



Mark Allan - General Manager Environment & Design - VicUrban

Melbourne Docklands Australia
Sustainable Waterfront Regeneration

EnviroSeries 2005 - Business Environment Council - Hong Kong

16th September 2005







Darwin

Perth

Adelaide

Melbourne

Canberra

Sydney

Brisbane

Hobart

Hong Kong - Melbourne, Victoria: Some Statistics

	Hong Kong	Melbourne (Capital City of Victoria)
Land Area - Total	1092 sq km	6109 sp km
Population	6.9 million	3.4 million (5.0 million Victoria)
Latitude	22 15 N	37 81 S
Climate	Tropical monsoon; Summer average maximum 32°C winter 14°C	Temperature climate with four distinct seasons. Summer average maximum 25°C winter 14°C
Annual Rainfall	1300ml to 3000ml	600ml to 800ml
GDP	US\$234.5 bn	US\$154.1 bn (Victoria)
GDP - real growth rate	7.9% (2004 est)	3.7% (2004 est)

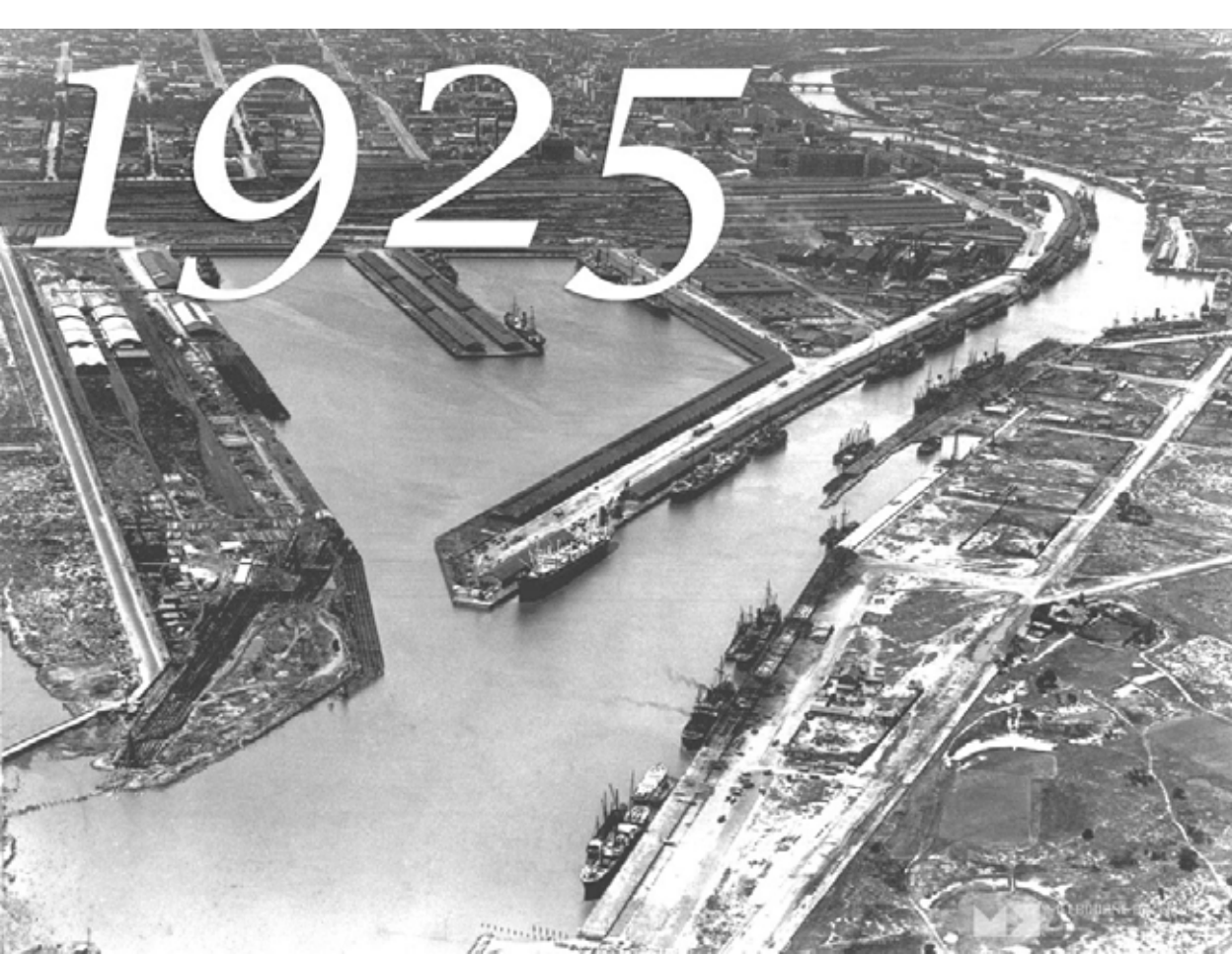








1925

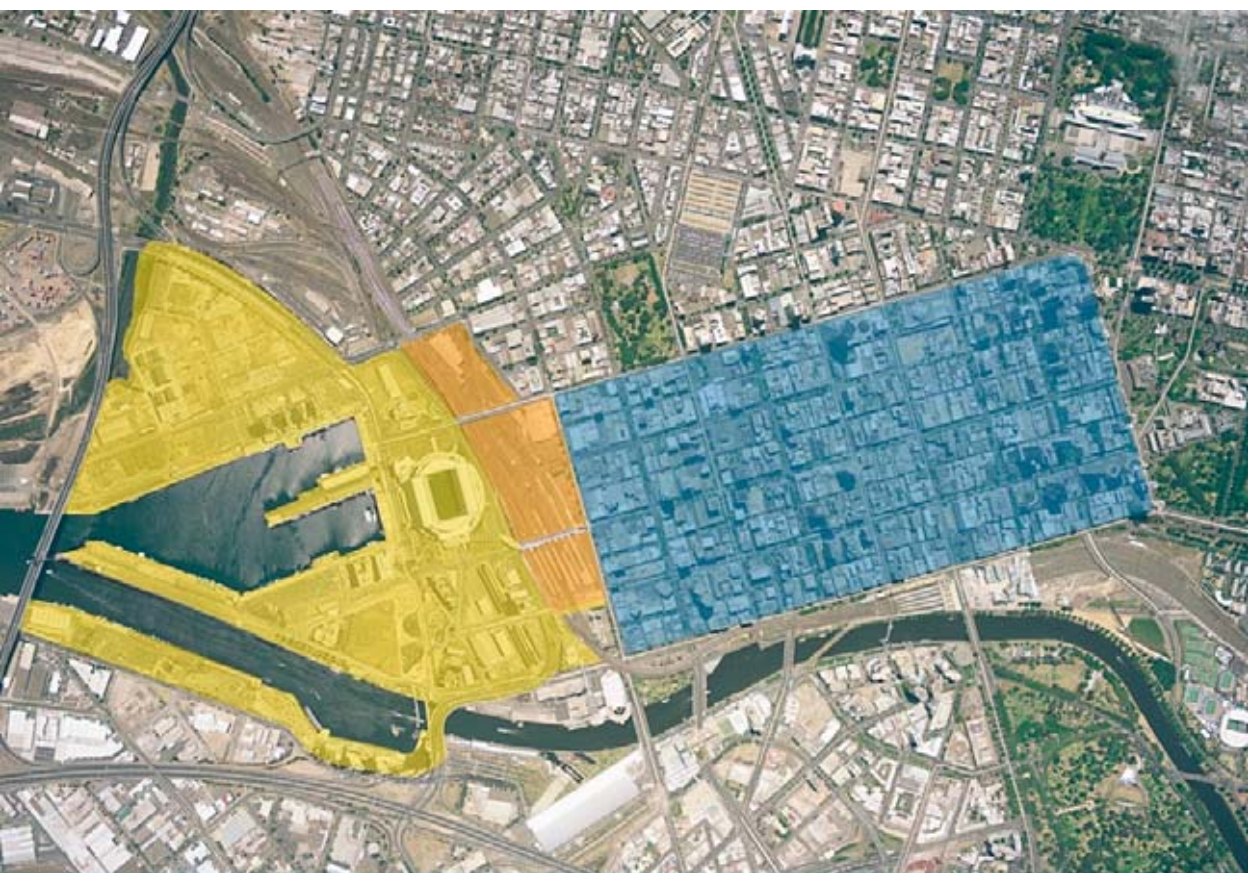


1996









Melbourne Docklands and CBD



MELBOURNE Docklands
Victoria



Recent Events

A blue-tinted photograph of the Melbourne skyline at night, viewed from across the water. Several large, starburst fireworks are exploding in the dark sky above the city. The lights of the buildings and the water's surface are visible in the background.

