



Reybridge Farm Stables, Reybridge, Lacock, SN15 2PF

STRUCTURAL STATEMENT FOR PLANNING

[1466GE]

May 2025

v3

Document

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1	16/05/25	Cath Parsons	First issue.
2	22/05/25	Cath Parsons	Updates to comments
3	31/03/26	Cath Parsons	Updated to new Plans

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1 Introduction

Giraffe Engineering has been requested to provide additional information in relation to the planning application.

2 Structural Overview

2.1 General Approach

The structural form of the stable is a traditional masonry building of ashlar and rubble stone construction, with timber trusses supporting timber purlins and rafters, as is typical of this type of stable farm building. A front elevation of timber posts and beams indicates a previously open front façade. Later, modern blockwork panels provide infill panels between the timber posts to the front elevation. A significant number of modern blockwork walls have been installed throughout the structure.

As outlined in the original structural report the building itself is in structurally sound condition. Very little of the existing structure, as a whole, has any significant structural decay. Where structural degradation has occurred, it is limited to the typical elements:

- Where water has caused decay to timbers.
- Where lime mortar has been lost due to natural movement of the building and weathering.

The primary items raised in the GE1466-01 Structural Report are minor repairs of a maintenance nature required for timbers and masonry elements to preserve the structure. No rebuilding of areas of the building is required for retention in its current form or for any future reuse.

Structurally, the proposed form does not remove large elements of the original barn structure and features, which are the rear wall, roof structure and the front timber frames. Walls proposed to be removed are modern interventions and allow reinstatement of a more traditional structural form to preserve the building.

No historic elements of the building require rebuilding, and it is our intention to leave as much historic material in place as possible.

2.2 Impact of alterations on original structural fabrics

Proposals for structural repairs, where required, are isolated in number and type and will ensure the conservation and retention of as much historic material as possible.

Masonry proposed to be removed from the building is almost solely the modern blockwork infill panels that detract from the historic structure's appearance and have been used to infill the timber framing to the front elevation. Historic masonry being altered is anticipated to only be around 3% of the historic masonry and limited to the left-hand end of the elevation, and not part of the original main barn. If fit for purpose, masonry ashlar blocks being dismantled from this area could be reused.

Historic timbers proposed to be removed from the roof is negligible. Our approach would be to retain all historic materials in place, and provide new structure alongside, where required.

The structural approach being considered for this building will be to provide either modern, datable repairs to the building that preserve the structure, whilst allowing the most material to remain insitu, or to strengthen the existing barn timbers in a manner that would have been appropriate to the time and use of the building. With the type of repairs being required relating to timber repairs, to maintain the existing strength of the structure, either option is structurally feasible.

Repairs considered for the barn at this stage are not solely relating to the proposed conversion; the repairs will primarily act to preserve the existing structure. The Architectural proposals have minimal effect on the original structural form of the building and are thought unlikely to require significant structural intervention to achieve required standards.

In line with the approach above, our proposed repair details are:

- Rafters: New timbers alongside existing to strengthen where needed as well as retain existing materials
- Purlins: Provide steel plates to top side, if required, to strengthen and retain existing purlins. Where Timber is decayed, eg bearings, new sections of seasoned oak can be cut in using traditional scarfed joints.
- Trusses: Repair existing timber with the use of either steel bracket details applicable to farm buildings at the time, or provide traditional timber repair details, while retaining as much original materials in place as possible.
- Timber posts: Traditional timber scarf base detail to retain historic post and reinstate lost bearings, to allow the blockwork walls to be removed, which harm the historic appearance of the building.
- Masonry repairs: Repointing with traditional lime mortar to match original form

From a structural perspective the design proposal removes the modern block work panels and reinstates a panel system to the building to form a structural system more comparable to its original structural state.

