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19th February 2021

Mr K Fox
Falcon Homes (Sussex) Ltd
Units 1 & 2
Place St Maur Des Fosses
Belmont Street
Bognor Regis
West Sussex
PO21 1BJ

Dear Kevin,

Re: Structural Survey at 67-69 and 71/71A Upper Bognor Road, Bognor Regis

Further to our recent telephone conversation and subsequent instructions I visited the properties on 15th February 2021 as requested to review the general structural condition for the purposes of property purchase. Access to the properties was provided by James Baird-Parker of the University of Chichester.

Introduction

Both properties lie within the current curtilage of the Bognor Regis Campus of the University of Chichester and sit adjacent to the Upper Bognor Road. The buildings concerned sit well away from the remainder of the campus and have been offered for sale along with planning approval for a mixed use development. The complete development including Charlotte House [not currently included within the sale] will be separated from the main university site but will maintain an emergency vehicle only access.
At the time of the visit there had been a reasonable level of overnight rain to help assess the weather tightness of the buildings. Both properties are understood to be Grade II listed for conservation purposes.

67-69 Upper Bognor Road

Description

The property was a pair of semi-detached cottages constructed with solid masonry walls and slate covered hip ended pitch roofs. Both cottages were identical in nature being traditional two up, two down with a full width single storey lean-to room at the rear. The building was set in an east/west aspect with front doors to the east and a walled rear garden to the west. The front doors were central to the property making each cottage double fronted. A small foyer behind the front door enabled access to the rooms each side with the stair case rising just beyond to two bedrooms at first floor. At ground floor were two rooms with one providing access to the rear lean to area that housed the kitchen and toilet. A slate covered pitched roof porch provided cover to the front door threshold of both cottages.

Access to the rear garden was not possible at the time of the visit as it was heavily overgrown and the writer was unable to determine the condition of both the rear elevation and boundary walls

from within the site. However the external condition of the boundary garden wall appeared reasonable considering its age.

The north, south and east elevations were painted smooth render whilst the west elevation was :random rubble˘ type with flint and brick. There was a two pot chimney at each hip end and a central four pot chimney on the party wall line of the two cottages.

Observations

It was clear that the property hadn˘t been occupied properly for a considerable period having no formal bathroom. However there had been significant repair work carried out to the main roof structure with a number of replacement rafters and bitumen roofing felt throughout. There appeared to be no obvious signs of water ingress through the roof coverings however there had clearly been significant water damage to the building fabric/d¶cor before the roof repairs.

The lean-to rafters and support plates had been completely replaced and had been covered with a modern breathable roofing membrane. However the support of the rafters at the top plate was not conventional as they should be notched over the plate to prevent spread.

All timber windows had been replaced as part of the more recent conservation repair works and appeared weather tight.

The division wall between the cottages did not extend above ceiling level meaning the whole roof was fully accessible from either cottage.

There were no remaining plaster finishes to either the ceiling or first floor however the first floor had retained the majority of the floor boards. The first floors and ceiling joists in both properties spanned east-west and had precautionary propping at the quarter point of the joist span. First floor joists were built into the walls each end whilst ceiling joists spanned plate to plate. All structural timbers appeared sound with no signs of rot or decay. Floor boards similarly appeared sound.

The southerly cottage (No 67) had an oriel window at first floor to the south elevation. The window appeared water tight but had suffered some historic rotational movement as noted by raking diagonal cracks to the plaster at the south west corner. The level of movement was considered minor. There did not appear to be any fresh movement as a result of the window replacement

No 67 also had a fully glazed bay window to its east elevation with a slate covered pitch roof. The whole bay window had been replaced when the roof repairs had been carried out as part of making the building more weather tight. The bay window and front room had a suspended timber floor built up off the oversite. This was the only ground floor room in both properties to have a suspended floor. Both joists and boards appeared to be dry.