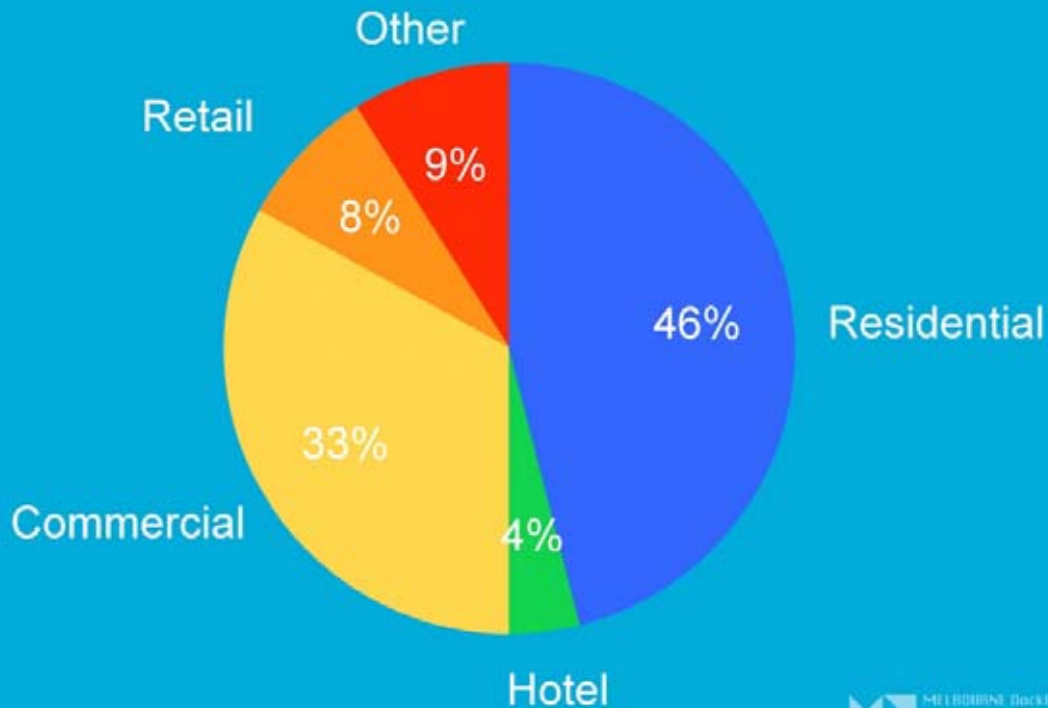






Docklands Projected Buildout Over 20 Years

By gross floor area (GFA)



Melbourne Docklands at a glance

Daily Population	2002	End 2004	2006	Project Completion
Daily Office Commuters / Retail Workers	1,000	5,500	6,500	30,000
Residents	300	3,600	6,300	20,000
Visitors (Million per annum)	8,000 (2.9)	10,000 (3.7)	20,000 (7.3)	55,000 (20.0)
Total Daily population	9,300	19,100	32,800	105,000
Construction workers	2,000	3,000	3,000	

Note: Future projections are estimates only and based on information available as at October 2004



MELBOURNE Docklands
Victoria

Melbourne Docklands at a glance

Development Financials	1999	End 2004	2006	Project Completion
Development Values completed / under construction	\$500m	\$3.0B	\$3.7B	\$9.0B
Contracted Development Values	\$2.0B	\$8.0B	\$8.4B	\$9.0B
Private / Public Investment Ratio completed / under construction	9:1	15:1	20:1	90:1
contracted development values	33:1	40:1	45:1	90:1

Note: Future projections are estimates only and based on information available as at October 2004



MELBOURNE Docklands
Victoria

Docklands Public / Private Development



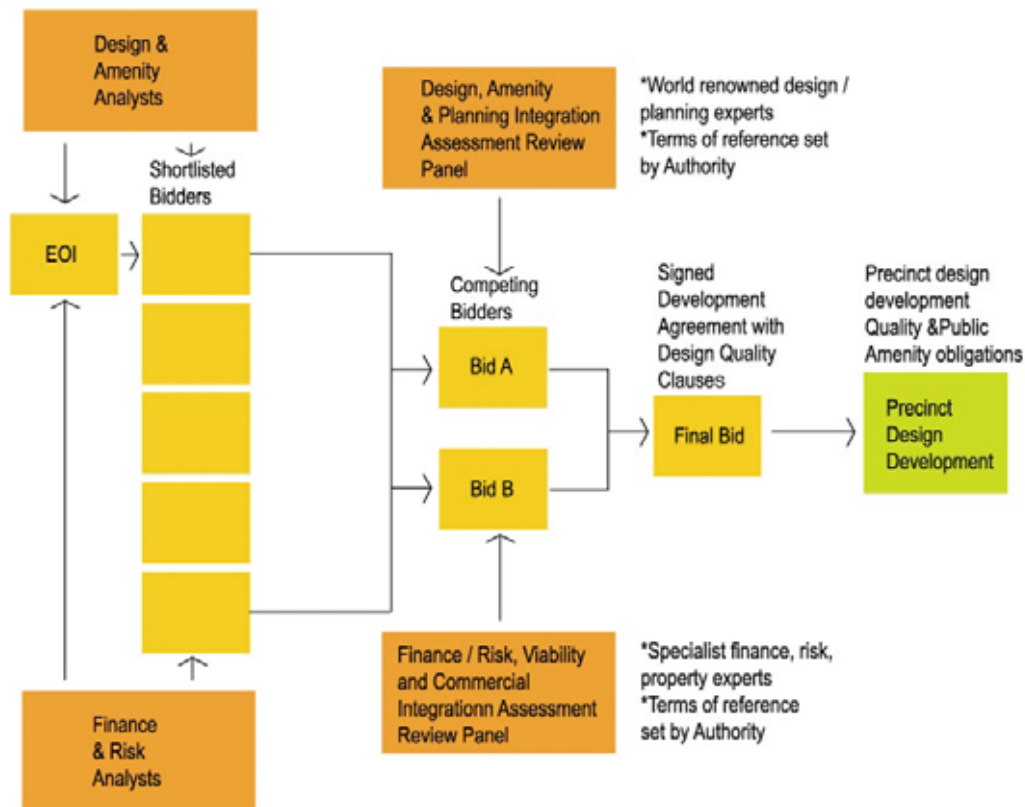
Selection Criteria - Robust

- ▶ Design & Amenity
- ▶ Finance & Risk
- ▶ Integration - City and precinct
- ▶ Viability / certainty
- ▶ Other

