Finite Design Ltd
Structural and Civil Engineers

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21 November 2025

Mr Ben Nicholls
Holly Bank
Fryern lane
Storrington
West Sussex
RH20 4NE

Dear Sirs

RE: Fd6111. Duckmoor Barn, Wooddale Lane, Billingshurst, RH14 9DZ

Further to our first visit to the above property on the 8th May 2025 to inspect the existing barn with a view to preparing a structural Report in support of a planning application for conversion to a single residential dwelling. We now report as follows.

Brief description

The property is north a facing steel frame barn structure. The building is made up of a 3 bay steel portal frame structure approximately 9x6m with bays of 3m each. The ridge height is about 3.5m with an eaves height of 2.8m, with the ridge line running east to west. The building is also made up of a steel lean-to frame off the southern side approximately 9x4.5m with an eaves height of 2.3m. Please see the attached key plan. Sk1. This also shows a basic grid system to identify particular areas.

The site is generally flat, surrounded by coarse grass trees and shrubs. The barn is largely empty with just a few farm machine parts, fence panels and general light storage.

Structural Observations

Our inspection was limited to a visual inspection from ground level only at this stage. The barn's steel frame has a corrugated cement fibre roof sheeting supported on steel purlins. The external walls are largely open sided with some areas of cement fibre sheeting to the gables and the southern elevations, supported on steel sheeting rails.

There is a blockwork external wall about 1.5m high on the southern (3A-D) and west elevation (A-1-3), with a similar internal dividing wall between the main barn and the lean-to (2A-D).

From our inspection it would appear that stored hay or similar has caught fire in the south west corner of the lean-to. The heat from the fire was sufficient to cause the steel frame to distort and buckle out of shape on grid line A 3-2. This includes the column and portal rafter at 2A. The heat damage in this area is extensive and has also caused the block wall locally to be badly cracked and unstable, with local areas having collapsed.

Aside from the fire damage to the steel frame and walls in the south west corner, the remaining steel frame appears to be in reasonable condition. With only light surface rusting that requires only cleaning and painting. The primary structure appears to be square and sound with all the principal members in place.

The roof and wall sheeting is a cement fire corrugated system that likely contains some asbestos. The sheeting is in poor condition with serval large holes mainly caused by the fire.

The floor to the barn appears to be currently just a dirt floor with areas of rolled hardcore as a finish.

Conclusions and Recommendations

From our inspection, it would appear generally the main barn frame is in reasonable order where not affected by the fire. We understand from the proposal that the western bay between grids A 1-3 and B1-3 is to be excluded from the application together with a large area of the southern lean-to.

Therefore, the proposed conversion falls within the non-fire damaged section of the building. The proposal is all single storey construction; the existing steel frame only need carry the weight of the insulated roof and wall sheeting. The existing cement fibre sheeting is relatively heavy and therefore any new insulated sheeting panels should be selected to ensure they do not weigh any more than the existing sheeting. Then the existing frame will be suitable without any major repairs or structural works.

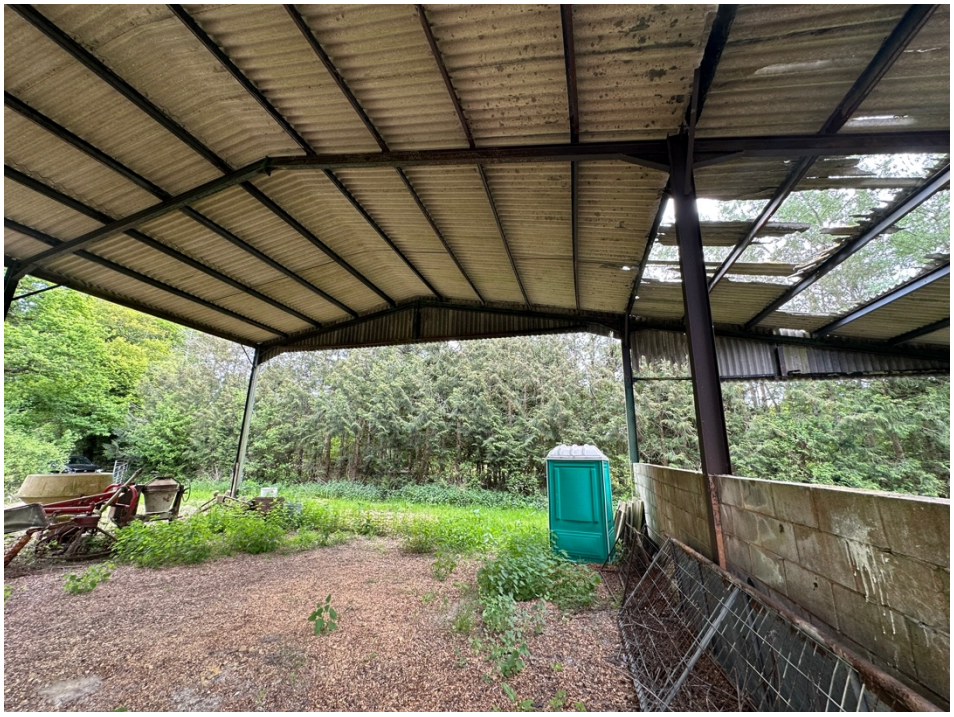
The fire damaged section of the existing frame should be taken down and removed from site as part of any future works.

We trust the above meets your requirements; should you have any comments or questions, please do not hesitate to contact us directly.

Yours faithully

Steve Saunter
For and on behalf of Finite Design Ltd

Internal View of existing barn looking from point A/2towards the eastern gable end.



Internal view of the fire damaged south west corner of the lean-too