The back door of both cottages had also been replaced when the repair works had been instigated. This also included construction of a new brick pier/wall to hang the door from. Both doors had allowed some water ingress under the door but No 69 was much worse. As this was so localised it was likely to be coming from blocked drains/gutters on the lean-to.

All window and door openings had a pair of 100mm wide timber lintels supporting the wall/floor/roof construction over. Again there appeared to be no sign of rot or decay to the timber.

Externally there was some hairline cracking to the render on the East elevation consistent with those associated with thermal movement. There was also some hairline cracking to the north elevation.

On the central chimney stack the north east pot appeared to be leaning more compared to the other pots. However there were no signs of movement or cracks to the chimney render. The hip end chimneys were not rendered and the pointing and roof flashing all appeared in good condition. All chimneys had good verticality.

Conclusion

The property had clearly been left open to the elements for a reasonable period prior to the reinstatement works to the roof and windows resulting in damage to the d¶cor and finishes. Walls were still drying out to a certain extent but being solid in nature will take longer as they are affected by the prevailing atmospheric conditions. Drying out of the walls had caused the finishes to peel that artificially made the cottages appear in a poorer condition than they actually were.

All the walls and structural timbers appear to be in sound condition with no sign of rot or decay. New timbers had been used in the repair of the main and lean to roof and there was no evidence of water ingress around flashings or roof coverings. The only ingress of water was under the back door in both cottages, likely to be the result of faulty rainwater goods, blocked drains or a combination of both.

Externally the basic shell of the building appeared in sound condition.

Recommendations

The cottages were generally in good structural condition as the majority of the main repair works had been carried out. The majority of the works needed to the cottages are cosmetic along with all the necessary services to bring them up to modern standards. The only structural items of note are as follows:-

- ¿ The lean to rafters require fixing back to the wall plate using :Simpson LSSU170/50˘ adjustable hangers to help resist any potential roof spread occurring.
- ¿ The oriel window would benefit from being fixed back to the walls each side using minimum 30x5x1.2m long galvanised mild steel straps located near the top and mid height of the wall. Two additional ties may be possible to install to the underside of the ceiling joists.
- ¿ Repair or replacement of blocked rainwater goods and possibly new soakaways will be needed to prevent future flooding under the back doors of both cottages.
- ¿ Provide a full fire break wall between the two cottages within the main roof space and the lean-to roof.
- ¿ Provide restraint straps to tie the first floor joists to the north and south hip ends. Provide wall plate straps to the main roof.

71/71A Upper Bognor Road

Description

The property was a large detached Georgian style house that had been converted to offices. The south facing front elevation had a painted smooth render finish to the walls as did the west elevation. The north elevation was painted pebble dash render and the east was a mixture of the two renders. Roofs were slate covered and pitched all round. An off centre valley broke the roof line on the north elevation into two hip ends meaning the dual pitch roof was u-shaped on plan. All windows were traditional timber sliding sash.

The property had been fully separated into ground floor and first floor offices with access to the upper floor provided via a masonry lean-to on the west elevation. A two storey hip roofed extension and single storey gable ended workshop were linked to the east elevation. The workshop housed the boiler and the majority of the roof was vaulted. The west elevation had a single chimney stack with three pots and the east elevation had four stacks with one two or three pots. Note the single spot and three pot stacks had been linked together as the single stack served the workshop building.

Observations

There were a few missing/slipped slates at each end of the south elevation, all other areas where visible from the ground appeared intact. At the centre of the west elevation it was noted that the roof was visibly sagging.

Hairline cracking was noted to the smooth render elevations consistent with thermal/seasonal movement with the south elevation having more noticeable cracks. It was evident these had been patch repaired in the past but had cracked over the repair. The render appeared sound and well adhered to the wall.

A larger crack was noted through the sill of the west window to the south elevation and was historic in nature. The split cill had also moved laterally to one another across the crack. A small hairline crack was noted in the render from cill level to ground level. There was no evidence of foundation movement to the wall and the cracking was very localised. It is plausible to consider that whatever had caused the cracking and rotation of the sill in the first instance had been removed.

