



21st August 2025

Affinity Architects
FAO Melanie Latham

Our ref: SJ/23147 – LR update
Please quote our reference when replying

Dear Melanie

RE: 10 The Close, Salisbury

Further to your request to inspect and report on the roof over Bed 3 now that the tiles have been removed, I report as follows.

1.0 Introduction

- 1.1 A second inspection of this roof was carried out by Stephen James of Alexander Associates on 24th July 2025. The weather was fine but overcast at the time of the inspection with an air temperature of 22 °C.
- 1.2 Due to its urban location, the building has a low degree of exposure to the prevailing wind.
- 1.3 We understand that the property was built in the 15th Century with additions since then, although the Historic England website states that it is 18th Century.

2.0 Description

- 2.1 The roof over Bedroom 3 is the principal focus of this report.
- 2.2 The roof has a cropped hip construction with plain clay tiles to the three roof slopes, the east slope only having sarking felt beneath the tiles, the tiles and sarking felt have since been removed.
- 2.3 The ceiling joists are attached to the existing rafters and purlins. These purlins span from the end gable wall beneath the cropped hip, over a truss and onto the wall of Bedroom 3. The current roof cannot be considered a raised tie construction due to the condition of the rafters and purlins and the connections between them all.
- 2.4 A plasterboard finish is applied to the skelining and to the ceiling.

3.0 Condition

- 3.1 The roof has a high tie and so the roof space is quite restricted which is why it was difficult to inspect all the timber of the roof, and particularly the rafters supporting the skelining prior to the tiles being removed.



- 3.2 There are up to three timber sections at each rafter position on the east face, put in place as the purlin deflected and then failed completely (Figs 1 to 3). These have been packed out to try and create a plane surface, but which has failed over time.
- 3.3 The ceiling ties are attached to the underside of the purlins which means that where they are attached to the east purlin, in some instances there is only 40mm of the joist attached to the purlin due to its heavily deflected shape, as well as being failed, too.
- 3.4 As the rafters aren't attached to the wall plate and are of slender section, I would not be able to justify these timbers to support the roof tile load and an imposed construction load if they were considered to span from the wall plate to the ridge beam, nor the ridge beam in these circumstances.
- 3.5 Whilst it may be possible to design a replacement purlin (the existing fractured one is too deflected and of small section to consider trying to repair it, and it is in the way of the bearing of a new purlin), again the rafters are of too small a section to justify.
- 3.6 I would not be able to create a raised tie truss at each rafter position using any of the timbers due to their small section and deflected shape.
- 3.7 Whilst I understand that as much of the historic timber as possible should remain, I have concluded that it is not possible to incorporate the historic timbers into the proposed roof structure.
- 3.8 The proposed raised tie trusses will support the roof covering of plain clay tiles and where we are able to pick up the original rafters, they will also help to support the existing ceiling and skeling finishes.
- 3.9 The hip rafters forming the cropped hip are in very poor condition and not attached to other timbers. They will need to be replaced with a hip rafter that can be attached to other timber members so that fixings from the hip tiles can be made securely.
- 3.10 The timber wall has been pushed out by the movement of the historic roof, but this can be restrained by the raised tie trusses

4.0 Conclusions and Recommendations

- 4.1 The condition of the roof structure is very poor, and I would not be content to leave it as it is with the significant defects in major members as well as the poor condition of the rafters.
- 4.2 I have designed a raised tie truss that will support the roof and the existing timbers, skeling and ceiling. Other possible solutions are difficult to justify in terms of re-using any of the existing timbers structurally.

This report is concerned only with the roof over Bedroom 3.



If you have any queries regarding this report, please do not hesitate to contact me.

Yours sincerely


STEPHEN JAMES
BSc(Hons) MBA CEng MICE MStructE

Encs: Photographs



Fig 1 View of east side of roof over Bedroom 3.



Fig 2 Fractured purlin and poor rafters.



Fig 3 Minimal amount of timber remaining to ceiling joist cut to suit purlin, which is fractured in any case.