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VISUAL STRUCTURAL INSPECTION OF MERIDAN FARM, APESFORD LANE



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PREFACE

a) This brief, preliminary report and/or opinion has been prepared for the specific purpose stated herein.

b) The report has been prepared for the exclusive use of: -

   a. Mr Robert Shufflebotham. Meridian Farm, Apesford Lane, Bradnop, Leek, Staffordshire

   b. Kernon Countryside Consultants Ltd

c) This document, or any part of this document, shall not be disclosed to any other persons except those specifically mentioned as follows: -

   i. Mr Robert Shufflebotham. Meridian Farm, Apesford Lane, Bradnop, Leek, Staffordshire

   ii. Kernon Countryside Consultants Ltd

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d) This document is issued only to the persons stated above and on the understanding that this practice is not held responsible for the actions of others who obtain any unauthorised disclosure of its contents, or place reliance on any parts of its findings, facts, or opinions, be they specifically stated or implied.

e) It is a condition of this report that we have not inspected all parts of the structure which are covered, unexposed or inaccessible. We are therefore unable to report that such parts of the structure are free from defect.

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1.0 INTRODUCTION

1.1 David Smith Associates has been instructed to carry out a visual structural inspection of the portal frame structure at the subject site, to confirm the structural integrity of the frame, and suitability for change of use from agricultural to residential premises.

1.2 The visual structural inspection was carried out on Tuesday 25th April 2023.

1.3 The weather conditions at the time of the inspection were dry, with relatively clear skies.

1.4 Site photographs taken at the time of the visual inspection are included in Appendix A.

2.0 STRUCTURE

2.1 The portal frame structure comprises steel framework at 4.6m centres comprising of 203x133 UB columns and 203x102 UB rafters. The portal frame structure has an approx. span of 12m, with eaves and apex heights of 4.2m and 5.7m respectively.

2.2 The roof structure comprises 75x150 timber purlins at 1.5m centres, which provides support to steel profile sheets.

2.3 The structure includes a mezzanine floor structure comprising of 50x150 timber joists supported via concrete blocks built directly off the ground bearing concrete slab.

3.0 VISUAL STRUCTURAL INSPECTION

3.1 We confirm that no sign of distortion or misalignment of the steel frame structure was noted.

3.2 Rust was noted to the steel framework throughout. This appeared to be limited to surface corrosion only, with no loss of section noted.

3.3 The existing foundation detail is not known. However, the existing foundation structure is considered to be working effectively on the basis that no sign of distortion or misalignment of the steel frame structure was noted.

3.4 The mezzanine floor structure appeared to be sound with no sign of distortion to the timber sections. The balustrade was missing in part and is to be reinstated. The design of the support member to the balustrade is to be confirmed.

3.5 The ground bearing concrete slab appeared to be sound, with no sign of structural movement noted.

4.0 CONCLUSION

4.1 We confirm that the existing portal frame structure appeared to be sound and is considered suitable to redevelop for residential use without any significant alteration to, or enhancement of the existing structure.

4.2 The above is subject to removing all surface rust and contamination to the steelwork and protecting the steelwork with a zinc phosphate primer.

4.3 The above is also subject to the assessment of the purlins and portal frame structure to confirm load restrictions when replacing the roof structure. The assessment of the frame is to be carried out by a qualified Structural Engineer.

5.0 CERTIFICATION

5.1 We trust that we have interpreted your instructions correctly and that this report is satisfactory for your present requirements. However, should you require any further information or clarification, please do not hesitate to contact the undersigned.



Signed:……..

Ben Mason BSc (Hons), IEng, MICE

9th May 2023

Date.....

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A P P E N D I X A

Typical Photographs



Photograph 1



Photograph 2



Photograph 3



Photograph 4



Photograph 5



Photograph 6



Photograph 7



Photograph 8



Photograph 9



Photograph 10



Photograph 11



Photograph 12