

PLS/sas/21/0424

24 November 2021

Mr R Lawton
96 Sugar Quay
1 Water Lane
London EC3 6AP

By email:
[REDACTED]

Dear Mr Lawton

Pratts Green Farmhouse, Kirtling

As instructed, we met at the property with Alan Smith of Snell David Architects on 9 November 2021. The purpose of our visit was to visually inspect the structure of the property and in particular the cracking adjacent to the area of earlier underpinning.

This engineer's report only deals with the above mentioned and our liability in respect of this report is limited to you as our client. There is no intention to confer any third party rights as described in the Contracts (Rights of Third Parties) Act 1999. Please also note that we have not inspected the condition of timber or any parts of the property which are covered or unexposed and cannot therefore report that such parts of the property are free from defect.

All directions given are as facing from the front of the property. The property is a traditional two storey L-shaped timber framed thatched cottage with the upper floor within the roof. We understand that the original cottage was extended to the north to the right side, however both sections of the property are of significant age.

External examination to the front wall of the original cottage revealed no significant structural cracking to the painted render above a low brick plinth. The roof line was reasonable plane with a level ridge. The chimney was relatively plumb (refer to Photograph 1).

Inspection to the front elevation of the north wing of the property showed the wall to bow outwards slightly along its length. At this location there was a fine vertical crack to the render. At the base of this wall was a relatively modern brickwork plinth (refer to Photograph 2).

No significant cracking was noted to the render of the north facing gable.

Contd/.....

Inspection to the west facing wall again showed no significant structural cracking to the render. A fine vertical crack to the render was noted centrally below the sitting room window. There was an area of brickwork exposed externally which would appear to have been part of an earlier chimney breast/oven. The plinth to this length of wall was painted red brickwork (refer to Photograph 3). It was noted that a very large tree appears to have been cut down from the garden. The stump is still evident.

External inspection to the rear south facing wall revealed distortions to the render but no significant recent structural cracking was noted (refer to Photograph 4).

Internal inspection to the ground floor of the property showed no significant structural cracking or distortion to the ground floor. The bow noted externally to the front wall of the sitting room was also evident internally (refer to Photograph 5). The timber soleplate to this length of wall appeared to be original. However, the soleplate to the north wall appeared to have been replaced (refer to Photograph 6).

In common with properties of this age and type the first floor had reasonable bounce. This was though not deemed to be excessive.

The property has a raised collar 'A-frame' roof structure with the wall plate being above the first floor level (refer to Photographs 7, 8 and 9). Again, with this form and age of construction it is common for the roof to 'sit down' and to push out the tops of the side walls. This movement has occurred to this property resulting in cracking along the ceiling/wall junctions. Attempts have been made to resist this outward movement by tying the raised wall plate to the first floor structure with a curved steel tie beside the stairs (refer to Photograph 10) and a steel tie to the corners (refer to Photograph 11).

An inspection within the roof space was difficult due to the fragile nature of the ceiling joists and lack of access to the roof above the original wing of the cottage. It is apparent that the roof structure is relatively weak, but again typical for this type and age of construction (refer to Photographs 12, 13 and 14). There appears to have been insect damage to the original roof and additional rafters have been added (refer to Photograph 15). From our inspection it is apparent that further opening up to gain access to the roof structure will be required and it is anticipated that it will be necessary to undertake roof strengthening works.

From our inspection no evidence was found of any significant ongoing foundation movement which would merit foundation work at this time. Whilst at the property it was noted that there were surveying targets on the walls. These are normally used to monitor foundation movement to a property. The subsoil in this area is medium shrinkability boulder clay. It is possible that the property suffered from historic movement due to the root action of the large, now removed, tree drying the clay below the foundations. It would appear that this movement has now ceased.

It is probable that the foundations to the cottage are shallow, and due to the boulder clay subsoil, there may be seasonal foundation movement during periods of drought.

We trust this initial report is adequate for your needs and attach our Invoice 9098 for the agree fee.

Yours sincerely



PETER STUART BSc (Hons), CEng, MICE
For and on behalf of Andrew Firebrace Partnership Limited

Enc



Photograph 1



Photograph 2



Photograph 3



Photograph 4



Photograph 5



Photograph 6



Photograph 7



Photograph 8



Photograph 9



Photograph 10



Photograph 11



Photograph 12



Photograph 13



Photograph 14



Photograph 15