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**DR. STEVE BURROUGHS**



**Sustainable Building Consultant & Academic Advisor**

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Dr Steve Burroughs is the principal of Steve Burroughs Consulting. Dr Steve delivers remote sustainable indigenous construction projects in Australia and in the developing world. Dr Steve consults with Government, Non-Government and Corporations in the development of research into sustainable performance of commercial buildings. He engages in the front end of projects including: scoping, designing and tendering, and on the back end of projects from project management through to practical completion. Dr Steve has over 45 years of experience in the construction and project management industry, including global and domestic exposure while specializing in sustainable building in commercial and housing within Australian and the developing world. He holds a PhD in Architecture obtained from the University of New South Wales, Sydney, Australia and is a member of the Royal Australian Institute of Architects

During his career Dr Steve has been involved in the formulation of project delivery/execution and supplier integration strategies, and the development of project delivery systems, procedures and assessment tools. He provided project management consultancy services, including the development of project systems, procedures, execution plans, and providing strategic advice on project delivery processes, as well the delivering project management/project architectural and engineering delivery services on major projects. His involvement in research and technical development projects honed his expertise in environmental, quality and safety management systems.

Dr Steve Burroughs has protected and enhanced the Indigenous communities in which he has lived and worked by placing sustainability at the core of building design and construction. During this time, he has been at the forefront of community engagement, working partnerships, and research and education in the sustainable building sector. Aspects of sustainability of the built environment of interest to Dr Burroughs include the environmental design and performance of commercial buildings, construction material technology, and ethnoscientific approaches to sustainability. His expertise has been applied to various projects both overseas (particularly in Africa) and in Australia.

In Australia, Dr Burroughs' work has focused on delivering environmentally sustainable buildings which meet the cultural, social and well-being needs of the people working and occupying the buildings. This work has included (in 2010) the design and construction of the first environmentally efficient homes under the Homes On Indigenous Lands (HOIL) programme (in Nguiu, NT). This project exemplifies Dr Burroughs' ability to develop meaningful partnerships with various stakeholders including aboriginal communities, government agencies, private corporations, universities and non-government organizations. With his network of professional colleagues, and as Principal of his consultancy firm Dr Steve Burroughs and Associates, collaboration with these groups and the investment of expertise have produced inventive built environment design solutions that promote the wellbeing of Australians.

As a result of his expertise and experience in sustainable building technologies, Dr Burroughs has been recognized by the University of Canberra where he holds the position of Adjunct associate professor (Architecture). There, he provides a creative and professionally oriented forum to encourage dialogue and collaboration among students, faculties, and the public and private sectors. He also provides research projects and supports students to achieve their academic and professional goals within Australia and overseas. As a guest lecturer overseas and a participant (often as a keynote speaker) at international conferences, Dr Burroughs has been able to disseminate his own work and stay informed of the most recent advances in sustainable building practices, supporting his roles as educator and leader.

Working with various government agencies and other NGO partners, Dr Burroughs continues to be involved at the forefront of sustainable building design, construction methods, and technologies. Current projects with corporations and other universities around the world epitomises his ethnoscientific approach to sustainable building design. The project involves the construction and/or the refurbishment of buildings, with a view to improving the economic, cultural, and environmental sustainability in the area.

For four decades, Dr Steve Burroughs has demonstrated leadership and innovative approaches in the advancement of built environment sustainability. He has worked at the intersection of environmental-based design, low-energy construction materials, alternative construction methods, and Indigenous knowledge and values. In doing so, he has not only contributed to the progression of environmental sustainability but has also enhanced the lives of those with whom he has engaged.

## Current Position at University of Canberra

Dr Steve is heavily involved in the built environment in accordance with the principles of environmental, social and economic sustainability. Given the various environmental imperatives facing our society, including resource use, energy consumption and environmental impacts such as atmospheric emissions and climate change, the sustainability of the built environment is of critical importance. Social sustainability in Australia must include consideration of Indigenous people's views, needs and contributions with respect to the built environment. Furthermore, it is now becoming apparent that economic sustainability is closely tied with environmental sustainability, and a growing body of data on the built environment from both Australia and overseas shows that the sustainable property industry has competitive advantage over the conventional property industry.

