

Your ref J Lynch

Our ref AR/2103/jap

24 February 2021

**CHURCH HILL FARM, BLACKWELL . DERBYSHIRE.**

**ONE AND A HALF STOREY BARN WITH EXTERNAL STAIR.  
REPORT ON THE STRUCTURAL ELEMENTS.**

To be read in conjunction with the Architects Report.

**ROOF AND FIRST FLOOR**

The roof comprises slate tiles on timber rafters and purlins spanning to two internal timber trusses with raised ties. The southern truss shows a local failure to its principal rafter.

The first floor comprises heavy timber floor boards supported by two main timber internal beams and the masonry end walls.

We did not enter the first floor for reason of safety.

Missing tiles have allowed water ingress and extensive deterioration can be seen in all these timber elements including the first floor. The timber wall plates appeared to be damp.

We are of the view that the roof structure has partly failed causing spread at the walls.

**ACCESS STAIR TO THE FIRST FLOOR**

Entry to the first floor is by means of an external brick staircase which is presently unsafe due to the handrail being broken and hanging loose.

The brick wall supporting the stair and the steps is displaced away from the end wall of the barn by some 100 mm.

**WALLS**

The external walls are mainly constructed in 225 mm brickwork and not incorporating headers.

The upper section of the south west gable wall has been rendered, presumably because of past extensive weathering.

The lower section of this wall is still weathered but to a lesser degree.

Extensive weathering has taken place generally and the wall containing the three door openings is seriously bowing outwards in both the horizontal and vertical planes at the first floor level which is due partly to roof spread, the of lack of bonding and buttressing from internal cross walls and the weakening effect of the three door openings.

The lower section of the gable wall at the stair is very badly weathered and generally the brickwork is of a poor standard, again with a lack of headers which appears to be typical throughout.

**LINTELS**

The front wall contains one stone lintel over the left door which is very badly weathered and very small inadequate timber lintels over the centre and the right hand door.

Small header brick lintels are present over the first floor door and window at the external stair wall. Windows to the west wall, one in ground storey and one in the first storey appearing to be arched brickwork.

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**CONCLUSIONS**

We are of the view that the building should be removed for the following reasons :-

The existing roof trusses and floor members are no longer effective, potentially dangerous and would require replacements.

The present state of the walls is such that extensive rebuilding and propping would be required i.e. it is not practical to partly replace such large defective masonry sections.

During any such replacements long term temporary propping would be required.

Our experience is that builders do not favour this type of extensive replacement work on account of overall cost and safety.

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We have not inspected timber members or other members which are not exposed or not accessible and we are therefore unable to report such members to be free from defects.

We are not expert in matters of damp proofing, timber infestation, rot, heating, plumbing or electrical installations and expert advice should be sought from specialists on these matters.

It should be noted that the comments made in relation to foundation conditions where trial holes have been excavated are based on information revealed by these trial holes and that conditions away from the trial hole positions can vary and be different.

It should be noted that the above items are not a definitive list of all defects and that a more detailed inspection should be made at the alteration works stage when sections can be opened up, made more accessible etc. particularly in relation to following :-

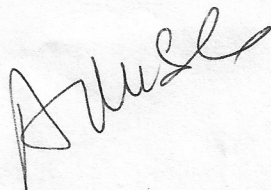
State of any brickwork behind plaster or wall finishes- assume poor until proved.

Timber members where access for closer inspection is required- assume varying degrees of cross section loss and some strengthening to be required.

State of timber members which are cased or covered- assume deteriorated in some form until proved.

During our investigation we did not see any signs of asbestos.

We are not expert in matters relating to asbestos and advice from professional consultants / firms should be sought if asbestos is found at this site.



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