

The Blue Mile – Wollongong Foreshore Master Plan

Abstract

A common problem for city foreshores is the condition of aging infrastructure. Materials used previously for footpaths, fencing and furniture are often found to be unsuitable due to selection, cost constraints, availability of materials at the time and construction methods. Exposed to harsh, coastal, salt laden winds combined with increasing and constant usage public domain infrastructure can quickly deteriorate over time. Challenges such as diverse stakeholders and ongoing financial constraint need to be surmounted. The spectacular coastal scenery which attracts the public for recreational purposes can result in the rusting litter bin or cracked footpath being tolerated well past design life. However ongoing risk needs to be considered.

Introduction

The Wollongong City foreshore precinct was increasingly under pressure from changing lifestyles and escalating patterns of use. These included increases in traffic volume, antisocial activities, visitation by locals and tourists alike, and population density within and surrounding the precinct. Demand had outgrown the ability of existing infrastructure to provide appropriate amenity, and connectivity and the expression of the city within its magnificent foreshore was missing.

The Revitalising Wollongong City Centre Plan (2006) set a 25 year strategic framework for the city centre to grow into a prosperous, vibrant and attractive regional city. The city centre foreshore is highlighted as a critical component of that vision and the plan identified redevelopment of the city foreshore as one of eight civic improvement projects that present major opportunities to achieve the vision for the growth, revitalisation and development of the city centre.

The city centre strategy was endorsed by Wollongong City Council in November 2006, and included a new Local Environmental Plan (LEP), Development Control Plan (DCP), and Civic Improvement Plan (CIP) which provide the necessary planning context for the development of *The Blue Mile Master Plan*.

The Blue Mile Master Plan was endorsed by council in 2007 and sets out the strategic framework for foreshore improvements adjacent to the Wollongong CBD. The Wollongong City Centre Strategy 2006, included a new Local Environmental Plan (LEP), Development Control Plan (DCP), and Civic Improvement Plan (CIP) which provided the necessary planning context for the development of *The Blue Mile Master Plan*.

The need for an overarching plan to improve the foreshore in a coordinated way was recognised by council's Landscape Architecture Section and Design Division management in 2004. As it progressed, it quickly resonated with both council and the wider community and the project tapped into an existing groundswell of support and enthusiasm. Branded the Blue Mile – Blue for the ocean and sky and Mile for both the physical distance and important heritage values - the project has been enthusiastically received as it has developed, and has been the recipient of several funding grants from both state and federal government.

Special Factors

- Iconic urban foreshore rich in history
- Large areas of open space adjacent to coastline
- Project led from conception by Landscape Architecture Section of council.
- Landscape, civil, structural design prepared in house.

Budget

- An opinion of Probable Cost was prepared by QS in 2007 and the order of cost is estimated at \$45 million that included upgrading of community buildings, roadworks and coastal protection works.

Concept

The aim was to significantly improve public infrastructure and recreation and tourism experiences in the foreshore area stretching from the Wollongong Golf Course in the south to Fairy Creek in the north.

The embellishment of the city foreshore area will have many social, economic and environmental benefits for Wollongong, its community and the wider region. A unified and high quality foreshore design, new facilities at frequent intervals, enhancement of the existing visual icons (such as the lighthouse), and suitably scaled quality artwork was necessary to generate a lasting image of Wollongong, the city by the sea. This image was not to be solely dependant on a fortunate natural setting, but was to be based on a cohesive plan to link the city into its foreshore. The existing infrastructure in the foreshore area fell short of the quality necessary to support current and potential demands and to create the image of a vibrant modern regional city.

Vision

The Blue Mile will become a high quality, popular and beautiful open space area that links the city centre to its magnificent foreshore, and provides a substantially enhanced amenity for residents and visitors.

Objectives

The principal objectives articulate the guiding vision above:

- Establish high quality open space
- Improve pedestrian/cycle access to and along the foreshore
- Provide high quality facilities of distinctive local design that respond to and enhance the unique natural environment
- Provide a range of facilities for families, visitors and local residents
- Ensure design proposals maximise the safety of visitors
- Improve vehicular access and parking opportunities
- Integrate public art into design proposals

Context

The precinct's magnificent setting had allowed the generally poor quality of some facilities in the precinct to be overlooked for some time. From a tourism and visitor perspective, apart from the wonderful natural setting, Wollongong was missing an opportunity to capitalise on its unique urban and coastal character.