Hurdles - no weightings



BID PROCESS & DEVELOPMENT AGREEMENTS



Yarra Waters

Development

Plan Overview



MELBOURNE Docklands
Victoria



MVA Pty Ltd
Architects
Planners
Interior Designers

**Alston Riggall
McDougall**
Architecture
Urban Design

Bates Smart
Architects
Interior Designers
Facility Planners

Barry Murphy
Landscape
Architecture
Urban Design

EDAW
Landscape Architecture
Land Use Planning
Urban Design



Development Agreement - Benchmarks

- ▶ Finance & Risk
- ▶ Delivery Specifications
- ▶ Design for whole
- ▶ Time - milestones & sunsets
- ▶ Obligations
- ▶ Market



Docklands' Planning Area Strategic Statement
July 2009
Evolution City
MELBOURNE Docklands
http://www.melbournedocklands.com

Integration & Design Excellence
July 2009

MELBOURNE Docklands
http://www.melbournedocklands.com

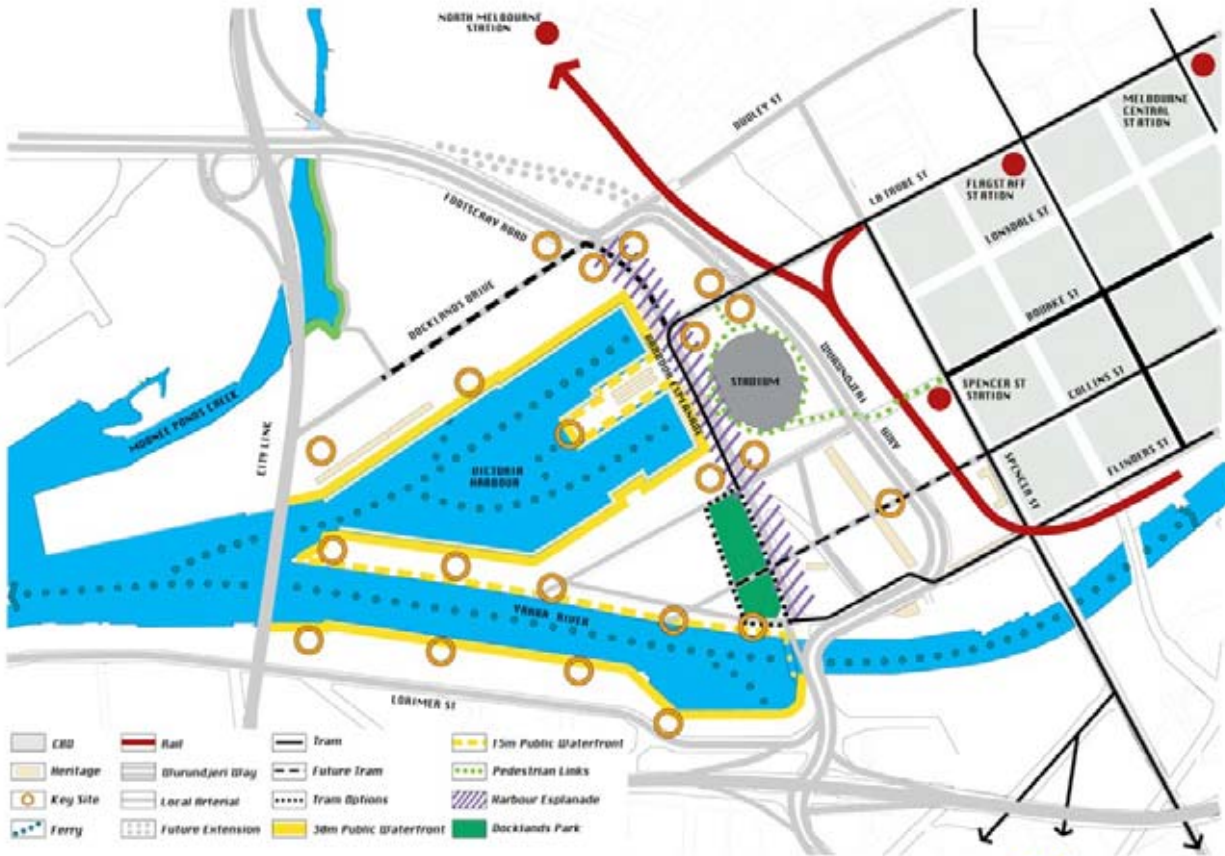
MELBOURNE Docklands
Victoria



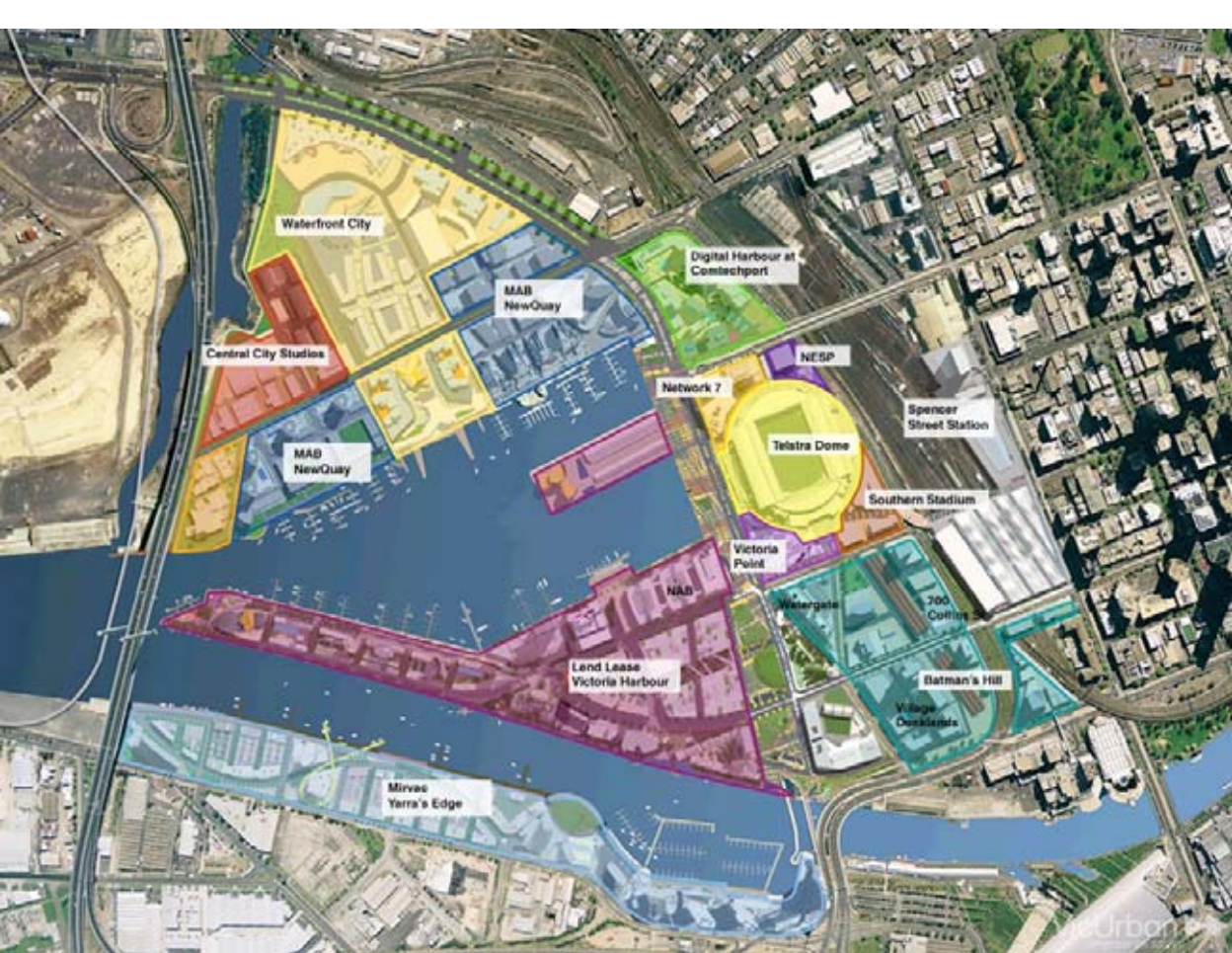
Key Design Principles

1. For all people and their needs
2. Responsive to Melbourne
3. Responsive to the Site
4. Focused on Water
5. Focused on the Public Realm
6. Economically viable & vital
7. Diverse & integrated
8. Creative & innovative
9. Ecologically sustainable
10. Dynamic





