

**PROPOSED  
PORT BOTANY EXPANSION**

Public Open Space Plan

Final Report

MAY 2003

# Proposed Port Botany Expansion

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## Public Open Space Plan

### Final Report

#### QUALITY CONTROL

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# 1 Introduction

## 1.1 BACKGROUND

Sydney Ports proposes to expand facilities at Port Botany. The proposed Port Botany expansion includes:

- The creation of additional land for port container handling infrastructure such as a core road and rail network, storage facilities and services.
- A shipping manoeuvring basin adjacent to the new berth-face to facilitate the movement of vessels to and from the new berths. Material would be dredged from the manoeuvring basin to meet the depth and length requirements for the safe movement of vessels and suitable dredged material would be used to create the additional land.

This proposal would have some effects on local public open space areas, including the beach fronting Foreshore Road and the Penrhyn Estuary.

Sydney Ports commissioned Manidis Roberts to facilitate a process with stakeholders which would result in the best outcome for the public open space in the local community interest.

## 1.2 AIM AND OBJECTIVES

The aim is to facilitate a process with stakeholders, which would result in an open space outcome in the interest of the local community.

Specific objectives are to:

- Engage stakeholders in the process of articulating their interests and expectations, and identifying and evaluating options.
- Identify a wide range of options.
- Use a facilitated interdisciplinary approach to narrow down the options to a shortlist.
- Select a preferred option for consideration in the environmental impact statement.

## 1.3 THE STUDY AREA

The study area includes the public open space on either side of Foreshore Road between the Parallel Runway and the intersection of Foreshore Road and Botany Road. This includes the Foreshore Beach area and the Penrhyn Estuary area. It also includes adjacent land uses, including Sir Joseph Banks Park and the part of Botany Bay that relates to Foreshore Beach.

## 1.4 STRUCTURE OF REPORT

Section 2 presents the approach to the public open space planning of the land adjacent to the port expansion.

Section 3 describes Sydney Ports' proposal to expand Port Botany.

Section 4 presents the vision, desired outcomes and practical ideas for the public open space.

Section 5 describes the development of options by the interdisciplinary team.

Section 6 describes the process of evaluating the options and the shortlisted options.

Section 7 describes the preferred option and the reasons underlying its choice.

## 2 Approach

The approach to the open space planning is illustrated in **Figure 1**.

The approach involved working with stakeholders in workshop situations to generate and evaluate options.

Following consultation with local councils and the Healthy Rivers Commission, stakeholders for the workshops were identified taking into account the proposed location, surrounding land and water body uses, existing Sydney Ports stakeholder relationships, community structures and organisations in the local and regional vicinity, and the ability of stakeholders to represent the interests of the wider community.

Stakeholder organisations, which were invited to the workshops, included:

- City of Botany Bay and Randwick City councils.
- Southern Sydney Regional Organisation of Councils.
- Waterways Authority.
- Environment Protection Authority.
- National Parks and Wildlife Service.
- Sydney Airport Corporation.
- Environment Australia.
- NSW Fisheries.
- Sydney Ports.
- PlanningNSW.
- Transport NSW.
- Rail Infrastructure Corporation.

Stakeholder organisations, which participated in the workshops, included:

- City of Botany Bay and Randwick City councils.
- Southern Sydney Regional Organisation of Councils.
- Waterways Authority.
- Environment Protection Authority.
- National Parks and Wildlife Service.
- Sydney Airport Corporation.
- Environment Australia.
- NSW Fisheries.
- Sydney Ports.

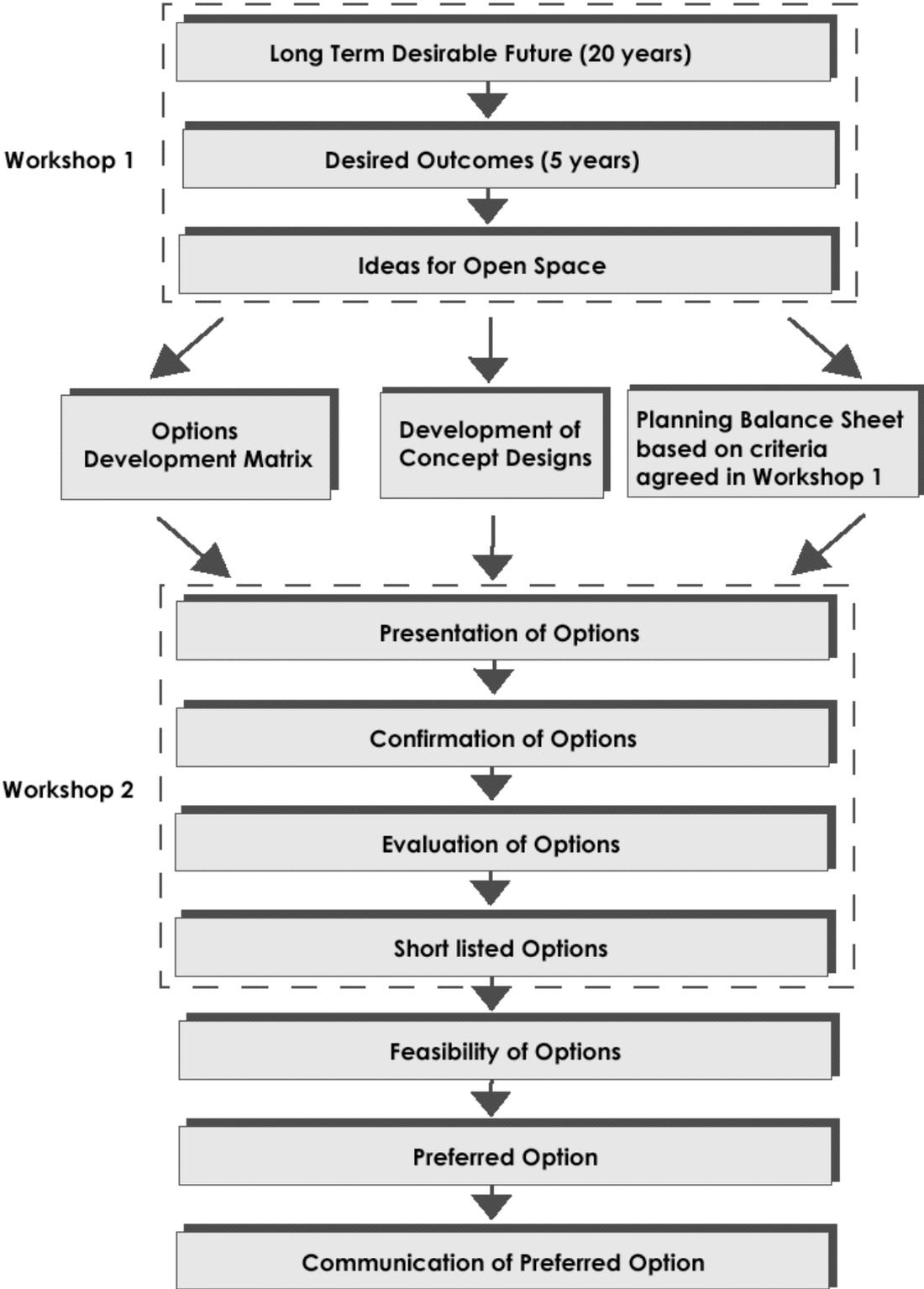
An interdisciplinary team of Sydney Ports internal and external specialists commissioned by Sydney Ports also participated in the workshops. Specialisations included urban design, landscape architecture, visual impact assessment, social impact assessment, environmental management, and engineering.

A bus tour of the site was arranged for interested participants on 12 September 2002 prior to the first workshop.

The first half-day workshop was held on 12 September 2002. The objectives of the workshop were to:

- Present and explain the current concept layout for the proposed port expansion.
- Develop a long-term desirable future (20-30 years) for the public open space areas.
- Identify the desired outcomes to meet the long-term desirable future for the public open space areas. Desired outcomes are shorter term goals (5-10 years) to achieve the longer term desirable future (20-30years). For example, a long term desirable future may be a vibrant public space and a desired outcome may be secure pedestrian access across Foreshore Road.
- Identify practical ideas for the public open space areas.

Figure 1



Between the first and second workshops, the interdisciplinary team of Sydney Ports internal and external specialists used the outputs from the first workshop to prepare for the second workshop. The following activities were undertaken by the interdisciplinary team in the period between the two workshops:

- Manidis Roberts prepared an options development matrix using the practical ideas that were developed for the open space at the first workshop. This matrix is further described in Section 5.3. The aim of this exercise was to create a tool, which could be used by the interdisciplinary team to develop a range of options for the open space.
- Manidis Roberts prepared a planning balance sheet to evaluate the range of options at the second workshop.
- A workshop was held with the interdisciplinary team to generate a number of options for further consideration at the second workshop. The planning balance sheet was also presented to this workshop.
- Timothy Williams & Associates, the architects prepared broad concept layouts of each of the seven options generated at the interdisciplinary workshop.

The second half-day workshop was held on 17 October 2002. The objectives of the workshop were to:

- Present the options developed from the outputs of the first workshop.
- Confirm that the options presented were the options that needed to be evaluated.
- Evaluate the options, using a planning balance sheet.
- Agree on the evaluation of options as a group.
- Identify shortlisted options.

