

## Port Botany Expansion

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Prepared for Sydney Ports Corporation



### Visual Impact Assessment

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**Cover image:** Aerial view of the existing Patrick Terminal and P&O Ports Terminal looking south east.

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This document is for  
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## 1 Introduction

The aim of this section of the proposed Port Botany Expansion EIS is to assess the visual impacts of the proposed Port Botany Expansion on the Botany Bay region and environs and to recommend mitigation measures, design refinements and visual design principles where appropriate.

## 2 Methodology

This visual impact assessment has been carried out by:

- Detailed field inspection to determine the extent of visibility;
- Analysis of the existing visual environment in terms of the immediate, local, regional, aerial and water contexts to determine significant vantagepoints;
- Visual simulations of the proposed Port Botany Expansion from important vantagepoints in the public domain within the visual catchment to show likely visual impact.

Visual impact assessment considers views from the immediate locality, local views, regional views, aerial views and views from the waters of Botany Bay of the proposed Port Botany Expansion.

In order to realistically illustrate the potential visual impacts of the proposed Port Botany Expansion a set of visual simulations was prepared which compared to existing viewing situation with the simulated views of the proposed Port Botany Expansion area. The visual simulations are presented in **Section 8** of this report.

Preparation of the visual simulations involved the following steps:

- Digital photographs were taken from each of the selected viewing points in the direction of the proposed location of the proposed Port Botany Expansion;
- A computer generated 3D model of Port Botany was created by using 2D plans of the proposed Port Botany Expansion and Public Recreation and Ecological Plan and
- The model was 'pasted' into the photographs to illustrate the likely visual impact.

### 3 Assessment criteria

Our approach to rating visual impact was based on two factors: visibility of the proposed Port Botany Expansion and the visual absorption capacity of the landscape.

#### 3.1 Visibility

'Visibility' is a measure of the extent to which particular activities/ components of a proposal may be visible from surrounding areas, the relative number of viewers, the period of view, viewing distance and context of view. The rationale for the assessment is that if a proposal is not visible the impact is nil, if the number of people who would potentially see the proposal is low, then the visual impact would be lower than if a large number of people had the same view.

For the purposes of this study, categories of visibility have been defined as:

- High (H) – where a large number of people would see the proposed new terminal at relatively close distances over a long period of time;
- Moderate (M) – where a medium number of people would see the proposed new terminal at medium distance over a moderate period of time, or a large number of people would see it over a short period of time, and
- Low (L) – where the proposal was essentially not visible.

The procedure for assessing site visibility involved:

- Determination of various categories and situations from which components of the proposed development could potentially be visible (eg motorist, resident); and
- Field inspection to determine the extent of visibility.

For the purpose of this study, qualitative criteria have been determined and used in the visibility assessment as follows .

Criteria	Definition
Relative number of viewers	
• High	• >1,000 people per day
• Moderate	• 100 – 1,000 people per day
• Low	• <100 people per day
Period of view	
• Long term	• >120 minutes
• Moderate term	• 1-120 minutes
• Short term	• <1 minute

#### View Distance

- |                   |               |
|-------------------|---------------|
| • Long distance   | • >3km        |
| • Medium distance | • 1.5km – 3km |
| • Short distance  | • <1.5km      |

### 3.2 Visual absorption capacity

'Visual absorption capacity' is an estimation of the capacity of the landscape to absorb development without creating significant visual change resulting in a reduction in scenic quality. The capacity to absorb development is primarily dependent on vegetation cover, landform and the presence of other development.

Coastal areas (ie. Botany Bay) generally have a low visual absorption capacity due to the availability of uninterrupted views across water. Visual absorption is a measure of the ability of the landscape (both natural and built) to absorb the proposed development and is based on the degree of visual contrast. The existing port related structures partially impede views of the proposed Port Expansion area from views from the south. Therefore the degree of visual contrast of the proposed Port Botany Expansion with the existing landscape is lower when viewed from the south then when viewed from north, east and west. From these vantage points the new terminal will visually blend into the existing context of industrial and port related structures.

The degree of contrast between the various elements of the development and the existing landscape setting in which they are located results from the scale, shape, colour, texture and reflectivity of the development. For the purpose of this study, qualitative criteria listed below have been determined and used in the assessment of visual absorption capacity.

