

FAIRCLOUGH
CONSULTING STRUCTURAL ENGINEERS
The Old Stables, Potts Lane, Ollerton, Cheshire. WA16 8SF
Tel: 01565 653768

STRUCTURAL ENGINEERS INSPECTION REPORT

of

**STONE BARN (BARN B)
TOMKIN HEAD FARM
TOMKIN LANE
STANLEY
STAFFORDSHIRE
ST9 9NA**

1 August 2024

Report No: 240716

INTRODUCTION

INSTRUCTIONS

1. Property to be inspected : Stone Barn (Barn B)
Tomkin Head Farm
Tomkin Lane
Stanley
ST9 9NA
2. Client : Gillian Bailey
3. We have been instructed to :

Inspect and report on the structural load bearing elements of the property.
4. The report is required for advice for a Planning Application for change of use to residential.
5. The property was inspected on the 16 July 2024.

EXTENT AND LIMITATIONS OF THE SURVEY & REPORT

6. This inspection report is limited in its scope to the instructions as noted above. We have not inspected parts of the property or defects that are not relevant to the instructions unless noted in this report. Our inspection was a visual inspection internally and externally as necessary subject to safe and reasonable access being available. We shall only report upon those structural defects that materially affect the stability of the property and provided that these defects are reasonably detectable at the time of our inspection. Whilst we will use all reasonable skill and care in preparing this report, it should be appreciated that we cannot offer any guarantee that the property will be free from future defects or that existing defects will not become worse.
7. This report has been prepared for the named client and for a particular purpose. Any liability, which may arise, is therefore restricted to the client and the client's professional advisers in relation to that stated purpose.

ORIENTATION

9. For the purpose of this report, unless otherwise stated, the front elevation is that which faces the public road (South) and all references to left and right are given as if viewing the property from the front.

DESCRIPTION OF THE PROPERTY

10. The property comprises a traditionally constructed two storey agricultural barn with stone elevations and a pitched tiled roof. The barn is at least 130 years old.
11. No details were available of any structural problems that may have occurred, nor of any structural repairs or structural alterations that may have been made to the property or to neighbouring properties except as noted in this report.

EXTERNAL OBSERVATIONS

ROOF

12. The main roof was observed from ground level. This roof is pitched and covered with tiles. The roof is free from significant deflection or distortion.
13. There is a small single storey extension to the left hand end. This part also has a pitched tiled roof. This roof is significantly deflected.

FRONT ELEVATION

14. This elevation was visually inspected from ground level. The elevation is formed from stone faced solid masonry. Horizontal lines are level within normal tolerances. The elevation is slightly bowed/distorted. There are no indications of roof/eaves spread. There are no structurally significant cracks, gaps, or other signs of recent structurally significant movement.

LEFT (GABLE) ELEVATION

15. This elevation was visually inspected from ground level. The elevation is formed from stone faced solid masonry. Horizontal lines are level within normal tolerances. The elevation is slightly bowed/distorted. There are no indications of roof/eaves spread. There is a vertical crack to the upper rear part of the elevation; the crack has weathered and rounded edges indicating that it is old.

REAR ELEVATION

16. This elevation was visually inspected from ground level. The elevation is formed from stone faced solid masonry. Horizontal lines are level within normal tolerances. The elevation is more bowed/distorted than the other elevations but still well within the limits expected in a barn of this type. There are no indications of roof/eaves spread. There are no structurally significant cracks, gaps, or other signs of recent structurally significant movement.

RIGHT (GABLE) ELEVATION

17. This elevation was visually inspected from ground level. The elevation is formed from stone faced solid masonry. Horizontal lines are level within normal tolerances. The elevation is slightly bowed/distorted. There are no indications of roof/eaves spread. There are no structurally significant cracks, gaps, or other signs of recent structurally significant movement.

INTERNAL OBSERVATIONS

MAIN ROOF STRUCTURE

18. My inspection was limited by safety concerns because of rotten floor boards at first floor but I was able to get a reasonable view of the roof structure. The roof structure consists of two substantial timber trusses supporting large section purlins and timber rafters; all of which appear to be in good condition.

SINGLE STOREY ROOF STRUCTURE

19. This roof structure is visible from the ground floor. The roof structure consists of a timber truss, purlins, and rafters. Parts of the truss are rotten. Purlins are rotten; some have been repaired with steel, and one has been replaced with steel but is bent.

MAIN INTERNAL WALLS

20. There are no structurally significant cracks, gaps, or other signs of recent structurally significant movement.

FIRST FLOOR

21. The main part of the barn has a first floor. This floor is of suspended timber construction supported at mid-span on steel beams and steel columns. The timber joists appear to be in a reasonable condition but I suspect that the upper surfaces will be affected by rot. The joists are of small size and widely spaced. A detailed assessment can only be made when the floor boards are lifted and the proposed layout of rooms is known but I suspect that they will fail to meet building regulations standards for deflection and probably for strength.

GROUND FLOOR

22. The ground floor is a typical agricultural concrete floor; it is distorted and out of level.

CONCLUSIONS & RECOMMENDATIONS

23. This building is structurally suitable for conversion to habitable use.
24. The elevations are robust and although slightly distorted this is well within acceptable limits and can easily be dealt with by introducing additional restraint from internal floors, walls, etc as part of the normal conversion works.
25. The roof structure to the main two-storey part is robust and should be suitable for use in the proposed conversion subject to detailed checks at Building Regulations Stage.
26. The roof structure to the small single storey part will have to be replaced with new.
27. The crack on the left-hand gable should be repaired by raking-out and deep re-pointing.
28. There will be numerous minor structural works to carry out, for example replacing cracked stone lintels, but significant re-building will not be required.
29. A new ground floor will be needed.
30. It is highly likely that a new first floor will be needed.
31. Foundation depths should be checked at Building Regulations Stage.

D.Fairclough BSc, MBA, CEng, MICE, MStructE, MInstRE
For Fairclough & Co Ltd