After the second workshop, the following activities were undertaken:

- Sydney Ports' interdisciplinary team tested the feasibility of the options.
- Sydney Ports' developed a preferred option.
- The findings of the public open space planning were presented to the community.
- The findings of the public open space planning were documented in this report.

## 3 The proposal

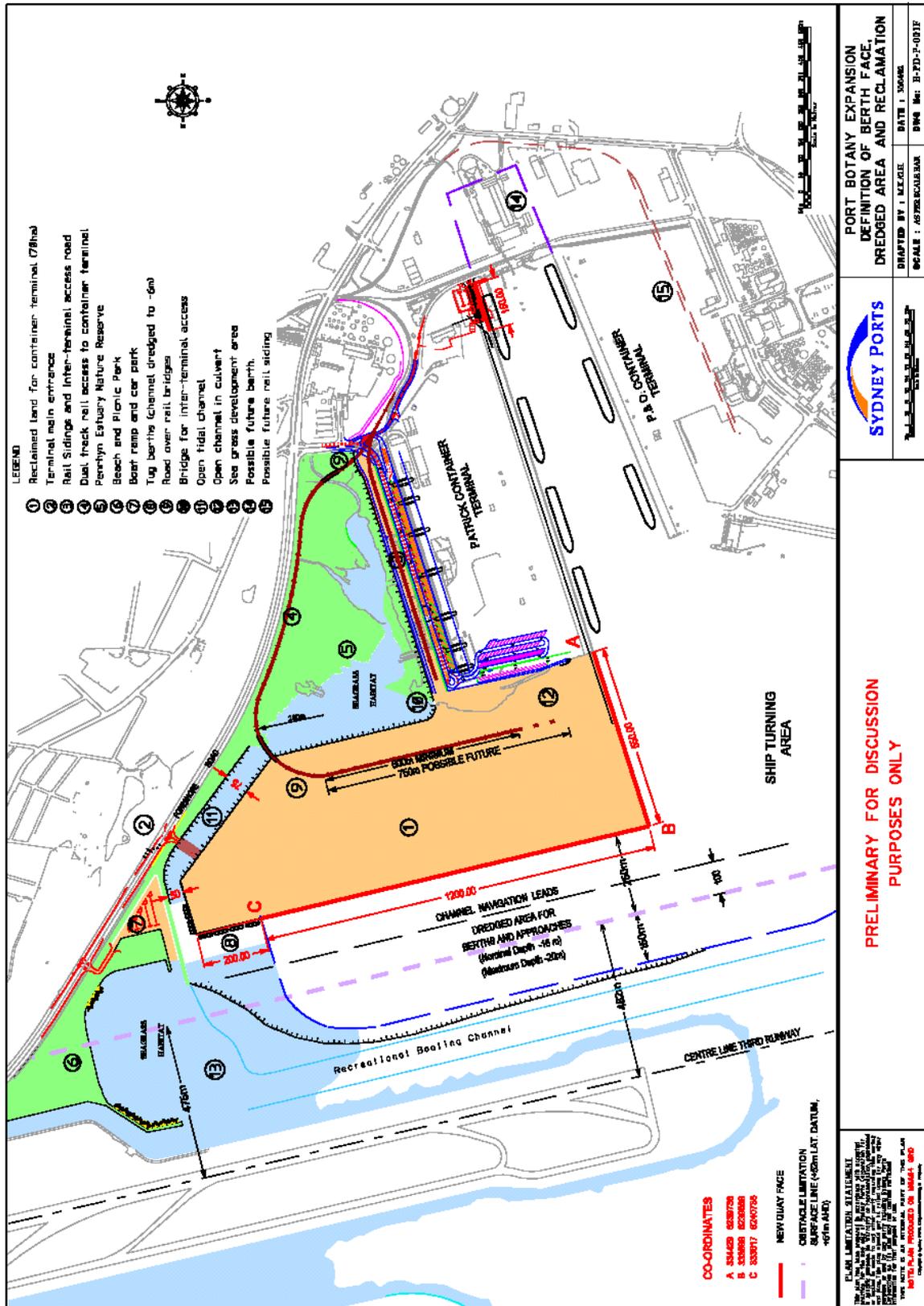
The proposal, which was presented to workshop participants, is shown in **Figure 2**.

The proposal includes:

- Reclamation of approximately 60 ha of land to create a new wharf and terminal area.
- Dredging to create a deep-water berth and supply material for the new terminal area.
- Road, rail and service connections to the new wharf.
- Enhancement of Penrhyn Estuary to sustain habitats for waterbirds.

The proposal enables continued use of the public open space between the terminal and Foreshore Road, including Foreshore Beach and the Penrhyn Estuary.

Figure 2



## 4 Public open space vision

Two exercises were undertaken at the first workshop. The first was a brainstorming exercise to develop the long term desirable future for the public open space (20-30 years) and the second was to develop desired outcomes in a shorter timeframe (5-10 years) to achieve the long term desirable future. Each exercise and its findings are described in this section.

### 4.1 LONG TERM DESIRABLE FUTURE

#### 4.1.1 The exercise

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The exercise was assumed to take place in the year 2020. Workshop participants were asked to assume the role of members of a local community group. The community group had won an award for the vision developed at a workshop that took place in 2002 in relation to the public open space adjacent to the proposed Port Botany expansion. It was assumed that the award was judged by a joint panel of councillors and officers from City of Botany Bay and Randwick City councils.

Workshop participants were asked to describe the essence of the vision that won the award. More specifically, they were asked to:

- Write down the key features of the vision that won the award.
- Focus on the question: What would have won an award judged by the local community?
- Think long term, be visionary and remember that the next two sessions would have a more practical focus.

### 4.2 FINDINGS

The key features of the long term desirable future for the public open space along Foreshore Beach and Penrhyn Estuary are:

- A strong concept of positive interconnections. Interconnections that were mentioned at the workshop include:
  - People and place.
  - Old and new.
  - Natural and built environment.
- A public place that is dynamic and vibrant. Desirable features included bringing people back to the space, opening it up, making it less isolated and safer.
- A place that builds on the special qualities created by port, airport, Bay and heritage.
- A place that provides diverse recreation opportunities.
- A place which provides a sense of ownership to the local community.
- Activities and development which result in a careful balance between people and the environment.

## 4.3 DESIRED OUTCOMES (5-10 YEARS)

### 4.3.1 The exercise

---

Each participant was asked to individually write down three desired outcomes (5-10 years) to achieve the long term desirable future. A group exercise followed where the group organised all the desired outcomes into homogeneous groups. The group then agreed on a title for each of the groups of desired outcomes.

### 4.3.2 Findings

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Desired outcomes included:

- Enhanced ecological integrity.
- Improved community access.
- Community ownership and involvement.
- Positive co-existence.
- Improved water quality.
- Enhanced landscape.
- Wider recreation choices.
- Enhanced interpretation.
- Best practice port operations.
- Delivery of commitments.

These desired outcomes are described below

#### ***Enhanced ecological integrity***

This desired outcome included the following components:

- General protection, restoration and enhancement of natural (ecological) values, resulting in improved environmental quality.
- Enhanced aquatic environment, including improved water quality, decreased contaminants, improved sedimentation management and growth of sea grasses.
- Penrhyn Estuary becomes a clean habitat, a sanctuary, and an enhanced waterbird habitat with no net loss of migratory bird habitat.

#### ***Improved community access***

This desired outcome included the following components:

- Improved community access and connections to beach, foreshore and public open space.
- Improved transport facilities and connections, including public transport, cycling and pedestrian facilities.
- Secure pedestrian access across Foreshore Road.

### ***Community ownership and involvement***

This desired outcome included the following components:

- Increased local community enjoyment and sense of ownership of the place.
- A community which is proud of their local beach.
- A community around the whole Bay which cares about the Bay and what happens to it.
- A functional relationship between the community and the port industry.

### ***Positive co-existence***

This desired outcome included the following components:

- Recognition of competing needs.
- Proud association between the community and the port.
- Healthy balance between economic, social and environmental values.
- Appropriate balance between port expansion and facilities, community needs and ecological values.

### ***Improved water quality***

Components of this desired outcome included improved water quality, cleaner water and cleaner water in Botany Bay.

### ***Enhanced landscape***

This desired outcome included the following components:

- Protection of existing landscaped/open space area.
- Maintenance of as much 'natural' landscape as possible, particularly the beach and water space between the beach and the port.
- Improved aesthetic environment and attractive landscape.
- Parkland recreation area that is safe and away from noise of truck and port traffic.
- A safe place for families.

### ***Wider recreation choices***

This desired outcome included the following components:

- Enhanced opportunities for active and passive recreation.
- An active recreation area for the general public.

### ***Enhanced interpretation***

This desired outcome included the following components:

- A place for children to experience the beach, boats and planes.
- Opportunities to experience port, airport and Bay.
- A place of learning, leisure and lifestyle.

### ***Best practice port operations***

This desired outcome included the following components:

- Innovative port design.
- Plenty of spare capacity left in the structure once built.
- Reduction of truck movements.

### ***Delivery of commitments***

This desired outcome included the following components:

- Agreement to vision.
- Assurance that the long term goals would be met through ongoing commitment.
- The open space area would be 'built' as planned.

## 5 Development of options

### 5.1 IDEAS

The third exercise at the first workshop was to brainstorm practical ideas to achieve the long term desirable future and desired outcomes developed in the previous sessions. Individuals were asked to write three ideas down. A group exercise followed where all ideas were recorded. The long list of practical ideas generated included ideas which tended to fall into categories of recreation facilities, transport facilities, landscape improvements, interpretation facilities and environmental improvements. The ideas are listed below under these headings.

