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BP477A
3rd January 2024

ROOF REPORT

TOWN HALL FELIXSTOWE

1.0 INTRODUCTION

1.1 The Brief

- 1.1.1 I have been requested by Debbie Frost, on behalf of the local council to re-visit the above with a view to reporting on the main roof and commenting on apparent roof leaks shown up as damp areas to the rafters.
- 1.1.2 The damp was commented on in my previous report from September 2023, report dated 14th September, being a 5 year monitoring report.
- 1.1.3 A further visit was made in late October 2023 following a ceiling fall after storms Babet and Ciaran. This visit concluded that the affected ceiling was under the flat roof area, and the gable separating the flat roof from the main roof attic area and was caused by water driving through the outer skin of gable brickwork and running down the cavity between inner and outer brick skins. The inside of the gable was damp at the time of this visit, but not damp enough to cause concern bearing in mind the extreme conditions that had occurred.
- 1.1.4 I was still concerned that the rafters showed damp in many places and recommended a monitoring visit to check moisture content after a dry spell, when there is a normalised moisture content. A dry period of 5 days before monitoring was specified for this reason.

1.2 Methodology

- 1.2.1 The report was carried out by a walkover survey on 18th December 2023.

1.3 Limitations

- 1.3.1 The report will be prepared with respect to the structural elements of the building and does not include commenting upon the fitments and fittings, unless it is considered any will have an impact on the structural elements.
- 1.3.2 Destructive testing or removal of panels etc. will not be carried out. The scope of the report is to be a walk-over only.

- 1.3.3 Please note we have not inspected parts of the structure which are covered, unexposed or inaccessible and are therefore unable to report that any such part is free from defect.
- 1.3.4 Please note that any comments made within this report are with respect to the structural elements of the property and are not intended to indicate or imply any financial valuation.
- 1.3.5 A series of photographs are included at the rear of this report to indicate the damage discussed. However, please note these photographs are included to show the nature of any damage discussed and are not intended to portray the full extent of any problems.
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2.0 DESCRIPTION

- 2.1 The description is as the report of 14 09 2023. This earlier report shows damp marks on rafters, but these photographs were taken immediately after heavy rain.
- 2.2 The roof spans front to back over the S.W. part of the building, and side to side behind the front gable, to the N.E.
- 2.3 Valleys run away from the ridge intersection, with the front-rear ridge being continuous from mid gable to rear support wall, and slightly higher than the side-side ridge.

3.0 EXAMINATION

EXTERNAL INSPECTION

- 3.1 **The Roof** is covered with red plain clay tiles, which appear to be in good condition. However, I was only able to view the outside of the roof from ground level.

INTERNAL INSPECTION

- 3.2 There are 5 distinct areas where damp is clearly visible on the sides of rafters:
- 3.3 Mid North-East, an area over the main Council chamber. Maximum moisture measured at 50% at top of several rafters.

- 3.4 Ridge junction, also over the main council chamber, but nearer the door. Moisture content highest just above channel, on either side of side-to-side ridge, up to 40% moisture content.
- 3.5 Lower part of channel, over landing, near top of stairs. Visible water tracking in dust, maximum 35% moisture content.
- 3.6 To south-west of north-east chimney, to the rear of ridge, three rafters show 35% moisture content over about a 2m length. The nearest rafter to the chimney is not as damp.
- 3.7 Also, to south-west of north-east chimney, but front side of ridge: about 35% moisture content to 3 no rafters matching 3.6 above.

4.0 RECOMMENDATIONS SUMMARY

- 4.1 The moisture content is un-acceptably high in the 5 areas mentioned, and if not treated, will lead to timber degradation, initially in the form of wet-rot, but potentially leading to dry-rot, and greater risk of insect attack.
- 4.2 The felt over the rafters is visibly damp in the worst areas, and there are small tears near the ridge intersection.
- 4.3 The felt is light grey (originally white) and appears to be a moisture barrier, rather than a breathable felt. There are no identifiable manufacturers marks on the felt, so there is no conclusive proof of its suitability or otherwise.
- 4.4 Based on its performance I have to conclude that it is not a recognised breathable felt, and it is not suitable for this use.
- 4.5 I therefore recommend that it be replaced entirely by a recognised breathable felt.
- 4.6 Currently there is the first sign of wet rot forming to the NE area as described in 3.3 above, this has not yet had a significant impact on the rafter structure. However, replacing the felt should be seen as relatively urgent work, to be carried out in the next 2 years, ideally sooner.



BOB PORTWAY BSc CEng MICE

4th January 2024.

TOWN HALL FELIXSTOWE



DAMP RAFTERS AS DESCRIBED IN 3.5



N.E. AREA, LOCAL HIGH MOISTURE CONTENTS.

TOWN HALL FELIXSTOWE



RAFTERS OVER COUNCIL CHAMBER AREA DESCRIBED IN 3.3



TYPICAL READING IN UPPER HALF OF RAFTER.