Criteria	Definition
• High	• Landscape able to absorb development. Low degree of visual contrast will result.
• Moderate	• Landscape able to absorb some development. Some visual contrast will result.
• Low	• Landscape unable to absorb development, High degree of visual contrast will result.

### 3.3 Visual Impact Rating

**Table 1** provides a matrix that compares the visibility rating with the visual absorption capacity rating to determine the visual impact rating.

	Visibility	Low	Moderate	High
Visual Absorption Capacity		Visual impact rating		
High		Low	Low	Moderate
Moderate		Low	Moderate	High
Low		Low	Moderate	High

Table 1. Visual impact rating matrix

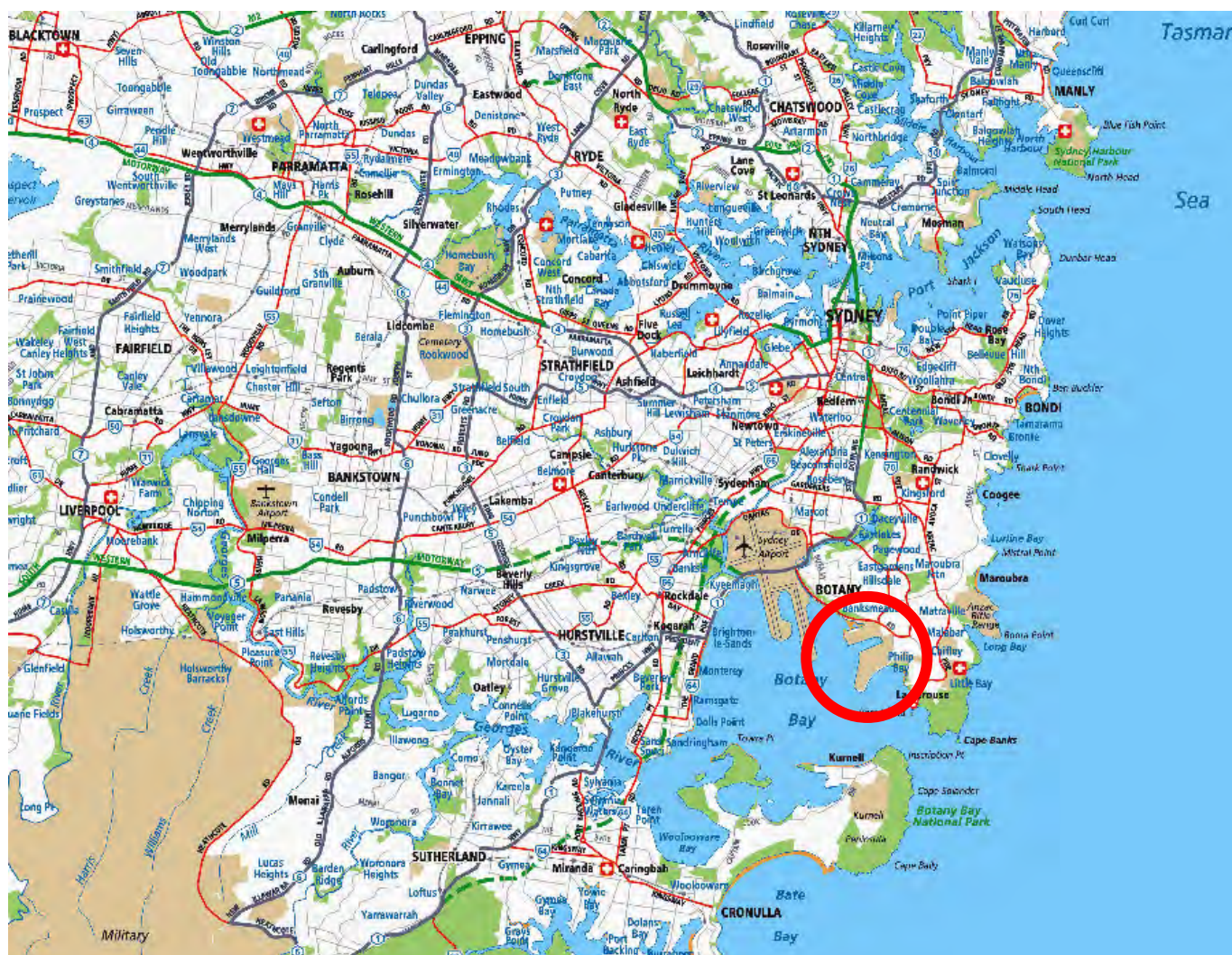
The overall visual impact rating was determined by comparing the visibility rating and visual absorption capacity rating.



