

SUSSEX BUILDING CONSULTANCY LIMITED

3 NORTHCOTE ROAD, BOGNOR REGIS. PO21 5LZ

Mr and Mrs A Moore
Little Drewston
Canons Close
BOGNOR REGIS
PO21

23 January 2015

Dear Mr and Mrs Moore,

**Ref Movement Cracks in House - Little Drewston, Canons Close,
Aldwick, Bognor Regis.**

I refer to the above mentioned property and your instruction to survey and investigate the possible causes of the internal and external cracking in the superstructure to the rear portion of the house.

From inspection I noted internal cracking in the ground and first floor rooms facing east. Horizontal cracks of up to 5 mm in width are evident at the junction of walls and ceilings with some vertical cracking adjacent to window reveals, some distress is also shown in the ceiling finishes – see photographs.

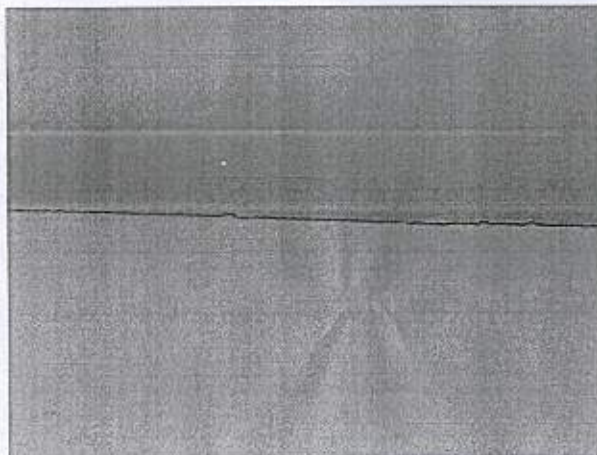


Photo 1 – Cracking at the junction of the walls and ceiling.



Photo 2 – Vertical cracking adjacent to window.

Externally and what is more of a concern is the apparent settlement cracks evident to the eastern elevation under the window with movement apparent where the lintol above this window has settled also – see photographs.



Photo 3 – External cracking below the window.

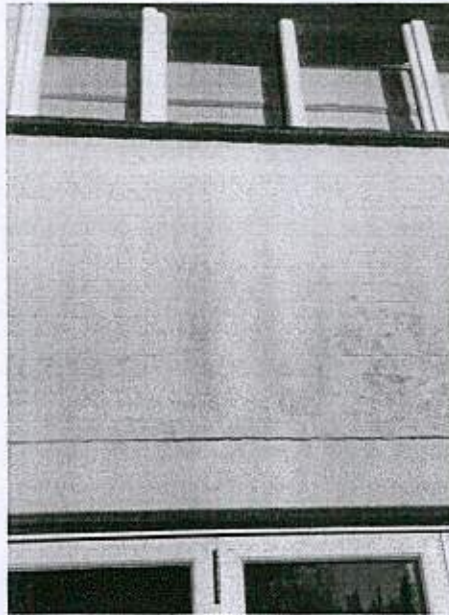


Photo 4 – External window lintol settlement cracks.

I would suggest that these settlement cracks are due to movement in the foundations to that portion of the building and when looking at the possible causes of the movement the large Oak tree at a distance of 4 – 5 metres away from the building as the likely cause – see site plan.



Photo 5 – The Oak tree in the rear garden.

The soil conditions in the Aldwick area are generally found to be a medium shrinkability clay with plasticity index of 20 – 40%. The Oak tree (*Quercus Rober*) is a very high water demand tree with extensive root growth when mature and even when the tree has been trimmed regularly, such is the water demand that it can cause clay shrinkage during dry seasons which can mean that the soil moves away from the underside of the foundations resulting in building settlement.

I am not aware of the depth of the foundations of that part of the building but would estimate a maximum of 1.00 metre deep. Assuming medium shrinkable soil an oak tree would normally dictate a depth of around 2.50 metres using recognised NHBC Tables.

It should also be noted that you may have liability in terms of the tree and its relationship to other buildings nearby. The property known as Craig Lea is closer to the Oak tree and because of the age of the building more likely to have shallow foundations at greater risk to tree root invasion and clay shrinkage.

My advice would be to seek the removal of the tree, however, because the tree is established, this would need to be removed gradually over a period of a few years to ensure that rapid ground recovery does not result in excessive heave causing further movement of the building.

I hope this answers your queries, however, please do not hesitate to call me should you wish to discuss the matter further.

Yours sincerely,

Chris Moore BSc (Hons), C.Build E MCABE