



# Proposals Replacement of Structural Timbers

Barn on Talbot Street,  
Chipping,  
Lancashire,  
PR3 2QE



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## 1.0 INTRODUCTION

This statement/document has been compiled to gain permission to remove the existing structural timbers and replace them with new at 'The Barn' on Talbot Street, Chipping, Lancs, PR32QE.

Following the start of works it has become apparent that the existing roof trusses are not fit for purpose. Please refer to the below image and structural engineer's report highlighting the issues.



Please see above photographs of the existing beams at close range, as shown there has been large ingress of water over the years it has been derelict, resulting in excessive water damage to the beam ends. This is then worsened by the insect infestation which has resulted in the original timber being able to be pulled apart by hand.

Our plan was to keep and repair the trusses however they have gone too far into disrepair and are in the opinion of this Author a health and safety concern.

It has been noted that the king truss sections of the beams are mostly ok and could be re-used in the new beam build up.

## 2.0 ROOFING PROPOSALS

The proposal is to place new steel purlins from spine wall to spine wall which is to support the weight from the main roof. We then propose that the new trusses will be installed in the barn. The timbers will be brought into the space and a joinery team will model and construct on site as each beam will be slightly different due to the existing shape of the build.

We request that the middle beam in the middle property is not reinstated since the existing beam is low and causes a head height issue in the corridor.

The timber to be used will be Douglas Fir to match the existing beams.