#### 4 Location

The proposed Port Botany Expansion area is located on the north eastern side of Botany Bay between Sydney Airport's Parallel Runway and the existing Patrick Stevedores and P&O Ports Terminals (Refer to **Figure 1**). Botany Bay foreshores and environs accommodate a number of nationally significant transport infrastructure and industrial uses including Sydney Kingsford Smith Airport and Port Botany at the northern end of the Bay, and the Caltex Oil Refinery at Kurnell to the south.

The existing Port Botany terminals are essentially flat hard stand decks extending into Botany Bay. Containers are stored on both the existing Patrick Stevedores Terminal on the northern side of Brotherson Dock and on the P&O Ports' Terminal on the southern side of Brotherson Dock.



**Figure 1. Location of Port Botany**

Port Botany is located on the eastern side of Botany Bay between Penrhyn Estuary to the north and Yarra Bay to the south

## 5 Existing visual environment

### 5.1 Land form

The topography surrounding Botany Bay is generally flat and has a low visual profile. The elevated headlands at La Perouse and Botany Bay National Park, Kurnell, located at the entrance of Botany Bay, provide visual relief in a generally flat visual profile.

Elevated dune areas vegetated with trees and shrubs, within Sir Joseph Banks Park screen the proposed new terminal from the open space and residential areas from the north. Coastal heath and shrubs behind Foreshore Beach partially obscure views to the proposed site from Foreshore Road.

### 5.2 Land use

The north eastern and eastern side of Botany Bay has a mixed use character dominated by heavy industrial uses comprising Sydney Airport and Port Botany related buildings and structures, industrial buildings and structures and predominantly detached housing in residential areas. Port related structures include containers, cranes, bulk liquid storage tanks, refinery stacks, manufacturing plants and warehouses.

The containers and cranes at Port Botany are the most visually significant forms in the locality. The region accommodates many moving elements such as water sport activities, aircraft and ships, all attracting attention and contributing to the strong visual character of the area. **Figure 2** and **Figure 3** illustrate the location of residential and industrial uses surrounding Port Botany.



**Figure 2. Residential areas surrounding Port Botany**

Residential areas include the suburbs of Phillip Bay, La Perouse, Matraville, Banksmeadow, Botany, Hillsdale, and Maroubra. The closest residential areas to Port Botany are located in Banksmeadow and Matraville. Source: Timothy Williams & Associates



**Figure 3. Industrial areas surrounding Port Botany**

Industrial land uses surrounding Botany Bay contributing to the mixed use character of the area. Source: Timothy Williams & Associates



### 5.3 Significant open space

While industrial and residential development characterises the landscape of the locality there are areas of significant open space surrounding Botany Bay. There are also a number of significant natural areas in the vicinity of Port Botany, such as, the beach and vegetation on southern and eastern sides of Botany Bay and the ridgeline between La Perouse and Little Bay. Significant open spaces illustrated in **Figure 4** include:

- Sir Joseph Banks Park, with viewing platform over Botany Bay
- Botany Golf Course, Banksmeadow
- Sydney Airport's North-South Runways
- NSW Golf Course, La Perouse
- Randwick Golf Course, Malabar
- The Coast Golf Course, Little Bay
- St Michaels Golf Course, Little Bay
- Anzac Rifle Range, Malabar
- Botany Bay National Park, La Perouse, Kurnell
- Molineux Point, Prince of Wales Drive
- Yarra Bay Recreational Reserve, Phillip Bay
- Frenchmans Bay Beach and public reserve, La Perouse
- Sydney Park, St Peters
- Eastlakes Golf Course, Eastlakes
- Bonnie Doon Golf Course, Pagewood
- The Lakes Golf Course, Eastlakes
- Botany Bay National Park, Kurnell
- Towra Point Nature Reserve
- Lady Robinsons Beach, Brighton-le-Sands
- Dolls Point
- Scarborough Park
- Kogarah Golf Course



