alan johnston
partnership

Stydd Lane Almshouse

Structural survey report

MARCH 2024

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1. INTRODUCTION

The *Alan Johnston Partnership Ltd* have been appointed by *Your Housing Group* to complete an external structural survey of the Grade II* listed residential property in Ribchester, PR3 3YQ. The survey was visual only and included an aerial drone inspection. The survey was completed on 19th March 2024, rain had fallen in the previous days but the weather was generally overcast at the time.

1.1 Scope of report

This report outlines findings which relate to the structural performance of the building fabric and loadbearing elements. Non-structural items which may affect the integrity are also covered. Whilst every effort has been made to identify defects, this report does not cover the internal condition of the building or concealed elements.

1.2 Information received

AJP were provided with an address only.

1.3 Description of structure

The building was constructed in 1728 as an almshouse (a charitable dwelling for the poor or vulnerable, often linked to a church) which was restored in 1990 to house four apartments. Formed from sandstone and brickwork, the property is two storeys and features stone steps and shaped gable above the entrance. The T-shaped roof is covered with slate and has two chimneys, one on each side gable. The side and rear walls are covered with render.

1.4 Inaccessible areas

AJP did not access any internal part of the building.

1.5 Summary of general condition

Based on guidance authored by *English Heritage*, the various possible condition categories are described in the table below.

Category	Description
Very bad	Building or structure where: - There has been structural failure - There are clear signs of structural instability - There has been a loss of significant areas of roof covering, leading to major deterioration of the interior - Where there has been a major fire or other disaster affecting most of the building
Poor	Building or structure with: - Deteriorating masonry - A leaking roof - Defective rainwater goods, usually accompanied by rot and general deterioration of most elements of the building fabric including external joinery - Where there has been a fire or disaster which has affected part of the building
Fair	Structurally sound but in need of minor repair, or showing signs of a lack of maintenance
Good	Structurally sound, weather tight with no significant repairs needed

Despite the reported leaks and minor water ingress, AJP are of the opinion the building is currently in a 'fair' to condition. This could easily deteriorate to 'poor' if not remediated quickly. Most defects have occurred due to water ingress, and a lack of maintenance.

1.6 Recommendation for further investigation

Building owners have an ongoing responsibility for repairs to the structure of the building under the Defective Premises Act 1972. It is always beneficial to prevent issues from occurring by way of proper maintenance, rather than dealing with defects after they have occurred. *Your Housing Group* are encouraged to consider the following further investigations:

- A timber specialist should be consulted to comment on the condition of timber roof joists/rafters if they have been exposed to moisture.
- It would be prudent to engage with a building surveyor to advise on non-structural matters.

The above recommendations are advisory only.

2 DESCRIPTION OF DEFECTS

Various defects were identified which has the potential to affect the structural integrity of the building directly. The condition of principle structural elements and their surrounding materials are discussed in the following sections.

2.1 Masonry and stone walls

All external masonry walls are loadbearing and provide stability to the building. Given the building age, no DPC will be present, but it is possible that injection resin works were completed and concealed behind rendered surfaces. Various defects were identified as follows:

- The rendered surface on both gables is being stained due to cascading water falling between gaps in coping stones. Cracking to the render has occurred at the head of the wall, likely due to thermal/building movement. The North gable is more severely affected. The cracks are large enough to allow water to penetrate fully to the brickwork substrate. Ref photo 1 & 2.
- Parts of the gable above the entrance are becoming soaked due to missing flashing. This is causing staining and will lead to vegetation growth if not dealt with. Refer to photo 3 & 4.
- Fine cracks have propagated through the sandstone arches, particularly near the keystones, potentially due to thermal/building movement. Due to the variation in colour of the sandstone, these cracks appear to be historical and may have been repaired previously as part of the restoration. They do not appear to be structurally concerning at this time. Refer to photo 5.
- One brick wall is becoming stained, likely due to the overspilling gutter. Refer to photo 6.

The condition of the exposed brickwork is generally good, and provided this is maintained it will remain defect free.

