DM/19/4330: Laurel House, 21 Manor Drive

x3 Lime Trees (T1), (T2) and (T3) - Fell.

A review of the structural engineer's report regarding the above application has been undertaken by Cuckfield Parish Council, who make the following observations:

- The structural engineer's report indicates that the property is situated on mudstone – silty clay turning to sandstone. However, reference to the British Geological Survey mapping for Manor Drive indicates that the property is on the boundary of the Cuckfield Stone Bed (sandstone) which actually lies above the Lower Grinstead Clay. Seasonal movement between these differing geological conditions would not be unexpected in view of their differential seasonal rate of groundwater absorption.

- Four metres of made ground highlighted in the report is a significant quantity, and is likely to increase seasonal differential groundwater issues, assuming it is well consolidated by now following construction.

- The structural engineer has indicated issues with the foundations of the property, and in particular the differing types constructed over different periods. Therefore, differential movements may well be expected, particularly given the geological conditions above and if the foundations were constructed upon different soils or bedrock, or the footings of the conservatory were not deep enough to reach soils or made ground that does not have sufficient structural strength.

- Bevan Bank has recently been constructed to the south of the property, and an access road retaining wall constructed on the boundary. This may have affected groundwater movement in the area.

- The trees in question are over several metres from the two extensions to the property highlighted as suffering from cracking, and on the opposite side of the house. There is mention of only superficial structural issues regarding the front (north) of the property, where the trees are situated, where it would be expected to be more prevalent if these were the cause of the problems, particularly as the trees are reported to be 130 years old and the property is at least 30.

- Some cracking is highlighted as not propagating below DPC, which suggests ground issues are not the primary cause of movement in these locations.

- If the trees are felled, the potential for ground heave should be addressed as the groundwater regime will be altered, which may lead to further issues.

The observations made are that it is unlikely that the trees are the main cause of structural movement or defects experienced, with design and construction of the extensions, in particular in relation to geological conditions, more likely to be the cause.

Therefore, felling the protected lime trees is unnecessary.

This review suggests that recommendations in the structural engineer's report related to touching up the finishes and décor to the property should be followed and then future cracking monitored for further issues. Further concerns regarding structural remedies should be directed at a more in-depth review of the foundations and structure of the extensions and interactions with the original building, rather than vegetation.

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