Conceptual Planning & Design Framework



Waterfront City

Central City Studios

MAB
NewQuay

Digital Harbour at
Comtechport

Network 7

NESP

Telstra Dome

Spencer
Street Station

Southern Stadium

MAB
NewQuay

Victoria
Point

Watergate

760
Collins

Batman's Hill

Village
Commons

Lend Lease
Victoria Harbour

NAB

Mirvac
Yarra's Edge

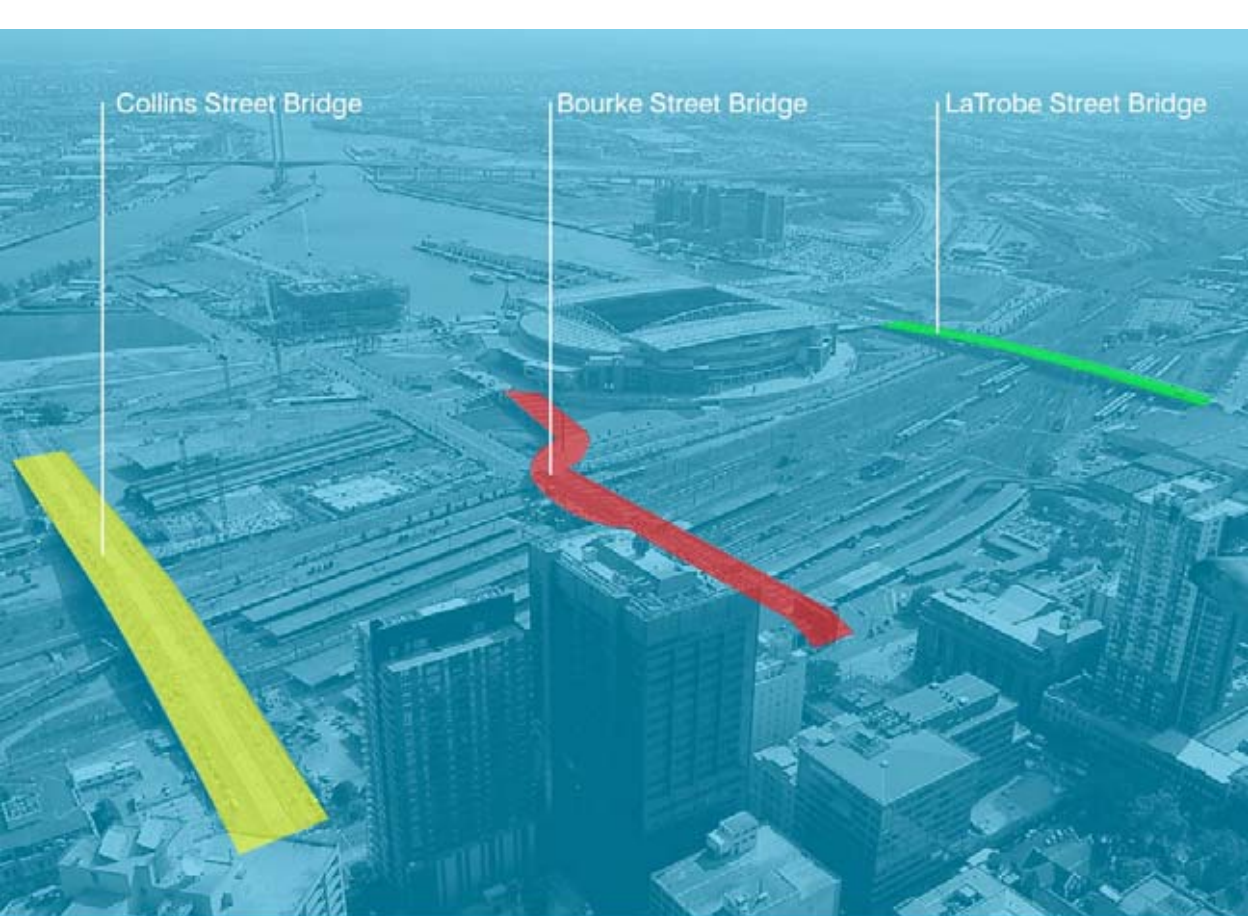
City Circle Tram



Collins Street Bridge

Bourke Street Bridge

LaTrobe Street Bridge



Totally Connected

VicUrban
remember the future



Collins Street Extension



MELBOURNE Docklands
Victoria

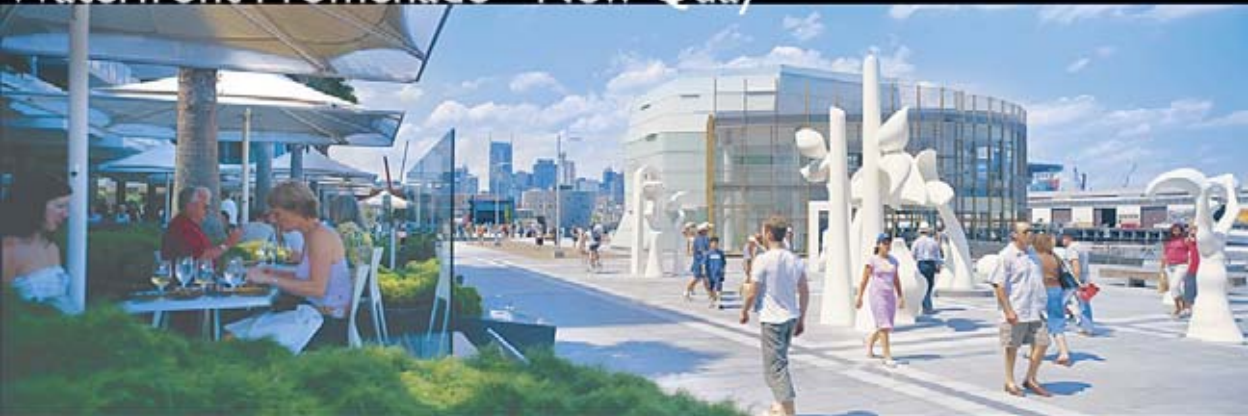




Telstra Dome



Waterfront Promenade - New Quay









Harbour Esplanade and Grand Plaza

