

Reference number: 15/507259

Additional supporting letter from applicant

The applicant has submitted a letter in support of the application from the Kent School of Architecture. The letter sets out how the proposed dwelling would be used by students of the University of Kent as an example of Passivhaus and how the research gained will be used to inform future developments of this nature.

The letter states that the writer (Lecturer in Sustainable Architecture) and post graduate students in the research group at the Centre for Architecture and Sustainable Environment have been involved in the proposal from the early stages. The research group investigates ways of delivering the German Passivhaus standard within the UK. The letter states that the proposed dwelling is designed to meet the stringent energy efficiency standards of Passivhaus, achieving a space heating demand of 80% below that of buildings complying solely with current UK building regulations.

The letter states that although the principles underlying the Passivhaus standard were developed in Germany twenty five years ago, meeting the stringent energy efficiency requirements in practice remains a challenge. It states that this challenge has been the subject of a collaborative research project that the writer has led at the University of Kent and involved 15 real-life case studies. The letter states that the research has illuminated the level of technical innovation, involving the development of new and the advancement of traditional methods of construction, required to achieve the standard.

The letter further states that the delivery of the proposed dwelling will be underpinned by research undertaken by post-graduate researchers under the writer's supervision and this will feed into the development of innovative construction details and methods required to achieve a high performance building envelope. It also states that the research will also involve the monitoring of the construction and manufacturing process and contribute to an educational programme by which local contractors and manufacturers will be provided with the advanced skills and technical understanding of Passivhaus.

The letter states that the writer will lead a three year post occupancy study of the dwelling, examining its actual performance from the point of energy use, indoor comfort and air quality. The study will involve a team of research students on the MSc in Architecture and Sustainable Environment and doctoral researchers will undertake a detailed analysis of the measured data. The dwelling will be equipped with energy meters and an array of sensors for

monitoring carbon dioxide levels, relative humidity, daylight levels and temperature.

The applicant states that the above demonstrates the uniqueness of the property, and highlights one of the benefits of permitting the scheme. The applicant further states that he is happy for the above to be secured as part of any grant of planning permission.

Officer response:

The Passivhaus standards to which the proposed house will be built are outlined in the main officer report.

As recognised in the applicant's submissions the Passivhaus standards were developed in Germany 25 years ago. What was reported at the time as the first certified Passivhaus project in the UK was also built in Staplehurst and has been occupied since 2009. This earlier project involved over 4 years post construction monitoring in collaboration with the University of Cambridge to help test and develop new techniques.

Whilst the educational benefits that have been outlined in the letter are supported in principle, as outlined above it is not considered that these would result in the building becoming outstanding or innovative as required by the NPPF and this does change the officer recommendation for the refusal of permission.

Recommendation remains unchanged : Refuse planning permission as set out in Section 10.0 of the report.