#### 5.1.1 Recreation facilities

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- A jetty to reflect history.
- Relocation of boat ramp close to where it is now.
- Small kiosk for people visiting the area.
- Possible amenities.
- A truck stop/restaurant/café.
- Consideration of facilities in Sir Joseph Banks Park in conjunction with Foreshore Beach.

#### 5.1.2 Transport facilities

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- At grade pedestrian crossing.
- Overpass/underpass on Foreshore Road to link with Sir Joseph Banks Park.
- Cycleway linked to existing public transport and to regional cycleways.
- Roadway improvements.
- Parking at beach.
- Completion of Bay trail with port spur.

#### 5.1.3 Landscape improvements

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- Landscape improvements to Foreshore Road.
- Heritage and interpretation in landscape.
- Arts projects. Historical connection of fishing community and arts.
- Landscape improvements to improve security.
- Landscape improvements to area between port precinct and adjacent land uses.

#### 5.1.4 Interpretation facilities

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- Interpretation signage.
- Additional viewpoints/interpretation.
- A multi-purpose walkway with interpretation facilities.
- Bird hides along trail.
- Heritage trail.

#### 5.1.5 Environmental improvements

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- Stormwater management off Foreshore Road.
- Management of beach and Estuary profile.
- Retention of length of beach.
- Augmentation of beach along Foreshore Road.
- Management of litter.
- Ownership of environmental improvements during construction and operation.
- Noise management related to port activities.
- Restricted/managed/controlled access to Estuary.
- Habitat identification and protection.
- Construction of terminal on piers – sand movement.
- Airport functional requirements in relation to birds.
- Polluters to clean up Mill Stream at source.
- Botany Bay Studies Unit at UNSW.

### 5.2 OPTIONS DEVELOPMENT MATRIX

An options development matrix was developed by Manidis Roberts to facilitate option identification by the interdisciplinary team. The long list of practical ideas were reduced to those which contributed to a differentiation between options. This options development matrix is shown in **Table 1**.

### 5.3 OPTIONS IDENTIFICATION WORKSHOP

An options identification workshop was held with internal Sydney Ports specialists and external specialists to identify a range of options to be presented and evaluated at the second workshop. Workshop participants were asked to consider the broad spectrum of options from minimal development to more intensive development. The workshop required participants to break into three small groups and then consolidate their findings in the larger group. The results are shown in **Table 1**.

Table 1: Options development matrix

Open space idea	1	2	3	4	5	6	7
	Status quo	Bare essentials	Active recreation	Passive recreation	Nature emphasis	Working port	Celebrate port and airport
<b>Recreation facilities</b>							
Jetty to reflect history			☒				☒
New safer boat ramp/jetty	☒	☒	☒			☒	☒
Boat ramp elsewhere in Bay					☒		
Small kiosk for visitors			☒	☒			☒
Barbecue facilities			☒	☒			
Amenities			☒	☒		☒	☒
Truck stop/restaurant/cafe						☒	☒
<b>Transport facilities</b>							
At grade pedestrian crossing		☒		☒	☒		☒
Pedestrian overpass/underpass			☒	☒	☒	☒	☒
Cycleway and pedestrian pathway			☒				☒
Board walks in Estuary			☒	☒	☒		
Existing access to Estuary							☒
No access to Estuary	☒	☒				☒	
Roadway improvements	☒	☒	☒	☒	☒	☒	☒
Parking at beach	☒	☒	☒	☒	☒	☒	☒
Completion of Bay trail with port spur			☒	☒	☒		☒
<b>Interpretation facilities</b>							
Interpretation signage			☒	☒	☒		☒
Viewpoints				☒	☒		☒
Education awareness centres					☒		☒
<b>Environmental improvements</b>							
Retention of beach	☒	☒			☒	☒	
Augmentation of beach along Foreshore Road			☒	☒			
Enhancement of habitat eg artificial reefs			☒	☒	☒		
Conservation of Penrhyn Estuary	☒	☒			☒		
Buffer along port	☒	☒		☒	☒	☒	
Public art in Sir Joseph Banks Park				☒			☒

## 5.4 DESIGN OF OPTIONS

Based on the options development matrix, Timothy Williams & Associates, architects, developed broad concept designs for each of the options. These options are described in Section 5.5.

## 5.5 DESCRIPTION OF OPTIONS

### 5.5.1 Option 1: Status quo

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Option 1 is shown in **Figure 3**. The intention in this option is to maintain the status quo as much as possible. Key features include:

- Retention of existing Foreshore Beach and existing uses as much as possible.
- Retention of existing character of Penrhyn Estuary as much as possible.
- Relocation of boat ramp as close as possible to existing boat ramp.
- No additional pedestrian or cycle links.
- No additional recreation facilities.

### 5.5.2 Option 2: Bare essentials

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Option 2 is shown in **Figure 4**. The intention in this option is to meet the basic requirements of the port. Key features include:

- No access to Penrhyn Estuary to protect the environment and the water birds.
- At grade pedestrian crossing across Foreshore Road.
- Relocation of boat ramp.
- No new recreation facilities.
- No new transport links.
- No new interpretation facilities.

### 5.5.3 Option 3: Active recreation

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Option 3 is shown in **Figure 5**. The intention in this option is to maximise active recreation opportunities. Key features include:

- A new jetty to reflect the history of the place.
- Relocation of boat ramp.
- Active recreation capability, including sailing, rowing, canoeing, windsurfing, and ball games.
- Board walks in Penrhyn Estuary.
- Pedestrian overpass of Foreshore Road.
- Barbecue facilities and amenities.
- Small kiosk.
- Pedestrian and cycle links to Bay trail.

#### 5.5.4 Option 4: Passive recreation

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Option 4 is shown in **Figure 6**. The intention in this option is to maximise passive recreation opportunities. Key features include:

- Retention of passive recreation uses of Foreshore Beach as much as possible.
- Sculpture walk and community art in Penrhyn Estuary and Sir Joseph Banks Park.
- At grade pedestrian crossing and pedestrian overpass across Foreshore Road to improve links with Sir Joseph Banks Park.
- Amenities and barbecues.
- Viewing points and interpretation facilities.
- Pedestrian and cycle links to Bay trail.
- Small kiosk on Foreshore Beach.

#### 5.5.5 Option 5: Nature emphasis

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Option 5 is shown in **Figure 7**. The intention in this option is to emphasise nature. Key features include:

- Conservation of Penrhyn Estuary and water bird habitat.
- Board walks, information centre and interpretation facilities in Penrhyn Estuary.
- Enhancement of seagrass habitats in Penrhyn Estuary and Foreshore Beach area.
- Retention of Foreshore Beach as much as possible.
- At grade pedestrian crossing and pedestrian overpass across Foreshore Road to improve links with Sir Joseph Banks Park.
- Viewing points.
- Pedestrian and cycle links to Bay trail.
- Links to existing green open space, including Sir Joseph Banks Park and the Botany Golf Course.
- Boat ramp elsewhere in the Bay.

#### 5.5.6 Option 6: Working port

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Option 6 is shown in **Figure 8**. The intention in this option is to support port development. Key features include:

- Truck stop/restaurant/café.
- Relocation of boat ramp.
- Facilities for ferries (eg Harbour Explorer).
- Pedestrian overpass across Foreshore Road to improve links with Sir Joseph Banks Park.

