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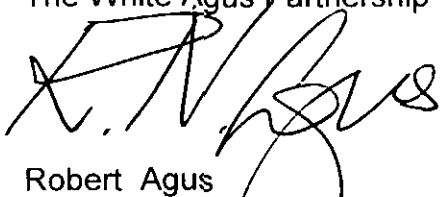
11th October 2012

Dear Sirs

Home Farm, Worsbrough Road, Worsbrough Village
Application Ref 2012/0626

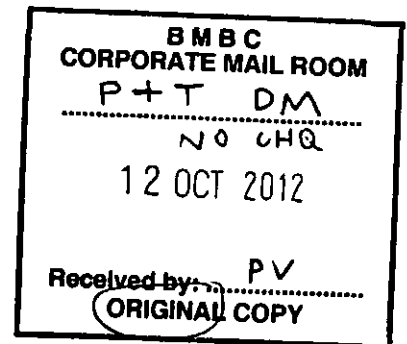
Please find enclosed a Structural Condition Report as requested prepared by Mr Ian Thorpe BEng(Hons), CEng, MISstructE.

Yours faithfully
For and on behalf of
The White Agus Partnership



Robert Agus

cc Mr Lidster (letter only)



**Home Farm, Worsbrough,
Barnsley**

**Structural Conditional Report
on Cow House & Hayloft**

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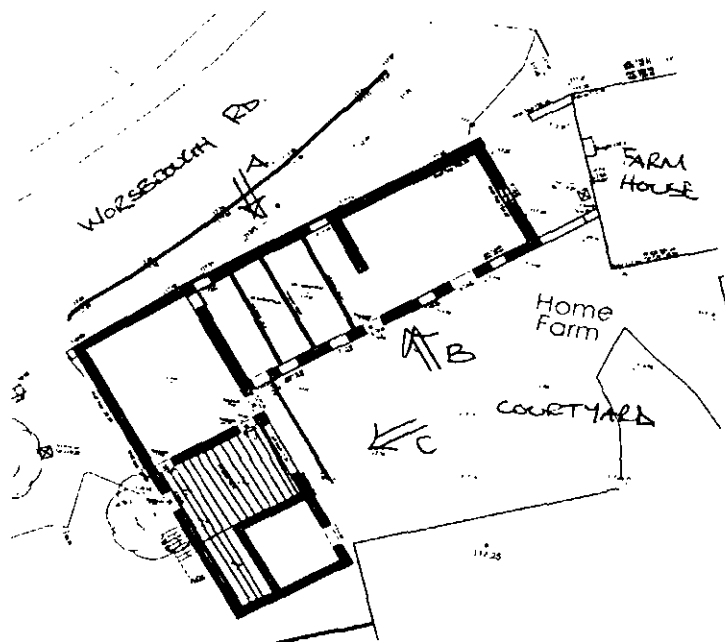
Introduction

A structural conditional report has been requested as part of a planning application to reinstate the structure of the existing cow house and hayloft at Home Farm, Worsbrough. In this regard a visual inspection was carried out by myself on the 17th September 2012.

This report examines the current condition of the buildings with a view to estimating the extent of structure to be removed and reinstated and structure which is satisfactory. The report is solely concerned with the condition of the hayloft and cow shed and no other farm buildings.

Existing Property Details

The existing structures are built from solid stone with the 2 buildings attached to form an L shape. The external elevation fronts on to Worsbrough Road, the internal elevation onto a courtyard. The hayloft abuts the existing farm house. The structures had internal 1st floors with pitched natural slate covered roofs.



Plan On Home Farm

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Inspection

The buildings are in a state of disrepair with the walls of the hayloft and the gable to the cow shed, facing on to Worsbrough road, restrained by scaffolding. In addition the arched door openings to both buildings have been propped to stabilise the stone voussiers.

The buildings have been vulnerable to the elements over many years. Because large proportions of the buildings have not been water tight, due to missing roof tiles and windows, this has affected the integrity of the roof structure, much of which has now collapsed, and the stone work to the elevations.

Hayloft (adjacent Farm House)

Where the sections of the roof structure have fallen in and landed on the 1st floor structures, this has exposed the 1st floor structure to the elements. As a result this exposure, plus the additional weight from the roof structure, has caused some areas of the 1st floor to collapse. With both the roof and floor structures missing, restraint to the main elevations does not exist and some movement of the walls has occurred. Currently the elevations are effectively restrained by temporary supports.

