

2005 CRC Construction Innovation

sustainability and facility management

9 August 2005, Potts Point

peter mould

A/NSW GOVERNMENT ARCHITECT

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OFFICE

NSW Department of Commerce

Chapter 5
towards a sustainable future



MANAGING THE BUILT ENVIRONMENT
Facilities Management Action Agenda

impediments

- Lack of agreed understanding.
- Lack of industry accepted metric.
- Difficulties in allocating responsibility.
- Communication.
- Demonstrating value.
- Skills gap.



facility management

“Primary function – the efficient operation of buildings and minimising operational life cycle costs”.



building procurement

Need to create an efficient operating system in order to operate efficiently.



design

- Need coherent brief and willingness to innovate.
- Encourage and invest in innovation.
- Need client commitment.



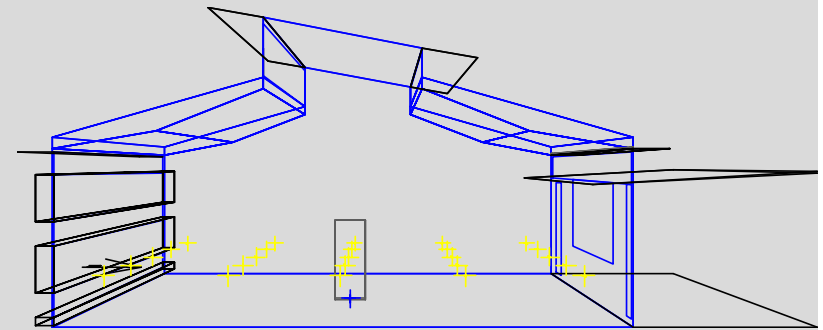
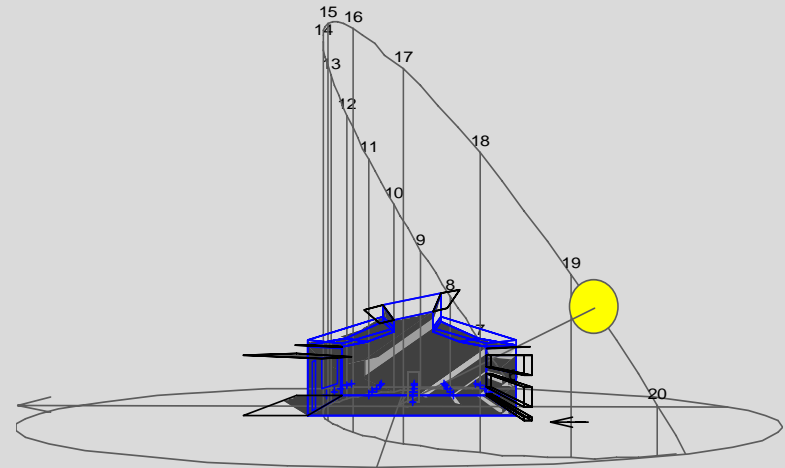
balance

- time / cost/ quality.
- cost / benefits of sustainability.
- capital cost / recurrent costs.



tools

- Rating tools.
- LCAid/ LCA Design.
- Audits.
- BCA.
- BASIX.
- Modelling tools.