### 5.5.7 Option 7: Celebrating port and airport

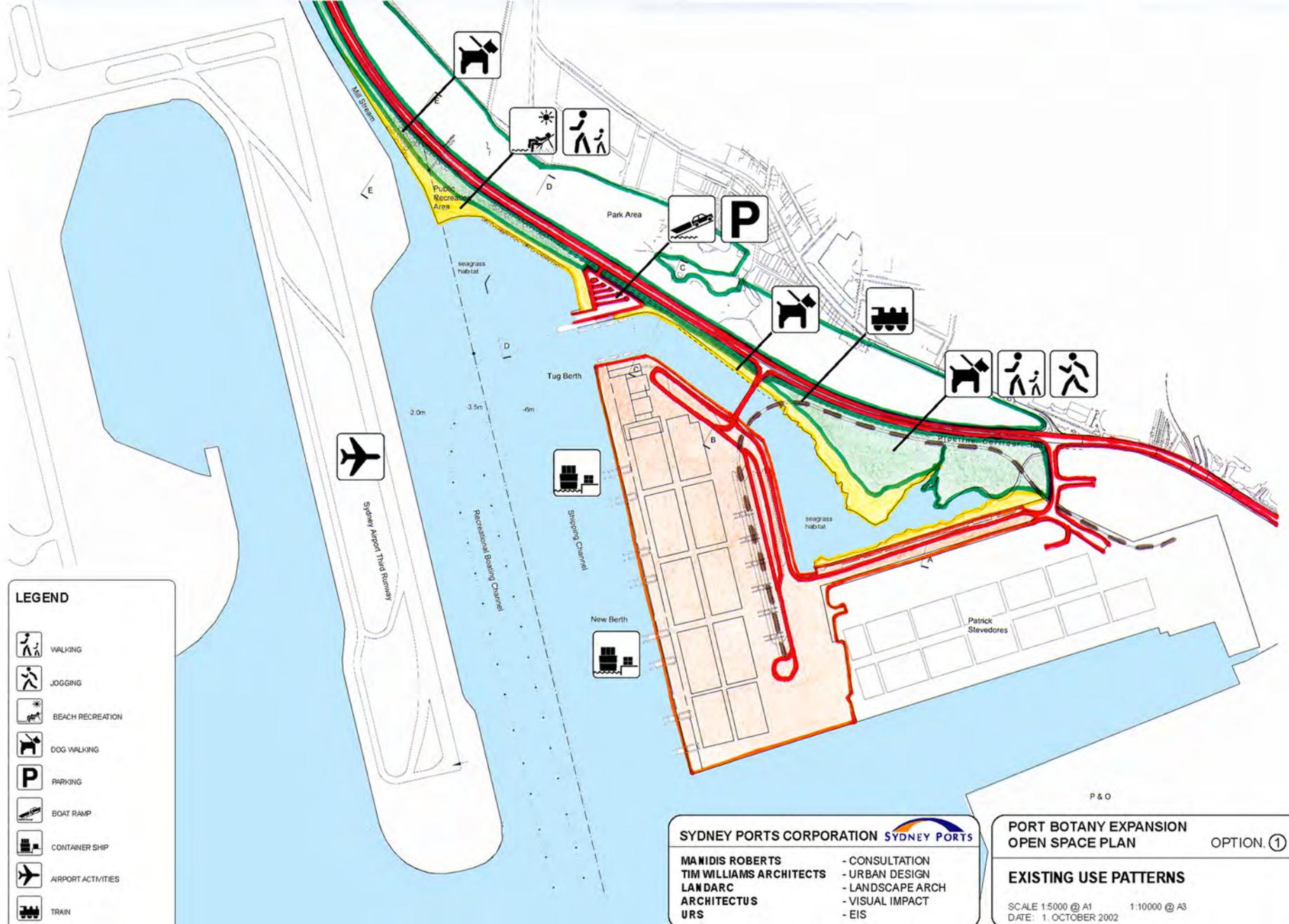
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Option 7 is shown in **Figure 9**. The intention in this option is to celebrate the port and airport. Key features include:

- Pedestrian/cycleway through the port.
- New jetty celebrating heritage and enabling views.
- Truck stop/restaurant/café, information centre, small kiosk and amenities on Foreshore Beach.
- Relocation of boat ramp.
- Facilities for ferries (eg Harbour Explorer).
- At grade pedestrian crossing and pedestrian overpass across Foreshore Road to improve links with Sir Joseph Banks Park.
- Community art in Sir Joseph Banks Park and Penrhyn Estuary.
- Viewing points and interpretation facilities.
- Pedestrian and cycle links to Bay trail.

## 5.6 CONFIRMATION OF OPTIONS

The seven options were presented at the second workshop and participants were requested to confirm that these options covered the range of options that needed to be evaluated. The workshop participants agreed that the options covered the range. However, some of the participants raised the issue that some of the options could be combined and that some of the integrated options were worthy of consideration. The workshop agreed to continue with the evaluation process enabling combination and integration of options after the first cut evaluation of options.



**LEGEND**

-  WALKING
-  JOGGING
-  BEACH RECREATION
-  DOG WALKING
-  PARKING
-  BOAT RAMP
-  CONTAINER SHIP
-  AIRPORT ACTIVITIES
-  TRAIN

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**TIM WILLIAMS ARCHITECTS** - URBAN DESIGN  
**LANDARCH** - LANDSCAPE ARCH  
**ARCHITECTUS** - VISUAL IMPACT  
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**PORT BOTANY EXPANSION  
OPEN SPACE PLAN**

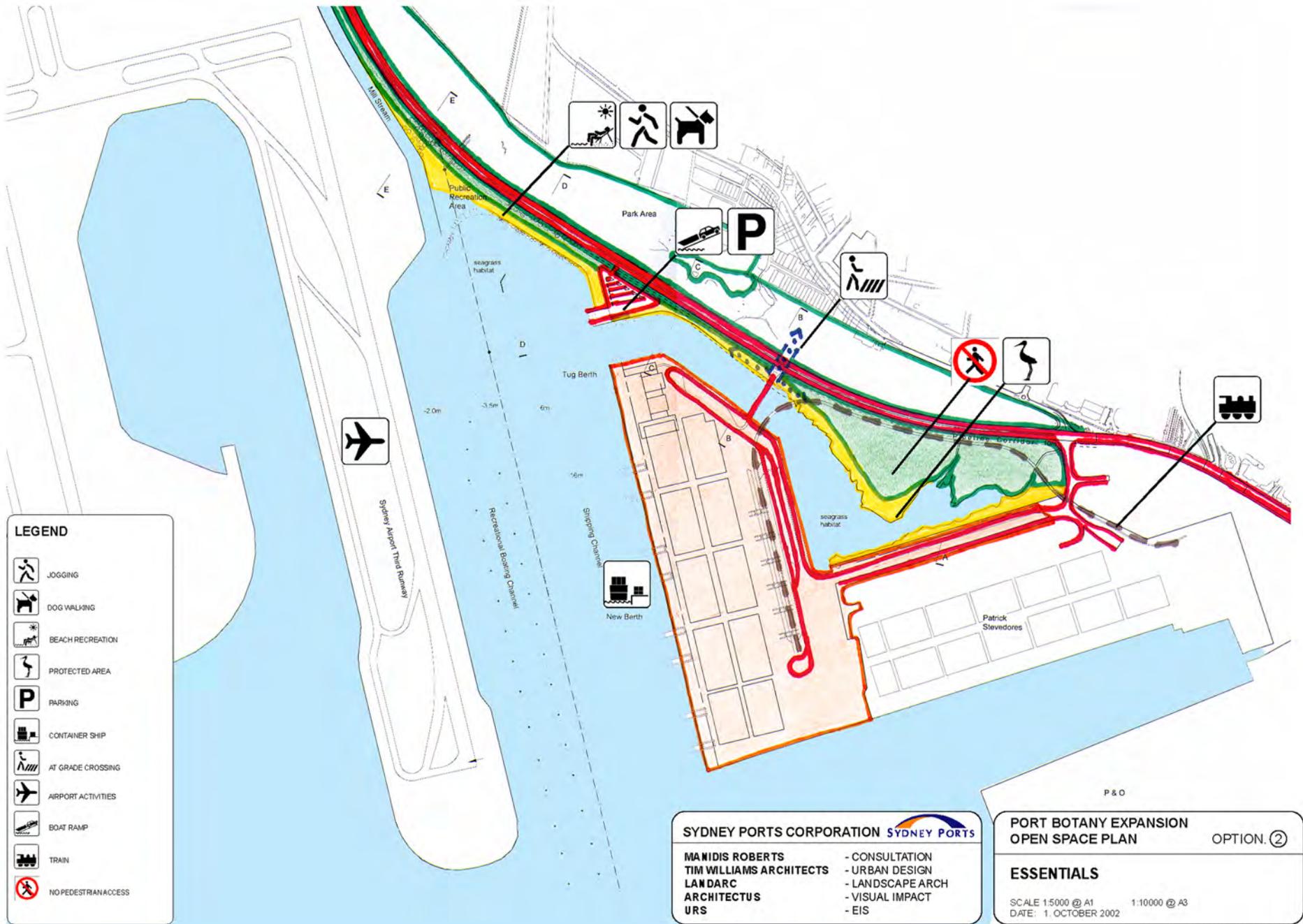
OPTION. ①

**EXISTING USE PATTERNS**

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DATE: 1. OCTOBER 2002

**LEGEND**

-  JOGGING
-  DOG WALKING
-  BEACH RECREATION
-  PROTECTED AREA
-  PARKING
-  CONTAINER SHIP
-  AT GRADE CROSSING
-  AIRPORT ACTIVITIES
-  BOAT RAMP
-  TRAIN
-  NO PEDESTRIAN ACCESS