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Examples of dilapidated infrastructure

Research

Four east coast Local Government Areas (LGAs) that had successfully implemented foreshore plans were investigated: Sutherland Shire Council (NSW), and Redcliffe, Caloundra, and Maroochy Shire (QLD). Emphasis was placed on the need for long term planning, coastal processes, connectivity, and increasing range of facilities to address anti social activities.

The Blue Mile Master Plan has been developed with a wide range of data from background research and supporting studies. The key areas are listed below:

- *Health Impact Assessment*
- *Community Engagement*
- *Access and Movement*
- *Plan of Management*
- *Cultural and Heritage Mapping*
- *Environmental Analysis*
- *Recreation Opportunities*
- *Commercial Opportunities*
- *Land Tenure Zoning and Built Form*
- *Landform, Topography and Geology*
-

Health Impact Assessment

The way we design our cities has been shown to have an impact on health. In 2006, a Health Impact Assessment (HIA) was conducted on the Wollongong foreshore precinct project by Wollongong City Council and the South Eastern Sydney Illawarra Area Health Service. The HIA provides a systematic process for identifying the positive or negative health impacts that could arise from a proposed policy, program or project.

The health determinants considered were physical activity, social cohesion and access to healthy food.

Findings from the HIA showed that the Precinct Project plan had the potential to benefit the health of residents and visitors to the Wollongong Foreshore by increasing opportunities for social cohesion, physical activity and access to healthy food.

Community Engagement

A strength of the project was the extensive community consultation carried out which included: One on one consultations, Information hotline, Suggestion boxes, Focus groups, Dedicated email address, Community kiosks, Telephone survey and Intercept (free range) survey. A list of key recommendations were:

Amenity:

- improving streetscapes
- retain heritage features
- identify commercial opportunities.

Access

- Quality of footways and signage
- Wider footways and viewing areas
- Better separation of cyclists and pedestrians

Culture

- outdoor entertainment facilities,
- increase opportunities for alfresco dining,
- interpretative trail along the Foreshore celebrating indigenous and European heritage.

Traffic

- Need to address ongoing issue of traffic congestion,
- car enthusiasts, speed, noise and lack of parking at peak times.

Safety

- Lighting, dominance by anti social groups.

Access and Movement

The Wollongong Foreshore has for many years experienced traffic congestion during peak summer periods. At Flagstaff Hill in particular, this sometimes degenerated into violence requiring the involvement of the Police.

On analysis it was clear that both the traffic congestion and the issues of unruly behaviour could not be resolved with the simple measures employed to date which involved traffic calming and partial road closures and tinkering with Traffic Signal phasing.

The solution lay in a transport network that integrated and supported improvements to the public domain along with new commercial activities to engage people coming to the foreshore in constructive ways.

The goal of Councils transport proposal therefore was to increase the amenity of the foreshore area through transport management measures in the areas of pedestrians, bicycles, motor vehicles, public transport and associated parking facilities.



Extract from Traffic Study

Cultural and Heritage Mapping

A cultural and heritage mapping exercise of the foreshore area was undertaken which identified significant buildings, such as the Courthouse and iconic structures such as the lighthouses. The series of tramlines which transported coal from the mines to the harbour, first by stock and then steam engines, can be traced along the foreshore which now accommodates the path of travel for pedestrians and cyclists. In addition to these obvious reminders the multiple layers of earlier, now invisible heritage will be celebrated through appropriate interpretive and informative works.