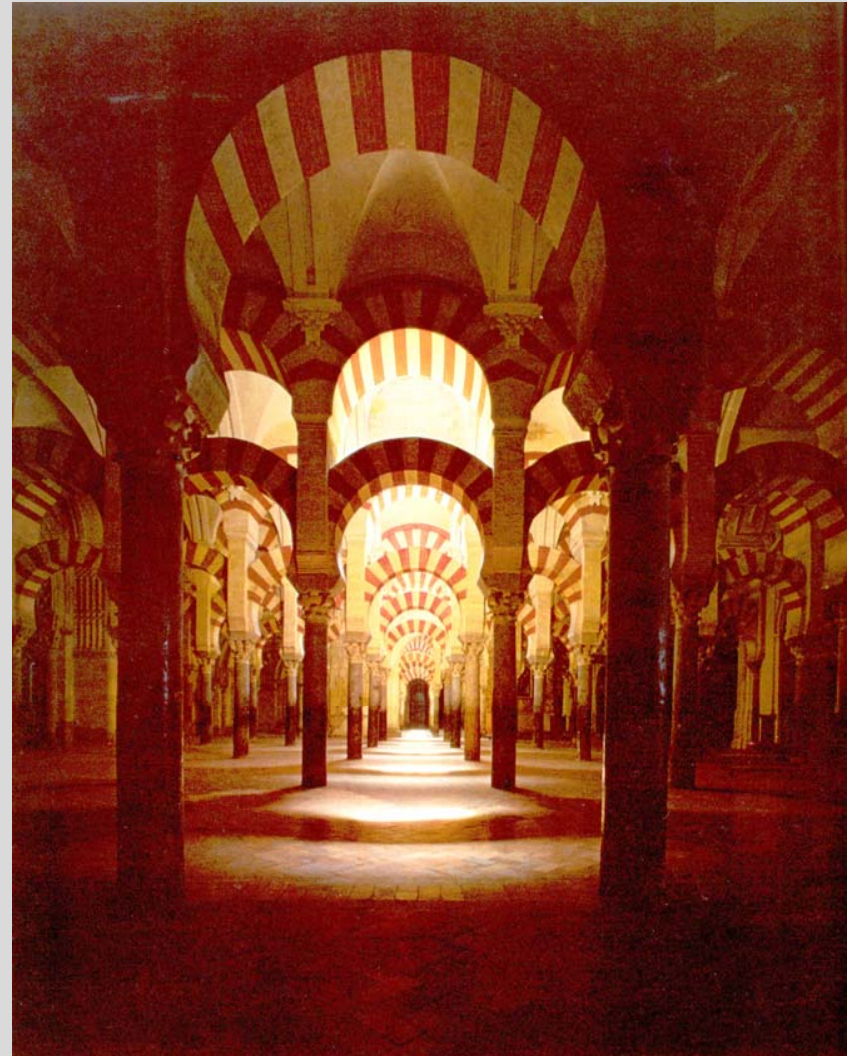


issues

- waste management
- energy
- water
- indoor quality
- materials

waste management

- Reduce waste by design.
- Recycle building materials.
- Recycle buildings.
- Flexibility in new buildings for future adaptation.