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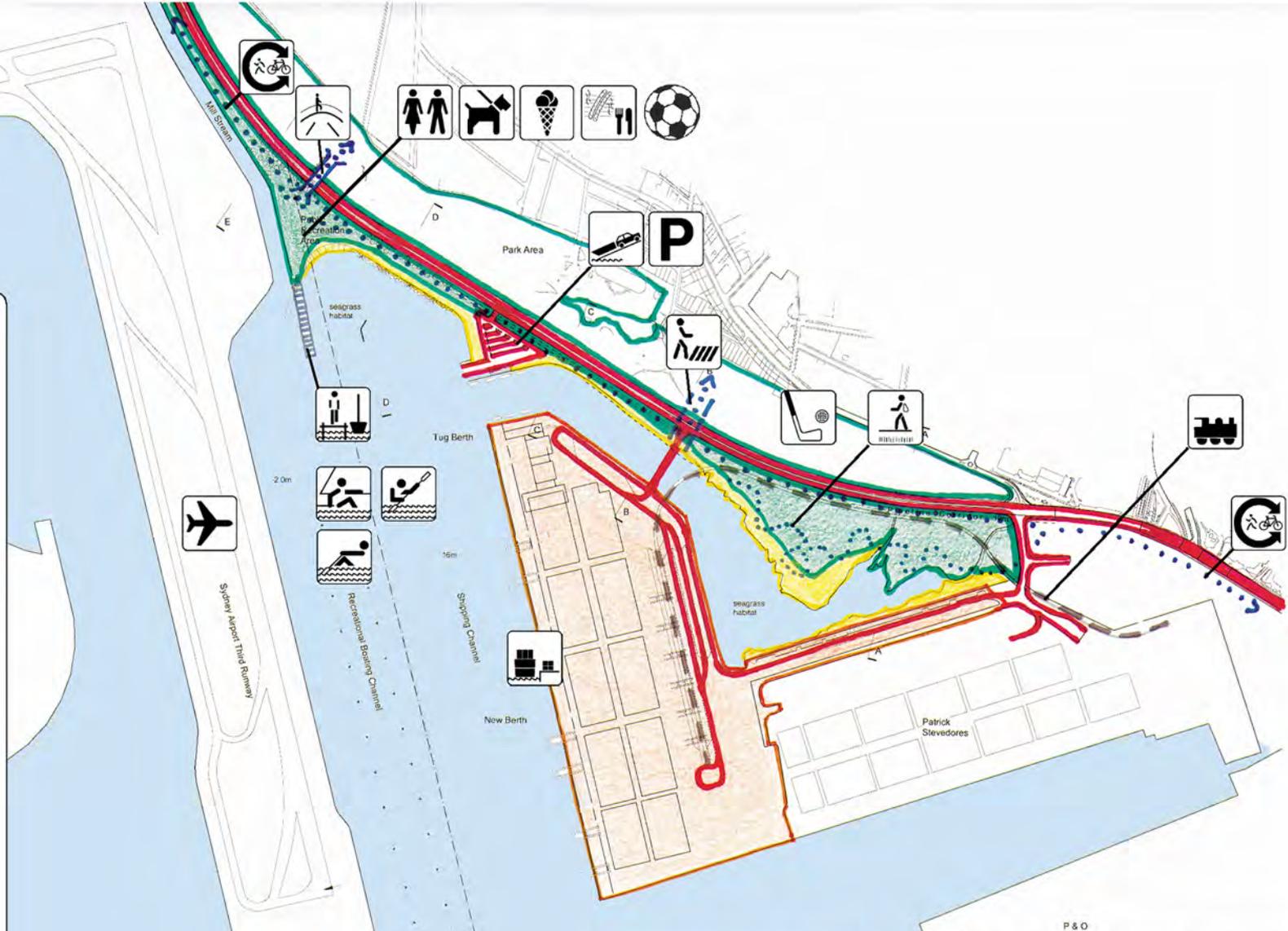
**PORT BOTANY EXPANSION  
 OPEN SPACE PLAN** OPTION. ②

**ESSENTIALS**

SCALE 1:5000 @ A1      1:10000 @ A3  
 DATE: 1. OCTOBER 2002

**LEGEND**

-  JETTY
-  SAILING
-  ROWING
-  CANOEING
-  EXISTING GOLF COURSE
-  SOCCER PLAYGROUND
-  CONTAINER SHIP
-  AIRPORT ACTIVITIES
-  DOG WALKING
-  AT GRADE CROSSING
-  PEDESTRIAN BRIDGE
-  AMENITIES
-  BBQ AREA
-  BOARD WALK
-  BAYTRAIL
-  BOAT RAMP
-  PARKING
-  TRAIN
-  KIOSK



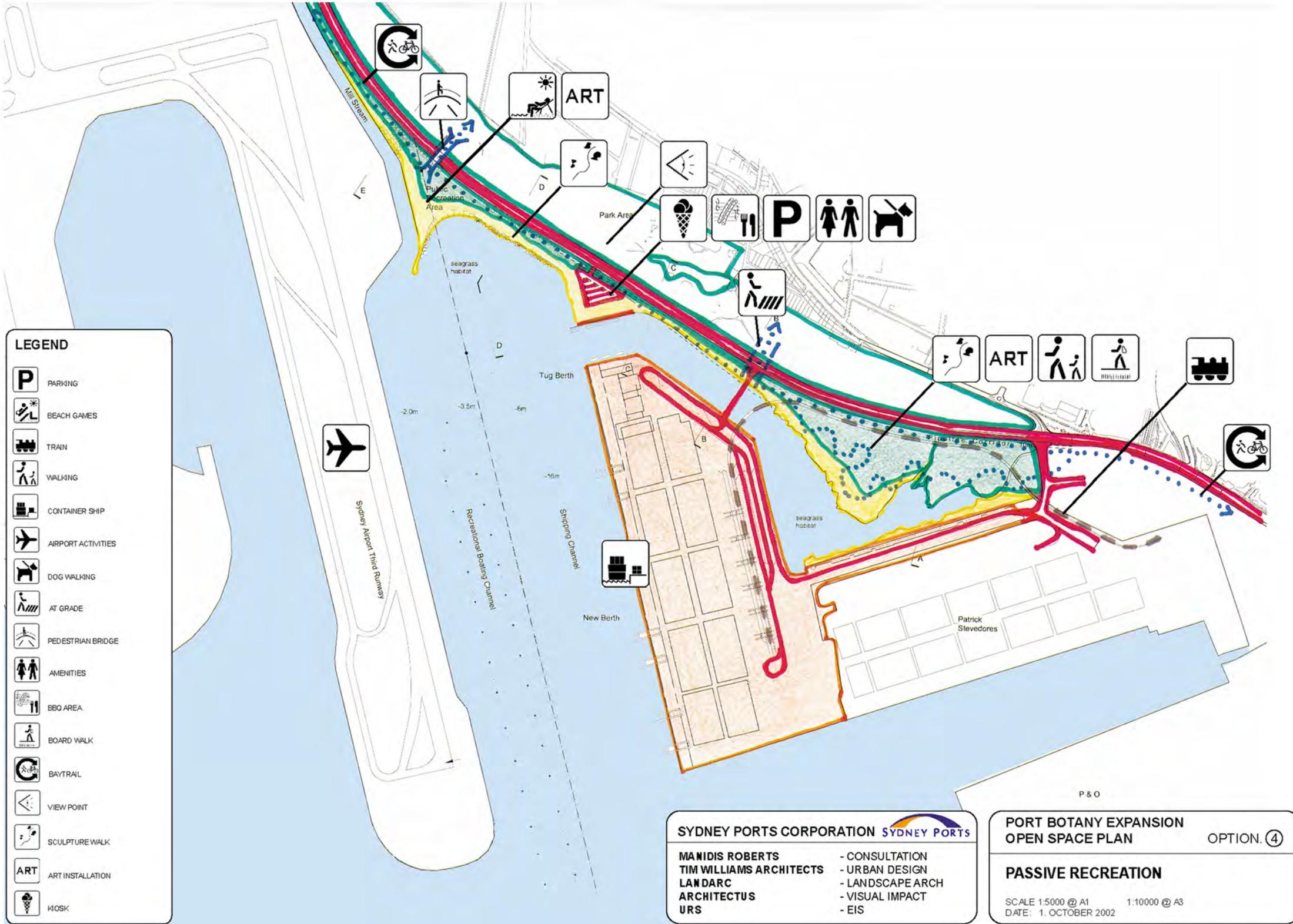
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**PORT BOTANY EXPANSION**  
**OPEN SPACE PLAN** OPTION. ③

**ACTIVE RECREATION**

SCALE 1:5000 @ A1      1:10000 @ A3  
 DATE: 1. OCTOBER 2002



**LEGEND**

- PARKING
- BEACH GAMES
- TRAIN
- WALKING
- CONTAINER SHIP
- AIRPORT ACTIVITIES
- DOG WALKING
- AT GRADE
- PEDESTRIAN BRIDGE
- AMENITIES
- BBQ AREA
- BOARD WALK
- BAYTRAIL
- VIEW POINT
- SCULPTURE WALK
- ART INSTALLATION
- KIOSK