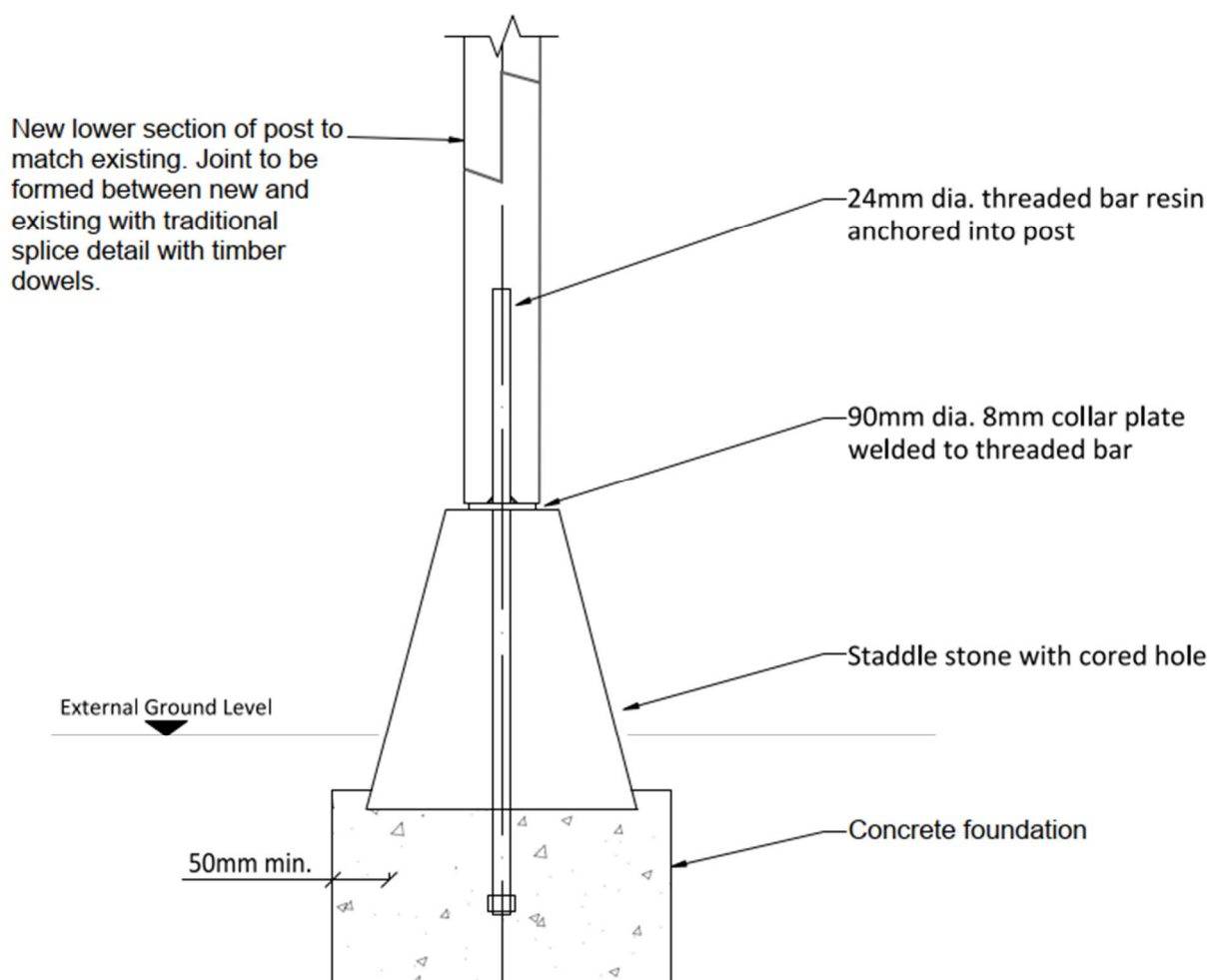
3 Conclusion

As discussed in our original survey report, and outlined above, the structure consists of a single storey masonry structure of 400-600mm rubble masonry stonework, with some ashlar stonework walls on the perimeter. These walls, and isolated timber posts to the front elevation originally supported the timber trusses at regular intervals. Cut timber rafters and purlins take their support on these trusses. The masonry walls and the timber roof structure appear to be in reasonable condition.