In order to reflect the precincts rich heritage the following actions were integrated into the master plan:

- Undertake archaeological assessments of study area for indigenous and European heritage during detailed design stages of implementation
- Protect and promote existing heritage items
- Develop identified potential public art sites
- Develop interpretive signage policy
- Develop areas for outdoor events such as Carols by Candlelight, opera, and drama
- Celebrate sporting culture in artworks

Environmental Responsibility, Sustainability and Biodiversity

An assessment of the condition of the natural environment was carried out and mapped to identify issues, priorities, and the scale of environmental management tasks likely to arise. Issues raised in the assessment were as follows:

- Stormwater quality issues
- Endangered ecological communities and threatened species
- Provision for animal habitat, buffer zones and weed control
- Erosion control, bank stabilization
- Ecological restoration plans for natural area management
- Arboricultural assessment of heritage listed and significant vegetation
- Value of views across natural areas
- Fragmented areas of endemic vegetation
- Significant maintenance requirements for open space and natural areas
- Potential contaminated sites and acid sulphate soils

Recreational Opportunities

The city foreshore area remains the focal point for recreational activities both for residents and visitors to the city, and for this reason an analysis was carried out on the existing recreational infrastructure.

The area offers opportunities for swimming at patrolled beaches, municipal pools and rock pools, passive recreation in attractive and natural settings and walking, running and cycling. Increasing opportunities exist to visit cafes and restaurants near the water.

The protected beach of the harbour, its pathways and grassed terraces are very popular with families. Facilities at Stuart Park on weekends and public holidays are well patronised.

An assessment of existing facilities along the city foreshore reveals a mixture of styles of picnic shelters, street furniture and equipment in varying condition.

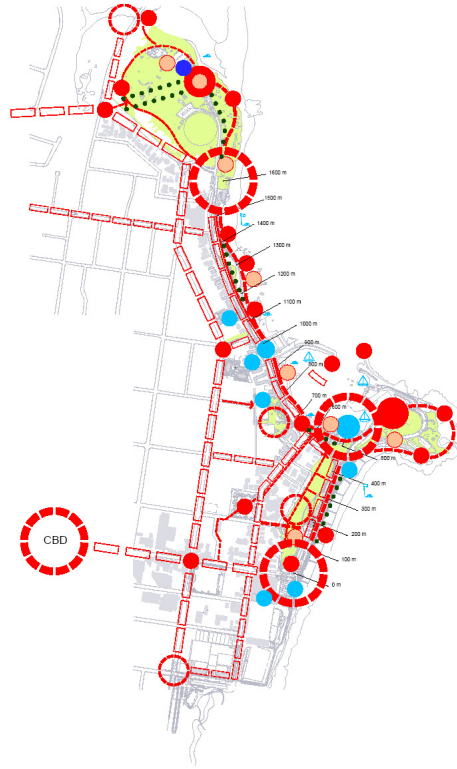
Lighting was found to be poor in several locations where improvements to pedestrians, cyclists and vehicle movement could be made. Shade and access to drinking fountains were found to be poor. Improvements to provide for equal access were also acknowledged.

Staging

The Master Plan encompasses the city foreshore from the golf course in the south to Stuart Park and Fairy Creek in the north. Distinct precincts exist within the overall plan, from the sweeping vistas of City Beach to the picturesque detail of the Harbour, and the magnificent open space and adjacent estuary of Stuart Park. The Blue Mile has been subdivided into 7 precincts, as follows:



Precinct Plan



Concept Plan

Blue Mile Precincts

1. Entertainment Quarter
2. City Beach / Lang Park
3. Flagstaff Hill
4. Harbour Precinct
5. Cliff Road Precinct
6. North Beach
7. Stuart Park

Landscape Design Principles

- Express the urban character of the city centre in the foreshore precinct with refined high quality materials and compliment and protect the city's magnificent natural setting
- Recognise and enhance the major movement corridors for pedestrians, cyclists, and vehicles applying the requirements of equal access
- Provide a series of destinations along these movement corridors at intervals
- Provide a high quality, continuous pedestrian/cycle route
- Upgrade traffic and parking infrastructure
- Develop two major gateways at the northern and southern arrival points of the city foreshore featuring major public art installations
- Clearly define and embellish paths of travel between the city and the heart of the city foreshore
- Ensure all design proposals are based on Crime Prevention through Environmental Design (CPTED) principles
- Draw upon the rich heritage of the foreshore area as inspiration for key projects within the master plan.



