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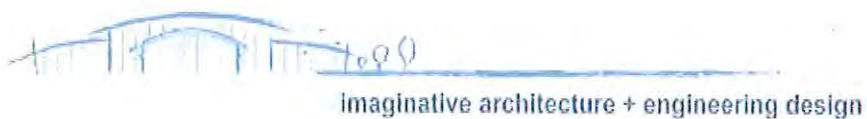
**VISUAL INSPECTION OF RANGE OF BARNs AT
CALFTHWAITE FARM, CLOUGHTON
SCARBOROUGH**

Rev A

FOR

MR. & MRS. McQUADE

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1.0 INTRODUCTION

- 1.1 We confirm that we made a visual inspection of a range of barns at Calfthwaite Farm, Cloughton, Scarborough on 18th May 2016.
- 1.2 The inspection and report is confined to matters relating to structural stability, and suitability for conversion to a residential related use.
- 1.3 As is typical in such conversion schemes, all of the roofs will be rebuilt to meet current Building Regulation Standards, and so their condition is not referred to in this report.
- 1.4 All of the walls consist of coursed sandstone at least 450mm thick.
- 1.5 The layout of barns is shown on drawings D10989-01.
- 1.6 The Report is to compliment a 'Pre Application Enquiry' to the National Park Planning Authority in respect of the proposed conversion of the buildings to a residential-related use (2 no. units). It should be read in conjunction with the documentation accompanying that submission.

2.0 BARN A

2.1 Observations

- 2.1.1 The east facing wall of Barn A can be seen in photographs 1 and 2. The wall is in reasonable condition except for a vertical opening of the perpend joints below the most southerly window and a general lack of mortar in the joints.
- 2.1.2 The south facing wall can be seen in photographs 3 and 4. The wall is in reasonable condition except for an opening of the perpend joints on the west side of the main opening and a general lack of mortar in the joints.
- 2.1.3 The west facing wall can be seen in photographs 5 and 6. The wall is in reasonable condition except for damage above the most southerly window and an opening of the perpend joints below the window.
- 2.1.4 The inside of Barn A can be seen in photographs 7 and 8. The walls appear to be in reasonable condition and there is evidence of a previous second floor.

2.2 Barn A - Conclusions and Recommendations

- 2.2.1 The barn is in reasonable structural condition and is suitable for residential use subject to the recommendations below and is capable for conversion to a residential-related use without substantial rebuilding. The recommendations below should be implemented as part of any such conversion.

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- 2.2.2 The opening of the perpend joints should be repaired by installation of Helifix bars in every other bed joint across the openings.
- 2.2.3 The damage above the window on the west facing wall should be repaired.
- 2.2.4 The general recommendations given in Section 7 below should be followed.

3.0 BARN B

3.1 Observations

- 3.1.1 The west facing wall of Barn B can be seen in photographs 9 and 10. The wall is in reasonable condition except for a gap between Barn A and Barn B and a general lack of mortar in the joints.
- 3.1.2 The north facing wall can be seen in photograph 11. The wall is in reasonable condition except for an inadequate lintel over the opening and a general lack of mortar in the joints.
- 3.1.3 The east facing wall can be seen in photograph 12. There is damage in the upper half of the wall to the south of the doorway and the wall to the north of the doorway has a lean.

3.2 Barn B - Conclusions and Recommendations

- 3.2.1 The barn is in reasonable condition except for the upper section of the east facing wall. It is, therefore, capable of conversion to a residential-related use without substantial rebuilding. The recommendations below should be implemented as part of any such conversion.
- 3.2.2 The damaged (and missing) upper section of the east facing wall should be carefully rebuilt.
- 3.2.3 The general recommendations given in Section 7 below should be followed.

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4.0 BARN C

4.1 Observations

- 4.1.1 The south facing wall of Barn C can be seen in photographs 13 and 14. The wall is in reasonable condition except for some slight damage at the western end of the wall and a lack of mortar in the joints.
- 4.1.2 The west facing walls can be seen in photographs 15 and 16. The wall is in reasonable condition except for some open perpendicular joints and a general lack of mortar. There is an inadequate lintel over the window.
- 4.1.3 The north facing wall can be seen in photograph 17. The wall is in reasonable condition at the western end of the building but towards the east the wall leans and becomes damaged, see photograph 18. This shows partial collapse of the external face of stonework.
- 4.1.4 The inside face of the damaged wall can be seen in photograph 19. There are also cracks in the internal dividing wall, see photograph 20.

4.2 Barn C – Conclusions and Recommendations

- 4.2.1 The barn is in reasonable condition except for the damage on the eastern section of the north facing wall. It is, therefore, capable of conversion to a residential-related use without substantial rebuilding. The recommendations below should be implemented as part of any such conversion.
- 4.2.2 The opening of the perpendicular joints should be repaired by installation of Helix bars in every other bed joint across the openings.
- 4.2.3 The inadequate lintel should be replaced.
- 4.2.4 The leaning and damaged part of the north facing wall should be carefully rebuilt.
- 4.2.5 The general recommendations in Section 7 should be adhered to.

