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PAY/EM/63830

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Email: IanH@catesbyestates.co.uk

16th June 2025

Dear Ian,

RE: Clear Water Barn, Fox Hill, Haywards Heath

As requested, I visited the above site on Thursday, June 12th to inspect the structural condition of the Barn. The purpose of the inspection was to provide a report upon the suitability of the structure to conversion for domestic or commercial usage.

General

The Barn is situated on level low-lying ground to the East of the B2112, Lunce's Hill Road to Haywards Heath. The Barn is essentially of timber framed construction. The main Barn has six bays with 5 timber cross frames. There is a catslide roof on the east side containing additional accommodation.

A sketch plan 63830/SK01 is attached for reference purposes. A number of photographs were taken at the time. Photographs numbered 1 to 31 are attached.

Inspection

The roof is clad with clay tiles. The ridge line is good and there is no particular evidence of excessive deflection or deformation of the rafters.

The west elevation is of timber frame construction off a brickwork sub-structure wall. The west elevation is clad with weatherboarding which overlaps the sub-structure brickwork.

The south gable end wall is of similar construction with weatherboarding externally and a double door opening adjoining the catslide. The north gable end wall is of 340mm bonded brickwork with a full-height door centrally placed.

The rear walls to the lean-to areas are of timber frame construction but with brick infilling. Brick panels vary between half-brick and full-brick thickness. There has been some displacement of the rear wall to the south lean-to. The base of the wall has moved outwards and there has been some remedial concrete underpinning – see photographs numbers 15 & 16.

There has also been some movement to the rear wall of the north lean-to. There has been some rotation or settlement of the foundation to the rear wall.

The main roof is constructed of sawn rafters approximately 100 x 75 at 400 centres supported at the mid-span point by sawn purlins approximately 200 x 75. The purlins are in turn supported by timber struts braced from the main frame tie beams. The rafters meet at a ridge board at the apex and are birdsmouthed onto the wall plates. There are no side braces to the rafters but longitudinal stability is provided by the two hip ends.

The main cross frames and external walls are of more traditional timber frame construction using oak timbers and traditional joints.

The majority of local timber-framed barns use timber cross frames which have high-level knee braces. The braces are tenoned into the main posts and cross beams.

The other variant does not have high-level knee braces but have raking diagonal timber struts which meet on a timber plate at floor level.

Here frame number 4 is of the raking strut type and frame number 3 is thought to have also been of the raking strut type - see photographs numbered 7 to 10.

Some of the other frames have had high-level braces spiked to one side of each frame and elsewhere softwood raking struts have been introduced - see photographs 2 to 6.

It was noted that a newer concrete floor had been introduced into the northern half of the barn perhaps at the same time that the full height door was introduced. It may be the case that these alterations to the original raking struts and braces were carried out at that time.

The timbers to the main frames were all suitably sized with posts varying from 200 x 200 to 220 x 220 mm. The main frames were generally performing satisfactorily. There was however one frame, frame number 2 where the post-stock has split - see photograph 3. Some tension strapping has been introduced to tie the two opposing wall plates.

The timber framing to the main front elevation (west) was fairly traditional with immediate posts, mid-height rails, and infill timber studding. Most bays were adequately braced. It was noted that some local concrete underpinning had been carried out at the south end. The older timber framing had been supported off new softwood plates off some shuttered concrete underpinning – see photograph 12.

The timber framing to the east frame (between the main barn and the lean-to areas) had similar main framing but was more open with fewer secondary studs – see photograph 11.

The lean-to areas were originally of timber frame construction open to the east but have subsequently had the outer walls infilled with brickwork. The brick panels are of half-brick thickness or full-brick thickness. As noted previously the rear walls show signs of past movement and some remedial works have been carried out.

It was not possible to access the south lean-to area.

The north lean-to area had a brick paved floor laid to fall towards the rear. The timber rafters were of more random sizes and rough cut. Some sizeable timber cross-bracing has been introduced at the main second frame position – see photographs 21 and 22.

The lean-to floor was at a lower depth than the main barn. The sub-structure wall to the east frame was exposed in places and could be seen to be built using sandstone blocks – see photograph 23.

The north half of the main barn has a concrete floor judged to be in reasonable condition. Elsewhere there is an earthen floor.

Comments and Concluding Remarks

The timber framing was considered to be in reasonable condition with the various timber sections being suitably sized. There is an unusual mix of knee-braces and raking struts providing stability to the mainframes. It is thought that the barn may originally have had more frames with raking struts but these were removed to accommodate the concrete floor and to provide more useable floor space. To address this additional raking struts and high-level knee braces have been introduced.

The second frame shows a large split between the tie beam and the poststock. This has presumably necessitated the strapping repair and the introduction of additional bracing in the lean-to.

There is evidence of some past movement to some of the walls to the lean-to areas. Some local concrete underpinning has been carried out. The foundations and ground conditions are not known but according to the Geological map of the area the site is underlain by soils of the upper Tunbridge Wells sand series. Given the neglected state of the building, it is difficult to judge whether there is any real evidence of any ongoing movement to the lean-to walls.