The gulley to the south west rain water outlet appeared blocked.

All walls internally had been dry lined throughout the main part of the original house. Signs of damp ingress were clearly evident around the south east access door along with the bottom rail of the door rotted through. It was unclear why water levels appear to be gathering near this point but was probably related to the roof drainage. There was also other evidence of damp ingress to the inside of the walls forming the store and equipment store (workshop).

There was evidence of water ingress down the wall between room 6 and the corridor at first floor. At the time of the visit a slight puddle of water was also noted on the timber sill/door threshold to room 6. The corridor wall lies under the main valley position and it is evident that roof flashings and or drainage has been compromised. The ceiling of room 6 is also partly vaulted with ceiling joists placed approximately a third of the way of the rafter.

Some of the sash windows did not appear to shut/close tightly at their tops allowing good ventilation but also access for rain water under windy conditions.

The guttering has a continuous leak on the buildings northwest corner and the drip has caused rotting out the fascia of the lean-to roof over the access to the first floor.

Conclusion

The property is generally good condition considering its age and construction with the main issue being maintenance of the central valley gutter and rain water goods generally. All windows appear in reasonable state even if not closing tightly. There was no evidence of ground or

foundation movement with just dilapidated finishes making the external appearance a little tired. Internally walls were sound with just staining to the finishes under the central valley.

Recommendations

The house was generally in good structural condition as it had been in use until very recently. The majority of the works needed are cosmetic however there are some structural items of note as follows:-

- The central valley gutter requires repair/maintenance along with review of the rafter bearings and any timber plates. The sagging west roof should be further inspected and strengthened accordingly as the sagging timber will put a strain on the general roof fabric. Particular attention will need to be taken on the condition of the flashings at the west chimney. Loose and missing slates will need to be reinstated to prolong the life of the roof under.

- All gutters, support brackets and downpipes should be checked for adequacy and serviceability and possibly taken to new soakaways as existing pipes are likely to be silted up.

- As the ceiling height is very high in room 6, it may be advisable to consider installing new ceiling joists at wall plate level that will triangulate and strengthen the roof and improve any further potential sagging.

- Discreet opening up of small sections of external wall at ground and first floor is also advised for record purposes to confirm the actual wall construction and help gauge the condition of all timber. Localised opening up of the ceilings at both first floor and roof level may also be needed for ease of inspection.

- Extensive refurbishment of the existing sash windows is advised to ensure they fully shut and are operable. The south east entrance door requires replacement.

- Drying out of the wall under the central valley may result in peeling finishes and will need careful consideration during redecoration.

- Render repairs to the cracks in the south elevation using render lathe are advisable

Although access to the main house roof was not possible the general condition of both the cottages and house are considered reasonable with no obvious signs of significant structural problems. All of the issues highlighted are considered minor with relatively straight forward repairs/replacement that form part of any normal refurbishment for a project of this nature.