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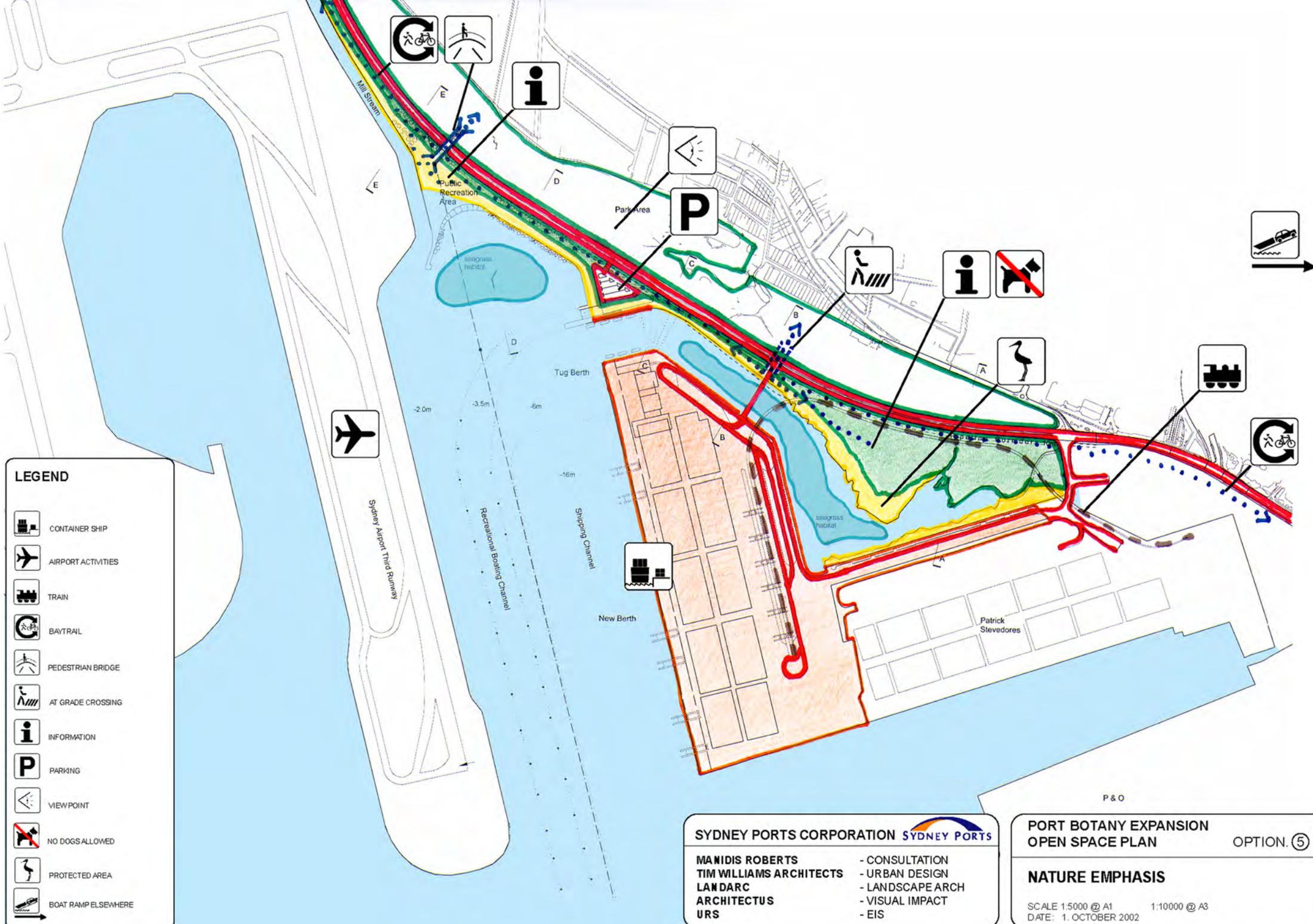
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**ARCHITECTUS** - VISUAL IMPACT  
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**PORT BOTANY EXPANSION**  
**OPEN SPACE PLAN** OPTION. ④

**PASSIVE RECREATION**

SCALE 1:5000 @ A1      1:10000 @ A3  
 DATE: 1. OCTOBER 2002

P & O



**LEGEND**

- CONTAINER SHIP
- AIRPORT ACTIVITIES
- TRAIN
- BAYTRAIL
- PEDESTRIAN BRIDGE
- AT GRADE CROSSING
- INFORMATION
- PARKING
- VIEWPOINT
- NO DOGS ALLOWED
- PROTECTED AREA
- BOAT RAMP ELSEWHERE

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**URS**

- CONSULTATION
- URBAN DESIGN
- LANDSCAPE ARCH
- VISUAL IMPACT
- EIS

P & O

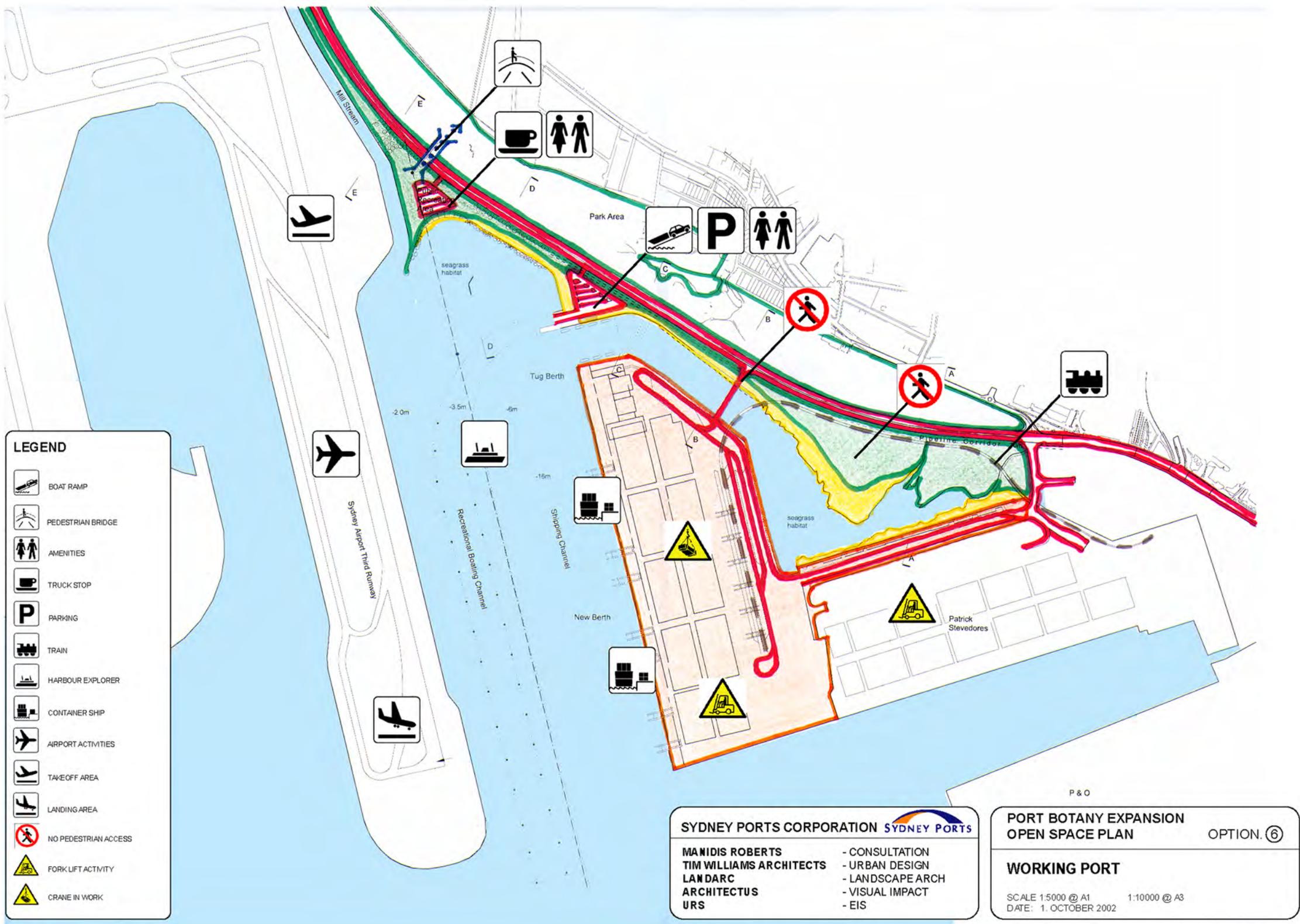
**PORT BOTANY EXPANSION  
 OPEN SPACE PLAN** OPTION. ⑤

**NATURE EMPHASIS**

SCALE 1:5000 @ A1      1:10000 @ A3  
 DATE: 1. OCTOBER 2002

**LEGEND**

-  BOAT RAMP
-  PEDESTRIAN BRIDGE
-  AMENITIES
-  TRUCK STOP
-  PARKING
-  TRAIN
-  HARBOUR EXPLORER
-  CONTAINER SHIP
-  AIRPORT ACTIVITIES
-  TAKEOFF AREA
-  LANDING AREA
-  NO PEDESTRIAN ACCESS
-  FORK LIFT ACTIVITY
-  CRANE IN WORK