VicUrban
Remember the Future



Harbour Esplanade and Grand Plaza



Melbourne Docklands Park









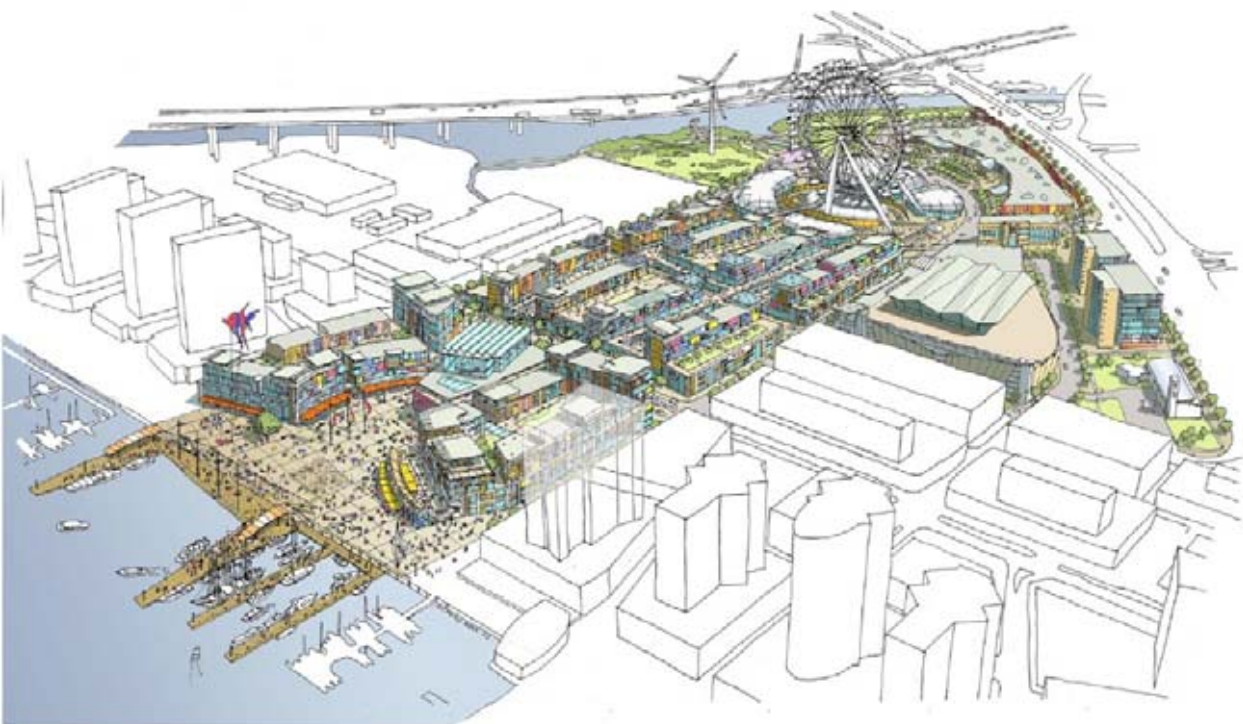
NAB



MELBOURNE Docklands
Victoria















MELBOURNE Rocklands
Vicki Barr



GRIMSHAW



MELBOURNE Docklands
Victoria



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VicUrban

Melbourne Docklands

ESD Guide

Ecologically Sustainable Development
October 2003



MELBOURNE Docklands
Melbourne's New Waterfront



VicUrban
REIMAGINE THE LAUREN

Melbourne Docklands ESD Guide

- ▶ Co-operative involvement of developers and agencies
- ▶ Share expectations
- ▶ Practical process which maximise return for effort
- ▶ Market the benefits



