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SUSTAINABILITY POLICY

“...Cullinan are among the world leaders in green design. Their buildings are also well-detailed and constructed in a broad palette of materials, many ‘natural’, that help the buildings blend into their settings and weather gracefully. Importantly too, they are generally popular with users and public.” Peter Buchanan ‘The Big Rethink’ Jan 2012 Architectural Review

Introduction

Cullinan Studio has a long-standing and enviable reputation for designing sustainable buildings and more recently masterplans. We understand that the importance of sustainability is not limited to ‘environmentally friendly’ buildings, but that it embodies political, social and economic ambitions. Focussing exclusively on the environmental agenda will result in little progress; only by resolving political, social and economic issues through an integrated approach can the environmental challenges really be tackled.

This is not to suggest that we as architects can tackle world problems single-handed; but, with buildings responsible for 40% of carbon emissions, we have a greater responsibility than most for promoting the sustainable use of the world’s natural resources; and making much better use of our existing buildings.

We have a very wide experience of sustainable design and it is our policy to continually to refine these strategies and to develop new ones.

“Often the innovation required in building is to bring people, processes and things together in slightly different ways to achieve radically better results.” Bill Bordass 20 Feb 2012

Political

Currently we seem to enjoy a shared political understanding of the environmental crisis but delivering it with the support of ‘the market’ and the Treasury appears to be more difficult. These issues are not exclusive to the environmental agenda such as the Kyoto treaty which addresses Green House Gas (GHG) emissions. It must also cover areas such as: Third World debt, child poverty, disease and famine, human rights, human trafficking, etc. The UK government has been active in these fields and must continue to be encouraged and supported by our profession.

Social

We have practised designing with community and users’ engagement in many projects, at various scales, over several decades and we believe this is essential to reduce the waste of designing the wrong building. On a community scale we support the Transition Town movement with its potential for collective action in a community including the local ownership and management of energy, water and waste; but first the local community must develop a socially responsible understanding and shared purpose. Achieving a more sustainable environment is an important step, but without addressing more fundamental problems such as crime, education and employment, it is difficult to imagine a cleaner local environment. Why would a community recycle if its members are likely to be mugged on the way home from the bottle bank?

Economical

For developments to happen, they must be economically viable, attractive to the clients, and provide a return on investment, although the return can be a mixture of fiscal, human and cultural capital.

How do we price a building? Costs such as construction cost, material cost, environmental cost, life-time cost, maintenance cost and operational cost should be assessed together with the ‘value’ of the building. How do we value a building? We need to consider the economic benefits, job creation, improved environment, better living conditions, better health and welfare, as well as design excellence.

Environmental

We have a long-standing ambition to design to minimise the energy that our buildings need, and to reduce the negative impact of our buildings on the planet.

Techniques vary widely, from using recycled or reclaimed building materials, to locally sourced low embodied carbon materials; from energy saving heating and lighting appliances to natural ventilation and daylight, to energy production incorporated into the building fabric such as photovoltaics and solar thermal etc; from water saving sanitary ware to rainwater collection and sustainable urban drainage system (SUDS), to grey water usage in landscape irrigation and toilets; from non-toxic finishes to reusable materials, to demountable structures; from flexible interior spaces to refurbishment of existing buildings; from well ventilated building enclosures to minimum heat loss; from highly insulated building envelopes to using the thermal mass of the structure.

There are many environmental methods and techniques being promoted within the building industry; most are genuine, some are misleading, others are outright wrong; so we need to measure the actual performance of our projects and share and publish the results. We will research and advise our clients on the pros and cons of all available options.

We are also committed to annual reductions on our own offices carbon footprint

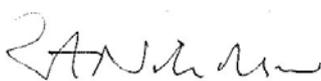
Approach

We understand that not all buildings can incorporate every 'green' measure available, but we wish to enter a dialogue with our clients and **agree** aims for sustainable development:

- Where possible, assist the client in the choice of the site to ensure the most sustainable development.
- Work with the (master)planners to consider the site and its landscape context carefully, so as to make best use of them and ensure that any new development will create an enhanced micro-climate and ecology.
- Engage the building users in the design process. It may be obvious, but getting the brief right and developing a design which meets it reduces waste providing there is a long-term flexibility.
- The health and well-being of the occupants is still a key foundation for building design.
- Guide our client through the maze of different and sometimes conflicting construction techniques and building materials.
- Design the form of the building to make **optimum** use of the sun as the prime source of all energy and daylight.
- Consider the embodied carbon of the materials to be used including the local sourcing of materials and labour and understand the whole life carbon cycle
- As part of our *WRAP agreement* designing to minimise construction waste.
- Consider using by-products which would otherwise find themselves in land-fill sites and moving towards a closed loop (McDonough and Braungart's *Cradle to Cradle*) systematic approach.
- Design the building so as to reduce the amount of CO₂ – non-renewable energy consumption - generated in its construction and operation.
- Encourage our clients to achieve as a minimum BREEAM excellent rating for their buildings
- Work with the (masterplanners) to develop the potential of the site for efficient use of water, including control of run-off.

Conclusion

Sustainability is more than '*creating less harm*', it is about understanding the conflicting and inter-related issues in order for us as a team to make more informed judgement and be able to give a coherent and intelligible reasoning to design decisions for a regenerative future.



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