The Old Cottages, Mellis Road, Thrandeston, Suffolk.

A schedule of potential repairs to the timber frame.

We have been engaged by the new owners – Mr. and Mrs. Wheeler to carry out some framing repairs having assessed the property at pre-purchase stage. This document seeks to catalogue the issues with the principal framing components as well as to provide a schedule of simple, but targeted and effective repairs.

This is written as a method statement for the project and an attempt to provide clarity for the local authority, hopefully allowing them to grant the application for listed building consent. As is entirely normal in such circumstances, some elements of the work are unknown until further opening up has been commenced. We propose that once consent has been granted, we will remove sections of render so that we might more accurately quantify the repairs and the precise approach to each element so that any attached conditions can then be swiftly discharged.

Throughout the project, the general principles of the repairs will operate on a sliding scale. Thus, we would supplement the framing if it is found to be deficient, but largely complete. If elements are in a more poor condition, then targeted repairs (patches, scarfs etc.) will be carried out using the correct materials and techniques on a like-for-like basis. Only if a primary component is missing or beyond repair will we consider full replacement and then, as above, for the new components to match the existing.

The sole plates to the rear (south) elevation are mostly in poor condition with the cement-based render currently acting as a diaphragm holding everything in place. The internal crossframes are largely intact and unusually, every single crossframe is a “closed truss” – that is to say there are no “open trusses” in the hall space and thus the frame is quite strong. Where earlier (17th-19th century) alterations have been carried out they have attempted to retain strength by using ironwork and a rare use of supplementary portal frames. In effect the south wall has been able to deteriorate with minimal problems caused to the surrounding fabric but this needs to be checked before that starts to happen so an intervention of some sort is absolutely in order.

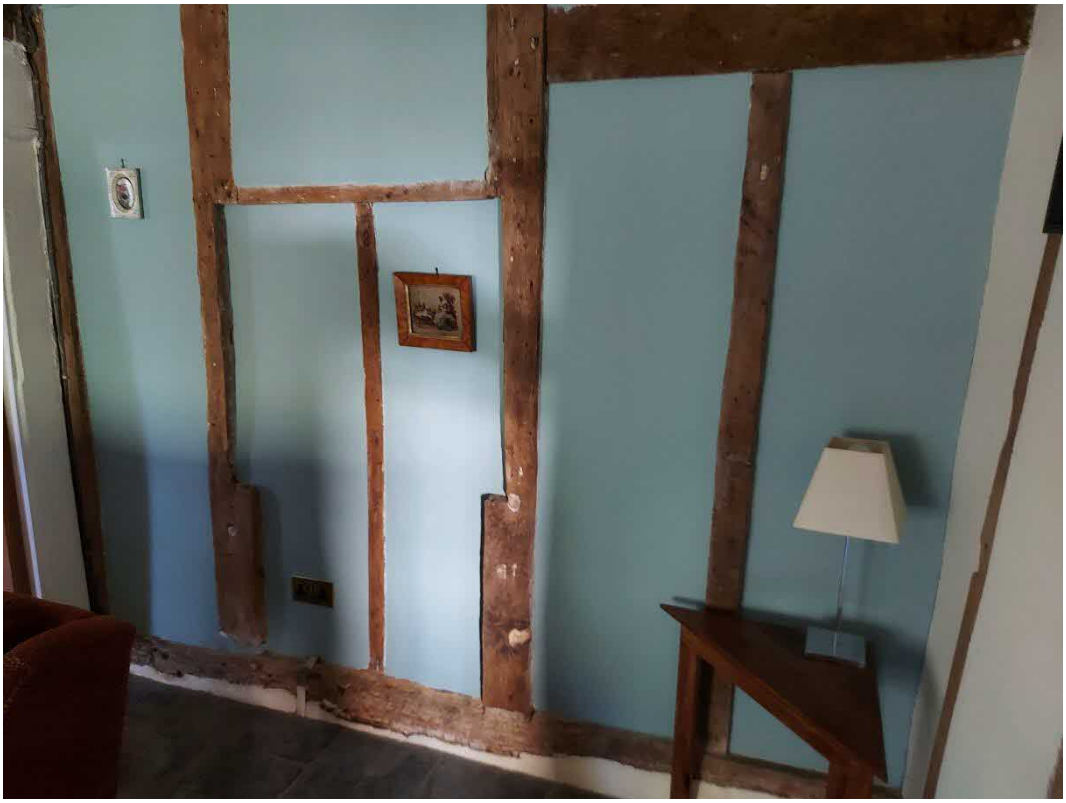
The plate to some of the south elevation can hopefully be repaired with a combination of lime and brick filler to any smaller voids within the timbers. Loose material would be raked out and replaced with broken soft red brick, tile and bound together with a lime mortar. Repairs such as this would be carried out in a staggered fashion so that no one element is reliant on the filler until it has been packed into place.