Master Plan

Cultural Events

An essential component is a program of cultural events and activities to further draw people to the area. Australia day celebrations, NYE, charity events, triathlons, Sydney to Gong Bike ride are held within area. A recent event organised is Twilight Markets celebrating various foods of the region.



Australia Day Celebrations



Twilight markets on Flagstaff Hill

Media

It is important to keep the public up to date with progress and milestones achieved. The local media has covered developments extensively.

Welcome to the blues, jazz and acoustic mile

Gellatly and Cunningham MP Sharon Bird turned out to cut the metaphorical ribbon on the \$3.4 million Grand Pacific Walk, which provides a new stretch of

Mile inching closer

Blue Mile on time and on budget

By MATTHEW JONES

THE latest stage of Wollongong's stimulus program and Ms Bird said it was money well spent. "It's not just the amenity of the ate the historic North Beach Bath-ers' Pavilion. Plans to renovate the pavilion

Belmore Basin vision begins to take shape

By NATHAN SIMPSON

A new children's playground will be built at Belmore Basin's Brighton Lawn before summer, while a promenade will be constructed in the same area by the end of October.

Last week Wollongong City Council revealed a detailed plan to enhance the area, followed by a second round of improvements in April 2009.

The planned improvements, which also include walkways, cycleways, park furniture and improved lighting and landscaping, are outlined in the council's Blue Mile Master Plan.

But first the failed 38-year-old sea wall at Belmore Basin must be replaced, allowing for construction to begin.

The council's operations executive manager Sae Baker-Finch said an assessment was carried out last week and fencing had been installed along the harbour.

"Council will then begin essential upgrades, including installation of a new playground, construction of a 4m-wide promenade with

feature lighting and seating, and a 120m-long seating wall along the promenade edge," she said.

"The popular walking and cycleway at Belmore Basin will be improved and picnic facilities will be upgraded to include park benches and seats, table settings, bins, foot showers, art work and lighting.

"As is the case when upgrading high priority areas which will ultimately benefit the community, there is always a period of temporary disruption.

"However we will be staging the timing and order of the Brighton Lawn works to minimise the impact on the community.

"Council has consulted with more than 2000 individuals and groups as part of the Blue Mile Master Plan exhibition period, and as a result, work at the foreshore will be reflective of the needs and views expressed by the community about this significant local asset."



MEDIA RELEASE CHILDREN HELP DESIGN BELMORE BASIN PLAYGROUND TUESDAY 1 JULY 2009

Children are helping to design a new playground at Belmore Basin's Brighton Lawn Reserve, with a concept plan for the playground to be presented to students from St Xavier's Primary School today, (Tuesday 1 July).

Wollongong City Council has commenced installing a new playground at Brighton Lawn in time for summer, as part of a major project to improve and upgrade the landscape and recreational facilities at Belmore Basin.

Earlier this year Council engaged playground design consultant, Frisco Riddie, to work with local children and find out how they would like to use the playground, and how they would prefer to use the popular play space at Wollongong Harbour.

Executive Manager of Operations, Sae Baker-Finch, said children have been heavily involved in the playground's design process as part of Council's commitment to developing a child-friendly city. The results of this consultation will be presented to the students today.

"Being 'child-friendly' is about having a shared vision with children for children, and by engaging them in the design of the Belmore Basin playground, we hope to provide local children with a sense of ownership and pride in the play space," Sae Baker-Finch said.

"Our playground consultant has taken the student's ideas and drawings and used them to develop a concept design for the playground. Today the students will have an opportunity to view the draft design which aims that visitors interactively the complex with 'fantastic moments'."

"Council will invest more than \$250,000 into the play space, which has been designed with a focus on working with our local children to create a better place for everyone." The child-



Grand plan: Tourism Wollongong is expecting an increase in visitors to the region thanks to the Grand Pacific Drive, the Blue Mile and new hotels. A tourism passport offers visitors discount vouchers.

Tourists to flood region

Precincts

Precinct 1 Entertainment Quarter

One of the prime visitor drawcards to the city foreshore is the grouping of major entertainment facilities on the original site of the Wollongong Showground - the Wollongong Entertainment Centre (WEC) and the WIN Stadium. Significantly, this precinct also includes the Wollongong's first Catholic cemetery.