**Figure 4. Open spaces surrounding Botany Bay**

There are numerous significant open space areas that surround the site including Sir Joseph Banks Park, and Foreshore Beach adjacent the proposed Port Botany Expansion. Source: Timothy Williams & Associates

#### 5.4 Botany Bay

The most apparent visual feature of the Port Botany environment is the waters of Botany Bay. Botany Bay as illustrated in **Figure 5** covers an area of approximately 80km<sup>2</sup>, with the distance from shore to shore varying from 4km to 9km. The majority of significant views across Botany Bay are seen from its foreshore panoramas and the immediate road corridors. Whilst reduced by distance, landmarks such as the industrial structures of the Port Botany, Sydney Airport and residential zones are recognisable.



**Figure 5. Botany Bay**

Botany Bay is the most apparent visual feature of the Port Botany environment.  
Source: Timothy Williams & Associates

## 5.5 Viewing zones

In order to establish the potential visual impacts of the proposed Port Botany Expansion the viewing zones are separated into five components:

- Immediate vicinity (< 1.5km);
- Local area (1.5km - 3km);
- Regional area (3km - 6km);
- From the air and
- From the water.

These zones are illustrated in Figure 6.



**Figure 6. Map of viewing zones**

Viewing zones of the proposed Port Botany Expansion are shown as blue lines extending out from the Port. Foreground (< 1.5km) is described as the immediate locality, mid ground (1.5km - 3km) is described as the local area and far ground (3km - 6km) is described as regional. These viewing distances are shown above.

**Immediate vicinity**

The immediate vicinity of the proposed Port Botany Expansion area is characterised by the existing port related facilities and other industrial uses within the Banksmeadow and Botany industrial areas. Public open spaces located within the immediate vicinity of Port Botany include Sir Joseph Banks Park and Botany Golf Course.

The topography in the immediate vicinity of Port Botany is generally flat with some undulation within Sir Joseph Banks Park. There is a slight incline in the landform sloping up to the ridgeline following Bunnerong Road.

The proposed Port Expansion is visible from various areas within its immediate vicinity. The flat landform, existing vegetation and buildings may however inhibit some views of the proposed Port Botany Expansion area. Elevated dune areas vegetated with trees and shrubs, within Sir Joseph Banks Park screen the proposed site from the open space and residential areas from the north. Coastal heath and shrubs behind Foreshore Beach partially obscure views to the proposed site from Foreshore Road.

