

Ref: 22-914

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14 Neville Road
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Dear Sirs

WHITNEY CLOSE FARM, HUDDERSFIELD

An inspection of Whitney Close Farm, Huddersfield was carried out during Tuesday 11th October 2022; the inspection being undertaken in order to comment upon the overall structural stability of the property.

Whitney Close Farm is a detached farmhouse type property with accommodation provided on two floors. Elevations are a combination of stone and render (it is assumed that the render is over stone. The inspection was limited to the main body of the property only. Due to the size and location of access traps, a meaningful inspection of roof voids could not be undertaken.

The property has been extended on five occasions. It is also thought that the stairwell area is an extension on a further relatively recent extension; the bed joints of the stairwell do not line through with previous work. Enlarged ground floor openings have been formed in the 'original' section of the front elevation (enjoying the view). It is also considered that the large flat roofed first floor up-stand windows to the front elevation have also been formed sometime after the original construction.

The newer extension has the benefit of a flat roof.

The inspection looked at the visible faces of walls and found as follows:

- To the front elevation, the left hand extension shows as a vertical joint in the masonry with masonry to the right having corner stones.

The masonry to the left hand extension is displaced relative to the vertical joint with a maximum deflection estimated at approximately 75mm.



- The central section of the main body of the property is now covered in Virginia Creeper. There was though evidence of slight lateral deflections affecting this section of the property with maximum deflections tending to occur at about mid wall height and reducing to zero at ground level and eaves.
- To the right hand extension, there is a Patras plate present on the front elevation, however no Patras plate was found to the rear.

Lateral deflections at the Patras plate were measured at approximately 125mm.

- To the right of the Patras plate and between the ground and first floor openings, the bed joints show a particularly non uniform line. This includes for the presence of chamfered stonework to bring the bed joints to the horizontal.
- To the rear of the right hand extension, the main wall is rendered and built off a stone plinth. The stone plinth is showing a significant lean inwards with a maximum lean measured at approximately 140mm and with this over the plinth height of 600mm. The external face of the stone plinth is severely weathered.

Along the line of this extension is a vertical crack in the render which occurs on the line of the original construction.

- To the front elevation, the left hand doorway has a timber head. The adjacent window opening has a depth of head which, considering the normal 'rule of thumb', is of inadequate depth to carry the imposed loads. The adjacent larger window opening has a timber head which is clearly suffering from the effects of decay.

The extreme right hand ground floor window head, again has a depth of head which, using the normal 'rule of thumb', is of inadequate depth to carry the imposed loads.



- Internally to the property, lateral deflections were observed affecting the right hand section of the property indicating that the inner and outer leaves of masonry are tending to behave in sympathy.
- To the ground floor and at the junction of the right hand extension with the original section of the property, vertical cracking was observed where the original elevation meets the extension. At this location also, lateral deflections increasing with height were observed with deflections at ceiling line measured at approximately 100mm.
- Throughout the ground floor, it is clear that the above first floor is supported on king beams, which in the main, sit above timber lintels above ground floor openings.
- To the first floor and to the right hand section of the property, there was some evidence of lateral deflections, again indicating that the inner and outer leaves of masonry were tending to behave in sympathy.

Based on the above observations the following comments can be made:

- It is clear that there are several factors which affect the overall structural stability and serviceability of the property.
- Deflections affecting walls are most likely due to a combination of lack of restraint and possible settling down of rubble fill within the wall construction.
- The presence of timber lintels supporting main king beams is undesirable. The size of some external lintels is also questionable etc.

To ensure the long term stability of the property, we would recommend that any owner considers the following:

- We recommend that both the front and rear elevations of the right hand extension be taken down and rebuilt. This will eliminate problems associated with the



weathered and significant leaning plinth to the rear plus also deflections to the front.

- This rebuild should also include for the provision of an adequate lintel to the inner leaf with this to support first floor supporting king beams.
- We would also recommend that the external leaf of the front elevation of the left hand extension be taken down and rebuilt. This should include for an adequate number of wall ties. We consider that the external leaf only will require rebuilding to this area.
- External stone lintels of an adequate depth plus timber lintels should be replaced by appropriately sized stone (or Art stone) lintels.
- As the property is to be totally refurbished, we would consider it appropriate to provide restraint to tie all elevations back into the main body of the property. This can be done using steel straps all fitted internally and hidden on completion beneath plaster, skirtings, floorboards etc. Straps should be secured to elevation walls (where necessary) and then anchored into first floor timbers and all solid partition walls (to both floors). We would envisage that restraint should only be provided to the front and end gables (the new extensions to the rear providing an effective buttress) We recommend that straps be inserted to fully comply with the requirements of Building Regulations and BS5628.
- Where first floor supporting king beams are supported by timber lintels, then we would recommend that consideration be given to replacing the timber lintels with appropriately sized probable concrete members. This will eliminate future problems associated with creep.

The inspection of Whitney Close Farm, Huddersfield revealed a property requiring significant works to ensure the long term serviceability and structural stability of the property. These works range from carrying out rebuilding through to replacement of undersized/timber lintels etc.

We have not inspected parts which are covered, unexposed or inaccessible, and are therefore unable to report that any such part is free from defect.

This report is for the sole use of the addressees and their professional advisers. The report cannot be assigned without the written authority of Holdgate Consulting Ltd.

Yours sincerely



Ian Holdgate
for Holdgate Consulting Ltd