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Structural Survey of Outbuildings at Rowston Farm

October 2022

Investigation and report undertaken by Mr S. P. Rich BSc, CEng, MICE Chartered Civil Engineer

Signature: Stephen Rich

Date: 13th October 2022

Report prepared for: Mr D. Lewis Hean Castle Estates

Structural Survey of Outbuilding - Rowston Farm

Introduction

This is a report into the structural condition of a farm outbuilding. The report is needed to accompany a planning application to convert the structure to a dwelling. The site was visited on 7^{th} October 2022.

This appraisal is based on a purely visual inspection and as such the condition of woodwork or any other parts of the structure that are covered, unexposed or are not readily accessible have not been reported on.

I did not undertake any excavation work to examine ground conditions or foundations or test drains.

In accordance with the BRE Digest 251 Classification of Cracks the following terminology can be defined as follows:

Hairline being up to 0.1mm

Fine being up to 1.0mm

Slight being up to 5mm wide

Moderate being 5-15mm wide

Severe being 15 to 25mm wide

Very severe being over 25mm wide.

Location and Site Description

The farm is some distance from the village of New Hedges. The structure is on ground that slopes from south west to north east.

Survey of Main Structure

The building is two storey stone masonry.

External Walls

Front	Possible slight outward lean from floor joist up. Otherwise wall is in satisfactory
elevation	condition.
North	Mainly behind flat roof annexe. The only visible area is above annexe roof. Visible
west	area is in satisfactory condition.
elevation	
Rear	Ground level is significantly higher this side. Some minor areas of missing masonry
elevation	otherwise in satisfactory condition.
North	Ground level on this gable elevation is at first floor level. Wall is in satisfactory
east	condition.
elevation.	

<u>Structural Survey of Outbuilding – Rowston Farm</u>

<u>Internal Structure - Ground Floor</u>

Front	Wall is in satisfactory condition. Some timber lintels should be replaced.
elevation	
North	Minor diagonal crack from ceiling in north east corner. Otherwise in satisfactory
west	condition.
elevation	
Rear	In satisfactory condition.
elevation	
North	In satisfactory condition
east	
elevation.	
Ceiling	Covered in first floor survey
Floor	Where visible is concrete and is in satisfactory condition

<u>Internal Structure - First Floor</u>

Front	Slight outward lean. Otherwise in good condition.
elevation	
North	In satisfactory condition.
west	
elevation	
Rear	In satisfactory condition.
elevation	
North	In satisfactory condition
east	
elevation.	
Floor	Floor joists are mainly in reasonable condition although appear to be undersized for
	the span. Some joist and boarding have suffered water damage and rot.

Roof

Structure	The roof structure is A frames with purlins and rafters. The A frame ties are higher
	than ideal and the legs have pushed the wall outward slightly.
Sheets/tiles	Roof covering is slates. Condition is reasonable but with some tiles missing and
	some timber work rotted.
Line/level	The line and level are reasonable.
Drains	Gutters and downpipes are in poor condition.

Structural Survey of Outbuilding - Rowston Farm

Conclusions

The roof is not satisfactory and will need strengthening in some way. It is also likely that the floor will also need strengthening.

The condition of the structure is generally reasonable and is suitable for renovation and conversion to a dwelling.

Survey of Annexe

The building is single storey mainly stone masonry and has some areas of more recent blockwork.

Ground Floor

Front	This wall has a large opening. The wall is in satisfactory condition.
elevation	
North	Evidence of damp internally. Some minor cracking associated with location of
west	purlins. Externally the current ground level is below the base of the wall. If this
elevation	remains the case in future development some local under pinning would be
	necessary.
Rear	Externally the wall has been repaired with blockwork in the past, the interphase with
elevation	the old masonry was levelled with a timber board, this is not satisfactory. There are
	also areas where masonry has been lost from the wall.
South	Evidence of damp internally. Otherwise in satisfactory condition.
east	
elevation.	
Floor	Where visible is concrete and is in poor condition.

Roof

Structure	The roof has purlins supported by structural rafters. Condition is adequate.
Sheets/tiles	Roof covering is profiled sheets which are in reasonable condition
Line/level	Where visible the line is adequate.
Drains	Gutters and downpipes are in satisfactory condition.

Conclusions

The roof will need to be replaced. Underpinning may be necessary in places. The floor also will need work. The structure is generally in satisfactory condition and is suitable for renovation and conversion to a dwelling.