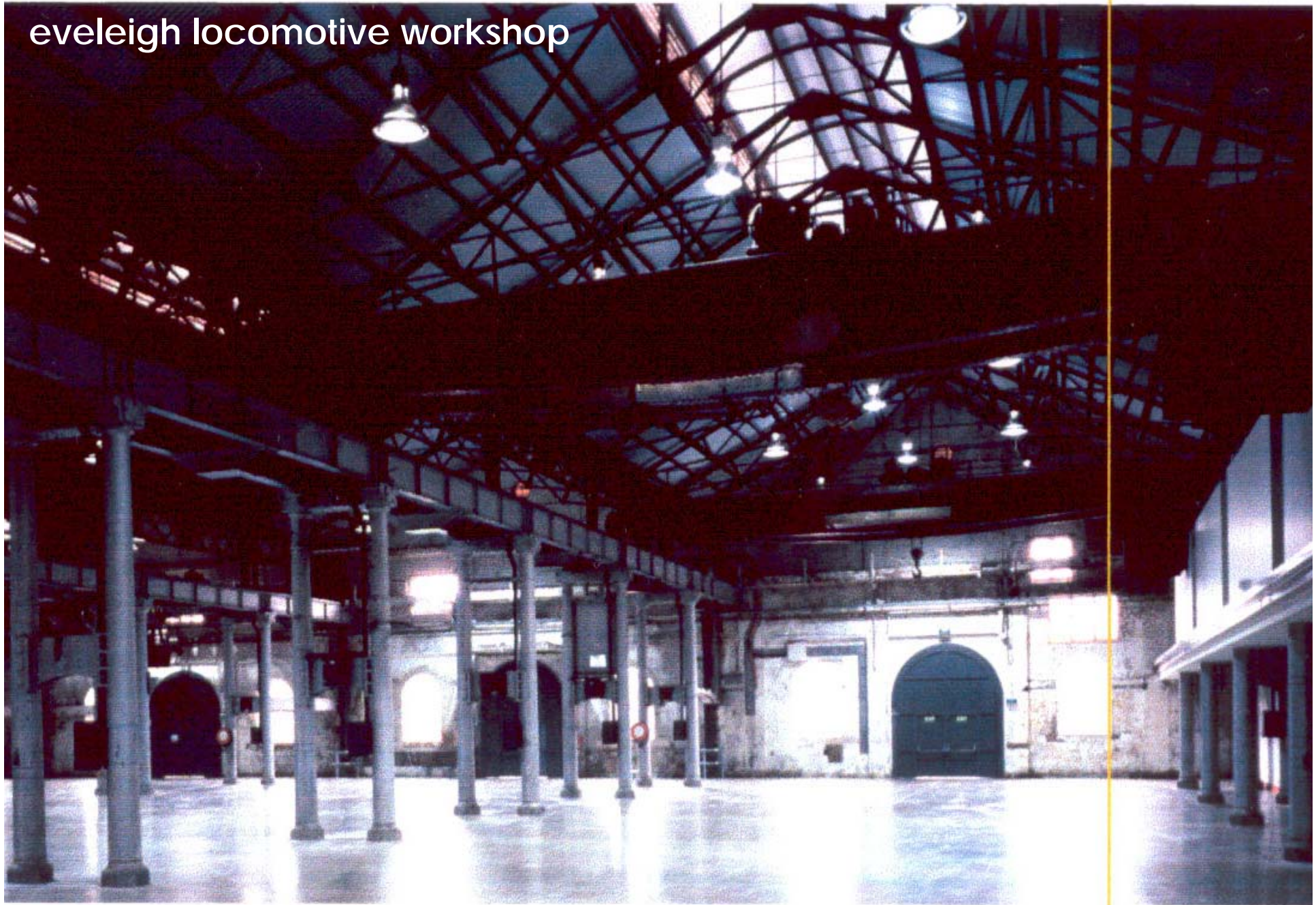
eveleigh locomotive workshop



eveleigh locomotive workshop



eveleigh locomotive workshop



Kirkbride. Sydney college of the arts