Work has been completed to create the important southern 'missing link' in the foreshore pedestrian/cycle shared way, and the establishment of a suitably upgraded southern gateway to the foreshore area. The Quilkey Place road reserve has been redesigned and reconstructed as a formal car park, and the Andrew Lysaght Rest Park has been created on the site of the Catholic cemetery adjacent to the Wollongong Entertainment Centre.

An upgrade of the stadium is currently underway which, together with the recent opening of an international hotel will further animate this area.



Andrew Lysaght Rest Park



Tree Guards lit at night

Precinct 2 Wollongong City beach

The Wollongong City Beach Precinct contains significant features from a historical, recreational, institutional, and commercial point of view. With the Wollongong Museum and Market Square, the open grasslands of Lang Park and Wollongong City Beach foreshore, St Mary's Star of the Sea College and Wollongong City Beach Surf Club, this precinct is a focus for visitors and is regularly used for large scale events.

A dilapidated surf club building was resited and replaced in 2003 with a viewing platform constructed in its place and has been recently named the Ted Tobin OAM Observatory Deck which offers unparalleled views over the beach area. The new SLSC has been resited further up the beach and set back, incorporating a function centre, kiosk and restaurant.



Ted Tobin OAM Observatory Deck



Wollongong City Beach SLSC

Precinct 3 Flagstaff Hill

The Flagstaff Hill Precinct includes the significant and iconic headland within the master plan study area. This dramatic rocky landform provides both a picturesque focal point when viewed from the city, and a superb location for viewing the harbour, north and south coastlines, the escarpment, city, and Port Kembla.

Currently the headland is dominated by the road network and has no facilities for families and poor access for pedestrians or cyclists. Typically on a Sunday this magnificent open space asset is used by only a narrow range of visitors taking advantage of the road access. One of the primary aims of the master plan is to widen the range of visitors by increasing the facilities on offer.

Pathways have been constructed along the southern perimeter, kerbside and leading to the Fish Markets Co-op building on the north side. Further funding is sought.

Precinct 4 Wollongong Harbour

The Harbour Precinct, rich in items of historical significance, animated by recreational and commercial boating activities, and possessing a warm sheltered north east aspect, draws significant numbers of visitors to the foreshore area.

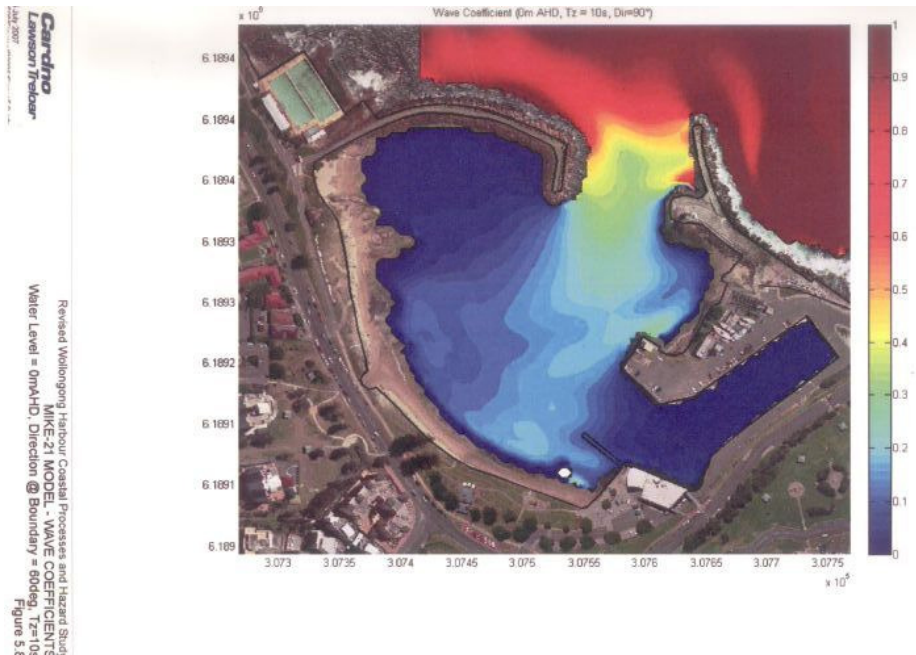
This precinct encompasses land owned by the Crown but under Council's management, and land under the control of the Department of Lands. Improvement proposals in this precinct will be developed in close consultation with the State Government. The Department of Lands announced in early 2007 its intention to call for Expressions of Interest from the private sector to partner in the redevelopment of the heritage harbour and to provide for enhanced marine, commercial, recreation and tourism use.

