

Document Ref: 21.175/JM/A  
Date: 29.04.2021

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## STRUCTURAL INSPECTION REPORT

AT

BARN AT DUX, BRIDGERULE

FOR

MR COLE

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Revision	Date	Notes	Prepared by
A	29.04.21	Initial Issue	JM

## 1. Introduction

- 1.1. Date of instruction: 23<sup>rd</sup> April 2021.
- 1.2. Instructions: Mills Engineering Limited have been requested by Mr Cole (the Client) to carry out a visual inspection of the barn adjacent at Dux, Bridgerule, Devon.
- 1.3. Summary: The site currently consists of a single storey barn, which the Client wishes to convert to a habitable dwelling.
- 1.4. Objective: The objective of this document is to report on the viability of converting the existing structure into a habitable dwelling.
- 1.5. Site: See existing site photo in Appendix A.
- 1.6. Liability: This report is for the sole use of the Client mentioned above and no other party shall rely upon it. We do not purport to assign any benefit arising from this report to any third party.
- 1.7. Limitations: The survey was a visual survey carried out from ground level only, therefore it is possible that hidden or inaccessible evidence exists that could affect the conclusions drawn. The report includes only aspects affecting the stability of the building. 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. It does not include matters such as, but not restricted to valuation, mortgage ability, insurance, legal matters, windows, doors, gutters, decorative condition, garden walls, paths, landscaping, finishes, services, damp proofing, sound and thermal insulation properties, fire protection etc. This is not a generalised report on the condition of the building.

## 2. Inspection

- 2.1. Date: 28<sup>th</sup> April 2021.
- 2.2. Weather: Cloudy and dry.
- 2.3. Present during inspection: John Mills.
- 2.4. Method of inspection: Visual, non-intrusive survey. No surfaces were opened up. All exterior inspections were carried out from ground level.

## 3. Existing Construction

- 3.1. History of recent uses: Housing livestock, storage.
- 3.2. Current use: Housing livestock, storage.
- 3.3. Roof: Corrugated roof sheets supported by timber purlins spanning between steel frames.

- 3.4. **First Floor:** Timber floor joists supported on steel/timber beams spanning between the steel portal frames.
- 3.5. **External walls:** Vertical timber cladding supported by timber rails/studs, with a blockwork plinth of varying height.
- 3.6. **Internal walls:** Internal walls are a combination of timber frame wall panels and single skin blockwork
- 3.7. **Substructure:** Foundations were not exposed at the time of the inspection. Ground floor appears to be a ground bearing concrete slab.

#### 4. Conclusion

The existing construction of the barn is typical of what might be expected of a building of its age and type.

The barn is still functioning as storage/housing for livestock and is viable for conversion into a habitable dwelling with a suitable scheme of remedial works.

The existing timbers appear to be in good condition with no obvious signs of distress or decay.

The existing steel beams/columns shows some signs of rust but there doesn't appear to be any loss of section, therefore removing the rust back to bare metal and applying a suitable corrosion protection system will allow them to support the proposed residential conversion.

The metal wall cladding is in good condition and is fit for purpose with a suitable waterproofing detail considered.

The blockwork walls appear to be in good condition with no obvious signs of distress or failure.

The existing concrete floor appears to be in suitable condition with no obvious signs of distress.