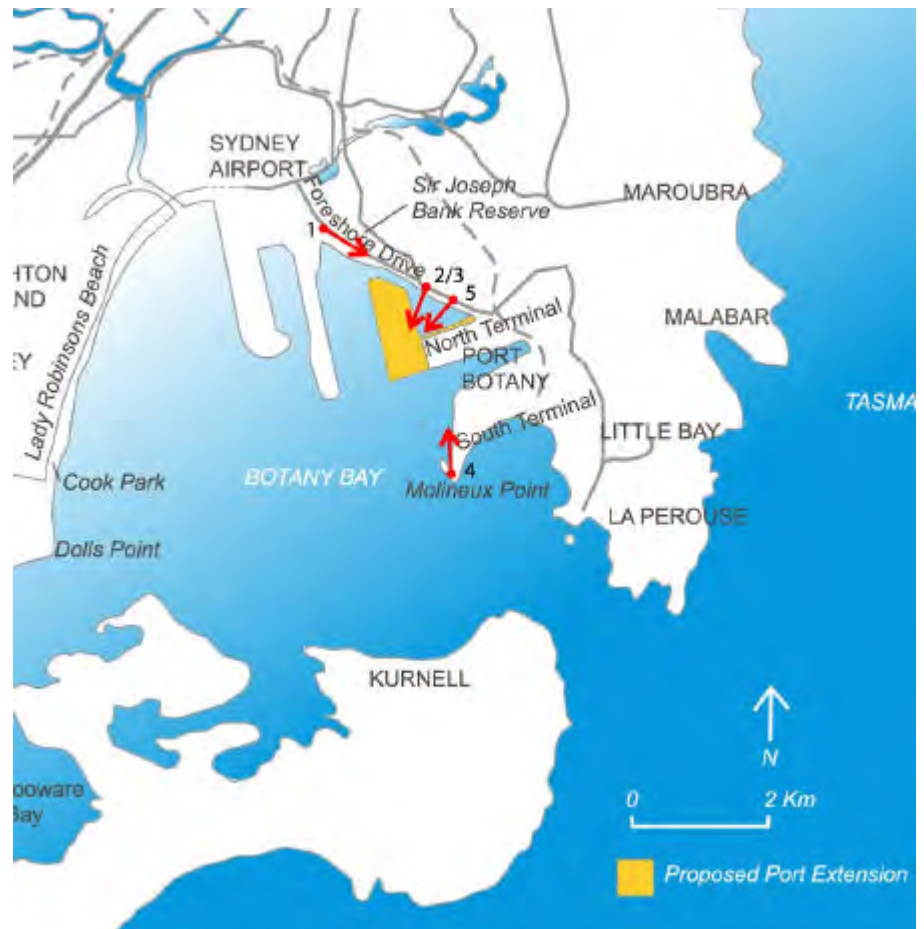
Views were selected from significant public open spaces in the immediate vicinity of the port because they are either highly trafficked or are historically and/or socially significant. These views represent views from the immediate vicinity from the north, south and east of the proposed Port Botany Expansion area. The significance of each vantage point is described in the following sections of this report. The selected views are:

1. Foreshore Road, Banksmeadow;
2. Sir Joseph Banks Park, Banksmeadow;
3. Foreshore Beach, Banksmeadow;
4. Molineux Point, Prince of Wales Drive, Botany Bay; and
5. Penrhyn Estuary.

**Figure 7** illustrates the location of selected significant views from the immediate vicinity of the port.

## Key

1. Foreshore Road, Banksmeadow
2. Sir Joseph Banks Park lookout, Banksmeadow
3. Foreshore Beach, Foreshore Road
4. Molineux Point, Prince of Wales Drive, Botany Bay
5. Penrhryn Estuary



**Figure 7. Immediate vicinity views**

Views of Port Botany were chosen from significant viewing opportunities in the public domain.

### **View from Foreshore Road, Banksmeadow**

Foreshore Road is located between Southern Cross Drive and Bunnerong Road on the eastern side of Botany Bay and has significant views to Botany Bay and Port Botany. This view is important due to the significant volumes of traffic using Foreshore Road. Foreshore Road is a flat four lane road with a central grass median. Both the eastern and western sides of Foreshore Road are densely landscaped with low to medium height vegetation.

Views of port related structures, such as containers and cranes, are currently available travelling south, although the Patrick Terminal and P&O Terminal deck are largely screened by existing vegetation (Refer to **Figure 13**). Glimpses of the containers at Port Botany are available as motorists travel further south along Foreshore Road.

### **View from Sir Joseph Banks Park lookout, Banksmeadow**

The lookout is elevated above Foreshore Road in the grounds of Sir Joseph Banks Park and provides panoramic views over Botany Bay. The Patrick Terminal, P&O Ports Terminal and the bulk liquids storage tanks are visible from this important vantage point. The horizontal form of the Sydney Airport's North-South runways is also visible (Refer to **Figure 15**).

The park has relatively few visitors and therefore the view is not widely appreciated. This vantage point is an important public viewing opportunity providing relatively uninterrupted panoramic views over Botany Bay.

### **View from Foreshore Beach, Banksmeadow**

Foreshore Beach is located on the southern side of Foreshore Road. The beach provides low level panoramic views across Botany Bay. The beach has a limited number of visitors and therefore this viewing point is not widely appreciated. However, this view is important given the close proximity of the proposed Port Botany Expansion and the possible location of public viewing opportunities along Foreshore Beach. The Patrick Terminal, P&O Ports Terminal and related structures are visible (Refer to **Figure 17**). At present there is an uninterrupted view of the Sydney Airport's Parallel Runway, and in the far background Kurnell.