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5.0 BARN D

5.1 Observations

- 5.1.1 The south facing wall of Barn D can be seen in photographs 21 and 22. There is a lot of vegetation on the wall but it appears to be in reasonable condition.
- 5.1.2 The north facing wall can be seen in photograph 23. The lower part of the wall is in reasonable condition but the upper part is missing.
- 5.1.3 The east facing wall can be seen in photograph 24. The wall is in reasonable condition. The internal view on this wall can be seen in photograph 25.
- 5.1.4 The internal face of the north facing wall can be seen in photograph 26. It is in reasonable condition.
- 5.1.5 The party wall with Barn C can be seen in photograph 27. There is damage at the north west corner and a vertical crack in the wall.

5.2 Barn D - Conclusions and Recommendations

- 5.2.1 The barn is in reasonable condition except for the damage on the upper section of the north facing wall and on the party wall with Barn C. It is suitable for conversion to a residential-related use without substantial rebuilding subject to the recommendations below.
- 5.2.2 The damaged part of the upper section of the north facing wall and the party wall with Barn C should be carefully rebuilt.
- 5.2.3 The general recommendations in Section 7 should be adhered to.

6.0 BARN E

6.1 Observations

- 6.1.1 The east facing wall of Barn E can be seen in photograph 28. The wall is in reasonable condition except at the north east corner.
- 6.1.2 The north facing wall can be seen in photograph 29. The wall is in reasonable condition.

6.2 Barn E – Conclusions and Recommendations

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- 6.2.1 The barn is in reasonable condition except for the damage at the north east corner. It is capable of conversion to a residential-related use without substantial rebuilding, with only the damaged north east corner requiring rebuilding works.

7.0 GENERAL RECOMMENDATIONS

- 7.1 All the roofs should be rebuilt and designed in such a way as to prevent roof spread and provide lateral resistance to the top of the walls. This work will also minimise the extent of rebuilding required to facilitate a conversion to residential-related use.
- 7.2 An internal block wall should be built on a reinforced concrete floor slab and this wall should support roof loads and any first floor joists. The blockwork should be tied to the existing walls to provide lateral resistance to the stonework.
- 7.3 Where the existing stone walls have spread they should be tied together (across the rubble fill) using stainless steel rods, resin grouted.
- 7.4 Where Helifix bars are recommended they should be installed in accordance with the manufacturers recommendations.
- 7.5 On the whole, the buildings are in reasonable condition and capable of conversion to a residential-related use without substantial rebuilding, with only small sections of the external wall requiring rebuilding.