It may well be the case that the foundations do not necessarily comply with the requirements of the Building Regulations however, there was little or no evidence of ongoing movement.

The general condition of the timber frame is such that I consider it will be suitable for conversion for domestic or commercial usage. Some remedial works will of course be necessary. A permanent repair to the second cross frame will be necessary and there will also be a need to rationalise and improve the stability bracing to the other cross frames.

The suitability of the foundations to be the lean-to areas will need to be assessed and monitored. Subject to the final proposals for the building some local mass concrete underpinning may be required.

Yours sincerely,

Philip Young
BSc (Hons), CEng, FIStructE, MICE

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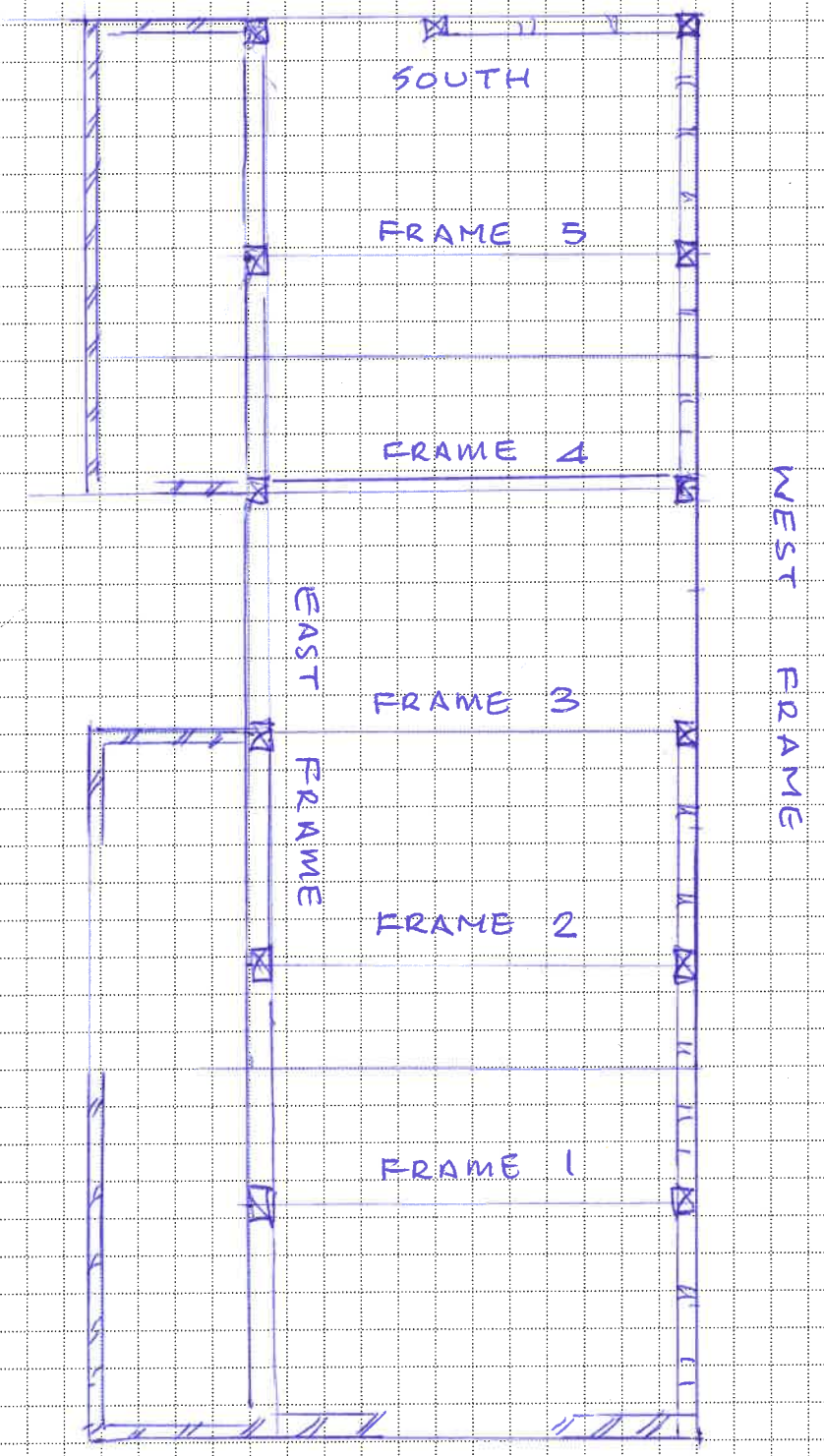
Job Title			Item		
CLEAR WATER BARN			SKETCH PLAN		
Designed by	Date	Checked by	Job No.	Sheet	Rev.
			63830	SK01	



