

Our ref: CE24/4214/RAC/REB

1 July 2024

Mr L Collins
Partners and Planning and Architecture Ltd
Suite 2
Clare Hall
St Ives Business Park
Parsons Green
St Ives PE27 4WY

Dear Mr Collins

Farm Building Cheal Road, Gosberton, Spalding, Lincolnshire, PE11 4JG

Thank you for your instructions to undertake a structural assessment of the outbuilding at the property and to report on the necessary structural works to carry out conversions to domestic accommodation.

This was a visual non-intrusive survey to determine how the works may be undertaken in compliance with the Town and Country Planning Order, Schedule 2, Part 3, Class Q to gain permission for the development.

This Engineer's report only deals with the above mentioned and our liability in respect of this report is limited to you as our Client. There is no intention to confer any third party rights as described in the Contracts (Right of Third Parties) Act 1999. Please also note that we have not inspected any parts of the property which are covered or unexposed and cannot therefore report that such parts of the property are free from defect.





The building was visually inspected on Thursday 20th June from ground level internally and externally. The existing foundations to the buildings were not exposed. No ground investigations were undertaken during the inspections and therefore any recommendations relating to substructure works will need to be confirmed following the undertaking of an appropriate investigation.

The building is adjacent to Ebenezer House, off Cheal Road to the south of Gosberton. The ground levels are relatively flat in the area; there is an agricultural track to the east of the building to gain access to the fields to the rear of the property.

The building measures approximately 27m x 21m (internal dimensions). The main section of the building consists of precast concrete portal frames with 180mmx350mm 'T' columns at 4.6m. The columns are 'T' shapes to allow 80mm wide precast planks to be bear against the inside flange and bolted through into the column. The portal frames are haunched at the eaves level; the haunch is connected to the column using large through bolts. The eaves level measures approximately 4.4m above slab level, while the apex measure approximately 6.9m above slab level. A continuation of the precast frame is attached to the east side and is effectively a lean-to structure using the main building frames for support.



There is a ground slab throughout which measures approximately 100mm thick where visible. The slab has been cast in approximately 4m wide strips the full length of the building, and as such shrinkage cracks are evident at approximately 15m c/c along the strips.

The precast frame appears to be in reasonable condition with no significant defects noted. However, there is evidence of vehicle impact to the front and rear precast panels adjacent to the door openings. Precast panels vary in height around the perimeter; above the panels and over the roof is clad in a fibre reinforced cementitious corrugated sheets

which are supported by a mixture of precast and steel purlins. The roof cladding has some localised damaged and daylight can be seen coming through.



The outside of the building as significant vegetation growth on the east and north elevations; there is another building partly obscuring the west elevation. The vegetation has started to protrude to the inside.

The gable ends have precast columns cantilevering out the ground to support the gable end cladding; the top of the gable end columns are not fixed back to the end frame. This suggests that the foundations are substantial to provide a robust cantilever base. No settlement of the frame was noted which suggests the foundations are similar to the main frames.

Generally, no evidence was noted of any serious corrosion or degradation of the precast concrete frame. No evidence was noted of any settlement to the frame or the perimeter panelling or the ground slab. We therefore believe the existing structure to be robust and in reasonable condition. The existing structure and foundations appear to performing adequately and the proposed conversion will not be detrimental to the existing structure. Loadings will remain similar to existing.

Some localised replacement or strengthening of secondary members will likely be required where these have been damaged in the past by the agricultural usage.

Depending on final proposals, the overall stability of the building could be enhanced by the introduction of new internal cross walls.

We have reviewed the existing structure and confirm that a successful conversion to domestic accommodation can take place whilst retaining the existing structure, layouts

and building heights. We therefore consider that this approach complies with the structural requirements detailed in the planning order for Class Q conversion.

We hope that this report provides the information you require, and if you have any questions or we can be of any further help, please do not hesitate to contact us.

Yours sincerely



Rupert Clarke BEng CEng, MIStructE
For and on behalf of AFP Consulting Engineers Ltd

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