

**I was asked to present to a forum at the GLA on the architects ability to influence environmental design. This is the gist of my presentation.**

## **Can Architects Influence Sustainability Issues?**

To try and answer this question I thought it might be interesting to have a look sideways at St Paul's Sq.

I use the word sideways as an epistemological reference for a specific reason. It's a branch of philosophy that looks at the limits of knowledge.

So from experience what did we learn in the maelstrom of a project like St Paul's Sq Liverpool, that can answer the question "Can architects influence sustainability issues.?"

At the end we can return to the question and draw some conclusions.

This project has been around the office for more than 7 years. It straddles a period in history where issues of sustainability have moved on to the highest point on the agenda. Part L has changed twice in the life time of the project. BREEAM has evolved and is about to be reissued again in the autumn. Eco-homes have been introduced and definitive renewable targets have been introduced, so all these things have influenced the project.

We were appointed by Amec to develop a master plan for Liverpool's new central business district back in 2001. The location was identified through a study and report known as The Bullens. It recognised a need for grade A office space in Liverpool. The area of St Paul's Sq and Pall Mall was an ideal location for this development with its proximity to the town centre and access to road and transport systems.

Our successful scheme accomplished two things. Firstly it allowed AMEC into a tripartite organisation made up of AMEC, Legal and General and English Partnership. Secondly it put in place an agreement for lease for the land owned by Littlewood's to develop out St Paul's Sq.

Urban Initiatives were then appointed by ECf to develop the master plan and eventually we were appointed as lead architects to deliver phase 1 of a three phase scheme on St Paul's Sq.

Our interim design report issued 11 November 2003 focus's on ECf sustainable agenda and our architectural response. It's worth reflecting on the ECf sustainable mission statement here to see how they corner the agenda.

## ECF BRIEF

The ECf sustainable development policy requires that the new development meets the needs of the present, without compromising the ability of the future generations, to meet their own needs. The key issues which the policy addresses are as follows.

- Promotion of energy efficiency
- Reduction of CO2 emissions
- Effective land use
- Reduction in car use
- Encouragement of social equity
- Greater local consultation
- Greater Public participation

“The need to be seen to promote and deliver sustainable design developments is paramount.”

“ECf go further and provide assessment criteria against which the sustainability of these developments is to be measured. The main criteria headings are as follow

- Environmental Quality
- Social Equity
- Economic Prosperity

In the world of the end user developments, then the ease with which a truly sustainable design is achieved is more straightforward. However, this is a speculative venture and its end user requirements need to be more flexible and respond to a less specific brief.

This should though be seen as an opportunity over a constraint and we should be capable of creating a healthy, natural and attractive development within commercial office market cost constraints.”

This open ended statement, probably drafted be a solicitor, has great ambition but is tempered with the last sentence of "**being constrained by the office market.**"

What was our response? Never one to shirk our responsibilities and always prepared to fight we gave a rabble rousing battle cry.

**So our mission statement was:**

*"Many believe that there is a moral imperative for architects and engineers involved in the design process to ensure that buildings reduce the environmental burden they impose on the planet. One of the most significant contributions that can be made is to reduce building energy consumption. This does not only involve low energy strategies for building operation, but also consideration of the more widespread urban issues that influence fossil fuel use for buildings and transportation.*

*We can learn a great deal from the responsive and adaptive examples that we see in nature and produce intelligently designed 'enclosural' building morphologies which can reduce the need to import energy for cooling, lighting or heating to a figure close to zero, and possibly even negative, as the building becomes an energy generator."*

So, a pretty heady place, one, a new client who has a sustainable agenda and a young architectural team ready to change the world.

We then went on to effectively design two buildings. One we refer to as Traditional the other Mixed Mode.

The traditional office was based on a regular deep plan with a central atrium. Four pipe fan coil, full fresh air distribution to a BCO standard.

The alternative scheme backed up by a cost plan showing savings on capital and running cost of £55/m<sup>2</sup> gross was a mixed mode naturally vented exposed soffitt, triple glazed scheme.

The client(S) didn't dismiss the green scheme. They said prove to me that we can let and sell the building. My goodness we tried but at that moment in time it wasn't good enough.

The client's agent, who must have been a case study for Freakonomics, stood firm on the issue of lettability. His advice was that the market just was not "ready for it." The appearance of an open mesh ceiling and the temperature swings would not be acceptable to any incoming tenant.

He obviously had a point. The traditional building went on to pre-let. It made the enviable accolade as the highest rent price in the city and sold twice before the economic crash of 2008.

We designed two further building and incrementally improved the energy efficiency each time.