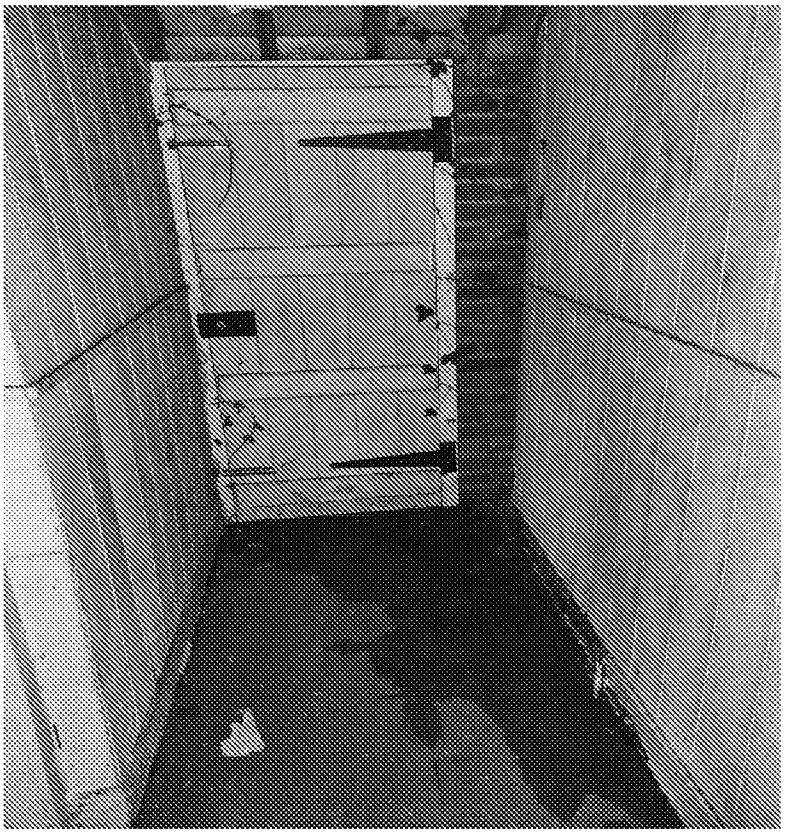
I trust all is satisfactory but should you have any questions please contact me on [redacted] or via email at [redacted]