Case study Brighton Lawn

Completed in September 2009 the Wollongong Harbour Precinct incorporating Brighton Lawn and Osborne Park represents the completion of a major milestone in the development of Wollongong foreshore.



Brighton Lawn consists of a 200m long x 4m wide promenade extending along the harbour edge, coastal protection works, playground, art installations, heritage interpretative material, shared use pathway and park improvements the project has met the challenge of retaining the valued landscape character of the location, installing major coastal protection works and provided for increased public visitation, all within a heritage conservation zone.

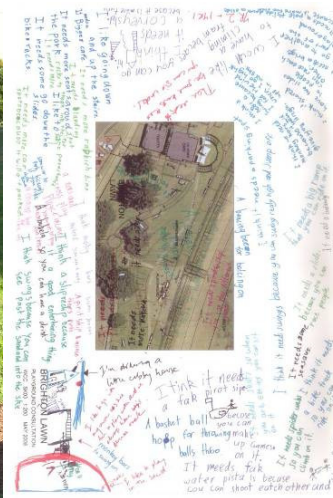


Extract from Cardno Lawson Treloar Report

Across the road Osborne Park is an important foreshore park which includes public artwork and heritage interpretative material highlighting area significant environmental, indigenous and European heritage values.



Public Art incorporated into project



Children involved in design process



The promenade is proving to be hugely popular

High quality material such as electro polished grade 316 stainless steel, a simple palette of insitu reinforced honed and exposed aggregate concrete pavements and milled concrete pavers, were all used to ensure longevity of project. Fully automated irrigation was installed to minimise water usage and erosion control fabric installed with recycled fabric content. A recycling program for the foreshore was also initiated. Lines were kept simple to facilitate ongoing maintenance. Mowing strips were incorporated into all walling.

- Triton mattress coastal protection
- suspended dune planting bed
- bleacher

- maritime seat
- playground with design input from local children
- child friendly drinking fountain
- recycling bin stations
- laser cut electro-polished art guard panels
- new eden light poles and uplit promenade lighting
- permeable paving
- heritage interpretative rail line
- cyclist deceleration panels



Triton ® mattresses being installed



Artwork celebrating indigenous and European culture and marine environment

Precinct 5 Cliff Road

This precinct is significant from a number of perspectives. It provides a vital pedestrian and cycle connection between the major drawcards of North Beach and Belmore Basin and is a link to Wollongong's early pioneer and industrial heritage, it encompasses another of the significant heritage items of the area – Battery Park, and it is uniquely picturesque in its own right.

The design proposals sought to enhance these features by providing more adequate space for circulation of pedestrians and cyclists, reduce traffic and pedestrian conflicts, provide improved historical interpretation, and take advantage of the superb views from both the upper and lower level of the cliff face.

A continuous 3m wide pathway has been constructed along 700m of Cliff Road offering expansive views of the coast. A large timber deck has also been constructed.



Precinct 6 North Beach

North Beach can be considered the most cosmopolitan of Wollongong's beaches with an established popularity, existing high quality commercial facilities, significant heritage buildings, and a relatively protected beautiful beach with a superb outlook.

Two of the three buildings of significance in the precinct are at various stages of redevelopment with the old kiosk now a successful restaurant and café, and the Bathers Pavilion refurbishment.



North Beach Precinct Plan

Proposed upgrade programmed for 2011

Precinct 7 Stuart Park

Major works are yet to be carried out in this precinct which possesses marvellous opportunities. An expansive foreshore park which features Skydive the Beach, lagoon, picnic shelters, playground and restaurant. Popular for both passive and active recreation the Master Plan recognises the need for facilities along the western perimeter, linking pathway network and improvements to dilapidated infrastructure. A regional playground is proposed with water play and youth space.