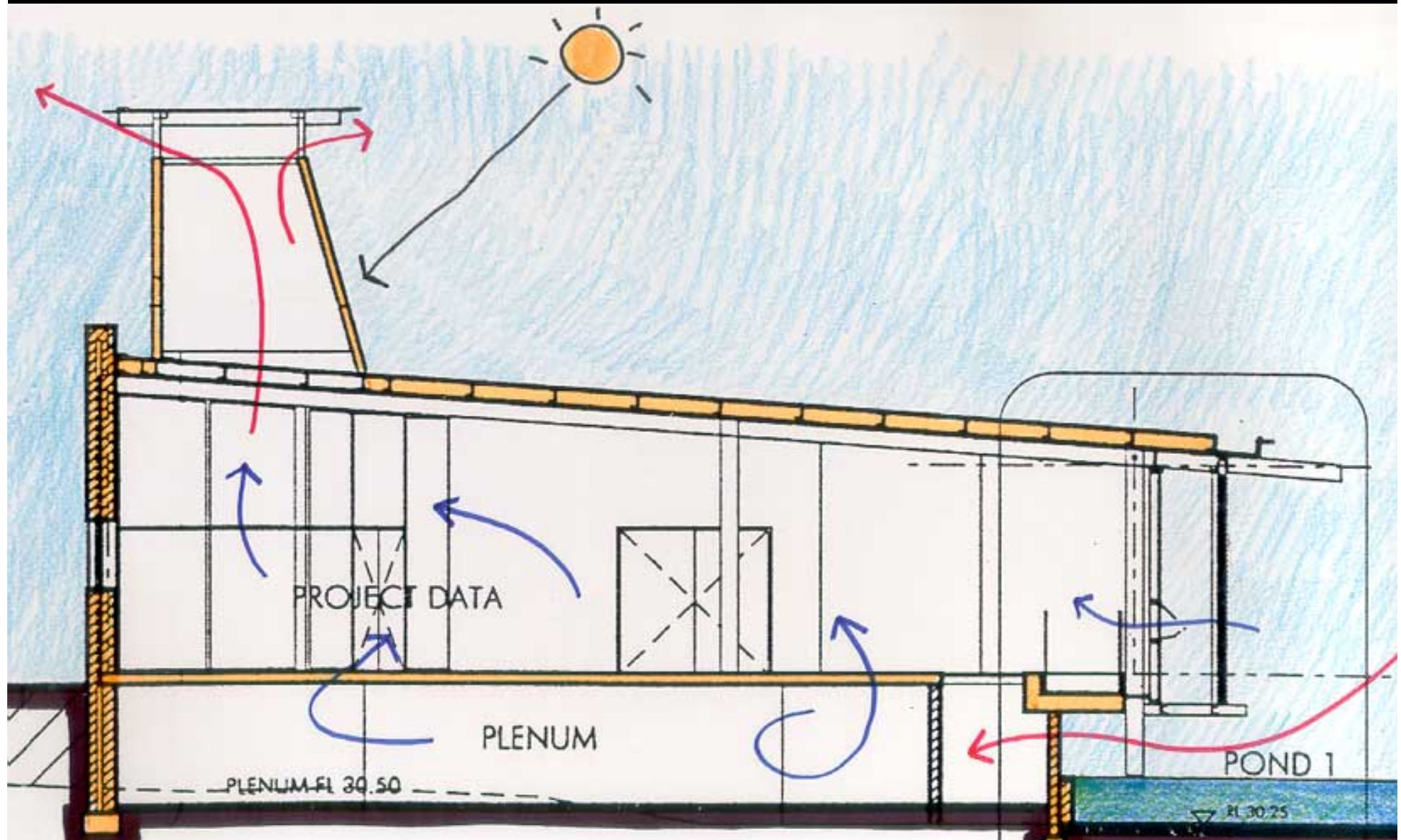
kirkbride



energy

- Look at passive systems first.
- Design to reduce energy consumption.
- Alternative energy sources.