Where the floor structure remains intact, this is providing effective restraint to the external wall structure. The floor structure in place appears to be of relatively new construction and appears to be sound.

Cow House

The roof to the cow shed is similar to the hayloft. Much of the roof has collapsed affecting internal structures including walls and floors. With structural elements removed the apex to the gable appears to be unstable. Some sections of the external wall, opposite to the courtyard, have collapsed.

Sections of the stone work to the external elevations have been severely weathered. This is more prominent to door and window surrounds where much of the stone has lost integrity and form.

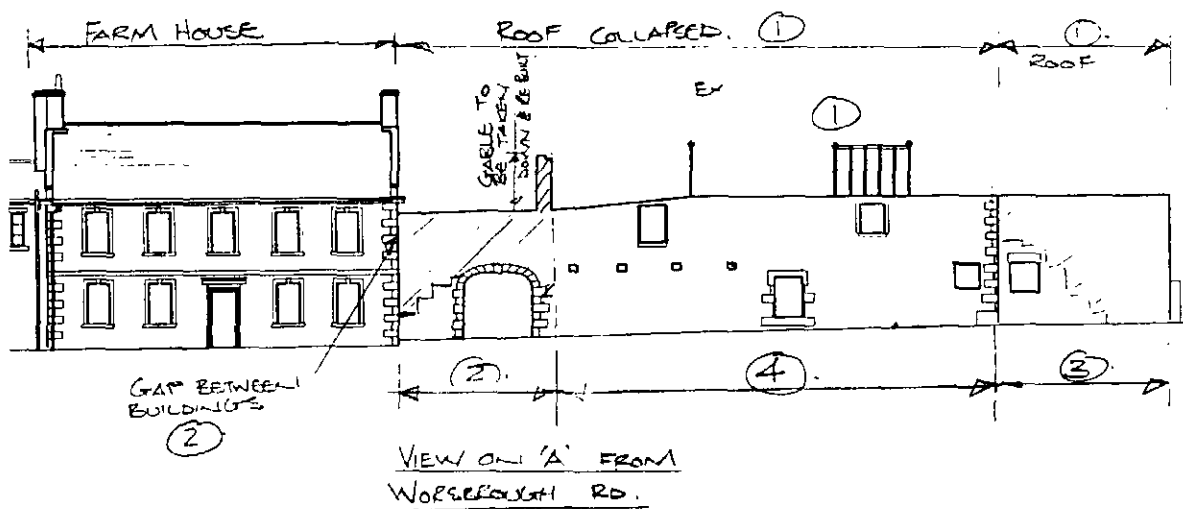
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Reinstatement

It is proposed to reinstate the buildings to stabilise the existing structure and make the buildings water tight. Reinstatement works are to include:

- 1 - Repair to the roof structure, forming new trusses and rafters.
- 2 - Provision of new floors to previous floor layouts.
- 3 - Removal and rebuilding of collapsed, damaged and weathered walls.
- 4 - Provisions of new windows and frames, and doors.

In this regard the percentage of the buildings requiring reinstatement / demolition is as follows
(Proposed details are outlined on architects drawings.)

