Design and access statement

Strengthening works

Hunter's Moon Cottage, 8 The Street, Shoreham by Sea BN43 5NJ

Introduction

Hunter's Moon is a 16th century Grade II attached listed building in the Old Shoreham Conservation Area. Constructed originally as a timber box-framed dwelling, the historic building has been converted into two properties and adapted and extended in the 18th, 19th and 20th centuries. The property stood in open farmland at the edge of Old Shoreham village until the early 20th century but is now surrounded by suburban developments.

Proposal

This application is to strengthen a central tie beam which has been heavily eroded by beetle attack.

We have recently removed a 20th century partition which divided the ground floor reception rooms in the oldest part of the building and inserted two oak posts to strengthen the original tie-beam.[1]

The partition and associated timber cladding had encased the original tie beam, limiting access. Removal of these elements has allowed us to fully assess the beam's condition. The structure (beam and support posts) is now self-supporting but beetle damage in one area of the beam is more extensive than had been apparent. There may be further hidden weakness in the timber.

To address this weakness, we have added a strengthening timber above the beam, tied to it by steel rods. We also propose to install a metal plate beneath the beam to spread the load carried by these rods, and to insert a third oak post to support these reinforcements.

Design principles

One of the overall purposes of repairs has been to improve the resilience of the building by reinstating adequate support for the original timber framing components. Modern additions have been removed and the original frame components are restored to view. These and the further strengthening works proposed here follow Historic England principles of repair:

- They do not involve the loss of any historic fabric, other than the necessary drilling of the oak beam to insert three 10mm metal rods
- The new reinforcing elements, comprising an oak beam and post are appropriate to the fabric of the building. The post will be positioned and connected to the original beam by an existing mortice, replicating part of the original frame construction
- The metal plate is a necessary safeguard against failure of the beam and connecting joists in the weakest area and should maximise the life expectancy of these components. Most of the other elements of the original frame have been lost at ground level as the result of earlier repairs and renovations.
- This intervention is reversible without detriment to the historic fabric. It avoids the alternative which would be to replace damaged parts of the beam with new timber..

Acces

The repairs do not affect access to the property.

[1] See AWDM/1878/19 *Listed Building Consent for removal of a modern stud and plasterboard wall at ground level*