Therefore, research into sustainable design and the sustainable built environment, and associated knowledge-based activities such as the enhancement and widening of links and networks with key stakeholders in various sectors of the built environment (on both a national and international basis), will be of increasing strategic value to the University of Canberra.

It is Dr Steve's ambition to work with universities around the world particularly the case when considering the increasingly close links that will need to be made with our World Partners (i.e. Czech Technical University in Prague) where sustainability issues are becoming of high importance.



## Current Clients:

**The Industry Superannuation Property Trust (ISPT) of Australia**, has a visible commitment to sustainability in the property industry, as revealed in its approach to business and in its activities of improving the environmental sustainability of its building stock. This commitment has become very clear to me during my recent work with ISPT involving case studies of building environmental efficiency. ISPT also has a commendable community program supporting initiatives and community organisations that share the trust's values and which demonstrate innovation and leadership.

**Indigenous Business Australia (IBA)**, provides policy advice and information to Government, Parliamentary Committees and other stakeholders on Indigenous economic development issues, drawing on the expertise gathered from the implementation of its programs.

- Cherbourg Material Recycling Facility (MRF), two years (2012-14) in the planning to establish a vibrant fully functional MRF operation in Southern Queensland. Additional advice and support to continue through (2014-15)

**Wunta Aboriginal Corporation – Sam Zaro, Far North Queensland**, Mr. Zaro proposes, The development of a master plan and awareness activities on which the community and the Traditional Owner (TO) may further pursue the development of the Eco-tourism site, Centre for Ecological excellence and a sustainable and responsible return to country as desired by the TO on his grandmother’s country at the mouth of the Nesbit River on the Great Barrier Reef in Far North Queensland.

**The Commonwealth Government Department of Health and Aging**, providing support as an independent certifier of remote health clinics being constructed or refurbished in remote Indigenous Communities of Australia.

## **Current Projects in cooperation with CTU, FCE, Dept. of Building Structures:**

Master students from the study branch Building and Environment are being involved in following projects within the project studio SPJ1 (Specialized Project 1, 2) and Diploma Thesis with the cooperation and under the supervisor of Jan Ruzicka from the Department of Building Structure of the FCE, CTU. Regular SKYPE meeting are organized to discuss the topics and to follow the progress. Up to now 5 students have been involved.

## **Red Beach Project Summary:**

### **Red Beach (Prunung) middens on the Mission River at Weipa, Queensland**

These massive middens, once several hundred metres long, are steadily being destroyed through vehicle traffic and general lack of protection. Several access points leading to Red Beach – mainly for fishing – have been pushed through the middens at regular intervals.

The mounds are estimated to be around 2300 years old. The elders of the Thanakwithi people, traditional owners of the country on which most of the middens are located, are interested in preserving and developing the site for visitor and providing cultural awareness.

### **The proposal:**

Staged development of the Prunung precinct – in conjunction with the Traditional Owners and– to protect the shell mounds, scar trees and story places.

To enhance the estate as a sensitively-managed, interpretive tourist attraction observing what may be the largest set of middens in Australia (yet to be confirmed through research) characterized as “a national monument” and an area of high national heritage value.

### **Feedback:**

Dr Steve in conjunction with Czech Technical University in Prague students and staff designed a project to meet the proposal. The proposal was presented to the Thanakwithi people and they gave the following feedback.

“Hi Dr Steve

The poster is ok and the elders like the design. The fly through is the one I feel would make an impression on them.

The Elders have seen the drawings. They were impressed with the building design and said it really suits as they do not want their land covered with a lot of sheds.

Thanks again Dr Steve “

## **China Wuhan Project**

### **Project for the Delegation from Wuhan Land Resources and Planning Bureau**

To have a mutual communication and design on Australian/Czech Republic urban waterfront landscape design style and the concepts for construction of a museum and hotel.

The project is proposed on the banks of the Yangtze River on parklands next to the river. This project would be located close to the Wuhan Yangtze River Tunnel and used to beautify and enhance the use of the parkland space for public and private access.

The project is based on environmental protection and ecological sustainable development that will take place on the waterfront using landscape design. Australian, Czech Republic and international standards are to be applied to the designs.