63830 – CLEAR WATER BARN, HAYWARDS HEATH – 12TH JUNE 2025

PHOTOGRAPH 1

PHOTOGRAPH 2

PHOTOGRAPH 3

PHOTOGRAPH 4

PHOTOGRAPH 5

PHOTOGRAPH 6

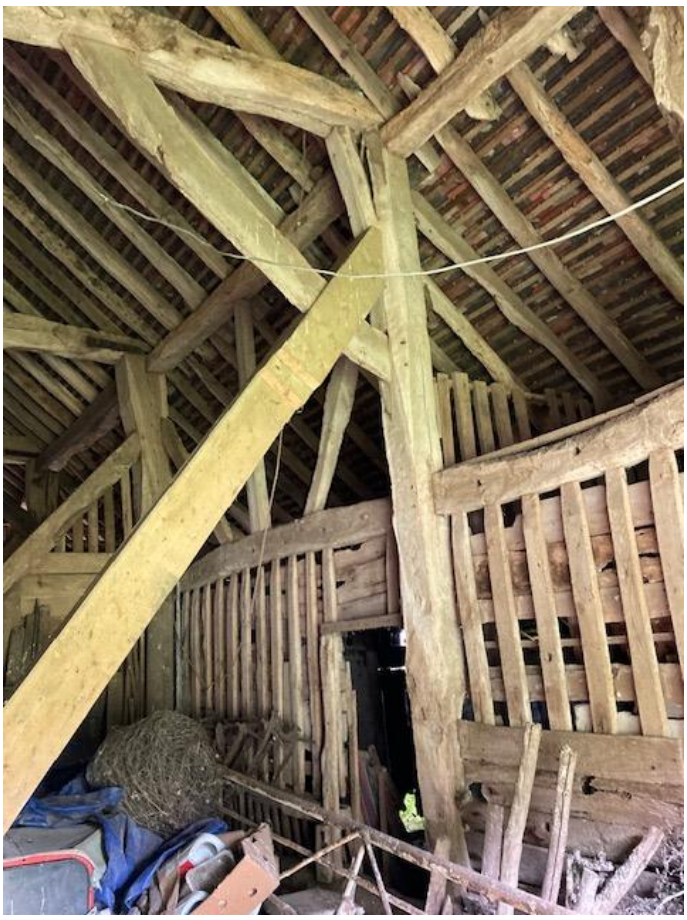
PHOTOGRAPH 7

PHOTOGRAPH 8

PHOTOGRAPH 9

PHOTOGRAPH 10

PHOTOGRAPH 11



PHOTOGRAPH 12

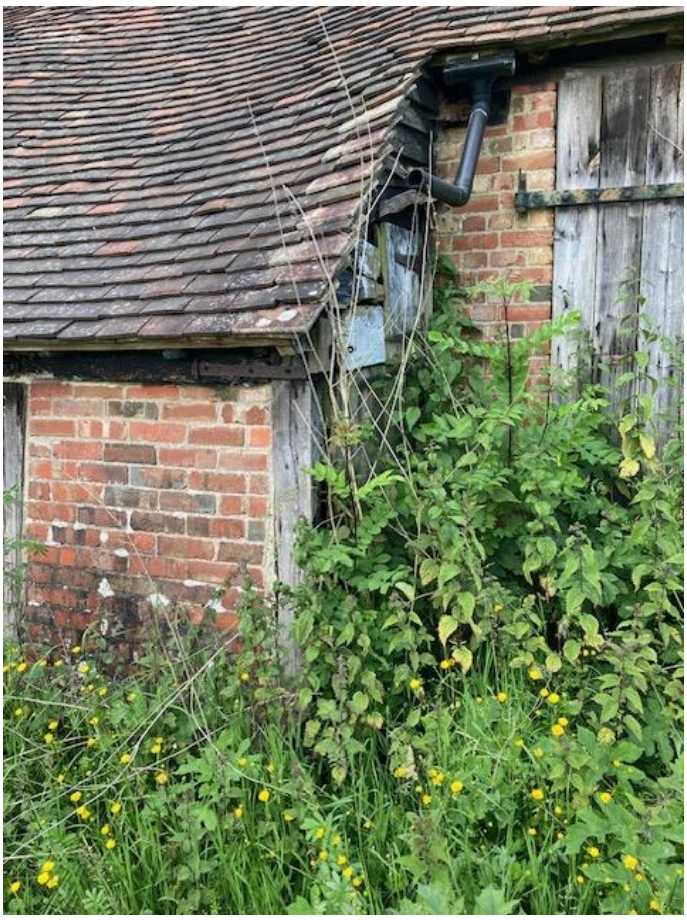
PHOTOGRAPH 13

PHOTOGRAPH 14

PHOTOGRAPH 15

PHOTOGRAPH 16

PHOTOGRAPH 17



PHOTOGRAPH 18

PHOTOGRAPH 19

PHOTOGRAPH 20

PHOTOGRAPH 21

PHOTOGRAPH 22

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PHOTOGRAPH 27

PHOTOGRAPH 28

PHOTOGRAPH 29

PHOTOGRAPH 30