**SYDNEY PORTS CORPORATION** 

**MANIDIS ROBERTS**  
**TIM WILLIAMS ARCHITECTS**  
**LANDARC**  
**ARCHITECTUS**  
**URS**

- CONSULTATION
- URBAN DESIGN
- LANDSCAPE ARCH
- VISUAL IMPACT
- EIS

P & O

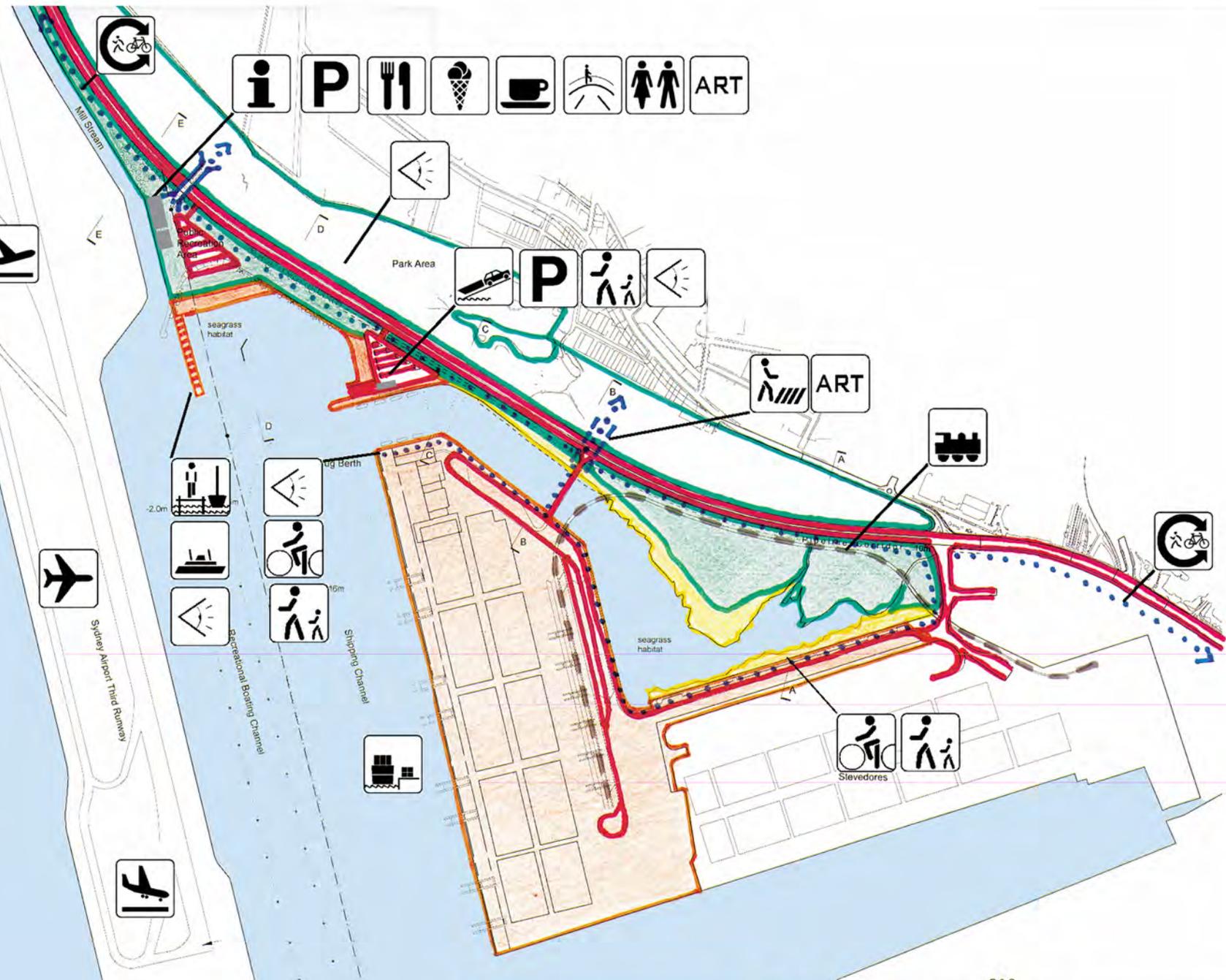
**PORT BOTANY EXPANSION**  
**OPEN SPACE PLAN** OPTION. ⑥

**WORKING PORT**

SCALE 1:5000 @ A1      1:10000 @ A3  
 DATE: 1. OCTOBER 2002

**LEGEND**

- AT GRADE CROSSING
- PARKING
- AMENITIES
- WALKING
- TRUCK STOP
- JETTY
- BAYTRAIL
- PEDESTRIAN BRIDGE
- CYCLE WAY
- HARBOUR EXPLORER
- BOAT RAMP
- KIOSK
- ART INSTALLATION
- VIEWPOINT
- INFORMATION
- CONTAINER SHIP
- RESTAURANT
- AIRPORT ACTIVITIES
- TAKE OFF AREA
- LANDING AREA
- TRAIN



**SYDNEY PORTS CORPORATION** **SYDNEY PORTS**

**MANIDIS ROBERTS** - CONSULTATION  
**TIM WILLIAMS ARCHITECTS** - URBAN DESIGN  
**LANDARC** - LANDSCAPE ARCH  
**ARCHITECTUS** - VISUAL IMPACT  
**URS** - EIS

P & O

**PORT BOTANY EXPANSION**  
**OPEN SPACE PLAN** OPTION. ⑦

**CELEBRATE THE PORT / AIRPORT**

SCALE 1:5000 @ A1      1:10000 @ A3  
 DATE: 1. OCTOBER 2002

Figure 10



Figure 11

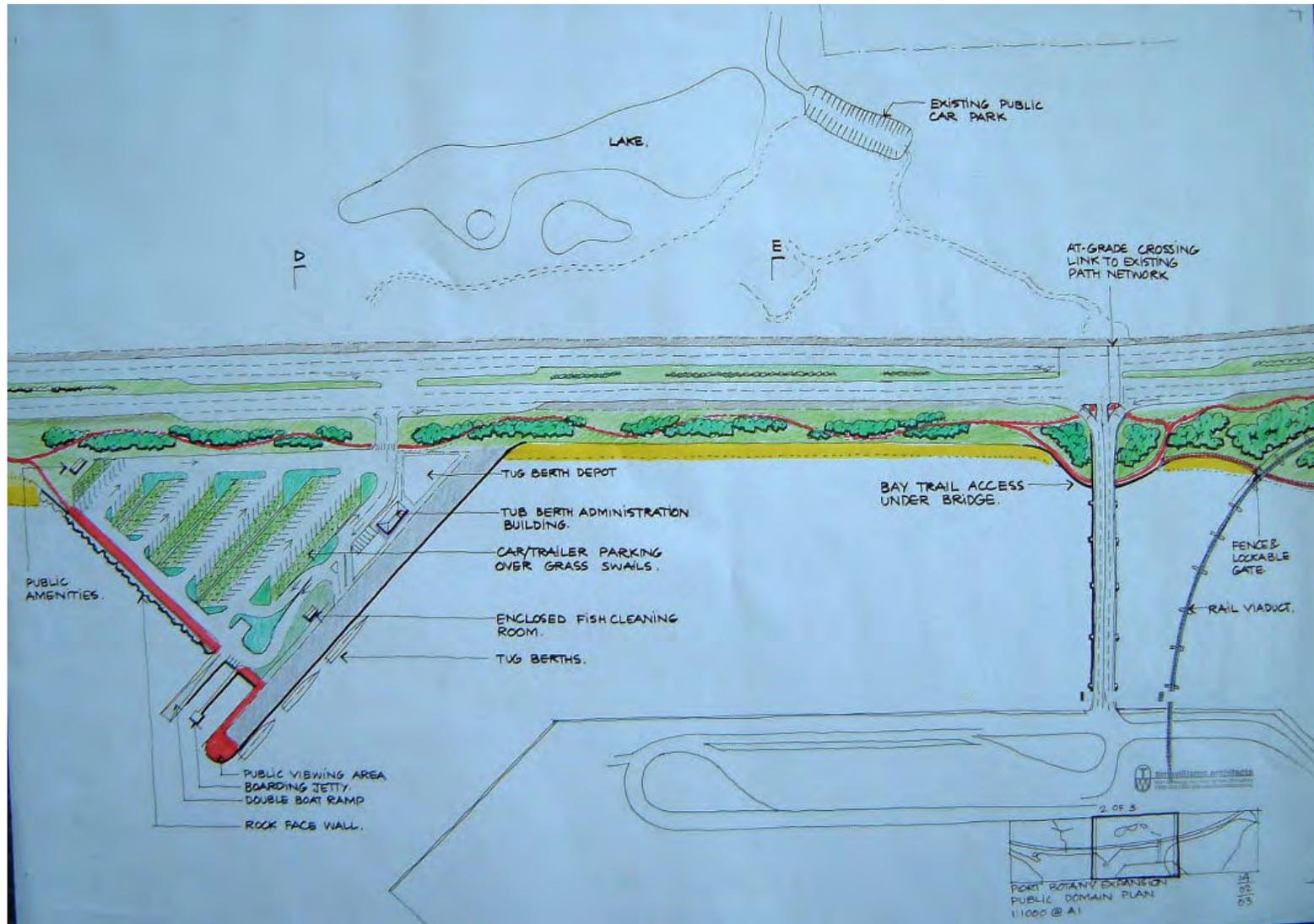
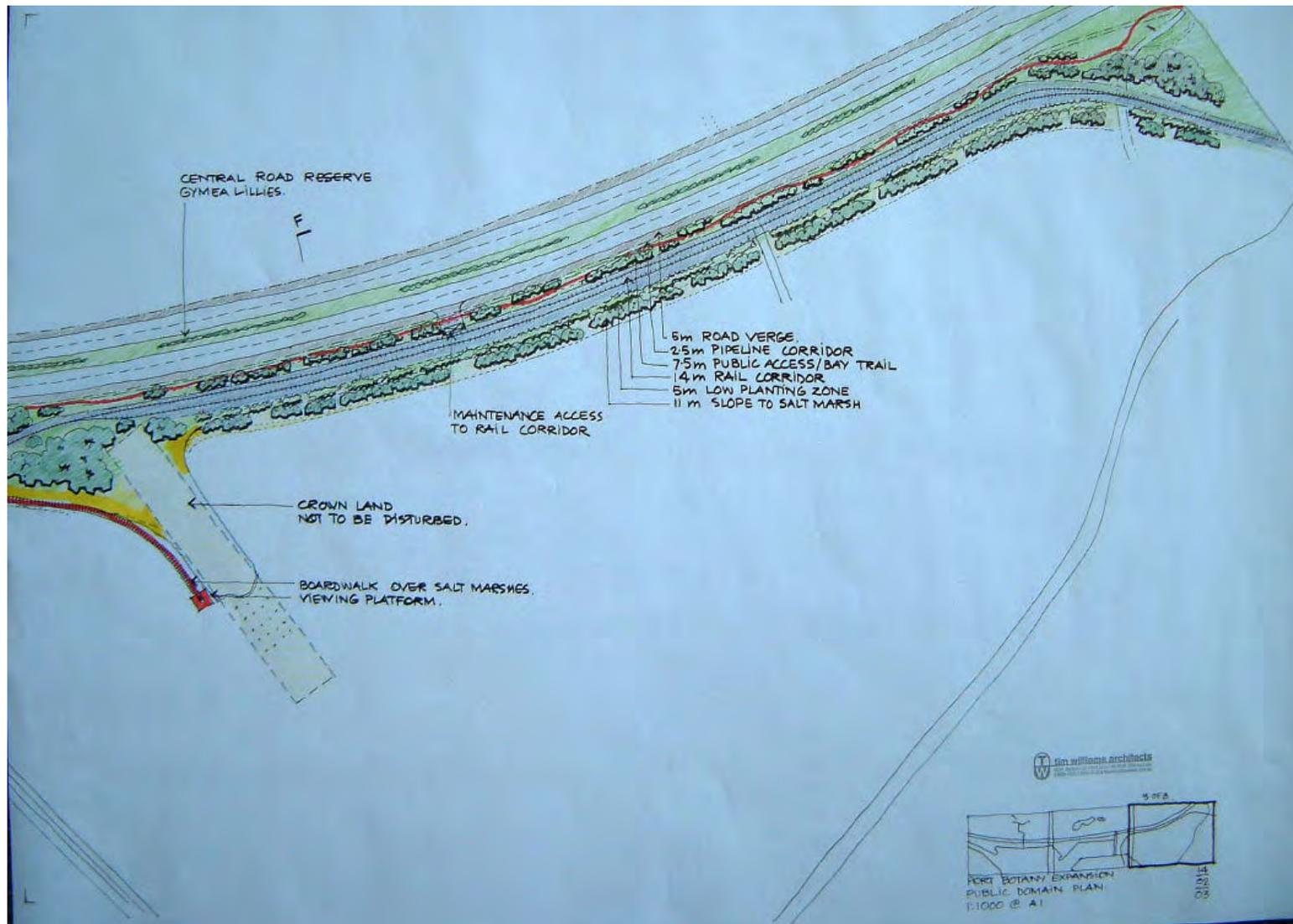