Yours sincerely,

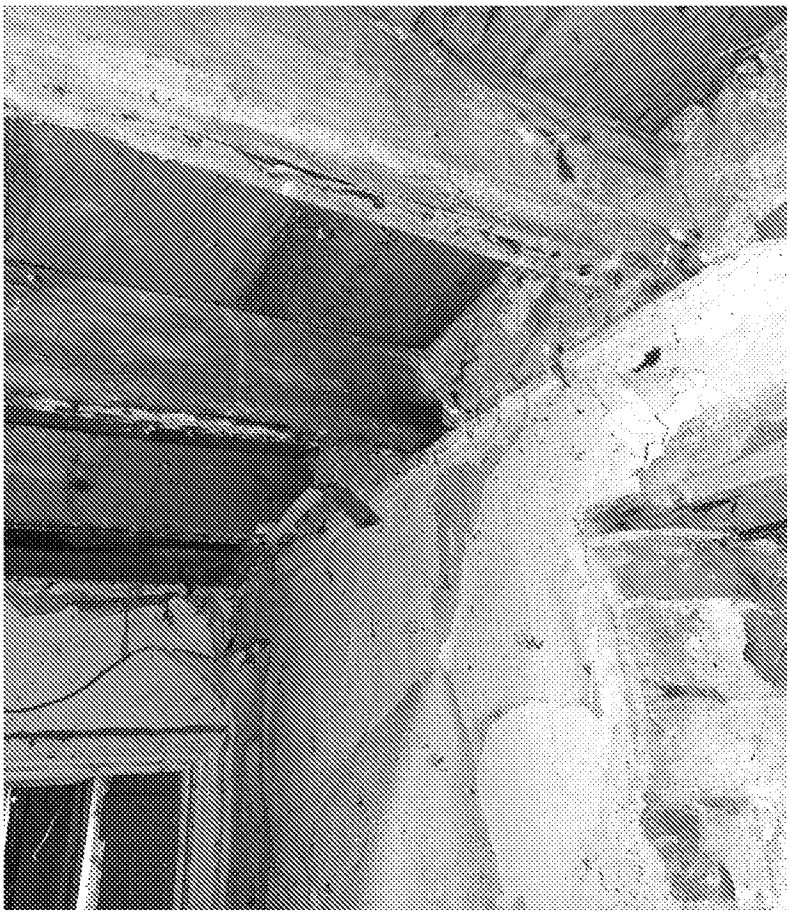
Bruce Taunton IENG., AMISTRUCT.E

No 69 ´ General view showing propping of first floor

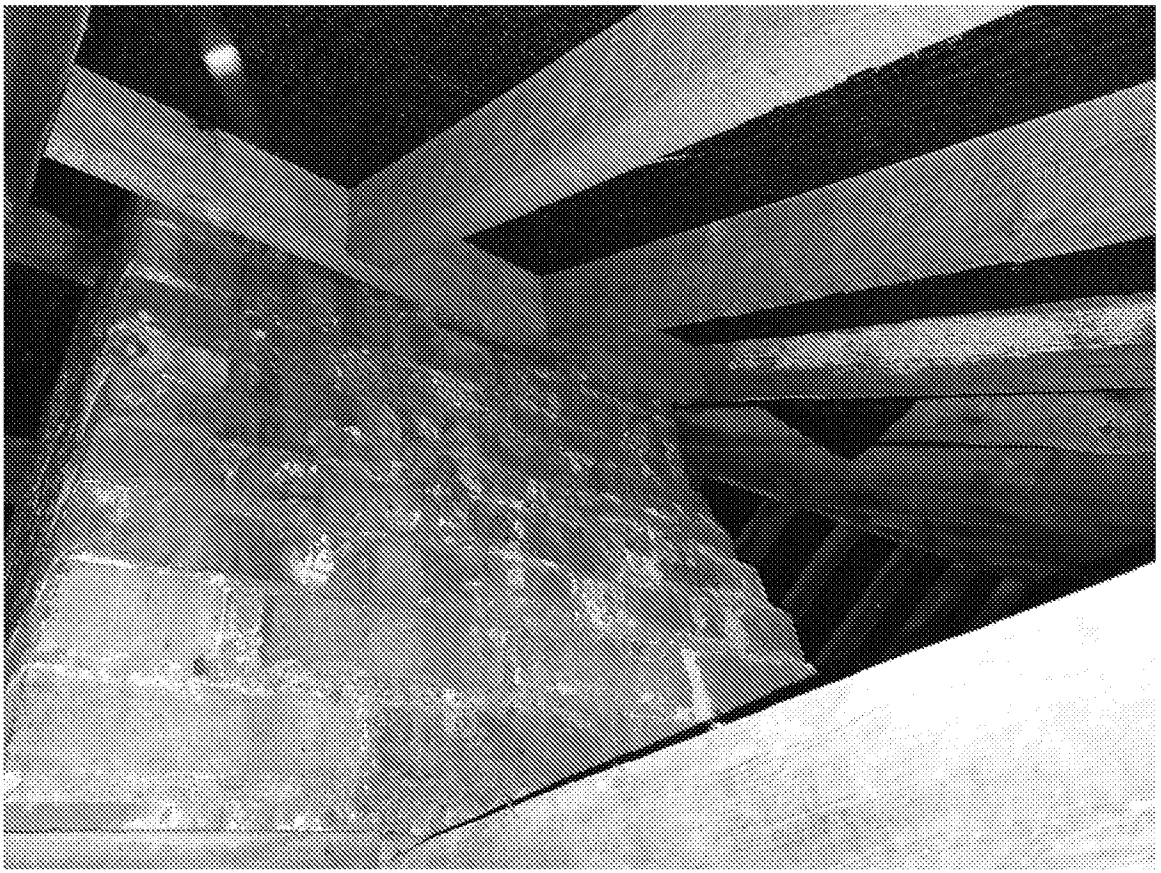
Lean-to rafter connection to rear wall of cottage.



No 69 ´ Back door showing water ingress under and new brick pier



No 67 ´ Floor joist bearing on east elevation



Central chimney showing roof repairs and no division wall.

No 67 ´ Bay window construction showing suspended timber floor joists

No 67 ´ Oriel bay window

House ´ Fractured sill

House ´ Blocked Gully

House ´ Render cracks

House ´ Water ingress to central valley

House ´ Poor fitting sliding sash window on south elevation