Photo 1 – Cracked render

Photo 2 – Staining on render at coping stone joint

Photo 3 – Poor or missing lead soaker

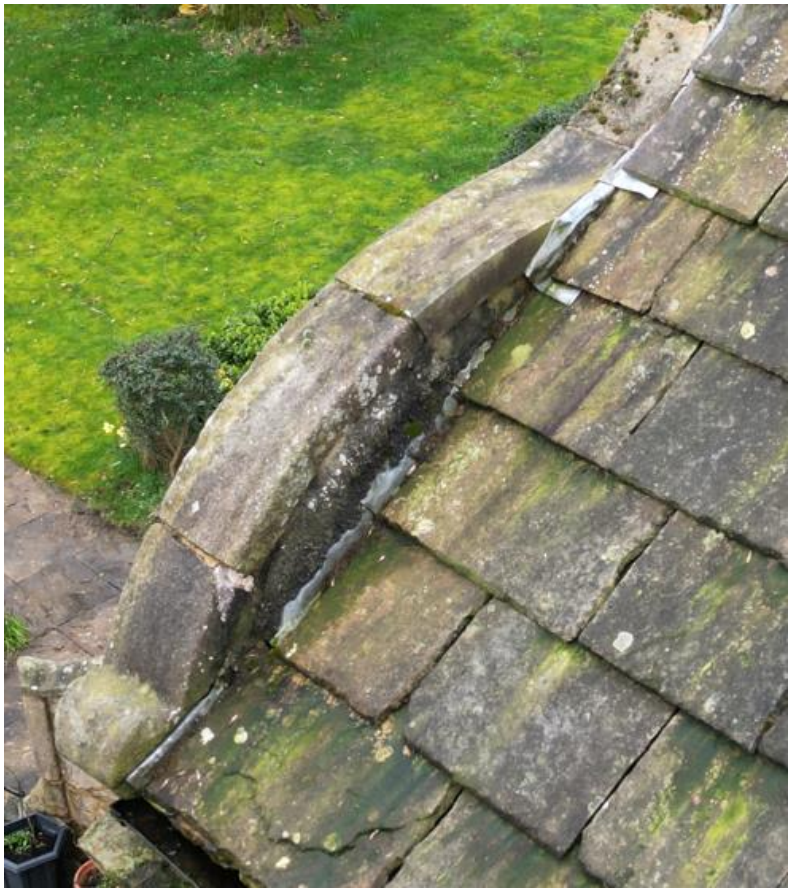

Photo 4 – Poor or missing lead soaker

Photo 5 – Possible previous repairs and discolouration to sandstone

Photo 6 – Stained wall likely due to gutter overspill

2.2 ROOF

The T-shaped pitched roof is almost certainly a timber construction, topped with overlapping slate of various sizes. Load soakers have been used at wall/chimney junctions. Guttering at the bottom of the roof pitch drainage into down pipes and outlets at ground level. Various defects were identified as follows:

- Due to leaves and other debris, some gutters are holding water and unable to drain effectively. This issue is compounded as the gutter has low points which cause water to pond. The gutters will overspill in heavy rain and cause the bedding beneath flagstones below to wash away. Refer to photos 1, 2 & 3.
- A small number of tiles have slipped or lost material due to cracking. At least two large tiles at ridge level has a crack in a critical location and may be allowing water ingress. Refer to photo 4 & 5.
- The protective housing to one of the plastic flues has slipped and will probably be holding water. Refer to photo 6.
- Mortar bedding appears to have been used in lieu of soakers at coping stone locations, the mortar has degraded and is allowing water to penetrate, leading to water ingress and render damage. Refer to photo 7.
- Soakers do not appear to be well installed to the feature gable above the main entrance, this is allowing water to penetrate and cause staining/water ingress. Refer to photos 3 & 4.
- The chimney flashing does not completely cover the head of the render, potentially allowing water behind the surface and causing cracking etc. Refer to photo 8.

Although AJP were not able to inspect the roof void, it is probable that water ingress has affected the timber joints inside.

Photo 1 – Ponding water in gutter

Photo 2 – Completely blocked water outlet in gutter

Photo 3 – Blocked valley gutter

Photo 4 – Broken tile

Photo 5 – Broken apex tile.

Photo 6 – Slipped flue housing

Photo 7 – Poor mortar condition beneath coping stones

Photo 8 – Render not completely covering head of render

3. RECOMMENDATIONS

As discussed in section 1.5 (p2), the condition of the building is judged to be 'fair'. This could easily be improved to 'good' with some minor remediation works. Similarly, the roof condition could easily deteriorate and allow more water in, leading to a 'poor' condition. *Your Housing Group* have a legal responsibility to maintain this building, particularly as it is listed, and are encouraged to undertake their own risk assessment to decide with recommendations are relevant/necessary. The defects are summarized below and annotated on photos 9, 10 and 11:

A All items in section 1.6(p2) are to be addressed, completing further surveys where necessary.

