Design and Heritage Statement

Ashvale
Lower Town
St Martins

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DUCHY *of* CORNWALL

Introduction

The proposal is to replace the slate roof covering of a farmhouse.

Ashvale is a 4 bedroom dwelling which has an attached workshop found in a cluster of dwellings agricultural buildings of lower town. The prominent buildings in the vicinity include a relatively modern large 30 bedroom hotel. Ashvale is not an imposing building as the most will view it from the lane that runs through Lower Town. This runs along the rear/side elevation whilst the principle elevations are perpendicular and set around 1 meter lower than the track. The building is Grade II Listed.

The listing describes the property as a *Farmhouse. Mid C19, incorporating older former dwelling. Uncoursed and roughly coursed granite rubble with C20 slate and pantile roofs; brick end stacks to main mid C19 range and truncated end stack to older range. 3-unit plan to main range and 2-unit plan to older range at right angles to west. 2 storeys. Main 3-window range has granite lintels over panelled door and horned 2/2-pane sashes. Lower former dwelling has granite lintels over C20 plank door and small window; concrete lintel over C20 window to right and C20 window under eaves. Interior: former dwelling has pegged A-frame trusses*

The proposal is to remove the defective existing slate roof covering, carry out repairs to the wall plates and timber rafters and provide a new natural slate roof covering with the addition of a continuous roofing membrane that is suited to the roosting of bats but will act as a secondary defence against water ingress.

The Existing Issues

The current roof is allowing the fabric of the building to deteriorate. Whilst temporary repairs have been carried out, issues continue.

Like many solid stone built older properties, the domestically occupied section of the property has suffered continual issues with dampness. This has been monitored over many years now. Water had been noted tracking down and manifesting itself through window reveal heads. Some opening up works were carried out and the roof was inspected internally. It appears that there is an inherent defect in the construction make up of the roof. Parts of the roof have a modern nonbreathable membrane, whilst other parts use a traditional technique of lime torching and some include both. Water is penetrating the slate roof covering, concentrating where it is unable penetrate the non-breathable membrane but subsequently overwhelming the lime torching and entering the structure of the building at the top of the walls saturating them during heavier rain and occasionally breaching the walls. The wall plate in the area which has been investigated is rotting so it is imperative that works are carried out swiftly however, the ecological surveys have found that bats are present and potentially a maternal roost would be found so timing the works will be critical.

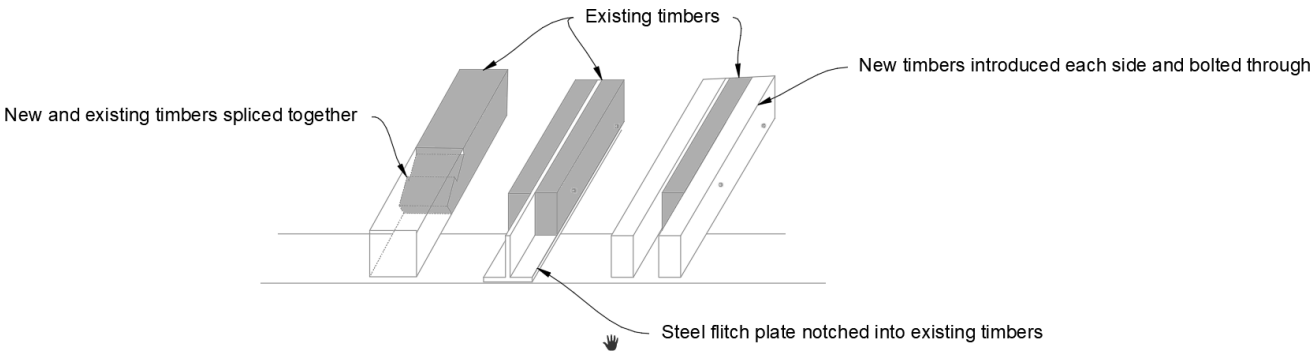
Materials and techniques

It is proposed to replace the wet laid slate with a dry laid slate so that a protective membrane can be effectively introduced.

The sole reliance on the existing wet laid scantle slate roof covering as currently in place, although a noble conservation technique is not conducive to the harsh environment and humid conditions observed for the locality. The proposal is therefore to use similar sized slates laid to a tight gauge but with traditional bitumen based nonbreathable sarking felt with ventilation space. The bitumen roofing felt has been recommended in the ecological study due to the presence of bats. It is thought the proposal would enhance the space for bats and would ensure the structure of the building, once repairs to the timbers have been carried out, would be better preserved.

Timber repairs are inevitable and it is proposed to replace the wall plate in a like for like basis, whilst the feet of the trusses and rafters are likely to require repairs. An example of potential techniques used is shown on the diagram below, however the exact details of the repair can only be finalised at the point that the timbers are fully exposed during the process of re-roofing. Principles which will be adhered to include:

- Retain as much of the original elements as possible.
- Ensure process is reversible.
- Where replacing material do so with like for like materials.
- Honest exposure of repair work – where modern intervention used, make it an obvious repair.
- Document the process through photographic records.



Impact

There will be a subtle change to the external appearance of the roof however the building will be better protected from the elements.

By changing from the problematic wet lay scantle slate to a dry lay slate there will be a subtle change in the appearance as viewed from the outside with some of the lime torching visible sandwiched between the slates. The use of small 200 x 400mm slates with a 100mm lap will achieve a similar gauge albeit not a diminishing course. The lime torching would have been introduced originally to prevent drafts and lifting of slates as well as a means of fixing the slates. This technique was before modern membranes existed. Buildings evolve with the technology available at the time. The latest attempt to replicate the traditional technique has not been good for the long-term preservation of the building. It is hoped by introducing modern roofing felts, insulation and ventilation along with keeping small slates to a tight gauge the building will be preserved for decades to come sympathetic to the history of the building and the ecology of the area.