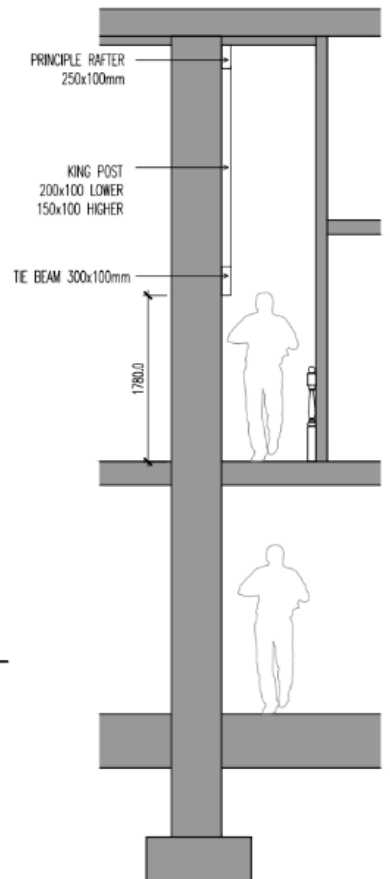
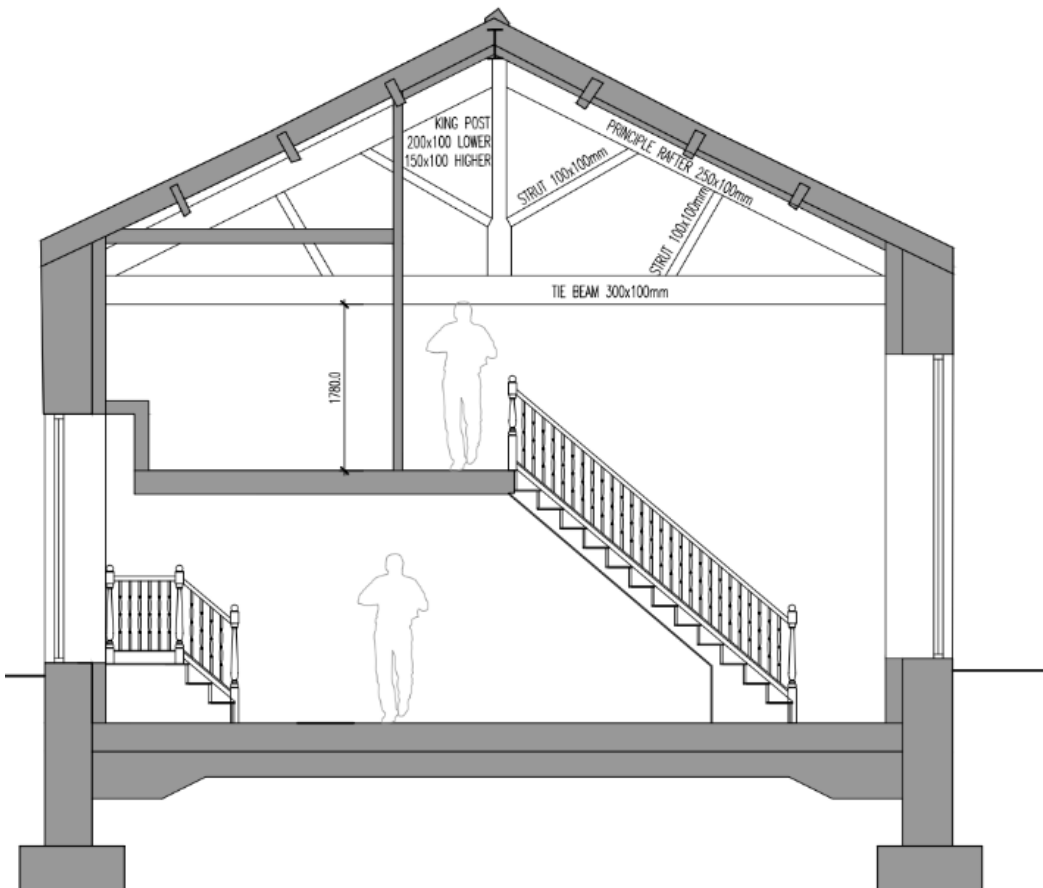
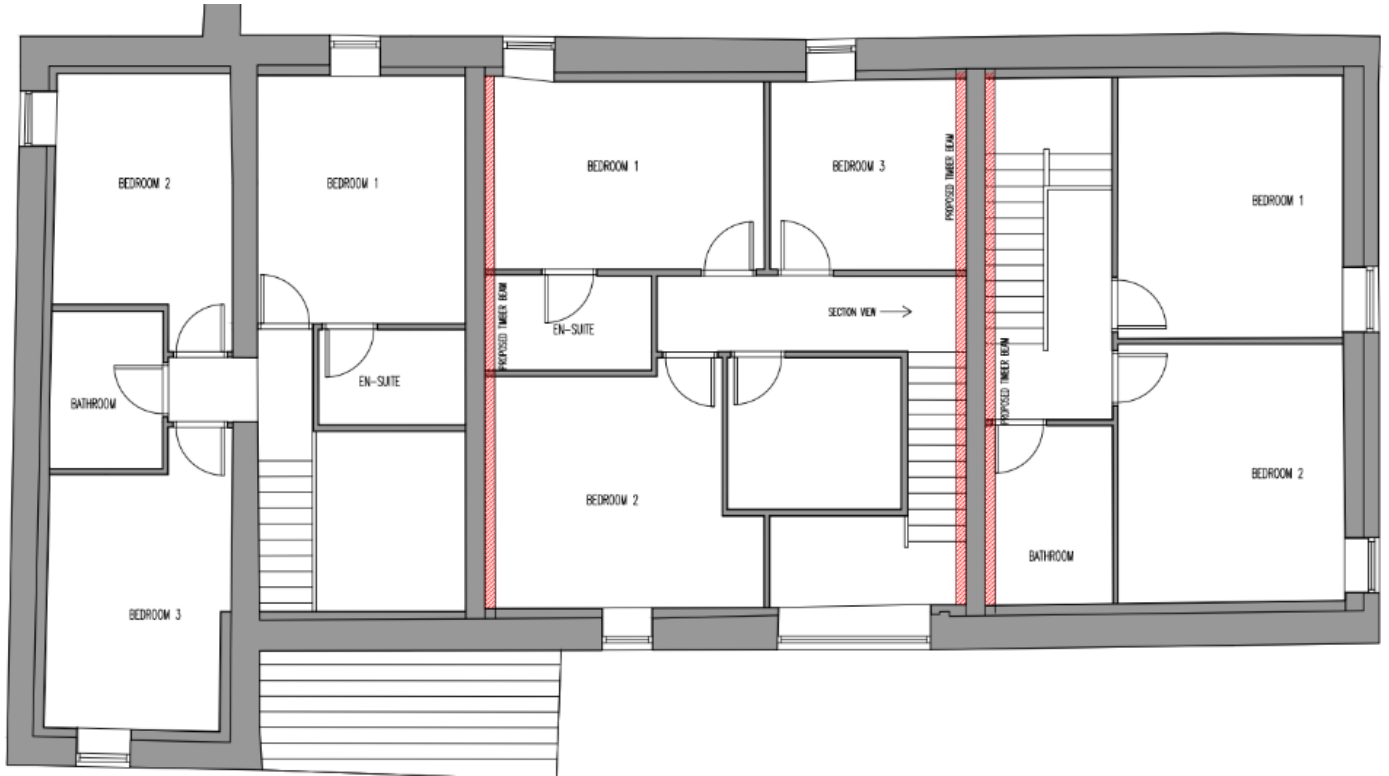
In our opinion the proposal will be sympathetic to the building, whilst also providing a safe and strong structural solution to support the integrity of the building going forward.