### **View from Molineux Point, Prince of Wales Drive, Port Botany**

Molineux Point is located at the western end of Prince of Wales Drive, Port Botany. The Point is elevated above sea level providing 270 degree panoramic views of Botany Bay, including Captain Cooks Landing Place at Kurnell, La Perouse, Bare Island, Sydney Airport and Port Botany (Refer to **Figure 19**).

This public vantage point is of significance to Sydney Ports Corporation and is dedicated to the trading alliance between Japan and Australia. It is also a formal public space with potential views of the proposed Port Botany Expansion.



**View from Penrhyn Estuary**

Penrhyn Estuary is located at the southern end of Foreshore Beach. The selected view is taken from the northern side of the historic remains of Government Pier looking south west.

The view is taken in the approximate location of a publicly accessible proposed boardwalk and lookout. This vantagepoint provides views of Penrhyn Estuary and an opportunity to view the increase in visually interesting port related activities. Public interpretation and education strategies would assist in educating visitors about Port Botany, the historic remains of the Government Pier and the environmental initiatives implemented at Penrhyn Estuary and Foreshore Beach.

**Local views**

The local area of the proposed Port Botany expansion area is characterised by residential and industrial areas. The topography in the local area of Port Botany is generally flat. There is a slight incline in the landform sloping up to the ridgeline that follows Bunnerong Road.

Port Botany is visible from a number of significant public vantage points in the local area. Port Botany is visible from parts of Banksmeadow, La Perouse, Phillip Bay, Chifley, Matraville, St Peters, Sydenham, Tempe, Rockdale, Monterey, Ramsgate Beach and Sans Souci.

The closest residential area to Port Botany is located approximately 500m from the site at Banksmeadow. This area is to the north of Botany Golf Course and Sir Joseph Banks Park and predominantly consists of single-dwelling houses. Views of the Port Botany environment from Banksmeadow are generally impeded by buildings and vegetation within Banksmeadow and elevated topography in Sir Joseph Banks Reserve.

Views were selected because they are either highly trafficked or representative of views in the local area. Views that are representative of the views in the local area are:

1. Koorngai Ave, Phillip Bay;
2. Elaroo Ave, Phillip Bay;
3. Beauchamp Street, Hillsdale; and
4. Beauchamp Street, Matraville.

**Figure 8** illustrates the location of local views.

## Key

1. Koorringai Ave, Phillip Bay
2. Elaroo Ave, Phillip Bay
3. Beauchamp Street, Hillsdale
4. Beauchamp Street, Matraville



**Figure 8. Local views**

Map showing the location of viewing corridors of Port Botany assessed during the preparation of this Visual Impact Assessment.

**View from Koorngai Ave, Phillip Bay**

Koorngai Ave, Phillip Bay is located within Yarra Bay Bicentennial Park. Koorngai Ave slopes down from Yarra Road to Yarra Bay. Yarra Bay Bicentennial Park is an important public open space in the local area. Yarra Bay Sailing Club adjoins the park and provides local residents with an important public facility. This vantage point is important in the local area given the moderate numbers of visitors using public facilities within the park and surrounding environment and its importance as a public open space to local residents and visitors.

The existing P&O Ports terminal, Banks Wall and bulk liquid storage tanks are visible from this vantage point. (Refer to **Figure 23**).

**View from Elaroo Ave, Phillip Bay**

Elaroo Ave is located in an elevated position on the La Perouse peninsula between Anzac Parade and Yarra Road. Elaroo Ave forms a view corridor to Port Botany. The view corridor is terminated by existing port related structures. (Refer to **Figure 24**).

**View from Beauchamp Road, Hillsdale**

Beauchamp Road, Hillsdale is located between Bunnerong Road and Botany Road and is a mixed residential and industrial area. This portion of Beauchamp Road is generally flat. Beauchamp Road forms the boundary between the City of Botany Bay and Randwick Local Government Areas. Beauchamp Street is a view corridor that is terminated by port related structures. This view is seen by a high number of motorists. (Refer to **Figure 25**).

**View from Beauchamp Road, Matraville**

Beauchamp Road, Matraville is located between Anzac Parade and Bunnerong Road and is a predominantly residential area. This portion of Beauchamp Road is elevated and slopes down to the lower land in Hillsdale. Existing port related structures are visible and terminate this view corridor (Refer to **Figure 26**).

