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Ref. LC/5260/01 1 November 2023

Mr. S. White, Lentiago, Sandford Avenue, Church Stretton, SY6 7AE

Dear Simon,

Site:

Existing Farm Buildings at: Denver House, Acton Burnell, SY5 7PO

Description:

Refurbishment of Existing Buildings for Domestic Use

Further to my inspection of the above Barn on 13 July 2023 my structural appraisal of the buildings at the site my observations and recommendations are given in report form below. However it must be appreciated that this report is merely to establish that the existing building may be refurbished without alteration of the building envelope and should not be regarded as a definitive report on all structural elements nor is it to be considered as a schedule of repair work:

A. Proposal:

The proposal is to refurbish existing buildings for domestic use, the buildings form a group of similar farm use buildings to be converted at the site. Building locations and designation are shown on Batch Valley drawing no. 805.10 appended to this report.

It should be noted that where possible the proposed works would retain the existing external brickwork walls and roof finishes.

B. General Description:

The buildings are individually described below:

Old Butchers Shop:

The building is single storey with a duo pitched slate clad roof and brickwork walls, the previous use of the building is evident from internal inspection. No signs of structural damage or deformation to the walls or roof was noted indicating that the existing fabric is robust and that foundations are robust.

A damp proof course is evident,

There is a false ceiling and this limits internal inspection of the roof structure.

Dutch Barns 1 and 2:

These barns are classic 'Dutch' barn construction with light steelwork frames, corrugated sheeted vaulted roofs and part wall cladding. The smaller Barn 2 has open walls and it is proposed that this will be converted into a garage and utility / storage. Barn 1 has vertical open joint timber cladding on three walls and it is proposed that this will be converted into a dwelling. If the barns are converted then I would recommend that the original structure could be incorporated into the new works but that it becomes non structural ie the new fabric of the building provides all necessary structure to support both dead and live loads and to resist wind.

Barns 1and 2:

Barns 1 and 2 form an 'L' on plan and are both single storey with tiled pitched roofs. The walls are 215 brickwork and generally these appear to be in sound condition and can be retained, but the west flank wall retains the garden at higher level and should be checked as a retaining structure. There is a cart shed double opening on the north wall and this has a timber lintel with a central cast iron post, there is evidence that there has been lintel deflection and this will have to be checked and possibly strengthened for the applied loads.

The cut roofs are supported by substantial timber members much of which can be retained although a check must be preformed to ensure that any additional loads due to plasterboard and insulation can be supported. The roof of the west wing of Barn 2 has collapsed and will have to be rebuilt.

Whilst no damage due to subsidence was noted it is recommended that a trial pit investigation is carried out to determine the adequacy of the existing foundations under a new load regime.

C. Recommendations:

Old Butchers Shop:

Whilst externally the roof structure would appear to be in good condition the false ceiling should be removed to facilitate closer inspection of the roof structure. It is not expected that the structure would be inadequate but rot and infestation should be checked. Revealing the roof structure may also enable the new internal layout of partition walls to be readily established.

Any new partition walls could be constructed from the existing oversite concrete slab but should any require to be loadbearing then a suitable foundation should be provided.

Dutch Barns 1 and 2:

Recommendations are provided in 'B' where the existing structure may be incorporated as non structural.

Barns 1 and 2:

Subject to the recommendations included in 'B' I consider that these barns may retain the majority of the existing walls and roof structure. However the existing timber elements should be checked for rot and infestation.

General:

In all cases the proposed buildings will require provision for compliance with the current Building Regulations particularly for energy conservation and preventing damp penetration. Where necessary new floating slab floors will be required. Any new or strengthening structure shall comply with the current Building Regulations.

D. Conclusions:

It is considered that the existing buildings can be readily converted to domestic accommodation whilst retaining the original appearance. The works would require minimal alteration to the external fabric subject to the observations and recommendations given in this report.

This report may be forwarded to all interested parties.

Yours sincerely,

Andrew Long CEng MICE MIStructE

For Longmynd Consultants