The proposed trusses will be for aesthetic purposes only as such we have the option to move them. The trusses are to be moved slightly from the original position to make them land in a more prominent position in the room make them more visible and make them more of a feature within the space.

## 3.0 SCHEDULE OF WORKS

The below is the proposed schedule of works in construction order;

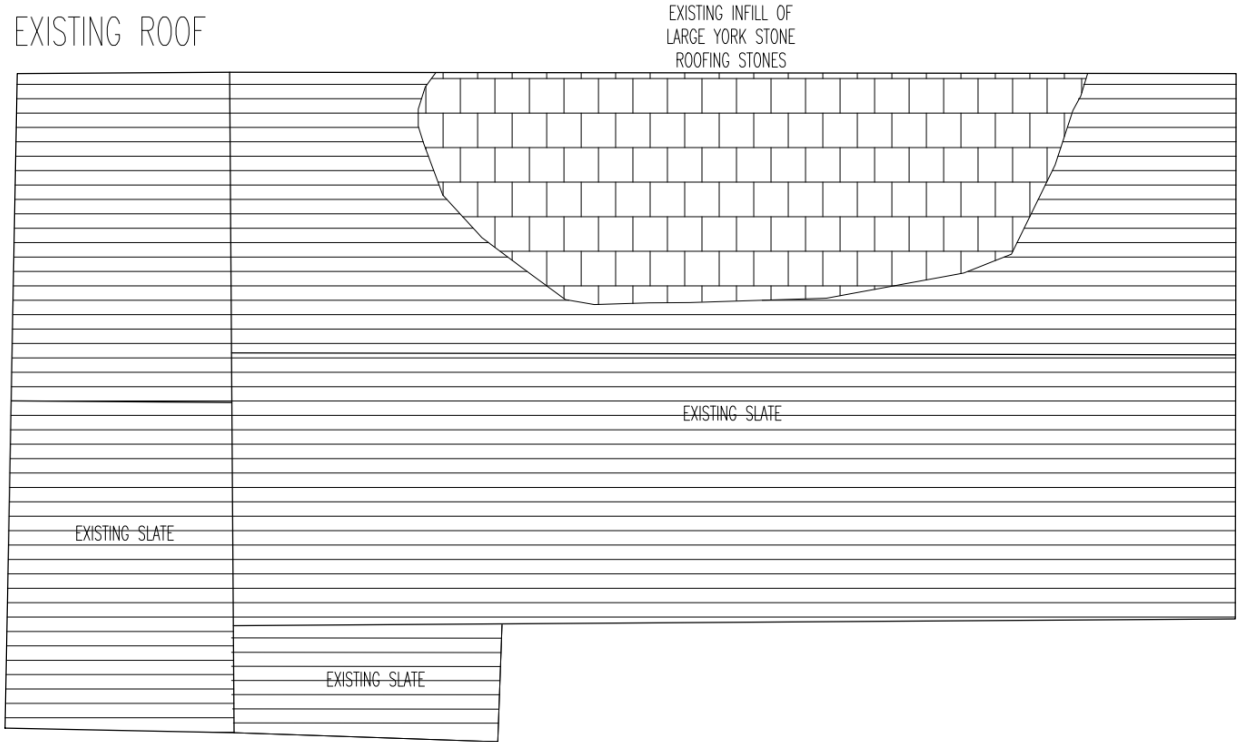
1. Remove slates and store safely for re-installation
2. Install new pad stone's for steel ridge beam and the two central side purlins
3. Lay the new roof steels via crane and secure in place
4. remove remaining current roof structure (Batons / Purlins) etc...
5. As the first floor is in place, scaffolding will be assembled next to the trusses and they will be dismantled in sections and cut to approximately 2 meter sections where needed. This will allow for easy removal from the building. The truss structures are not strong enough to remove by crane due to rot and the risk would be high for collapse during removal.
6. All sections of trusses which can be salvaged and reused to be carefully dismantled (no cutting) and stock piled on a raised platform off the bare ground. The sections of timber are then to be re-used in the new design.
7. The aim is then to install the new batons, membrane and slates as soon as possible in order to put the weight back on to the walls to secure the structure.
8. We will then aim to replicate the truss structure against the spine walls. These will be above roof plate level and secured against the spine walls using anchor bolts. Once the structure is in place the bolts will be cut back so they are inside of the beam and the bolt holes will be plugged so as not visible.
9. The trusses will be prepared and built on location using three meter jointed lengths of Douglas Fir in keeping with the current material.
10. Once the trusses are in situ against the spine walls, plasterboard will be cut and placed between the frame and remaining section of wall and this will then be plastered, thus giving the impression that the truss is half in the wall, but on full view to appreciate and add the desired character to the building.



