks will be assessed by their condition and state to form consideration as to whether such cracking is recent and whether it poses a potential problem.
- If the condition of the cracks does not indicate historic movement, it may be necessary to monitor them over a period of time or to open up parts of the structure for further investigation.

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This survey has only included examination of timbers which are fully exposed. A reasonable effort has been made to assess timbers hidden behind boards or render, etc., but the full condition of any damage will only be proven on full exposure of the timber frame. Based on experience, an attempt has been made to predict the extent of timber degradation but there will be uncovered areas which may require additional repairs.

Furthermore, the survey has been made with a bias towards retaining as many structurally sound timbers as possible, even where disfigured by attack or rot. If the retained timbers of poor visual appearance are subsequently to be removed this should be arranged with the Local Authority or by consultation with Stroud Associates Ltd.

- 8 This report has reviewed the building at the time of the visit. No responsibility can be taken for ongoing deterioration of the structure.
- This report has been prepared to identify any structural problems in the building and is not intended to be an exhaustive list of repairs and works required. This document is not to be used for construction/repairs.
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