

Your source of Building Futures updates, local sustainable construction and design news, and upcoming events.

Passivhaus inspired dwelling granted permission

Permission has recently been granted for an iconic replacement dwelling in Elstree that employs *Passivhaus* design principles, and other sustainable solutions, to create a low carbon, sustainable, and family oriented home.



The design of the scheme, led by Ray Hole Architects, successfully integrates simple design ideas with more technical solutions to allow the building to meet Code for Sustainable Homes Level 4. Sustainable technologies and solutions incorporated into the design include:

- A highly insulated 'shell like' design and orientation that protects occupants from excessive solar heat gain and noise pollution
- Light wells providing natural daylight to the heart of the home and opportunities for passive stack ventilation
- Triple glazing with low U-values to the north elevation maximising use of natural daylight
- A layer of raised timber battens that shade the roof and south facing windows and include solar reflectors on the northern eaves
- High Efficiency Mechanical Heat Recovery Ventilation, providing good internal air quality whilst retaining heat within the building, together with passive cross ventilation that does not compromise security
- A closed-loop borehole Ground Source Heat Pump to provide the bulk of space heating and a solar thermal array providing hot water, both supported by a high efficiency gas boiler for winter months
- Building Management Systems to automatically control plant and equipment

The scheme shows how sustainable buildings can complement architectural innovation whilst reducing any visual impacts upon surrounding areas. It is hoped that construction of the scheme will start in 2011.

Hertfordshire “Low Carbon Housing Innovation” project

The Hertfordshire “Low Carbon Housing Innovation” project bid was submitted to the ERDF in November 2010 in response to calls for proposals by the EU. The bid, led by Creative Environmental Networks (CEN), is currently being considered and if successful would receive project funding by May 2011.

The “Low Carbon Housing Innovation” project will be a demonstration project that showcases best practice in low carbon retrofitting of energy efficiency measures in hard to treat housing. The 20 properties to be used in the project will be provided by Hertfordshire based Riversmead Housing Association. Other project partners include BRE, National Energy Action (NEA), British Gas, Climate Energy Solutions, Integria Solutions Ltd and Anglia Ruskin University.

The Building Futures web based guide would play a key role by showcasing the exemplar sustainable construction techniques used within the project and will disseminate lessons learnt to the Eastern region’s Small and Medium Enterprises (SMEs). Building Futures would also support events to learn more about the sustainable construction techniques used and provide insights and learning on other sustainable construction issues, such as sustainable procurement.

For more information on the proposed project, contact [Building Futures](#).

Hertfordshire Building Futures Awards 2011

The Hertfordshire Building Futures Awards 2011 is now less than a year away and preparations are already underway. The 2011 award categories are:

- **Design Excellence;**
- **Most Sustainable Construction; and**
- **Outstanding Commitment to Adapt to a Changing Climate**



The Hertfordshire Building Futures Awards 2011 are open to any development that has or will be completed between 16 September 2009 and 16 September 2011. A number of exciting projects within Hertfordshire are already catching our attention, with more expected to be completed in the next 12 months. Details of the 2009 award winners can be found on the website, along with further information on the awards scheme itself.

If you know of a completed development or an on-going project eligible for one or more of the 2011 award categories, then tell us about it by emailing us at buildingfutures@hertscc.gov.uk

Upcoming Events

SUDS Foundation	CIRIA, London 20 Jan 2011
Zero Carbon Hub Annual Conference	Zero Carbon Hub, London 1 Feb 2011
Planning Conservation	RIBA East, Cambridge 3 Feb 2011
Surface Design Show	London 15-17 Feb 2011
Designing SUDS	CIRIA, London 23-24 Feb 2011
Ecobuild	London, 1-3 Mar
Designing Green Homes	RIBA East, Cambridge 17 Mar 2011