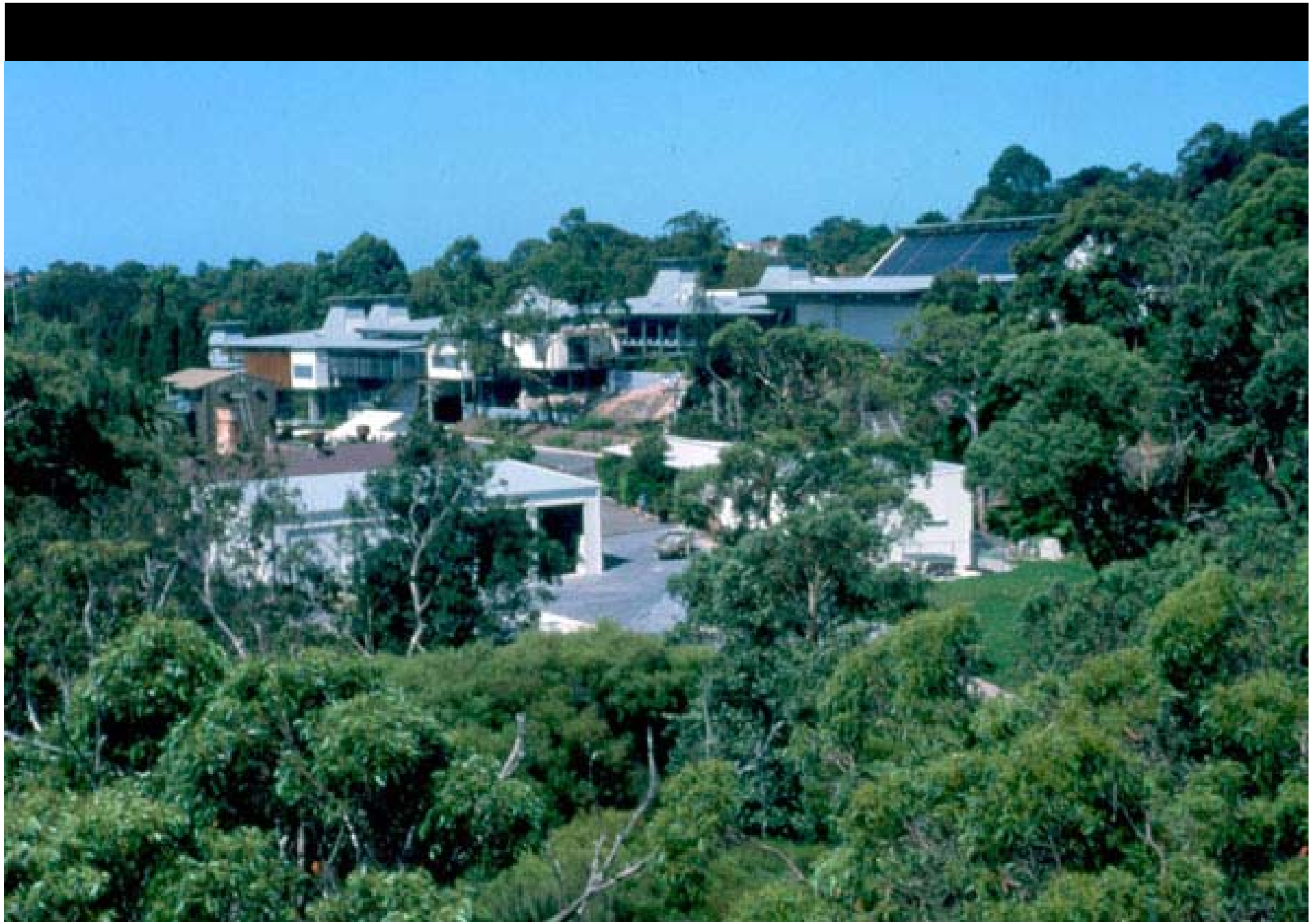




Manly hydraulics laboratory



Manly hydraulics laboratory



Manly hydraulics laboratory

Manly
hydraulics
laboratory



Energy Savings



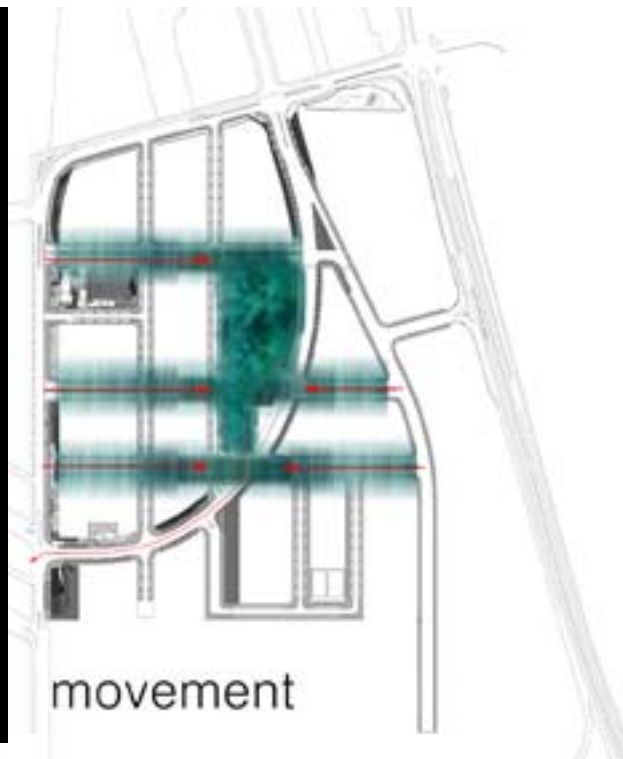
water

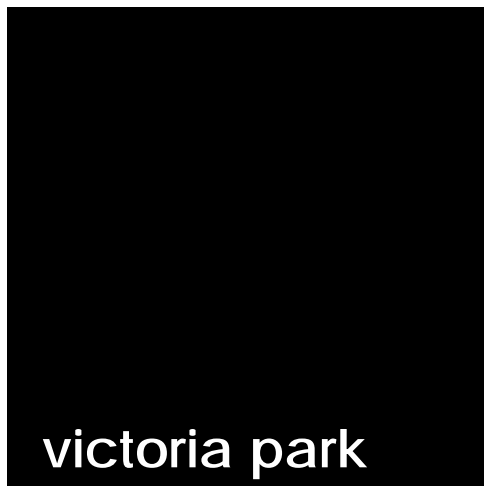
- Reduce consumption.
- Recycle water.
- Collect water.