Seven key factors in implementing a master plan

- **Community participation**
It is essential to ensure that the broad community is involved in the whole process to ensure an ongoing sense of ownership. Innovative ways of seeking community comment such as kiosks, phone surveys need to be undertaken.



- **Sense of Place**

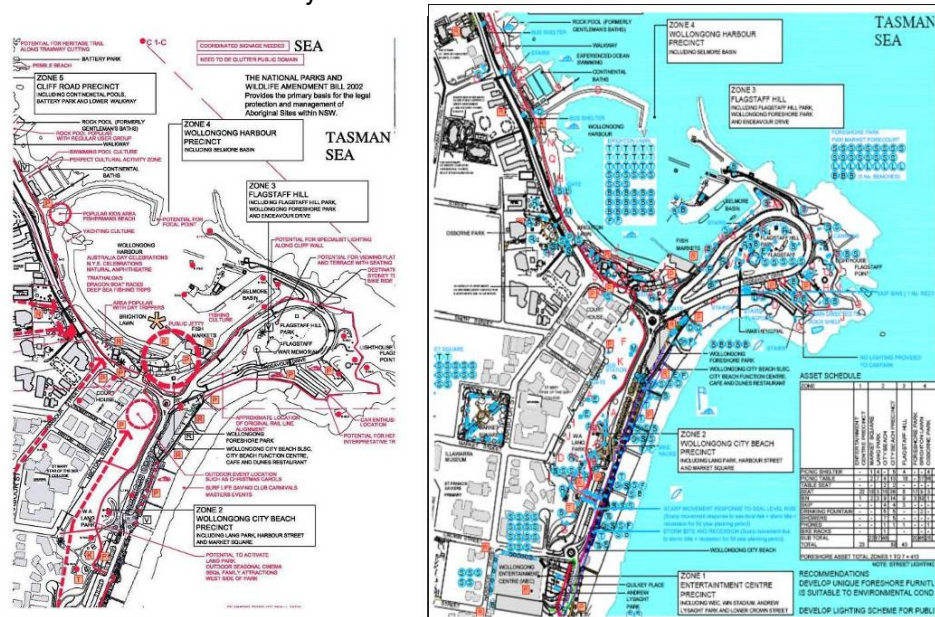
The qualities of the specific site has to be recognized, expressed and celebrated to ensure a generic treatment is avoided.



Image of original coal tramway Illawarra Images

- **Site Analysis**

A deep understanding of processes and opportunities and constraints needs to be documented and analysed.