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PHOTOGRAPH 1
CALFTHWAITE FARM, CLOUGH – BARN A



PHOTOGRAPH 2
CALFTHWAITE FARM, CLOUGH – BARN A

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PHOTOGRAPH 3
CALFTHWAITE FARM, CLOUGH – BARN A



PHOTOGRAPH 4
CALFTHWAITE FARM, CLOUGH – BARN A

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PHOTOGRAPH 5
CALFTHWAITE FARM, CLOUGH – BARN A

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PHOTOGRAPH 6
CALFTHWAITE FARM, CLOUGH – BARN A

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PHOTOGRAPH 7
CALFTHWAITE FARM, CLOUGH – BARN A



PHOTOGRAPH 8
CALFTHWAITE FARM, CLOUGH – BARN A



**PHOTOGRAPH 9
CALFTHWAITE FARM, CLOUGH – BARN B**

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PHOTOGRAPH 10
CALFTHWAITE FARM, CLOUGH – BARN B

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PHOTOGRAPH 11
CALFTHWAITE FARM, CLOUGH – BARN B

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PHOTOGRAPH 12
CALFTHWAITE FARM, CLOUGH – BARN B

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PHOTOGRAPH 13
CALFTHWAITE FARM, CLOUGH – BARN C



PHOTOGRAPH 14
CALFTHWAITE FARM, CLOUGH – BARN C

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PHOTOGRAPH 15
CALFTHWAITE FARM, CLOUGH – BARN C



PHOTOGRAPH 16
CALFTHWAITE FARM, CLOUGH – BARN C

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PHOTOGRAPH 17
CALFTHWAITE FARM, CLOUGH – BARN C



PHOTOGRAPH 18
CALFTHWAITE FARM, CLOUGH – BARN C

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PHOTOGRAPH 19
CALFTHWAITE FARM, CLOUGH – BARN C



PHOTOGRAPH 20
CALFTHWAITE FARM, CLOUGH – BARN C

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PHOTOGRAPH 21
CALFTHWAITE FARM, CLOUGH – BARN D



PHOTOGRAPH 22
CALFTHWAITE FARM, CLOUGH – BARN D



PHOTOGRAPH 23
CALFTHWAITE FARM, CLOUGH – BARN D

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PHOTOGRAPH 24
CALFTHWAITE FARM, CLOUGH – BARN D



PHOTOGRAPH 25
CALFTHWAITE FARM, CLOUGH – BARN D

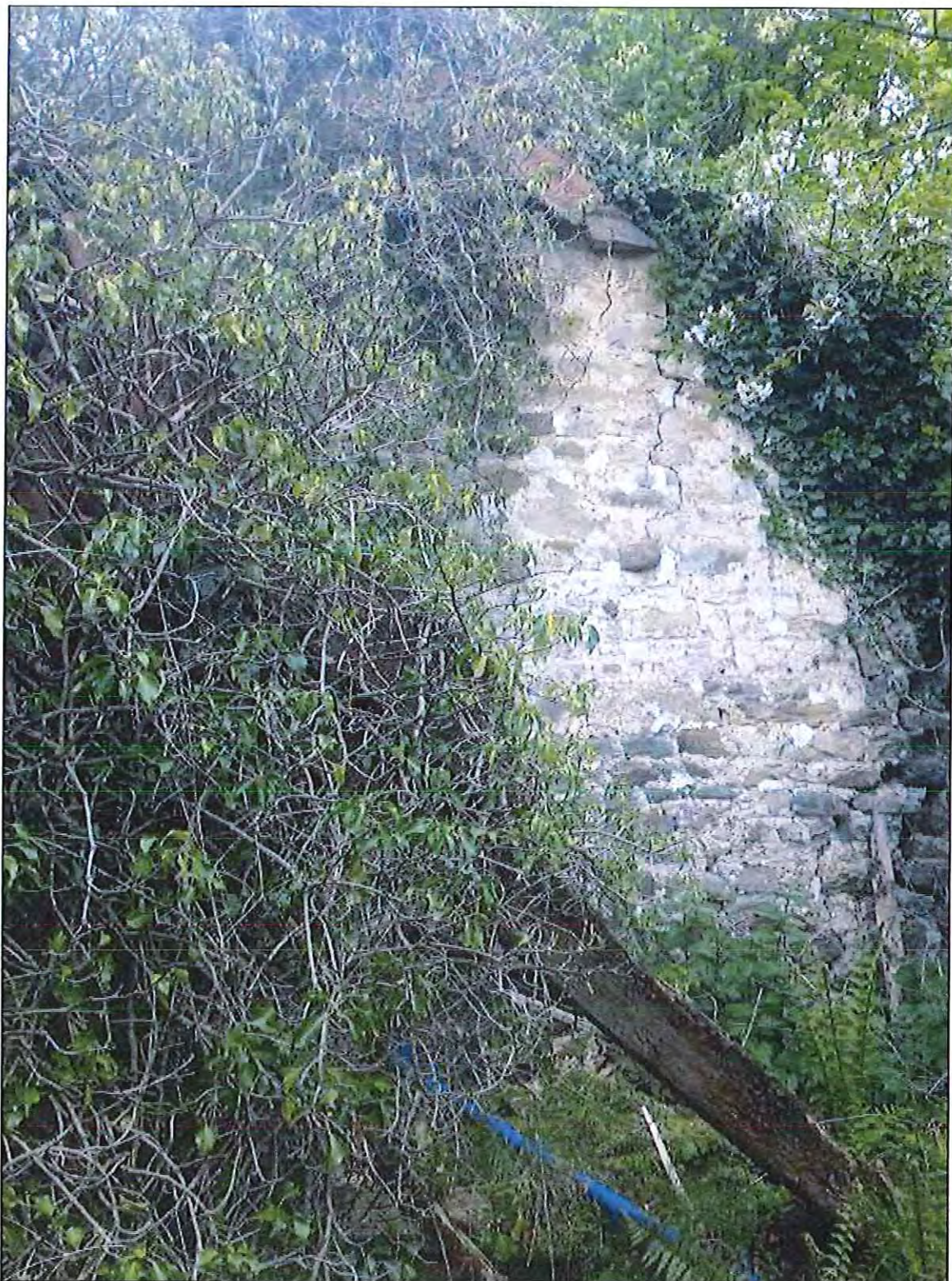
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PHOTOGRAPH 26
CALFTHWAITE FARM, CLOUGH – BARN D

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PHOTOGRAPH 27
CALFTHWAITE FARM, CLOUGH – BARN D

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PHOTOGRAPH 28
CALFTHWAITE FARM, CLOUGH – BARN E



PHOTOGRAPH 29
CALFTHWAITE FARM, CLOUGH – BARN E