**Regional views**

The region is characterised by a wide variety of land uses and landforms. There are large areas of public open space on the foreshore surrounding Botany Bay. Public open spaces located within the region of Port Botany include Sir Joseph Banks Park and Botany Golf Course. Built up areas comprise commercial, industrial and residential development.

The topography of the region is generally flat providing low panoramic views over Botany Bay. There is some undulation in the landform sloping up to ridgelines surrounding Botany Bay to the east, north and west. However, the landform of the region generally follows the horizontal form of Botany Bay.

Views of the proposed Port Botany Expansion Area are available from many areas within the region. Distant views are available from elevated urban areas surrounding Botany Bay. However, the long distance and urban obstructions reduce these views to glimpses and blurs into the landscape. Selected views at the regional scale are from significant public open space have been chosen because they are either highly trafficked or are significant historically and/or socially. The selected views are:

1. Lady Robinsons Beach, Brighton-le-Sands.
2. Silver Beach, Kurnell
3. Botany Bay National Park, La Perouse
4. Sydney Park, St Peters

**Figure 9** illustrates the location of these significant regional views.

## Key

1. Lady Robinsons Beach, Brighton-le-Sands.
2. Silver Beach, Kurnell
3. Botany Bay National Park, La Perouse
4. Sydney Park, St Peters



**Figure 9. Regional views from significant public domain areas**

Views of Port Botany at a regional scale were chosen from important public places. The public spaces are important either as places of cultural or social importance.

### **View from Lady Robinsons Beach, Brighton-le-Sands**

Lady Robinsons Beach forms a large portion of the western shoreline of Botany Bay extending from the entrance of Cooks River into Botany Bay in the north to Dolls Point in the south. The beach is generally flat and provides panoramic views over Botany Bay. This vantage point is a significant regional public open space with large numbers of visitors using the foreshore environment. Views of the existing port are distant glimpses due to the scale of Botany Bay. Sydney Airport's runways impede views of Port Botany when viewed from the northern end of Lady Robinsons Beach (Refer to **Figure 27**).

South of Brighton-le-Sands towards Dolls Point, views are even more distant and less discernible and appear to blur into the landscape.

### **View from Silver Beach, Kurnell**

Silver Beach, Kurnell is generally flat and provides panoramic views over Botany Bay. The view of Port Botany from Kurnell is distant but constitutes an image of cranes and boats and the adjacent airport runways. The existing oil jetty in the foreground at Kurnell introduces the 'industrial' character of the vista (Refer to **Figure 29**).

There are relatively few viewers from this vantage point. However, Silver Beach, Kurnell is an important public open space and vantage point of national historic significance given its association with the early history of Australia. Botany Bay was the spot where Captain Cook and his men from the *Endeavour* first came ashore in 1770.

### **View from Botany Bay National Park, La Perouse**

Botany Bay National Park is elevated above Botany Bay on the La Perouse Peninsula providing wide panoramic views over Botany Bay. This vantage point is an important public open space of national historic significance given its association with the early history of Australia. A French expedition lead by La Perouse landed at this location on 1788. Also, this vantage point is important as it provides elevated sweeping views of Botany Bay and the Port Botany environment.

Banks Wall, Port Botany and bulk liquids storage tanks are visible from this vantage point (Refer to **Figure 31**).

### **View from Sydney Park, St Peters**

Regional views of Port Botany are available from Sydney Park, St Peters. Parts of Sydney Park are elevated. This park is an important public space, forming a regional public open space in Southern Sydney. The increasing immediate population in the southern inner ring suburbs of Rosebery, Zetland and Green Square and the immediate suburbs of St. Peters, Alexandria and Sydenham use Sydney Park for recreation. Distant views of Botany Bay, Sydney Airport and Port Botany are available from elevated parts of the park (Refer to **Figure 33**).

### Views from the air

The Port Botany Expansion area is clearly visible from the air on approach and departure to and from Sydney Airport. Aerial views show the industrial and residential areas surrounding Port Botany which characterise the landscape. Public open space is located on the foreshore of Botany Bay and is unevenly dispersed within surrounding industrial and residential areas.