Extract from Analysis Dwgs

- **Materials Palette**

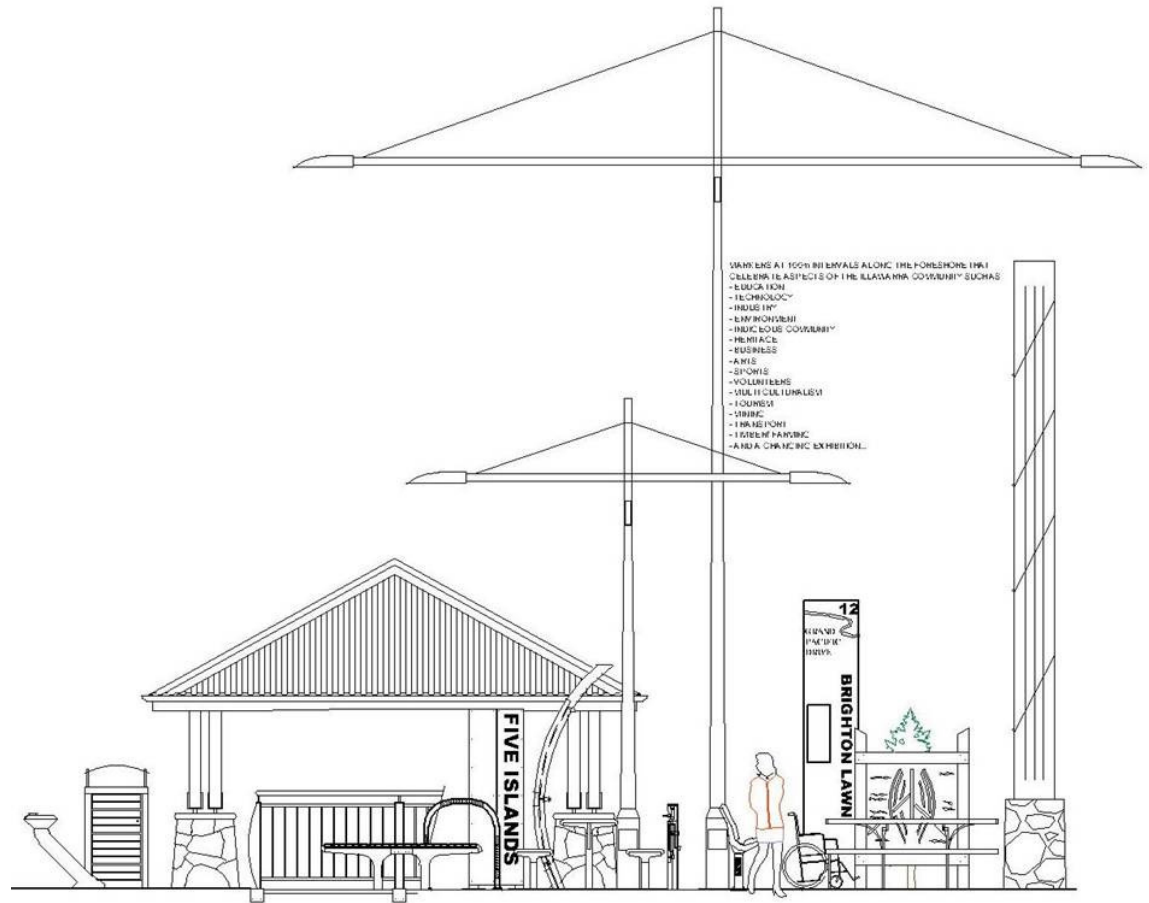
A need to investigate new materials and processes is required and a suitable materials palette established to unify the project



Triton ® Matresses



Child Friendly bubbler



FORESHORE FURNITURE PALETTE

- **Attention to detail**

The harsh environment and discerning public demand quality workmanship.



- **Staging**

It is unlikely that large scale projects can be implemented in one go. If a project can be broken into manageable sections it can suit funding requirements from diverse sources and builds flexibility into project.

- **Need for a Champion**

It has been said before that projects need a torch bearer, whether it be a community representative, project manager, senior executive or working party group that are passionate about the project and site to maintain momentum...



Conclusion

The Blue Mile is a vision with potential to deliver enormous benefits to Wollongong and the wider region. Through this vision, the community, Government, private business and investors all have the opportunity to contribute to a project which will leave a lasting impression, maximising the benefits Wollongong has as a modern, progressive city between an unparalleled green backdrop of the escarpment, the majesty of golden beaches, and a clean, azure sea.

Acknowledgements

Council Sections

Landscape Architecture Section
Structural
Survey
Traffic
Property
RNR
Asset Management
Project Delivery Unit
Works
DAC
Strategic
Services Cultural Services
Legal
Community Engagement
Osborne Park Concept: Andrew Christie
Tori De Mestre and Mary Hutchinson

Private Consultants and Contractors

TPE Tony Pollard Electrical
ICE Innovative Consulting Engineers
David Potts Consulting Arborist
Hanna Newman Quantity Survey
Waterwell Irrigation Design
Encat Metal and Civil
Kingston Civil, GMT Affective Services
Brecknock Consulting

Artists: Tori De Mestre, Col Henry,
Lorraine Brown, Narelle Thomas, Engineering
Michael Keighery, Andrew Smith

Harbour Playground Design: Fiona Robbe

Note : All photographs taken by Wollongong City Council, by Andy Goldie – Senior Landscape Architect and John Madry – Registered Landscape Architect

WCC Landscape Architecture Section current members, Andy Goldie (SLA), John Madry, Nyrie Davis-Raiss, Danielle Pollock, Felicity Samways, and Ramona Adair.