



SHROPSHIRE CONSTRUCTING EXCELLENCE

SCE Exemplar Housing



Overview

- How can we make Code 6 and Zero Carbon Homes viable in the current market place?
 - Build costs 130% to 150% more than Code 3.
 - Selling Agents are struggling to accurately value ZC properties.
 - Nervousness over new technologies.

Overview

- By providing land at nil cost we can help offset the additional construction spend.....
 - In collaboration with Shropshire Council we have allocated a site which can be used for Code 6 purposes in Shrewsbury.
 - The idea is that each plot will yield a zero carbon property constructed by an independent housing developer team. The experience will fine tune what is and what is not possible with Zero Carbon properties. These properties will be bought by end users as real homes – this is not an experiment.

Land Acquisition

- How will the land be granted?
 - The SCE and Shropshire Council are working together to provide the land for this project.
 - The land will be handed over to the developer team with a back to back agreement in place with the end user.
 - On satisfactory completion of each house the end user will take ownership of the 'Title' from Shropshire Council.

Land at Greenfields



Solar capture - electrical

Site Constraints

- The land allocated has constraints that require attention before and during the scheme.
 - The land is designated as ‘white land’ and is therefore available to develop.
 - There is a private drain on site which will require diverting around the plots before work begins.
 - The SCE will work with the Council to deal with these matters.

Solar capture - Air Heating

Team Structure

- Teams will be invited to present their ideas to the panel through a tender process. Each team will have to be able to:
 - Provide end users for the proposed property before work begins.
 - Provide a design team that can deal with Zero Carbon Design, Town Planning, Building Regulations and the publicity element.
 - Provide construction, management and maintenance services.

Successful Teams

- Teams selected to participate in this project need to satisfy the following:
 - Both local resident, SCE and Shropshire Council scrutiny. This will be achieved by the local residents commenting on the outline design proposals in collaboration with the Panel at a public presentation.
 - Zero Carbon design and satisfy the design brief.
 - Locally based teams will get preference.

The Brief

- The brief is now being considered but in general it will be set to achieve the following goals:
 - High Quality Design.
 - Zero Carbon Emissions.
 - Low embodied Energy.
 - Sensible cost approach – affordable.
 - Low maintenance.
 - Realistic design solutions that can be repeated on mass.

Solar capture - electrical

Code 6 and Zero Carbon reviews

- The SCE will be looking to Anders Associates to provide feedback on the Developers proposals.
 - Anders Associates will be helping the SCE compile the briefing element for the tender process.