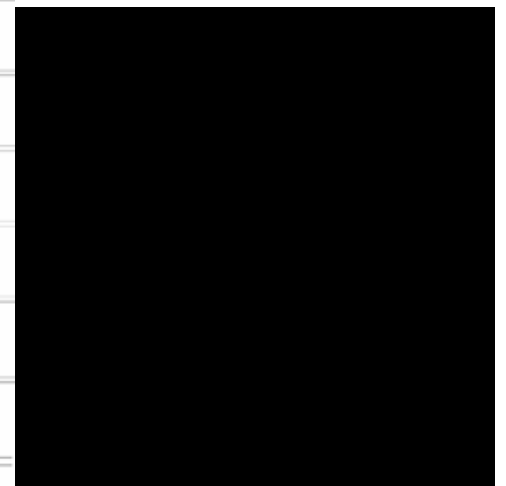
Water Savings







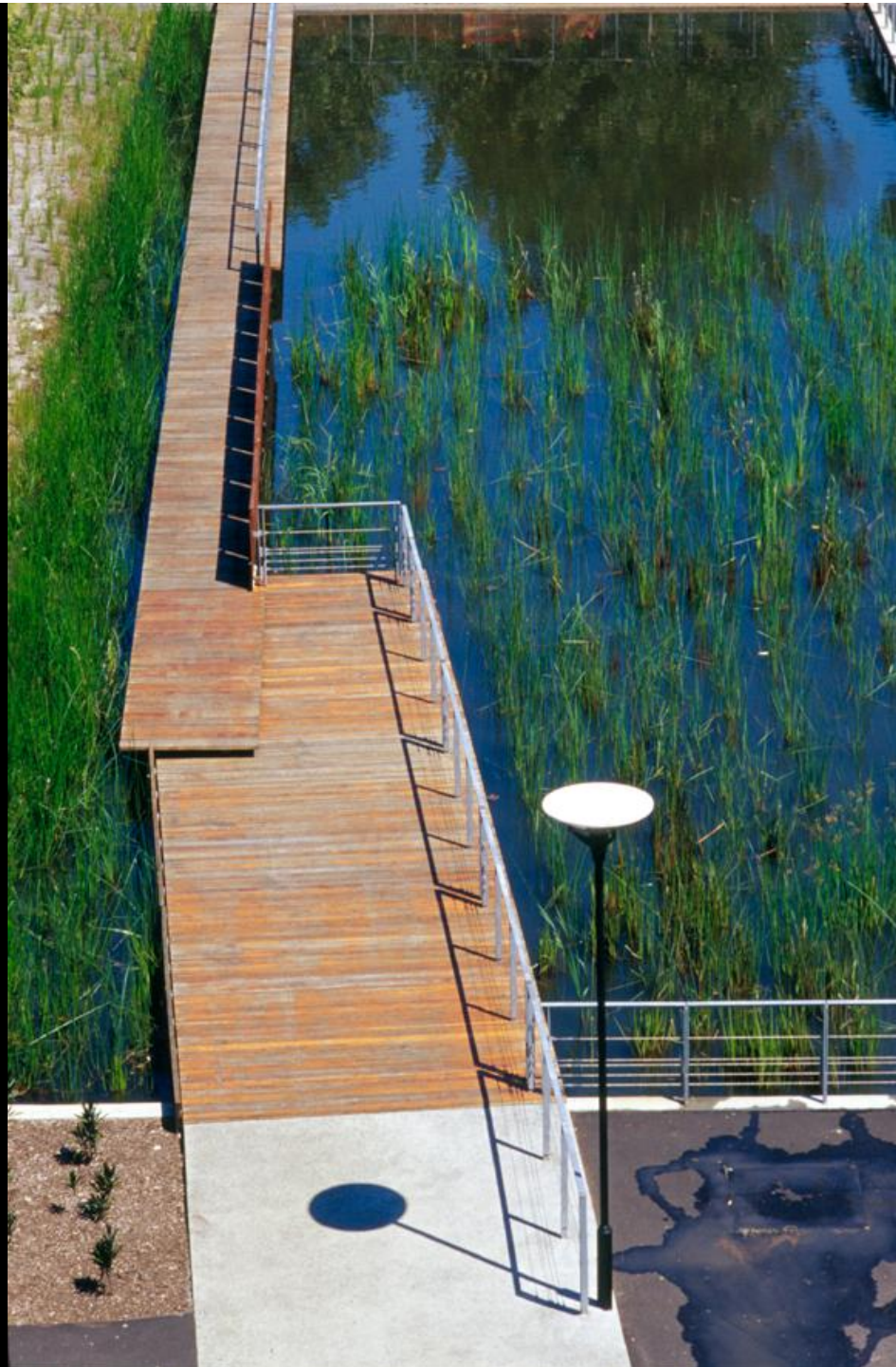
victoria park





victoria park

victoria park

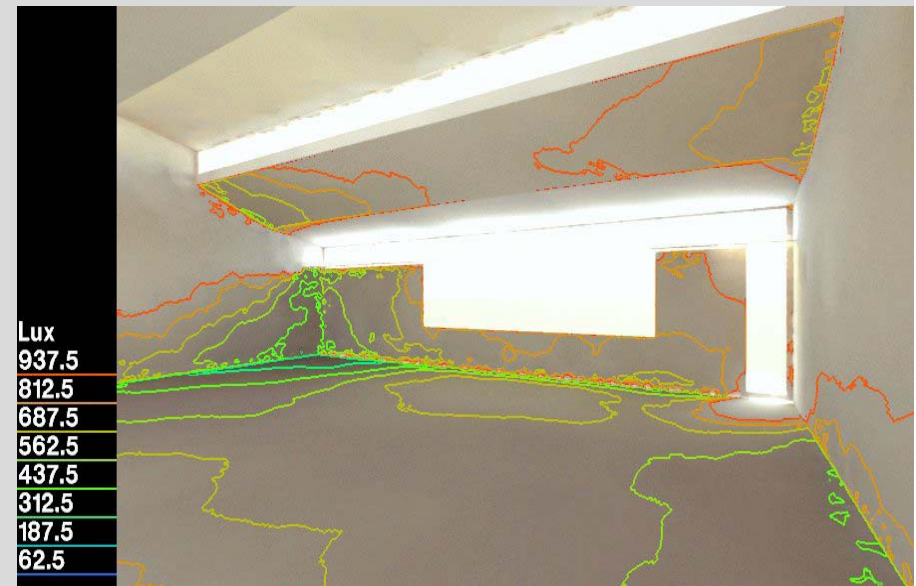


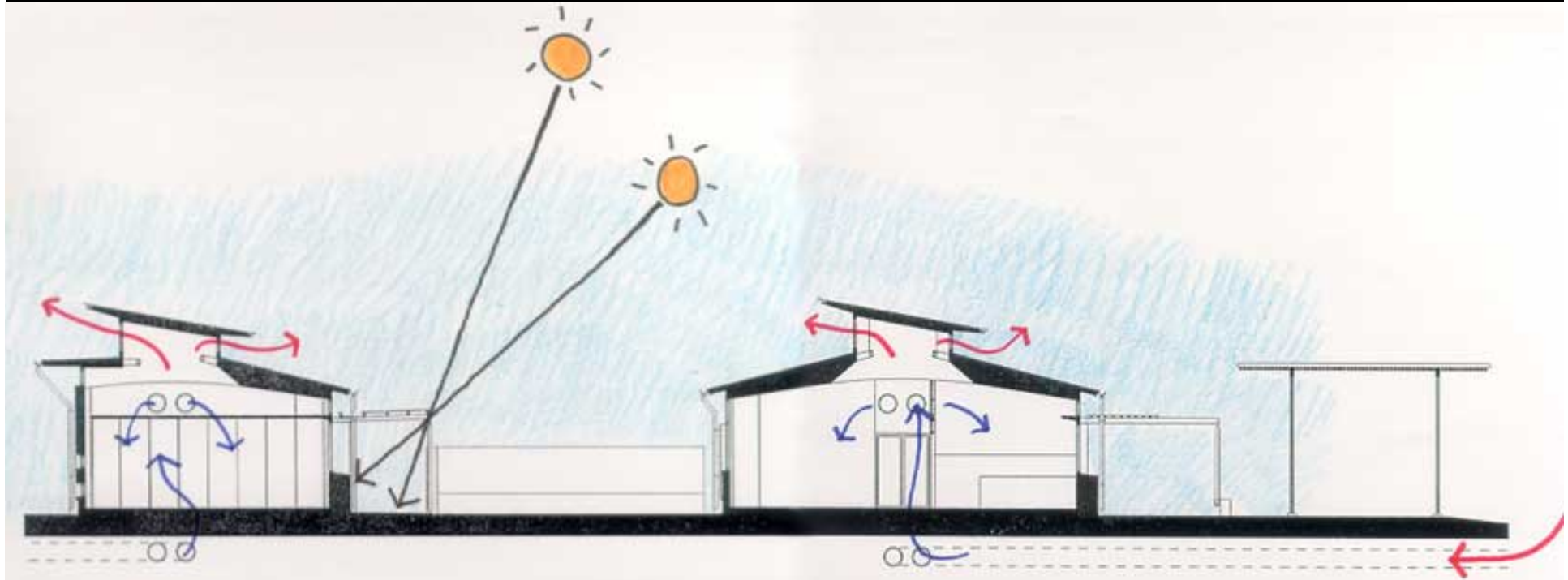


victoria park

indoor quality

- Air quality.
- Off gassing.
- Natural light.