Figure 12



## 6 Evaluation of options

The seven options developed by the interdisciplinary team were evaluated using a planning balance sheet shown in **Table 2**. The planning balance sheet exercise and its findings are described in **Section 6.1**. The shortlisting of options is discussed in **Section 6.2**, including combinations and integration of options.

### 6.1 PLANNING BALANCE SHEET

#### 6.1.1 The exercise

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A planning balance sheet is an evaluation tool, which evaluates a range of options in terms of criteria. Usually, the evaluation takes the form of a written description. To facilitate the evaluation in a workshop situation, it was decided to use three categories of evaluation represented by symbols. These included high relative performance, average relative performance and poor relative performance. The criteria were developed from the desired outcomes developed at the first workshop and described in **Section 4.3**. Workshop participants broke into three small groups. Each group evaluated the options using the planning balance sheet. This was followed by a whole group exercise in which all groups and participants agreed on the evaluation.

#### 6.1.2 Findings

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The findings of the planning balance sheet exercise are shown in **Table 2**. The salient findings of the planning balance sheet evaluation were:

- Option 5: nature emphasis stands out as the preferred option.
- Option 7: celebrating port and airport, Option 3: active recreation, and Option 4: passive recreation have some good points which could be incorporated into shortlisted options.
- Options 1, 2 and 6 are unlikely to perform as well in relation to community expectations.

Table 2: Planning Balance Sheet

OUTCOMES	Ecological Integrity*						Community Access				Community Ownership and Involvement	Positive Co-existence		Enhanced Landscape			Recreation Choices		Interpretation		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Evaluation Criteria	Penrhyn Estuary	Aquatic environment	Water quality	Sediments	Seagrasses	Migratory bird habitat	Access to beach	Access to Bay	Access to public transport	Bicycle and pedestrian links	Local community enjoyment	Sense of ownership of the place	Different users – community, port operators	Diverse uses – natural environment, human, operational	Maintenance of existing landscape	Aesthetically and ecologically improved landscape	Safe landscape	Active uses	Passive uses	A place to experience beach, ships and planes	A place of learning, leisure and lifestyle
Option 1 Status quo	D	●	●	D	●	●	●	D	●	●	D	●	D	●	■	●	●	D	D	D	●
Option 2 Bare essentials	D	D	●	D	D	D	D	D	●	D	D	●	D	●	■	●	●	●	D	D	●
Option 3 Active recreation	D	D	●	●	D	D	■	■	●	■	■	D	■	■	●	D	D	■	D	■	■
Option 4 Passive recreation	●	D	D	D	D	●	■	●	●	■	D	D	D	D	D	■	■	D	■	■	■
Option 5 Nature emphasis	■	■	■	■	■	■	■	●	●	■	D	D	D	D	■	■	■	D	■	D	■
Option 6 Working port	D	D	●	D	D	D	D	D	●	●	●	●	●	●	●	●	●	●	●	D	●
Option 7 Celebrate port/airport	D	●	●	D	●	D	D	■	D	■	■	D	■	D	●	D	■	■	■	■	■

\*includes water quality

High relative performance ■	Average relative performance D	Poor relative performance ●
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## 6.2 SHORTLISTING OF OPTIONS

In the workshop discussion on the shortlisting of options, participants saw value in dividing the public open space area into two precincts:

- Penrhyn Estuary precinct.
- Foreshore Beach precinct.

Penrhyn Estuary opportunities include:

- A nature emphasis with minimal access by people and no dogs. This would maximise opportunities for conservation of the wading birds
- A nature emphasis with greater access by people. This would include board walks and interpretation facilities.

Foreshore Beach opportunities include:

- A nature emphasis, maintaining the current environment and activities as much as possible.
- Active recreation emphasis, including open space, boat ramp and a maximum of active recreation opportunities. This option would be more structured with greater potential for more intensive uses such as cafés/restaurants.

The workshop concluded that these four options should comprise the short list which would be assessed by Sydney Ports.

## 7 The preferred option

Sydney Ports assessed the shortlisted options and selected a preferred option with the following emphasis in each precinct:

- A nature emphasis for the Penrhyn Estuary with minimal access by people and no dogs. The focus would be on the conservation of the wading birds and enhancement of seagrass habitat.
- A nature emphasis for the Foreshore Beach precinct, maintaining the current environment and activities as much as possible. This would include some recreation activities, including a new boat ramp and enhanced public open space.

The preferred option is graphically presented in Figures 10-12. The preferred option for each precinct is described below with reasons for choosing the preferred option.

### 7.1 PENRHYN ESTUARY PRECINCT

The preferred option would substantially expand the existing habitat at Penrhyn Estuary to provide a larger, more open, area of habitat with tidal flats and salt marsh for feeding and roosting. The aim would be to attract as many, and potentially a greater number of, migratory wader birds than use the Estuary at present. Access to people would be restricted in keeping with the conservation emphasis.

Specific habitat enhancement works would include:

- Creation of additional intertidal flats for shorebird feeding and retention of existing intertidal flats.
- Removal/excision of sand dune on the western side of Floodvale Drain to maximise the area of mudflats.
- Retention and/or transplanting of existing saltmarsh and creation of additional saltmarsh habitat for shorebird roosting.
- Removal of mangroves currently present in the Estuary to prevent them from out-competing the saltmarsh and colonising the tidal flats.
- Creation of seagrass habitat for transplanting seagrass that would be lost due to the reclamation and for the natural colonisation of additional seagrass.
- Restriction of access to a pedestrian board walk and viewing platform extending a short distance into the Estuary. This would minimise disturbance of the migratory birds and damage to seagrass/saltmarsh.
- Fencing of the Estuary to control and restrict access to the location of the board walk only.

The conservation emphasis of the Penrhyn Estuary precinct was preferred for the following reasons:

- Penrhyn Estuary is the only viable shorebird habitat remaining on the north side of Botany Bay and should therefore be conserved.
- Migratory shorebirds that use Penrhyn Estuary are listed in international treaties and on threatened species lists.
- Potential impacts of the proposed port expansion on migratory shorebird habitat at Penrhyn Estuary would be minimised by a conservation emphasis for this precinct.
- Conservation of seagrasses within the Estuary would compensate for seagrasses lost as a result of the proposed reclamation.
- The conservation emphasis would potentially provide habitat for the colonisation of additional seagrasses.

## 7.2 FORESHORE BEACH PRECINCT

The preferred option for the Foreshore Beach precinct would have a passive recreational focus within a natural/cultural foreshore setting. The linear corridor would include the following major landscape components:

- Protection, restoration and enhancement of existing foreshore interface and native vegetation buffer.
- Proposed elevated lookout/ viewing platform and native planting near the mouth of the Mill Stream.
- Pedestrian/cycle path multi-use access and enhancement of pedestrian foreshore/ beach linkages.
- Improved pedestrian linkages across Foreshore Road, including a pedestrian at-grade crossing and pedestrian overpass.
- Relocated carpark and boat ramp, boarding jetty, public amenities and associated facilities.

This option was preferred for the following reasons:

- The local community would prefer minimal change to the form and use of Foreshore Beach.
- The local community would prefer a passive recreation focus as opposed to an active recreation focus.
- The local community would prefer less development of the Foreshore Beach precinct. The boat ramp was considered essential as there is a current boat ramp which would not be accessible following construction. Intensive activities such as restaurants and cafes were not preferred.