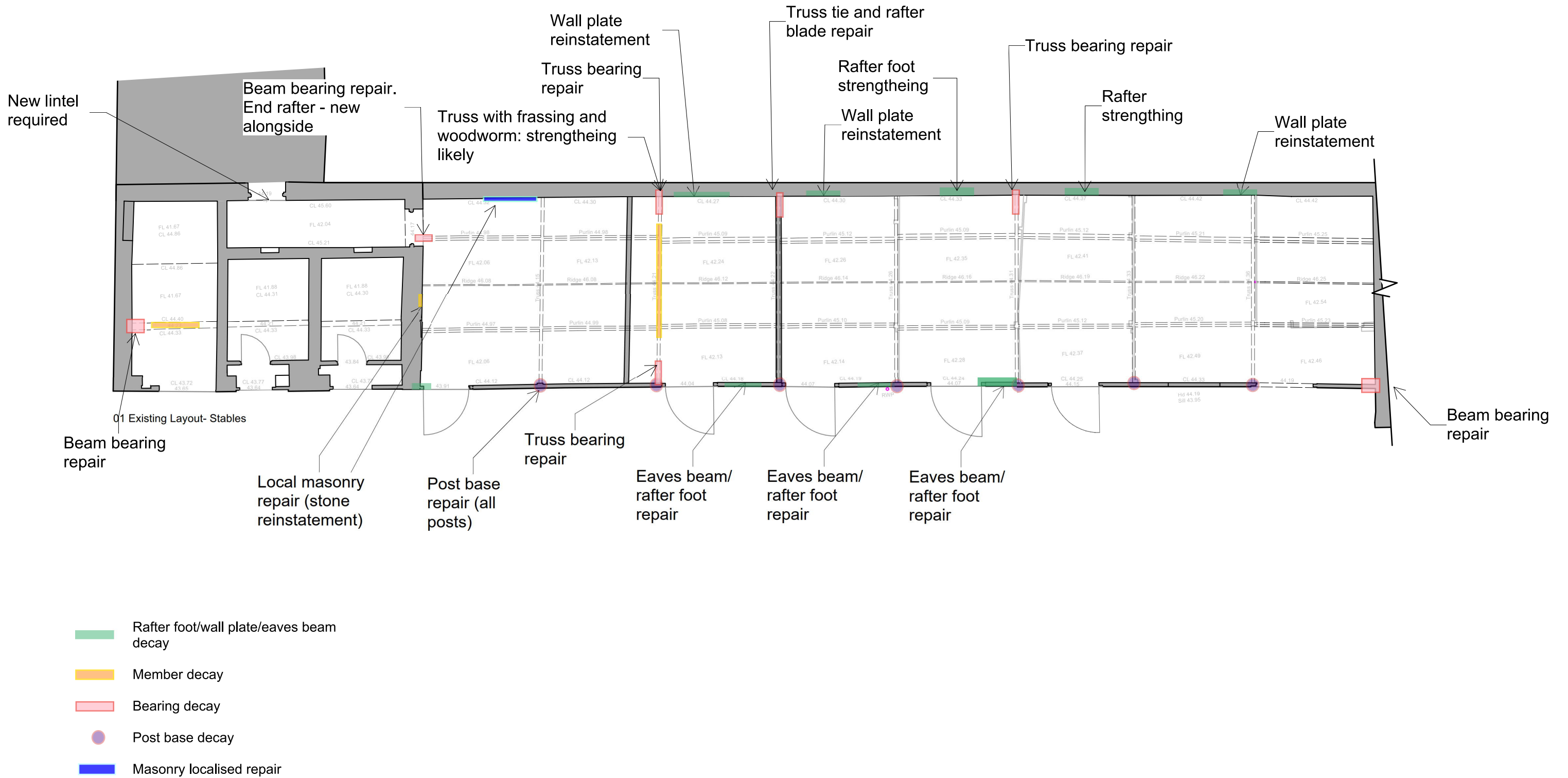
The building is capable of conversion to residential use without major rebuild. Retention of the structure will be possible structurally, with only minor (maintenance) structural repairs. The existing building appears from our observations to be structurally sound and capable of complete retention

The changes to loading are minimal and will not significantly increase based on the proposals. We therefore consider that the existing building foundations to all areas of the building will be adequate.

Appendix A Proposed Typical Post Base Detail



Appendix B Proposed Repair Extents



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Reybridge Farm

DRAWING NAME
Repair Extents

PROJECT No.
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