B Clean all gutters, including at roof valleys, and unblock outlets

C Appoint a competent roofing contractor, with experience in dealing with historic slate/timber/lead construction, to advise on various issues including:

- The poorly installed/missing lead soakers at the junction between the roof and the gable above the entrance.
- Slipped and broken tiles which may be leading to water ingress
- The deteriorated mortar bed for the coping stones on the side gables
- The slipped plastic housing around the plastic flue
- The flashing which appears to terminate beneath the render

D Remove the render below the coping to expose the probably damp brickwork. Allow the brick to breath/dry whilst improving the condition of the coping (as the previous point) to ensure water does not drain from the roof edge down the wall. The render can be replaced as necessary. *Historic England* should be made aware of these works as the buildings appearance will be affected temporarily and they may wish to comment.

E The fine cracks in the sandstone gable, which may just be marks from a previous repair, should be monitored as part of periodic surveys.

Lettered references are on p10

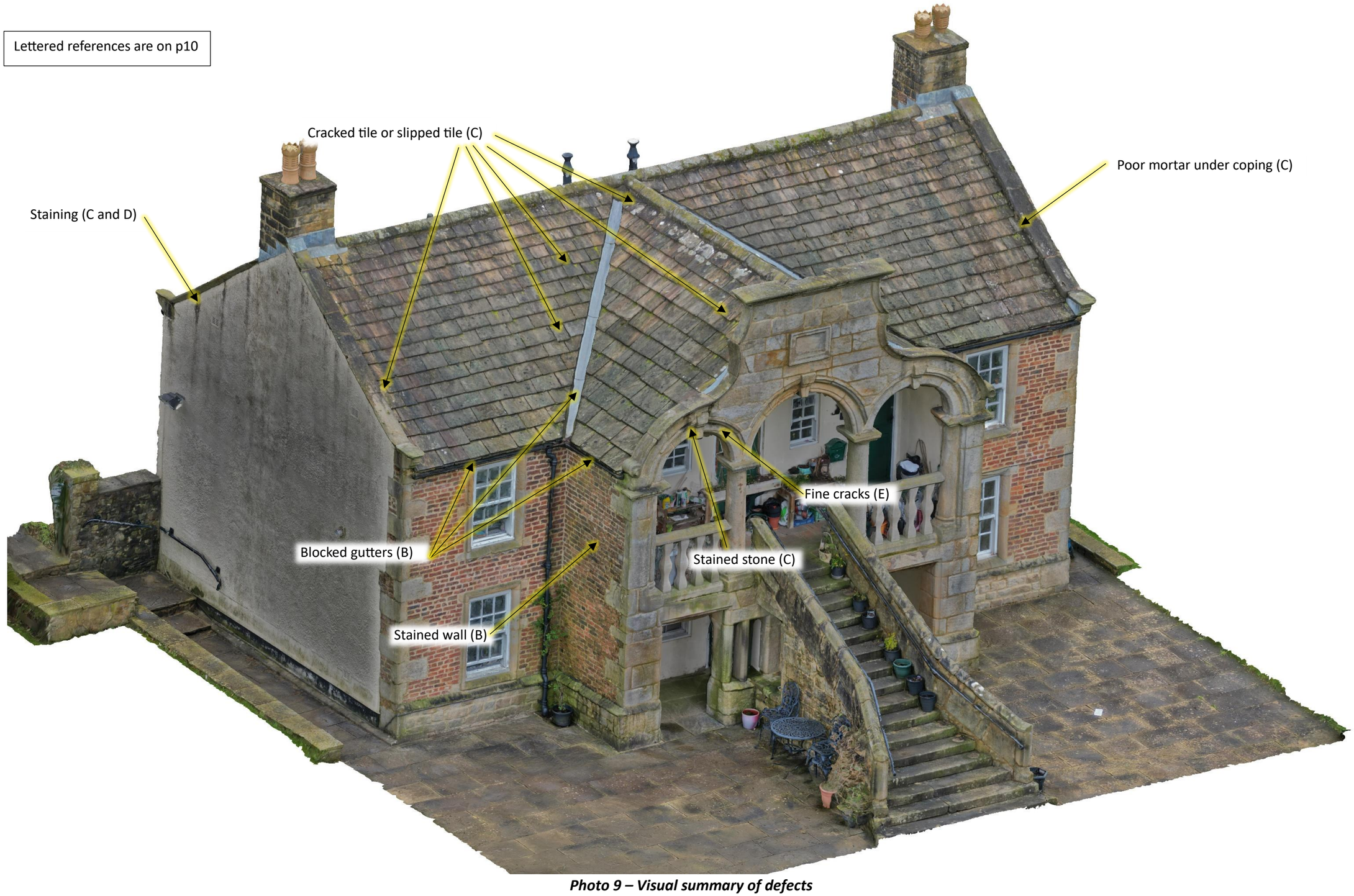

Photo 9 – Visual summary of defects

Lettered references are on p10

Photo 10 Visual summary of defects

Lettered references are on p10

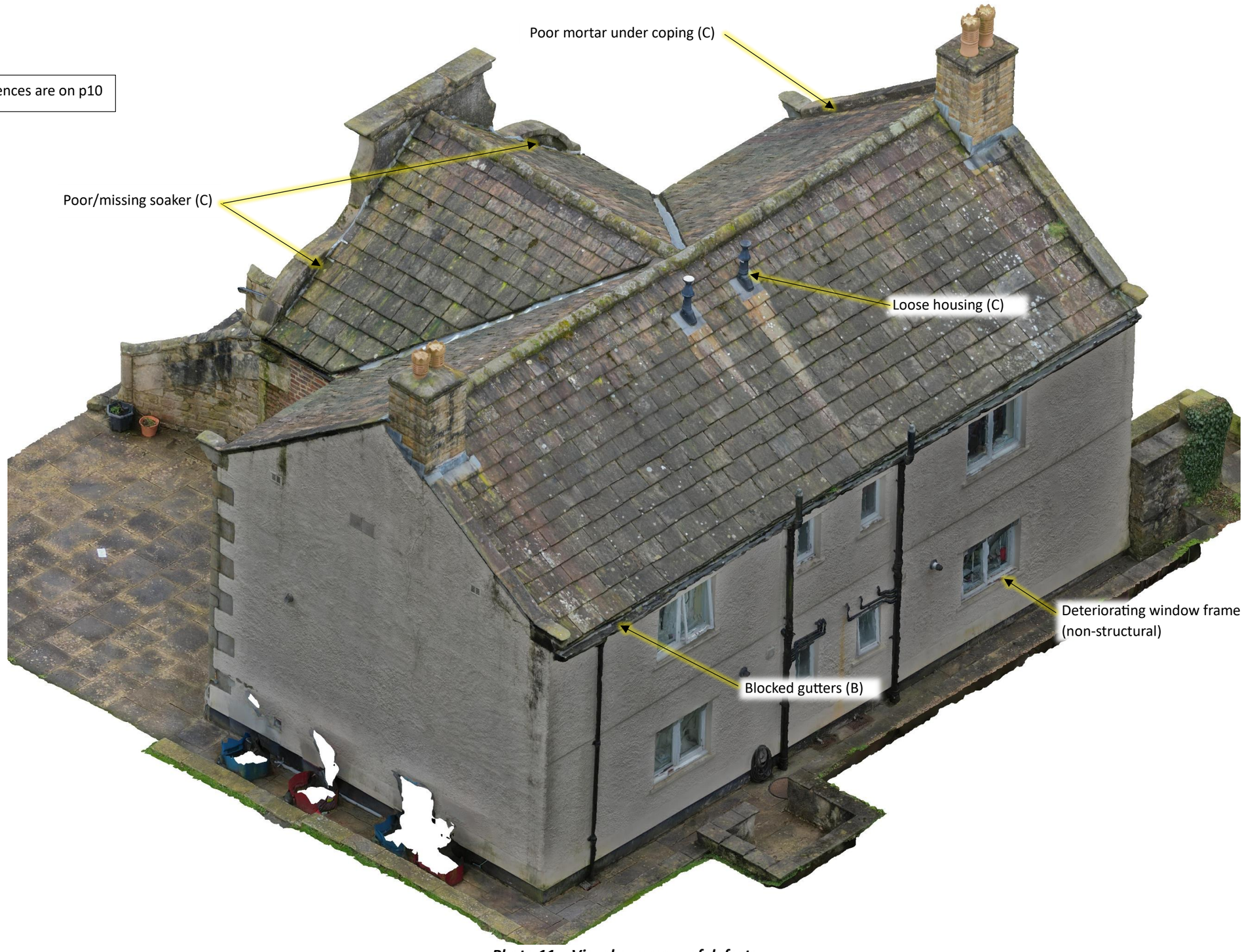

Photo 11 – Visual summary of defects

Photo 12 – Orthographic image of the Almshouse, for visual appreciation