Where the decay is over a larger area we will use simple timber patches, to be fixed to the existing fabric with stainless steel fixings of a size appropriate to the repair.

However, where the plate is insubstantial to more than 50% of its section then it should probably be entirely replaced with new green oak.

Where possible, mortice and tenon joinery will be retained but where any stud/post tenons have decayed or broken then simple stainless steel L-brackets will be coach-screwed between the stud/post and the sole plate. These will be positioned within the infill area and not visible once the work is complete.

A section of sole plate on the south elevation (above) – two modest sections appear to be simply butted together with no obvious pegs which suggests a later replacement. Both are soft to the underside and outside, behind the cement render, they are likely to be in worse condition.



The rear wall shows much evidence of alteration and even where plates are of a larger section there is an absence of obvious pegged joinery. Many elements have been plastered over internally – presumably due to their irregular shape but also to perhaps mask their condition.

To the exterior (south), the brick plinth is rendered and painted black – some of which could be coal tar, applied as an attempt to stop dampness reaching the plate but invariably causing further permeability issues. The cement-based render is decorated with modern paint and there is some cracking evident in numerous locations, although none very large as yet.

Adjacent to the plinth is a strip of shingle which should allow better evaporation at the base of the building and the brick paviours are laid to a reasonable fall so we might assume the rain is adequately directed away from the building.

We propose to remove approximately 600-900mm of render in a neat, level line across the entire rear elevation and the adjacent east gable. We would carry out any appropriate repairs and then hand over to others for closing in.

Once the timber repairs are complete the plinth will be made good as necessary but much of it is below the ground levels so it should be fully retained with only minor repairs needed to the top course or two.

Damaged infill panels of wattle and daub will be repaired with reconstituted daub, laid onto new wattles if necessary.

Although the existing render is thick, hard and cement-based, the current programme of works doesn't call for replacement in entirety. However, all making good to the lower section where we have cut render to allow tool access and fitting of new timbers will be carried out by an experienced lime plastering contractor, see their separate comments regarding the makeup of the render.

It is hoped that once all works have been completed the adjacent surfaces (shingle and paviours) are considered satisfactory and that no additional groundworks are required to these elements.

The eastern gable shows some sign of movement and here we might conclude that the sole plate and studs/posts above are in need of further inspection and probable repair. It is likely that the plate has decayed and compressed, which in turn allows the studs and posts above to push down into the insubstantial timber and cause distortions and misalignments.

This area may require the inspection and subsequent repairs to go higher – probably up to first floor level. The corner shows some evidence of recent filler and has cracked since that filling but the overall distortion appears to largely pre-date the rendering as this amount of movement under a cement render would not be tolerated by so brittle and rigid a material and we might expect to see far more cracking and separation.

As is entirely normal in such circumstances, some elements of the work are unknown until further opening up has been commenced. If anything is found to deviate from the principles of this schedule, we will report back to the local authority and advise them of our findings before carrying out anything markedly different from what has been agreed.

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