

Reply to: **Hampshire**

Mr Paul Knight
ITS Personnel
Clock House
Reading
Berkshire, RG1 4HP

14th December 2020

Our Ref : JRB/CSM : 20.612

**Visual inspection to :
Existing Offices at Yeomanry House, 131 Castle Hill, Reading, RG1 7TA.**

1. Introduction

An instruction was received from Mr Paul Knight for Pattern Associates Limited to undertake a visual survey of the external and internal fabric of the existing office building. The basis of this assessment is to investigate the cracks highlighted in the previously undertaken condition report, author being Romans Surveyors, and this was dated 2nd to 5th October 2017.

A visual inspection of the building was undertaken internally and externally by Jeff Brown of Pattern Associates Limited on Thursday, 3rd December 2020. The weather was very wet and overcast. We have not made any exploratory holes unless noted in this report. We have not inspected other parts of the structure that are considered unexposed or inaccessible and therefore are unable to report that any such part of the structure are free from defect.

The existing property was furnished, with carpet and vinyl on the floor finishes and the internal decoration condition was in average condition. There are areas of the external rendering in poor condition, please refer to conditions survey by others. All external inspections were carried out from ground level.

The inspection visit was arranged as a result of recommendations within a Condition report dated 2-5th October 2017 carried out by Romans Surveyors, which highlighted certain cracks and defects that require an assessment by a structural engineer. This report should be read in conjunction with the above report recommendations.

2. Location and Site Description

The property is a detached Georgian Grade II Listed building of traditional construction dating from the early 1800's. The property is currently used as the base for the Register of Births, Marriages and Deaths for Reading and is set back from Castle Hill in an elevated location to the South.

3. Property Details

Looking at the plans and elevation the original property is thought to be the central element which is symmetrical in form on three floors plus part basement. Through its history there has been two large side extensions to the East and West of the central element. The building has dual pitch slate finished roof of traditional construction which part brick/ render external finished walls. The property is detached with a carpark / hardstanding surrounding on the elevations. The ground floor is of mixed concrete and suspended timber construction with upper floors throughout being of suspended timber format. Internal partitions are of mixed type, featuring both masonry and stud walling with a combination of plasterboard, plasterboard dry lined finishes, lath and plaster and plaster materials. Ceilings in the property are of mixed type featuring both lath and plaster and plasterboard type materials.

4. Inspection

Within the Condition report carried out by Romans Surveyors the following comments were made to cracks found:

There was general evidence of cracking and movement to the West wing both internally and externally. The internal cracking was evident at the junction of ceilings and walls, wall to wall junctions, timber door frame/wall junctions and at wall/skirting board junctions to both ground and first floors with notable cracking where the West wing adjoins the original part of the building; at the toilet accommodation. General plaster cracking was also notable to wall surfaces particularly within the staircase and landing area of the West wing including wider cracking and isolated blown plaster to the chimney breast adjacent to the first floor door. Isolated cracked tiles to the same chimney breast feature were also noted within the ladies toilets on the ground floor. In conjunction with this cracking, a noticeable hump was evident to the suspended timber first floor running in line with the chimney breasts.

The external cracking to the West wing is largely concentrated around window and door openings to both front and rear elevations but is generally hairline in nature. To the west facing gable end elevation, there is an area of more noticeable cracking and blown render/damp affected finishes however, this is concentrated around what appears to be two former ground floor door openings. Otherwise, some localised misalignment was evident to floors, partitions and doorheads however, this was relatively minor in nature and believed to be historic.

And concluded:

The external cracking affecting the West wing is largely considered to be a result of the defective render finishes as a consequence of the render being taken down to ground level in places particularly to the gable end elevation and part of the rear elevation where the cracking is worse in nature.

PA was directed to look at the cracks highlighted at the junction of the main building and West wing which occur predominantly internally and the following observations are made:

The cracks noted within the West Wing staircase and first floor wc adjacent are hair line in nature and do not appear to have increased in size or length from the photographs appended to the condition report. It should be noted that the Condition report is 3 years old.

It was noted that on the Second floor staircase landing area in the West Wing there was evidence of larger extent of cracking both in the ceiling and wall adjacent to the chimney stack location. (Photographs 1, 2 & 3) these cracks were not specifically noted within the 2017 condition survey and so it is difficult to determine if these cracks postdate the survey or simply was not recorded. It was not possible to investigate the other side of the wall junction in photograph 1 which is noted as a roof void on the architect's survey plan drawing No. 3556/101 as no access is available.

Further cracks are noted within the corridor/ kitchen area within the second floor of the West Wing see (photographs 4, 5 & 6)

Whilst it was noted that there was minor undulation between floor levels between wings and central building, this was minimal in nature and the differential settlement would be consistent in a set of buildings of this age.

There is an external vertical crack within the North facing East Wing wall adjacent to the junction of central block. This crack widens at the top and runs approximately two stories. (Photographs 7 & 8). An inspection was carried out internally within the rooms directly adjacent the external crack, however there was no visible signs of any cracking, this may be due to previous redecoration within these rooms.

An inspection of the walls within the second floor store room to the East Wing was carried out and there was cracking around the chimney stack (Photograph 9 & 10). It should be noted that the condition of this wall/ crack is similar to that found in the condition report date October 2017.

5. Conclusion

It would appear from the evidence that the cracks noted within the 2017 condition report are similar with little change occurring which suggests that this movement is historic and this is concluded in the original report.

The cracks witnessed in the second floor of the West Wing which were not highlighted in the original report also look to have some age. Due to the fact these cracks did not appear in the original report, it is suggested that further investigation is carried out by removing an area of plasterwork both on the ceiling and wall to ascertain if the cracks are caused by a breakdown of materials due to age, or as a result of structural movement.

Looking at these particular cracks and those found in photographs 4, 5, 6 & 7, it suggests that there may have been some spreading of the roof structure, which is due to the rooms in the roof space and lack of lateral restraint to the rafters at external wall level.

The other recommendations in the Romans Condition report dated 2nd, 3rd & 5th October 2017 should also be considered.

Yours Sincerely

J R Brown

1. Cracks in Second Floor West Wing landing Photographs 1, 2 & 3



2. Cracks in corridor/ kitchen second Floor West Wing Photographs 4, 5 & 6



3. Cracks in external render in East Wing Photographs 7 & 8



4. Cracks in second floor Store room East Wing Photographs 9 & 10