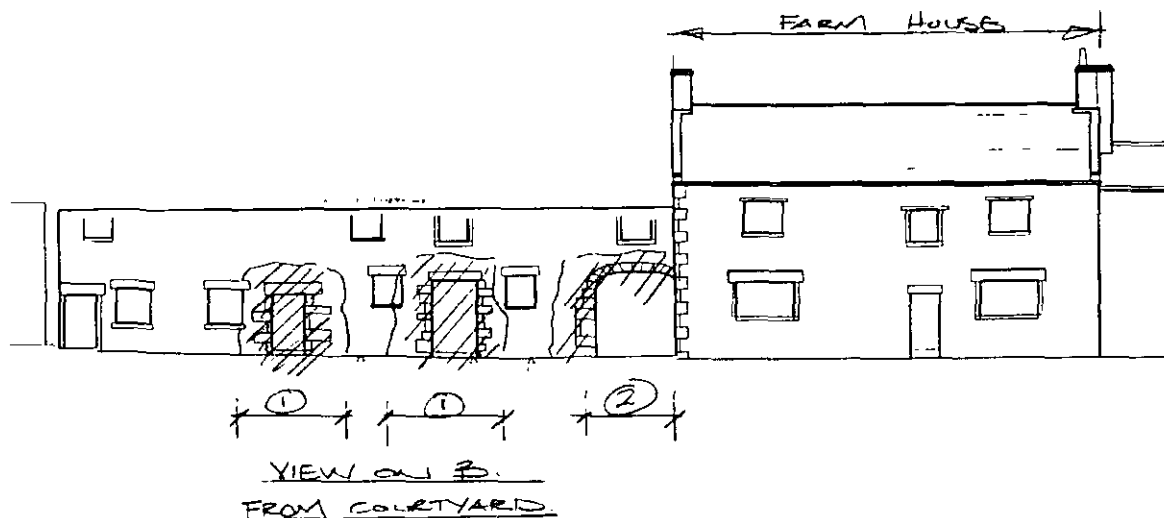


View on A – From Worsbrough Rd

Element	Repair	Approx % of Elevation
1	Remaining Roof structure to be removed. (Top of walls to consolidated and repaired to make level)	15%
2	Wall to be taken down and reinstated / realigned. Feature stone replaced / rebuilt	14%
3	Sections of stone to be replaced repointing required	16%
4	Minor patch repairs + repointing. Generally sound structure	5%

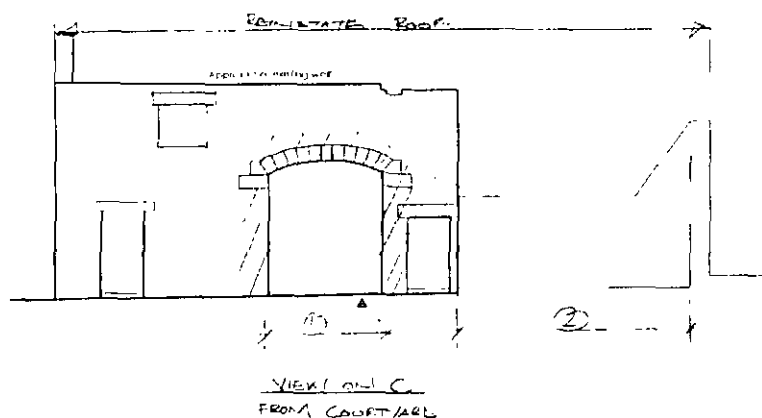
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View on B – From the courtyard

Element	Repair	Approx % of Elevation
1	Badly weathered stone work around doors to be taken down and replaced	14%
2	Voussiers to door are unstable. Take stones down and reinstate	8%
3	General patch repairs and repointing	5%



View on C – From the courtyard

Element	Repair	Approx % of Elevation
1	Voussiers to door are unstable. Take stones down and reinstate	20%
2	Collapsed area of wall to opposite elevation to be reinstated. Sections to be taken down to stabilise and allow reinstatement	25%
3	General patch repairs and repointing	3%

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Conclusion

The main issue is to stabilise the main elevations to both buildings to allow removal of the temporary supports. This requires the complete reinstatement of the roof structure to all areas. This will serve to restrain the tops of the walls and to go some way to getting the buildings water tight. In addition the 1st floor structure should be reinstated where these previously existed, giving additional restraint.

To enable the roofs and floors to be installed the walls need to be reinstated and weathered / damaged sections repaired in order that the walls above doors openings etc can sustain applied loads.

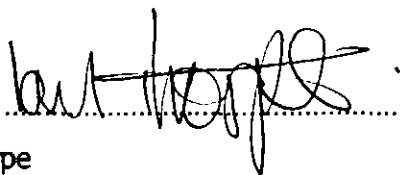
All internal areas should be cleaned of debris and unsuitable materials, and additional temporary supports installed where necessary. All suitable materials are to be retained for use in the reinstatement.

From our initial inspection we suggest that approximately 65 – 75% of the structure, as it stands, can be retained. This figure excludes roof, walls and floor sections which have already collapsed.

In the reinstatement an internal skin of blockwork is proposed to be added to the external elevations. This skin will provide additional restraint to the external elevations.

We suggest that excluding the removal of the current roof structure approx. 35 – 25% of the existing elevations need to be taken down to be rebuilt to a satisfactory condition.

Signed :



Ian Thorpe

BEng (Hons) CEng MStructE

Date : 10/10/12

For And On Behalf Of

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