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Richard Atkinson, Esq.,
RJCA Chartered Architects,
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West Sussex,
PO19 5RQ

17 March 2017

Our Ref: CRB/sep/

Dear Sir,

re: Conversion of Existing Barn Building
- Polsons Dairy, Lidsey Road, Bognor Regis, PO22 9PG

In accordance with your client's, I did, on Tuesday, 7th March attend the above site and carried out a survey and inspection of the existing barn building and report to you hereunder my findings, comments and recommendations regarding its proposed conversion into a two bedroomed detached domestic bungalow.

This report letter should be read in conjunction with Messrs. RJCA's architectural drawings showing plans and elevations as existing and as proposed.

My survey was carried out in dry, cold, sunny weather conditions and only the structural aspects of the existing barn were inspected and are reported on hereunder.

Site Inspection

The existing barn is rectangular in plan shape measuring approximately 100 square metres and consists of a large office/workshop space, small store, two offices, a w.c. and kitchen with stairs leading to the first floor of which approximately a third is used as a store and the remainder is void.

The external walls on the north gable is comprised of iron stone (as advised by client) 400mm thick and there is no evidence of any structural subsidence or bowing in the gable, but there are signs of some cracking to the left hand roof slope -- although this can easily be repaired by removing cracked bricks and inserting new bricks to match existing. It is noted that there is a crack to the inside face render which may require some additional exploratory work and will need to be repaired with lintel stitch detail to match existing to bond wall.

C.R. BARROW
Director

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The south side gable has its upper portion clad with corrugated sheet metal and similar to the north gable there is 400mm thick iron stone which, again, is in very good condition for its age with no sign of subsidence or bowing in the wall. As in the north gable there is some cracking which is superficial and could easily be repaired. The windows to the south gable have concrete lintels over which are seen to be straight and true and contribute to the building's structurally sound status.

Timber lintels have been inserted into the face wall appear to be level, although these may only be for aesthetic purposes but are given to be structurally sound.

The east wall is, again, of original iron stone at a thickness of approximately 400mm with a rendered inside finish which measures 2.1M to eaves level and is seen to be structurally satisfactory being straight and true with no signs of any bowing or subsidence.

The west elevation wall is of more recent construction comprising of face brickwork measuring approximately 300mm from ground level up to eaves height and is seen to be structurally satisfactory, straight and true with no signs of any bowing or subsidence. Any loose bricks to be re-bedded and mortared.

The roof construction is a trussed roof with trusses at approximately 1M centres approximately 200 x 50 comprising of a corrugated tin roof with a gable each end and pitch up and over. The roof is relatively new and in good condition and deemed to be structurally sound. The trusses were supplied by specialists and are seen to be in excellent condition and level.

Although the proposed new roof will be taking a heavier load with regards to battens, tiles, etc, it is accepted that the effect of this additional weight will have negligible effect on the trusses. This can also be confirmed by a specialist truss supplier.

The internal walls to the barn are comprised of lightweight breeze blocks so as to divide the area for offices, storage, kitchen and w.c. These internal walls can easily be removed without affecting the overall structure.

The barn's foundations are assumed to be corbelled out stonework, although it is recommended that further site visit to dig an inspection hole to ascertain precisely what is there and would suggest a conditional approval be sought from the local authority.

The floor to the inside of the barn is a recently screeded flat surface and seen to be in good condition so could easily receive the required insulation, etc. to bring it up to the correct level as stated on the architectural plans.

Conclusion and Recommendations

The barn is accepted as being structurally satisfactory for the proposed conversion providing the few minor repairs previously referred to have been undertaken it will be fully acceptable to convert into domestic habitable accommodation as shown by your drawings.

As previously mentioned, the existing floor is comprised of a level screeded area but if this doesn't constitute the required levels it could easily be reduced in level to allow for the correct ground floor slab levelling and finished with a screed finish on insulated 150mm ground floor slab with 142 mesh reinforcement on dpm consisting of 1200 gauge polythene turned up around perimeter edges and on sand blinding on 150mm consolidated hardcore base, all in accordance with architect's specification and to conform with all latest building regulation requirements.

All existing footings should be checked for adequacy to be able to take additional loadings which can be justified by full working drawings through architect. Please consult engineer on adequacy of footings.

Any new partitions should be built off the new 150mm concrete slab in either lightweight blockwork or timber studwork.

Any additional windows and doors inserted to be shown on plans and proposed lintels, etc. designed by engineer prior to commencement of work.

With regard to any additional loading to roof, the wall plate to perimeter walls to be checked to see if straight and true and any defects to be reported to engineer at a site meeting to ascertain the best option.

I trust the details given are sufficient for your purposes but if you have any queries or require any further information please do not hesitate to contact me.

