

This commission, for a private client, is set to be Hampshire's first PassivHaus. The new house is proposed within the garden of our client's existing residence, which sits adjacent to a river and is also on the edge of a conservation area in Winchester.

The design of a Passivhaus on this site set ArchitecturePLB a significant challenge; due to town planning and heritage concerns of the potential impact on the conservation area, the building had to be largely set back within the existing chalk bank that formed much of the garden to the existing house. This in turn resulted in a largely west-facing dwelling, which is not ideal for a Passivhaus, but did produce advantages in terms of reducing heat loss.

To ensure that the PassivHaus standard is met, we have worked with the PassivHaus consultants, Warm, who have modelled the building and advised on the specification of the main building elements regarding u-values and cold bridging.

Part of the client's brief was for a building that was 'quirky' and 'not-quite conventional'. Partly in response to this, as well as the demands of the site, an 'upside-down' approach was taken

to the internal layout, with the main living spaces and master bedroom being located at first floor level, arranged around a terrace balcony. This also allowed the house to take advantage of the views across the river and Winchester's Water Meadows, while above the house, extensive views of the city are available from a second terrace at the top of the bank.

A single storey wing, containing the guest bedrooms, separates the new ground floor courtyard garden from the remaining garden of the existing house and ensures privacy for both. This is the only element of the building that meets the street frontage, but is hidden behind an existing brick and flint wall, with only its green roof visible above.

Hardwood timber cladding to the first floor areas will help the building to age gently with the site, while zinc detailing will retain a sharpness appropriate to its aesthetic. The resultant scheme is one that is subservient to the existing house, but which has a subtle presence appropriate to its location. The commission, for a private client, is set to be Hampshire's first Passivhaus.



01 Visual of proposed scheme
02 Cross Section