ESD GUIDE PERFORMANCE INDICATOR TABLE

Melbourne Docklands ESD PERFORMANCE INDICATORS (MAXIMUM POINTS AVAILABLE)				
	Provisional	Consensus	Benefits	
A Outdoor green life				
A1 Solar paneling %	0	0	Lower water use, lower garden maintenance	
A2 Light wall	0	0	Improved light environment and energy cost savings	
A3 Sustainable recreation and use	0	0	Lower water rates	
A4 Greenfield site development	4	4	Reduces previously used and contaminated sites	
B Resilience				
B1 Zero LFCs	Mandatory	Mandatory	Reduced damage to Storm Layer	
B2 No VFCs or Inlet	4	4	No damage to Storm Layer	
B3 Rainflow heat dispersion	4	4	Minimises leguminous rot, low energy & lower water rates	
C Watercycle and wastewater				
C1 Water conservation	4	4	Lower water rates	
C2 Treatment and reuse of waste water	4	4	Lower water and sewage rates	
D Transport				
D1 Ergo facilities	4	4	Healthier population, lower air pollution	
D2 Proximity to alternative transport	4	4	Reduced car use, alternatives for workers, visitors, residents	
E Energy				
E1 Maximum energy (MWh/L1) 42 star or equivalent	Mandatory	Mandatory	Energy cost savings, lower greenhouse gases emitted	
E2 Car park CO2 monitoring	Mandatory	Mandatory	Energy cost savings	
E3 Low energy building design	4	4	4pts	
E4 Renewable energy - electricity	4	4	4pts	
E5 Renewable energy - hot water	4	4	4pts	
E6 Natural ventilation in apartments	4	N/A	Energy cost savings, better air quality	
E7 Lighting Density (commercial)	N/A	4	Energy cost savings	
E8 Natural ventilation in car park	4	4	Energy cost savings, better air, improved light	
E9 Low energy appliances	4	N/A	Energy cost savings	
F Building materials				
F1 PVC prohibition	4	4	Lower harmful chemicals generated (fabrication & disposal)	
F2 Phthalate ban	4	4	Prohibition of end growth foams	
F3 Embodied energy	4	4	Less energy used to make buildings	
G Indoor environmental quality				
G1 Indoor air quality	4	4	Improved health and productivity for tenants	
G2 Natural lighting	4	4	4pts	
G3 Low emission paints	4	N/A	Improved general health, less chance of allergies indoors	
G4 High Frequency Sockets	N/A	Mandatory	Improve light quality and visual health, reduce energy costs	
G5 Thermal comfort	4	4	Improved morale and productivity	
G6 Views	N/A	4	Improved morale and visual health	
H Waste				
H1 Recycling facilities	Mandatory	Mandatory	Reduce waste going to landfill	
I Innovation				
I1 Innovative ESD technology	0	0	Breaks ESD barriers to help others	
I2 ESD design professional	0	0	Optimises ESD potential of building	
I3 Community participation/brand systems	4	4	Optimises ESD potential - general, buildings, user space	
I4 Partnering financing energy performance	0	0	Increases revenue to minimise energy use	
TOTAL	(11)	(10)		



ESD GUIDE PERFORMANCE INDICATOR TABLE

Melbourne Docklands
ESD PERFORMANCE INDICATORS (MAXIMUM POINTS AVAILABLE)
Residential Commercial Benefits

	Residential	Commercial	Benefits
A Outdoor space, the site			
A1 Native planting %	2	2	lower water use, lower garden maintenance
A2 Light spill	2	2	improved light environment and energy cost savings
A3 Stormwater retention and use	2	2	lower water rates
A4 Brownfield site redevelopment	4	4	restores previously used and contaminated sites
B Atmosphere			
B1 Zero CFCs	mandatory	mandatory	reduced damage to Ozone Layer
B2 No HCFCs	6	6	no damage to Ozone Layer
B3 Heat dispersion to water or ground	4	4	eliminates Legionnaires Disease risk, low energy and lower water rates
C Water cycle and wastewater			
C1 Water conservation	8	4	lower water rates
C2 Treatment and reuse of waste water	4	4	lower water and sewerage rates

Indicator	Residential	Commercial	Benefits
0 Indoor environmental quality			
01 Indoor air quality	3	3	improved health and productivity for tenants
02 Natural lighting	3	3	0/10
03 Low emission paints	3	3/4	improved general health, less pollution of strategic markets
04 High Frequency Sounds	0/4	0/4/5/6/7/8/9	improved light quality and visual health, reduced energy costs
05 Thermal comfort	2/4	2/4	improved health and productivity
06 Odour	0/10	0/1	improved health and visual health
1 Waste			
07 Recycling facilities	mandatory	mandatory	reduced waste going to landfill
2 Innovation			
08 Innovative ESD technology	0/1	0/1	reduces ESD footprint to long-term
09 ESD design performance	0/1	0/1	optimises ESD potential of building
10 Green ICT performance systems	1/2	1/2	reduces ESD footprint, general building, team spirit
11 Watering strategy energy performance	0/1	0/1	reduces water use, reduces energy use
TOTAL	107	109	



Australia Award for Urban Design 2004
Melbourne Docklands
An Innovative Strategy for Designed Development

November 2004





2000



2006



2007



2008



2010



2015



2020



Necessary & Sufficient Conditions - Attract Investment

- ▶ Vision - commercial & planning principals
- ▶ Partnerships - Community, Government & Private Sector
- ▶ Planning Certainty
- ▶ Infrastructure - just in time
- ▶ One-stop shop for investment approvals
- ▶ Market



Determine Objectives

- ▶ Scope of development (m², \$, ?)
- ▶ Uses - mixed
- ▶ End population - visitors, workers, residents
- ▶ Time & Strategy
- ▶ Focus - Urban Design
 - Sustainability
 - Community
 - Tourism ⇒ Locals

