

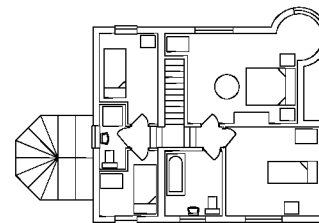
# Surveyors and Designers

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## Bryceson Shaw Associates

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### Method Statement for roof repairs.

November 2020

Our ref. 2657

### Littlehampton Farm, Franciscan Way, Littlehampton.

The roof of the farmhouse is of traditional construction with rafters, ceiling joists and in places purlins. The purlins are of limited effect because of support conditions. The roof is some 300 years old and has clearly had repairs in the past. The house is to be renovated and divided into 2 units.

The roof structure needs to be repaired in order to progress the project. Some rafters are broken, others are undersized and some have weakened fixings.

Calculations show that 100x50 rafters are adequate as are the existing 89x76 rafters. Rafters in the older part of the building are split trees and these will need individual assessment as the working section is different for each one.

As the building is listed any repairs will have to be reversible if possible and preserve the vernacular structure.

Crawl boards and lights will need to be provided so the carpenters can work safely. The house is 2 buildings and one has a continuous roof for its whole length whilst the other is divided into sections with several trap hatches. One room has ashlar walls and boarded skellings and the structure cannot be accessed.

Broken and fractured rafters are to be sistered alongside with 1x 100x50 C24 timber. Ideally the support rafter should span from ridge to wall plate if possible however, some are probably too distorted to achieve full support so the new timber is acting as a splint. The support rafter is to be timber locked at 200-300 c/c to the defective rafter.

Rafters below the above section sizes are to be sistered as well. The connections of each rafter to the ridge and ceiling joists are to be examined and if appearing loose or pulled away shall be additionally screwed or bolted together.

As the work proceeds the insertion of additional collars will be considered particularly where a measure of distortion occurs.

Every collar inserted and rafter treated is to be sequentially numbered and photographed before and after treatment in such a way that the number is clear and a full record of the works is maintained. Plastic tags nailed to the timbers with indelible marker pen numbers are likely to be the best solution rather than trying to mark old, dirty timber. Mobile phone pictures will be more than adequate for the recording.

One room at the South end has a rare reed and plaster ceiling and this has to be preserved. Unfortunately the room also has a suspect collar joint, a broken/rotten purlin and the rafters are split trees. This room is to be repaired last so problems found in the execution of the job can be considered as they occur with a view to developing a separate method statement for the room.