Heat capture

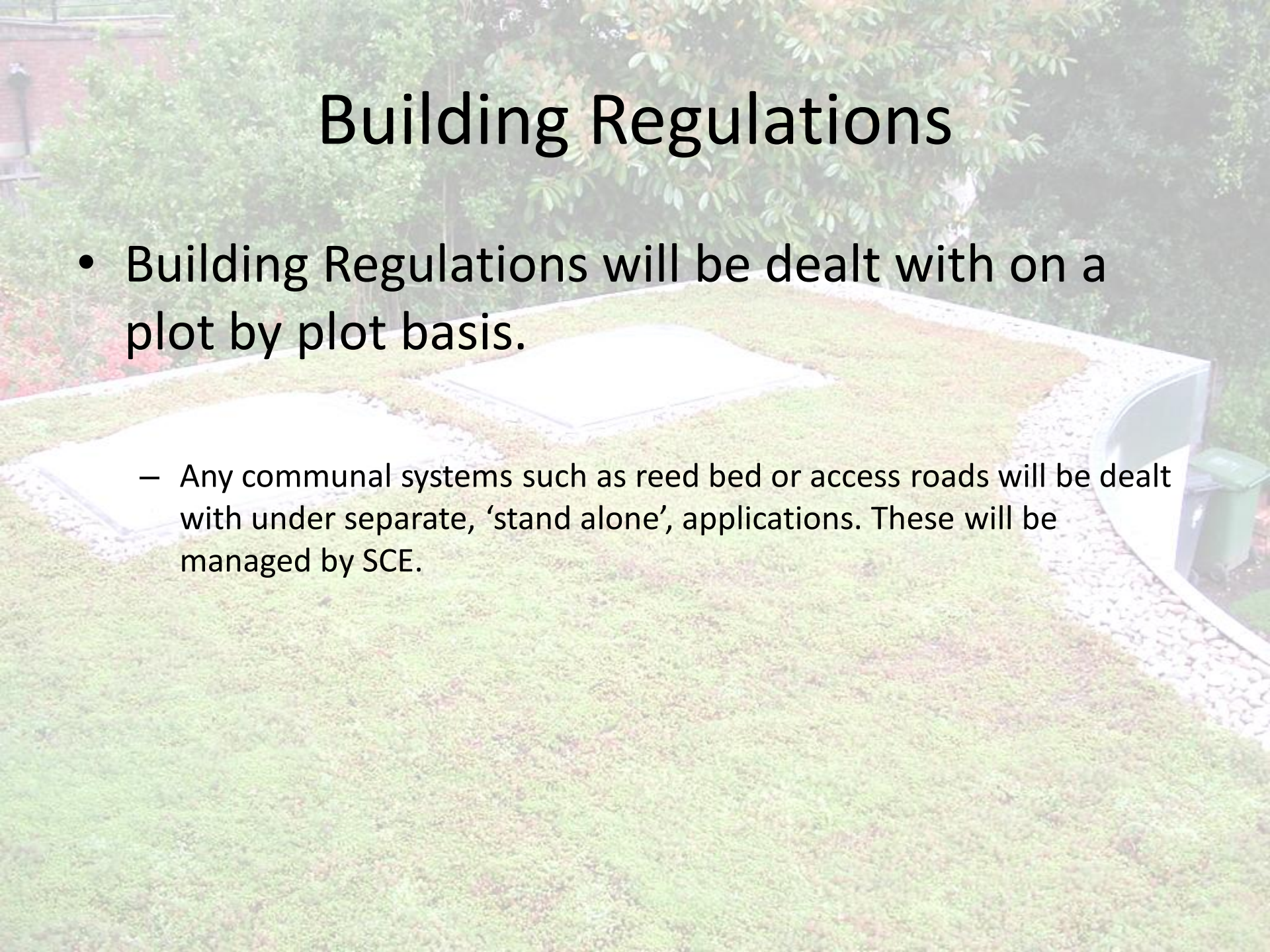
Solar capture - Air Heating

Town Planning

- Town Planning will be co-ordinated by SCE but the information prepared by each Team for their own design.
 - One application will be submitted following a public consultation process.
 - Materials, scale and access will be dealt with in the brief in collaboration with the Planning Authority.

Building Regulations

- Building Regulations will be dealt with on a plot by plot basis.
 - Any communal systems such as reed bed or access roads will be dealt with under separate, 'stand alone', applications. These will be managed by SCE.



Construction Safety

- There will be a site wide CDMC (Cyril Orchard Group), but because each house is being built for an allocated end user a CDMC will not be required for each plot. Health and Safety will be the responsibility of each main contractor for their plot. A co-ordinated approach to any operations outside of each plot will be dealt with by the site wide CDMC.

Site Wide Project Manager

- The SCE will look to appoint a site wide Project Manager. He or she will be on hand to deal with any communal issues arising on site and will report back to the SCE and Shropshire Council panel on a regular basis.

Public Interaction

- During the build a space will be allocated outside of the construction zone for the public to view the progress of the build.
 - Spaces will be limited daily so as not to cause nuisance to the local residents.
 - Seminar days for each team will be allocated so that they can present their proposals and ideas to invited guests.
 - Other best practice clubs from around the West Midlands will hold visits.
 - Television, Radio and the Press will also be involved.

BRE Registration



- Once the teams have been selected and the schemes known the SCE will register the site with the BRE.
 - Negotiations will commence shortly with the BRE to notify them of our intentions.

Energy Monitoring

- SCE will be working closely with a University who will be providing sensor equipment to monitor the performance of each house over a three year period.
 - The results will help guide future Building Legislation.

Programme

- The outline programme is as follows:
 - Land Allocated - May 2010
 - Letters of interest received from Developers - May 2010
 - Tender and Public review of proposals - June / July 2010
 - Teams procured - July 2010
 - Proposals signed off by Panel - August 2010
 - Statutory Permissions - August - Dec 2010
 - Construction Period - Jan – May 2011
 - Completion - June 2011
 - Showcase - July 2011
 - Ongoing Monitoring - July 2011 - 2014

Conclusion

- What are we hoping to achieve?
 - Proving what does and does not work in Zero Carbon design.
 - Proving Zero Carbon house values in the real world.
 - Giving the construction industry a chance to hit the 2016 Zero Carbon goal – or exposing the fact that it may just not be achievable in the current economic climate – either way we need to know as soon as possible.....

What now?

- We are asking developers to download and complete the Developer Proforma Interest Document from the SCE Website to register your interest and email to

office@basearchitecture.co.uk