DMA
BUILDING DESIGNS

STRUCTURAL STATEMENT

Proposed change of use of agricultural building to dwelling:

Normans
East Street
Rusper
West Sussex
RH12 4RD

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DE1220



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Overview

We visited the above property to carry out a visual inspection and prepare a report on the existing agricultural building in support of the planning application to convert the building to a habitable dwelling.

Brief Description

The building comprises a large timber framed barn sited on the edge of the open land and screened to the rear by trees. To the front is a small fence with access gates.

The building is a single storey timber clad timber framed barn structure with a pitched roof approx. 40 degrees pitch and is approximately 12m long x 6.1m wide, made up of 3 bays internally. Roof cover is timber boarding laid horizontally overlapped to ensure water tightness which overlaying ply boarding to the underside. The roof has a considerable feature overhang at the eaves curving into a nice feature at the main entrance. Internals to the roof include rafter supported on purlins, in turn supported on king posts and tie beams, with internal timber support columns. The external side walls comprise horizontal wood board cladding with overlap, all fixed back to a timber stud frame. The ground floor is generally compacted soil and aggregate. The building is used for agricultural livestock.

Structural Observations

The building is in a reasonable state of repair with evidence that it has been well maintained over the years. All of the structural supporting walls and timber post/rafters appear to be in fair condition and free from any structural issues.

There is some evidence of some water penetration to the boarding to the underside of a small area of the roof, but this has been repaired and is not of a structural concern.

The structure due to its open front entrance has seen that this has remained well-ventilated which has helped to maintain the condition of the timber members. Most of the timber boarding/sheets to the roofs are in a fair condition, it is just at the more exposed eaves areas that are needing minor works to trim and boarding.

Conclusions and recommendations

Generally, the building is in a good condition, the only required work would be the replacement of the odd roof boarding /eaves trim and is not considered to be excessive.

For conversion to domestic usage the main floors and walls will require insulation to the current regulations, and this can all be done internally with concrete slab and timber frame and plasterboard.

In respect of the ground floor the soil and gravel will be removed from within the structure and a new internal concrete slab would be cast together with DPM and insulation and a floating chipboard floor.
There is adequate height for this to take place.

The roof would need to be insulated and plasterboard and this can all be done without affecting the current roof structure or covering.

We understand that in order to improve the appearance some new windows may need to be installed and this can all be done by trimming back the cladding and installed support framing from within the structure. Some minor repairs to the cladding and roof, with rainwater guttering added to the external eaves. None of these will affect the structural integrity.

From our inspection we see no structural reason why the existing buildings cannot be converted for domestic use.

David Mott
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