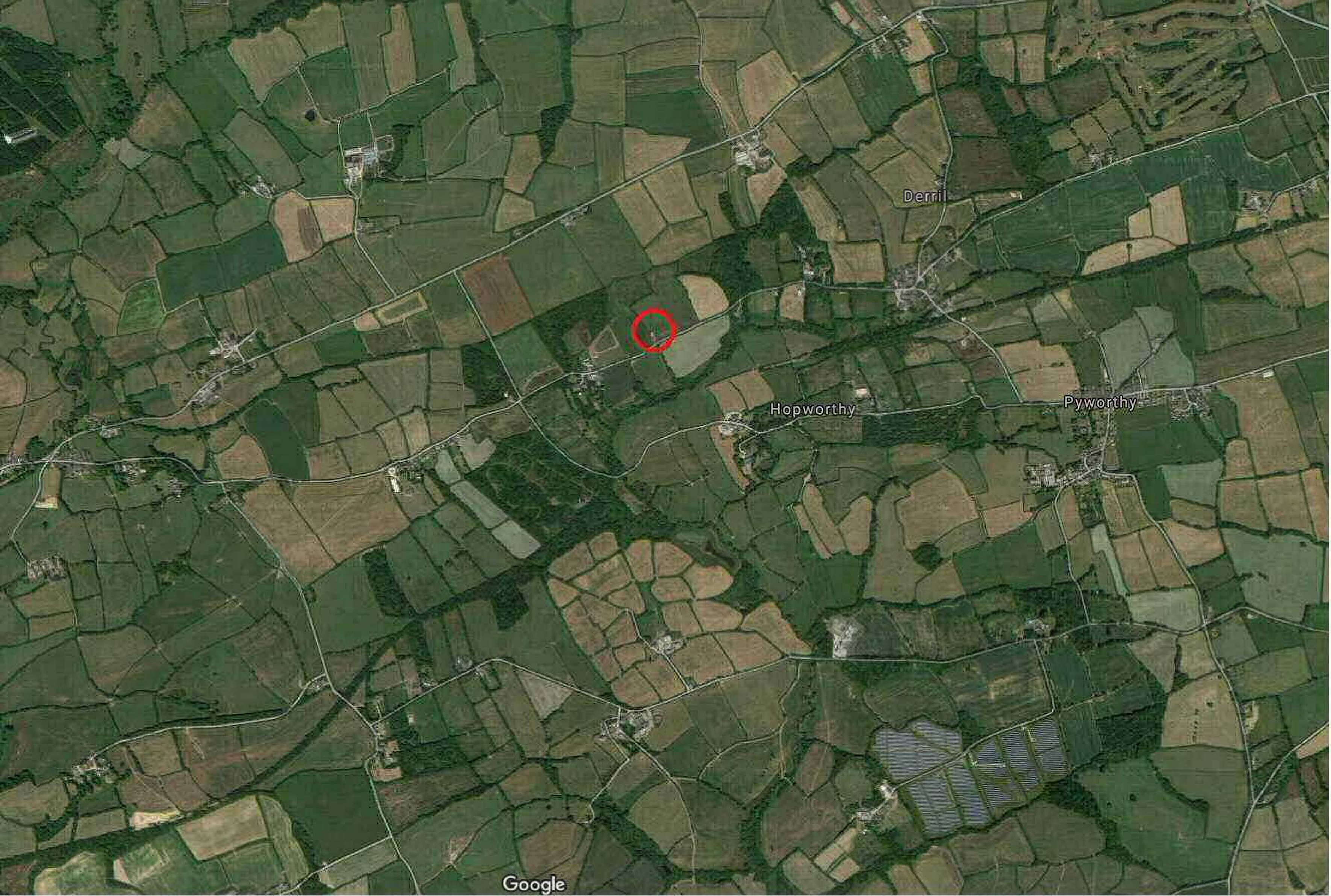
In general terms the conversion of the barn should be able to be achieved without significant external alteration, extension or substantial rebuilding.

Report produced by Mills Engineering Ltd

  
John Mills *Meng (Hons)*, *CEng MStructE*  
Structural Engineer

# APPENDIX A

## LOCATION PLAN/SITE OVERVIEW



Derril

Hopworthy

Pyworthy



# APPENDIX B

## PHOTOS





Photo 1: External View



Photo 2: External View



Photo 3: External View



Photo 4: External View



Photo 5: Internal View



Photo 6: Internal View



Photo 7: Internal View



Photo 8: Internal View