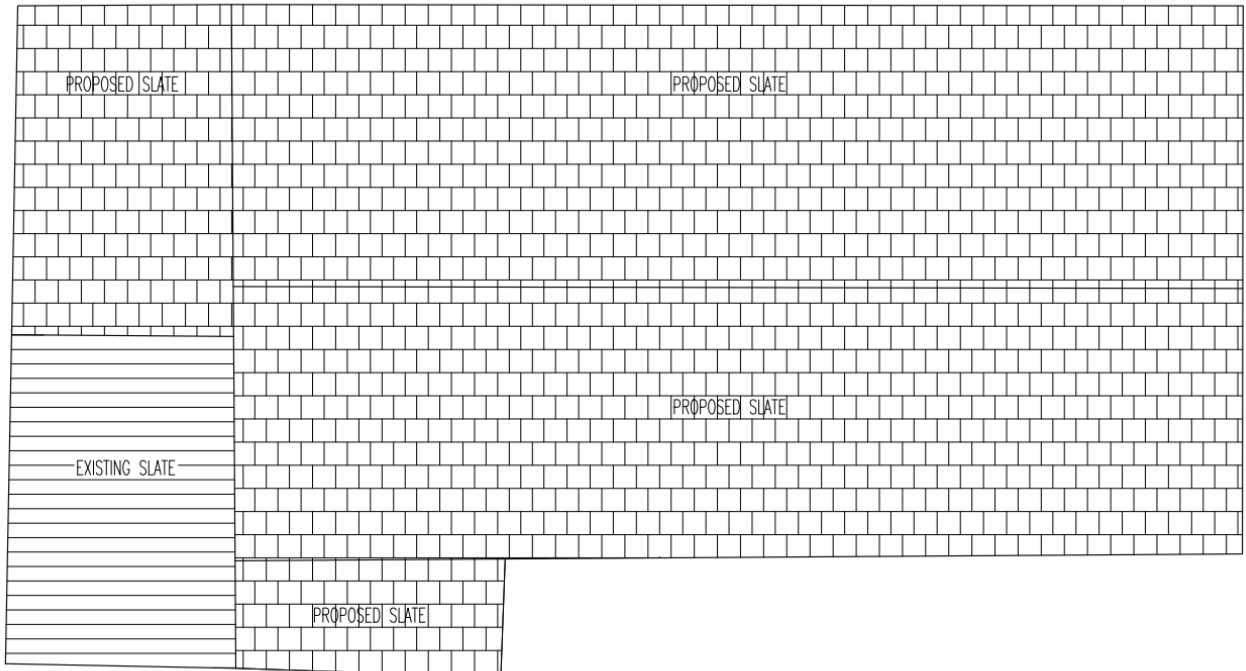
#### 4.0 ROOFING MATERIALS

Following the removal of the majority of the slates it was identified that most of the slate is either unstable due to existing damage or cut with a curved back (as they have been slid in and not fixed properly). As such there will be enough 'good' slate to re-installed on the roadside prominent roof to the southwest of the site (Highlighted in drawing below).

EXISTING ROOF



PROPOSED ROOF



There are numerous areas across the barn roof which appear to have been patch repaired over the years with different materials as such the proposed scheme will look to remove these elements and consolidate the existing tiles into 1 of the 4 roof pitches. The pitch chosen to have been based on what is most prominent. The roof chosen is the front extension of the barn along which is raised to the north as this is highly visible when coming down the hill from Windy Street – Please refer to drawing on the next page.

The other roofs will then be solely fitted with Slate which samples are to be delivered to the council offices for sign off.



The layout for the tiles will be as per the middle picture. This shows the new tiles being installed evenly with 60% overlap. There is very few photo showing the existing roof layouts however this is the best one taken from the archaeology report. Its difficult to see but the image does show an even install lines with the majority of the tile covered.

The existing roof had a few of vents along the ridge, instead of more modern methods of having the vents in the mortar joints the existing vents projected up from the ridge. We have found ridge tile which mimics this existing look below. They will be placed at 2m intervals (2x vents on house 1, 3x vents on house 2 and 2 on house 3).



To achieve cross ventilation, we would usually have vents in a facias/soffit however the barn does not have soffits as such we are proposing to use a tile vent which will be installed just above the gutter (under the last tile). This will mean the building will achieve cross ventilation required and the vent will not be seen from street level. Please see photos below of system.

