

**Report on a Structural Inspection
29th February 2024**

**Proposed barn conversion at
Pellings Barn, New House Farm
Cuckfield Rd , Hurstpierpoint BN6 9LL**



General view of the two timber framed barns

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Introduction

I was asked by Batcheller Monkhouse to make a structural appraisal of two adjoining timber framed barns in a field at the above address.

This is a specialist report limited only to the structural conditions of this building. No other aspects, such as the services or the drainage were considered.

This survey was carried out by a careful visual survey.

A full analysis would require further investigation, but this is not considered necessary as no structural problems were found.

The original barns were burnt down in a fire and rebuilt in 1995

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Observations

Size of buildings are approximately :-

Tall barn. Overall = 17.5m x 5.8m in plan and 9.0m high

Low barn. Overall = 18.0m x 4.0m in plan and 5.0m high

Construction. The structure of both buildings consists of a soft wood and oak timber frame built off brick dwarf walls.

The wall cladding is horizontal softwood boards over a 215mm thick 900mm high brick wall generally.

The roof structure is of softwood rafters and purlins and oak frames.

As can be seen from the photographs which follow; the building is generally structurally sound.

The roof of the low barn has moved but could be realigned.



Restraint The stability of the buildings is reliant on the timber braces between the timber posts and the tie beams. The brick walls also give rigidity. The location is not sheltered; however, the barn has not been damaged by wind loading.

Condition of the walls. The timber framed walls were carefully inspected. No major problems were found, the sole plates and posts were in good condition. A detail is shown below



The dwarf walls, sole plates and oak posts are all in good condition

Roof structure. The softwood roof structures have some signs of deformation. The main beams and purlins were sound. The lines of the roof pitches were reasonably straight.

The plain tiled roof covering is in good condition. Rafters, purlins, and trusses could support new insulation and plasterboard lining.

The plain tiled covering to the two roofs is in reasonable condition. The walls, floors and roof are not insulated.

Ground floor is a compacted hardcore with no concrete slab. A new concrete floor with insulation could be built to provide a solid foundation for internal partitions and could be stitched into the dwarf walls to reinforce and underpin the main structure.

Foundations. The ground conditions of a clay subsoil would indicate that the foundations are adequate.

No serious structural movement is evident.

The adjacent trees have not caused foundation movement.

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Conclusion

In my opinion these two barns are structurally sound and are capable of being converted to provide a habitable dwelling. Clearly, work will be required to bring the internal space up to Building Regulation requirements.

David Wool

6th March 2024

The photos which follow show further detail



Internal view of the tall barn showing the roof structure



Tall barn external view



This photograph shows the view of the two barns from the road



Low barn roof members – all in good condition