- Occupant choice.





the national environmental centre



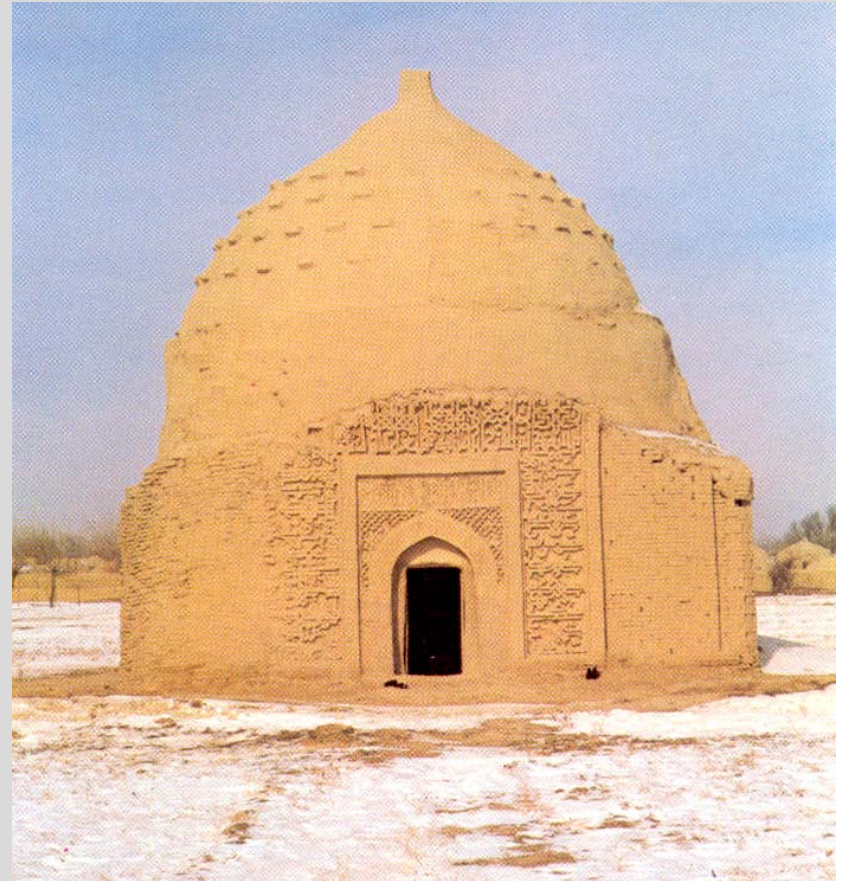
the national environmental centre



the national environmental centre

materials

- Embodied energy.
- Suitability.
- Adaptability.
- Life cycle.
- Maintenance.





Lithgow government offices



Lithgow – government offices







summary

- Invest in innovation.
- Design is an overarching concept.
- Sustainability starts at conception.
- Need to evaluate recurrent as well as capital costs (and demonstrate savings).
- Measuring/rating tools are part of the process not the end.
- Sustainable building is part of a sustainable built environment.

