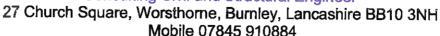


W. L. Robinson B.Eng.(Hons.); C.Eng.; M.I.C.E. Consulting Civil and Structural Engineer





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Mr J. Athay The Fold Selside Settle

North Yorkshire BD24 0HZ

Your Ref:

Our Ref:

Date: 20 November 2017

For the attention of Mr J Athay

Re: Structural Condition Report of the Barn Slated Laithe, off Paa Lane, Paythorne, Clitheroe

Terms of Reference

At the request of Mr J. Athay I have carried-out a visual, structural inspection for the titled property with consideration for converting the existing barn into three-bedroomed family home The inspection was undertaken on 11 November 2017.

Introduction

The building comprises mostly solid stone walls, of varying thickness, but generally 450mm to 600mm for the external walls, which support a corrugated steel roof on timber purlins on timber trusses. The external walls are made up of both sandstone and limestone

The intention is to convert the existing barn into a domestic dwelling with limited alteration to the exterior fabric.

Whilst considering the current, structural condition I have taken into account the end use and have studied the proposals shown on the drawings 276/1 by the Architect, Mr J. Athay under instruction from wbw Chartered Surveyors.

Summary

The existing masonry structure, with minor, localised, external repairs will prove suitable for the intended use. The existing roof will need to be completely replaced, utilising some of the roof space as habitable area.

There is adequate surface-water drainage, electricity and water supply locally for conversion. Foul water provision may have to be treated by a septic tank. Biomass fuel is recommended for heating.

With a limited amount of sympathetic re-building and a complete new roof, the existing structure should prove structurally adequate for conversion, providing a unique, quality family home.

Findings (see plates 1 to 11)

The solid walls of the barn have an outer skin of predominantly, square-coursed, pitch-faced sandstone with some limestone and an internal skin of random rubble. The outer skin jointing is pointed in some areas, but not all, with lime mortar. The inner leaf of random rubble is bedded and jointed extensively with lime mortar The external corners of the building comprise stone quoins for the full height. The North-West external elevation has a limited amount of random rubble infill that is not original construction (Plates 1 and 2). The South-West elevation, which is the primary elevation for weathering, has some localised collapse (Plates 3 to 5).

The solid external walls are generally in good condition (eaves lines are vertical and true) with limited localised collapse, particularly confined to the South-West elevation. Much of the principle timber structure supporting the roof is in good condition with no discernible signs of distress. The roof structure, whilst in reasonable condition, will require replacing with a functional, insulated slated roof, for domestic purposes.

Conclusion

There are no signs of subsidence or settlement (the coursing and eaves lines remain relatively true and horizontal). On rectification of the localised collapse and repair/replacement of the pointing, the walls will prove to be more than suitable for the proposed redevelopment. It should be noted that the jointing to the outer skin is 'tight' in places and may prove difficult to point, in which case the inner skin of the solid wall should be re-pointed to make weather-proof, as per the original construction.

The existing roof covering will need complete, replacement with new slates on suitable felt on new timber rafters and purlins, appropriately insulated, Provision of guttering and rainwater pipes will prevent future deterioration of the external walls.

The proposed impermeable area of redevelopment is significantly less than that required for Sustainable Drainage under the Town and Country Planning (Development Management Procedure)(England) Order 2015 for domestic use.

Yours Sincerely

10.00.

W. L. Robinson B.Eng.(Hons.); C.Eng.; M.I.C.E.





Plates 1 and 2 Illustrating the North-West elevation

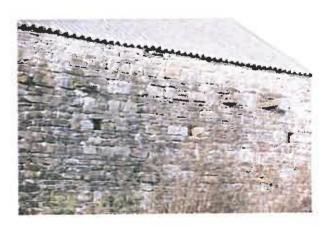




Plates 3, 4 and 5 Illustrating the South-West elevation.







Plates 6.and 7 Illustrating the view of the South-East elevation





Plates 8.and 9 Illustrating the North-East elevation





Plates 10 and 11. Illustrating the internal layout looking towards the South-West Gable

Location Plan (not to scale)

