



SYKES ROBINSON LLP
CHARTERED BUILDING SURVEYORS AND VALUERS

BUILDING SURVEY REPORT

ON

**Far Broad Oak Farm
Gunthwaite
Penistone
S36 7GE**

On Behalf of:

**Mr & Mrs Moody
C/o J J Bolchover Architects**

23 August 2011



Prepared by:

**Mr T Sykes FRICS
Chartered Building Surveyor**

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INSTRUCTIONS

We refer to your instructions confirmed by signed Conditions of Engagement dated 23 July 2011 requesting us to carry out a full Building Survey on the above property. Our inspection was carried out on 1st August 2011 and we are now able to report to you as follows:

DESCRIPTION

The property consists of a detached barn which originally may have been timber framed. A number of vertical timbers remain which may form part of a timber frame or could have been timber jambs to openings. We suspect the former.

It is apparent that a severe fire has occurred in parts as the remaining timbers are damaged and the stone is discoloured pink due to extreme heat.

The older walls are of solid stone construction consisting of an outer leaf of squared rubble brought to random courses, an inner leaf of rubble with rubble fill between. The walls to the original section are of substantial thickness and possibly at least 450mm. This was extended or rebuilt entirely consisting of solid stone outer leaf of squared rubble, with inner leaf of full brick thickness in English garden wall bond. We assume that there is no cavity.

The roof is traditionally constructed consisting of softwood king post trusses supporting purlins which in turn support softwood rafters, which meet and are secured to a softwood ridge piece. There are four bays with 3 No king post trusses. If you look at the centres, where they are smaller than the others, this has been the result of subdivision within the modern constructed blockwork wall.

Concrete pillars have been incorporated into the main structure and this is likely to have provided stiffening support. Both externally and internally these are unsightly although you are likely to have to incorporate these into your plans. You stated that you will probably have foliage over them although it would also be possible to create stone pillars if you so wished. It is likely that there may have been another floor originally which was discontinued after the fire. If the vertical timbers were door jambs these could have been access to a hay loft. It is difficult to assess the date of the fire although we would suggest that the reconstruction was at least eighty to ninety years ago. The roof construction is late Victorian or early twentieth century.

We understand that you are to construct an extension off the far gable. This has been agreed with the Planning Department and you have let us have a copy of the appropriate plans.

WEATHER

Sunny periods and dry at the time of our inspection.

STRUCTURAL CONDITION AND STATE OF REPAIR

The main structure is surprisingly sound. Maintenance has been reasonable considering the type of building and together with the renewal of the roof it has remained generally watertight. The end of the property, which is of course an extension, remains straight and true. The only area of concern in connection with main walls is on the yard side. Externally there is a significant bulge on the outside immediately above the right hand reveal to the door opening. This is to the right of the first king post truss. This extends almost as far as the rainwater downpipe. A stepped vertical crack has appeared above the door. This is not mirrored internally. It passes through the entire wall thickness with no evidence of parting company of the two leaves of stonework.

There is no evidence that the wall is moving out significantly. It is bulged both internally and externally, confirming that it is not simply a case of the outer leaf of stone moving away from the rubble fill. As far as we are concerned it should remain stable and indeed you will be replacing the floor internally which should stiffen it up. It is our opinion that externally the crack could be stiffened up by the use of Thor Helical ties and that the inner and outer leaves can be bound together by using products from the same company. Alternatively traditional but short tie bars can be used. The rebuilding of sections of old buildings can often look out of place and for this reason I am suggesting this course of action.

Plans show that a section above this opening is to be removed and glazing provided. This can cause a weakness in the remaining stonework which has bulged although removing this stone will of course allow you to see whether there is any significant movement away of the outer skin to the rubble fill.

The worst case scenario is to rebuild a section of wall in this area which should not extend more than 10 sq metres. We think that you are looking at an additional cost of between £3,500 and £5,000 if you carry out this work although you will have to rake out all joints externally and repoint together with any stiffening work to the bulge including the Helical ties which will have a cost. Therefore the additional nett cost is likely to be in the region of £3,000.

You inform me that you are to increase the height of the roof. Using attic trusses or similar you could of course retain the present roof height and achieve your two floors of accommodation. It is not clear on your plans what you intend to do although this would appear to be the case. The door on your elevation to the outer wall appears to be exactly the same part as the door on my photographs with a similar height of stonework above.

Your annotation confirms that slates to match existing are to be used. Indeed the slates are actually natural slate and appear to be sound, although you would no doubt be removing them and re-using the existing. We suspect that a substantial majority can be re-used. Typical of the period of build the floor is out of alignment. Barn floors often follow the fall in the land and you either have to level up throughout which often results in a substantial reduction in height at the lower end of the room although this can often be dealt with by a step in some location. Your layout suggests that there are no significant problems in this respect.

Stone has discoloured due to effects of time and impurities in the atmosphere and mortar pointing has likewise weathered. All this building will require is for joints to be well raked out, matching mortars if possible used (lime based) together with correct repointing, often ignored by the vast majority of contractors in the region. Stonework of course should always be pointed flush with the surface and bagged off or bristle brushed prior to mortars going hard. It is our experience that Portland cement based mortars, especially when weathered or strap pointed, crack and fall out within a short period of time.

CONCLUSIONS

The property is generally satisfactory structurally excepting the area above the yard side door opening. There are many areas covered by climbing plant where we could not effectively see. The building has probably survived as well as it has due to the fire many years ago which resulted in a completely new roof being provided. When works were carried out at that time it was intended that they would survive for centuries and not just a short period of time, although this did depend on adequate maintenance being carried out which was not necessarily the situation in farming communities.

The removal of stone above the yard side door to form a window opening may in itself cause problems and may disturb stonework in order that you have to carry out some rebuilding although you will be able to see this once you have started the works. We would prefer to leave well alone adjacent if possible.

We have not arranged for any investigations to be carried out to determine whether or not high alumina cement concrete or calcium chloride additive or any other deleterious material has been used in the construction of this property, and we are therefore unable to report that the property is free from risk in this respect. For the purpose of this report, we have assumed that such investigations would not disclose the presence of any such material in any adverse conditions.

Finally, and in accordance with standard practice, we confirm that this report is for your attention only and no liability rests with any other party for the whole or part of its contents.

Signed: 

Name & Qualifications: T Sykes FRICS
Chartered Building Surveyor

23 August 2011