



R. G. PARKINS & PARTNERS LTD
CONSULTING CIVIL & STRUCTURAL ENGINEERS

**REPORT ON 'BETTY BARN'
WADDINGTON**

Our ref: K35392/DH/AG

March 2019



R. G. PARKINS & PARTNERS LTD
CONSULTING CIVIL & STRUCTURAL ENGINEERS

Report on 'Betty Barn' Waddington

Version	Amendment	Date
1		March 2019

Notice

This report is for the sole use of the Trustees of the Colhurst Estate and their professional advisors. R G Parkins & Partners Ltd will not be held responsible for any actions taken or decisions made by any third party as a result of this report.

Meadowside Shap Road Kendal Cumbria LA9 6NY

Tel: (01539) 729393 Fax: (01539) 740609 Email: mail@rgparkins.com

Also at: 97 King Street Lancaster LA1 1RH Tel: (01524) 32548 Fax: (01524) 843989

Directors :-

A Roberts BEng (Hons) CEng MICE J R Parkins Dip Eng HNC

Associates :-

T Melhuish MEng PhD CEng MICE E Roberts MEng (Hons) CEng MICE
S Winstanley Eng Tech TMICE CMAPS O Sugden MEng

Registered Office: Meadowside Shap Road Kendal Cumbria LA9 6NY Reg No: 4107150



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1.0 BRIEF

- 1.1 To visit the barn to inspect its structural condition and report on its suitability for conversion.
- 1.2 The inspection, which was from ground level only, was carried out on 28 February 2019 in cold overcast conditions.
- 1.3 No opening up works were carried out during the inspection.
- 1.4 This report is for the sole use of the Trustees of the Colhurst Estate and their professional advisors. R G Parkins & Partners Ltd will not be held responsible for any actions taken or decisions made by any third party as a result of this report.

2.0 EXTERNAL OBSERVATIONS

- 2.1 The barn is a rectangular in plan building, approximately two storeys high to eaves. The ridge line of the barn runs in a direction east to west and it is located immediately adjacent to a farm access track.
- 2.2 The current use of the barn is for storage of materials associated with agriculture.
- 2.3 The general construction of the barn is from random rubble stone walls with dressed stone quoins forming the corners. The roof is clad with stone slabs.
- 2.4 The north elevation is reasonably straight. It has a main opening which is formed with an arch. The voussoirs forming the arch are in good condition and are generally well set. The arch profile does not appear to have suffered any deformity.

There are two other openings within this elevation, a small window to the left of the arched opening and a door adjacent to the west gable.

In general, the wall panel, pointing and corners are in good condition, although there is a slight discontinuity adjacent to the east corner.

- 2.5 The east gable wall is reasonably straight with well formed corners. There are two openings at ground level adjacent to each corner, the heads of which are reasonably level. The stonework and pointing are in reasonably good condition.

- 2.6 The west gable wall is generally straight with well formed corners. There is one window opening at ground floor level. An adjacent opening has been blocked up. The masonry towards the south corner, particularly at the top right hand corner, is more open jointed and missing pointing than the rest of the panel.
- 2.7 The south elevation is straight, plumb and in good condition. A previous door opening in the centre of the panel at ground floor level has been infilled.
- 2.8 The roof, which is clad in heavy stone slabs, is undulating on both pitches.

3.0 INTERNAL OBSERVATIONS

- 3.1 Generally internally, the areas that are visible on the wall panels are in a similar condition to those externally.
- 3.2 There is a full height stone cross wall in the building which supports the roof purlins and a small hay floor within the shippon to the east side of the building.

The wall is reasonably plumb and in generally adequate condition for its age.

- 3.3 There is a timber first floor in the east end of the building. It is envisaged that this will be removed during the conversion.
- 3.4 The roof structure of the barn consists of rectangular timber purlins supporting timber rafters. The purlins are orientated at 90° to the pitch of the roof, and are supported on gable walls, the internal cross wall and a single timber king post truss.

Due to the weight of the roof slabs the purlins have deflected. The truss looks to be in good condition although one of the internal struts is dislodged.

4.0 CONCLUSIONS & RECOMMENDATIONS

- 4.1 Our overall view of the barn is that the structure is in good condition for its age. It is unlikely that any of the walls will require taking down and rebuilding, apart from where new openings are proposed.
- 4.2 As with any conversion, discontinuities in the stonework should be re-pointed and stitched if necessary, to knit the fabric together.

4.3 It is unlikely that the purlins and rafters will be able to be re-used as part of the conversion. The truss however does look to be in good condition and of adequate proportion to be included as part of the works. The internal strut will require repair/replacement.

5.0 **DISCLAIMER**

5.1 We have not inspected woodwork or other parts of the structure which are covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from defect.

5.2 We advise that a specialist timber condition surveyor be engaged to inspect all exposed timbers and advise on the extent of any rot or worm infestation.

5.3 Copyright of this report remains the property of R G Parkins & Partners Ltd.



D Heron BSc CEng MICE MCIHT IMA PS
R G Parkins & Partners Ltd

March 2019

APPENDIX A

PHOTOGRAPHS

KENDAL Meadowside Shap Road

Job **Betty Barn, Waddington**

Date

**March
2019**

LANCASTER 97 King Street

Title **Structural Report**

Initials

DH



1) East elevation



2) North elevation

KENDAL Meadowside Shap Road

Job **Betty Barn, Waddington**

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LANCASTER 97 King Street

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3) Some open joints and discontinuity to adjacent corner



4) West elevation

KENDAL Meadowside Shap Road

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5) South elevation



6) Timber roof truss