Aerial views of the proposed Port Botany Expansion are considered significant due to the close proximity of the proposed development to Sydney Airport and the high numbers of international and domestic passengers arriving at and departing Sydney Airport. The orientation of flight paths allows international and domestic passengers to view Port Botany. Port Botany is one of the first impressions visitors have of Sydney. Port Botany presents a colourful array of cranes, ships, containers and bulk liquid storage tanks within an active industrial area on the eastern side of Botany Bay when viewed from the air.

The following aerial views were assessed:

1. View from the air from the north
2. View from the air from the north east

The location of these views is illustrated in **Figure 10**.

The aerial views selected for this visual impact assessment are looking west and south. It would be desirable to assess the visual impact of the proposed Port Botany Expansion from the air from the west, north and south. However, due to limitations placed on flying in the vicinity of the airport the aerial photographer was unable to take suitable photographs to assess the visual impact of the proposed Port Botany Expansion. The selected views from the north and northeast are considered satisfactory to assess the visual impact of the proposed Port Botany Expansion from the air.



## Key

1. View from the air from the north
2. View from the air from the north east



**Figure 10. Map showing the location of views from the air**  
Aerial views are taken from the north looking south and from the east looking west.

**Views from the water**

Port Botany is visible from the waters of Botany Bay. Botany Bay is the most apparent visual feature of the Port Botany environment. The proposed Port expansion area is visible from a large portion of Botany Bay. However, there are areas of Botany Bay where views of the proposed Port Expansion Area are impeded by existing man made structures and natural landscape features. For example, views from the north-western corner of Botany Bay are impeded by the existing north-south and parallel runways. Also, views from the entrance to Botany Bay are impeded by the existing Banks Wall and Port related structures on the P&O Ports terminal.

As the viewer moves further from the Port Botany environment the existing port facilities are less visible and appear to blur into the landscape. Views from the waters of Botany Bay are important given the ecological, social and economic significance of Botany Bay within the Sydney region. However, the number of viewers from the water is relatively low. Boats are limited to the ships associated with Port Botany and a relative small number of pleasure craft. Commercial fishing in Botany Bay is prohibited.

Views assessed from Botany Bay are:

1. View from the immediate vicinity looking north east (< 1.5km)
2. View from the immediate vicinity looking south west (<1.5km)
3. Local view (1.5km-3km)
4. Regional view (3km-6km)

**Figure 11** shows the location of selected views of the existing Port Botany environment.

## Key

1. View from the immediate vicinity looking north east (< 1.5km)
2. View from the immediate vicinity looking south west (<1.5km)
3. Local view (1.5km-3km)
4. Regional view (3km-6km)



Figure 11. Views from the waters of Botany Bay

## 6 Description of the Proposal

### 6.1 New terminal

The components of the new terminal would include the following:

- A new container terminal with an approximate area of 63ha extending about 550m west and 1,300m north of the existing Patrick Terminal;
- Approximately 1,850m of additional wharf face to create five new berths for shipping and containers.
- The paved container storage yard within the new terminal with more than 8,000 container storage bays;
- An interface within the new terminal where containers would be transferred to or from trains and/or trucks;
- Rail access to the new terminal area by means of an extension of the existing Botany Freight Rail Line parallel to Foreshore Road including a rail bridge and culverts;
- Three 600m. rail sidings within the new terminal parallel to the wharf face for loading and unloading containers;
- A strip of existing land north of the existing Patrick Terminal for inter-terminal access road and two additional rail sidings;
- Dedicated road access consisting of a signal-controlled junction at Foreshore Road and an entrance bridge across the channel separating the existing shoreline from the new terminal;
- Construction of a road-over-rail grade separation at the eastern end of Penrhyn Road;
- Six new tug berths;
- A dredged navigation channel providing access to the berths including the necessary aids to navigation;
- Buildings including an administration and operations centre and equipment maintenance workshop;
- Supporting services and facilities including stormwater management system, water supply, sewage connections, power supply and telecommunications.

The components of the new terminal are described in further detail in the following section. The plan of the proposed Port Botany Expansion is shown in **Figure 12**.

In addition to the works associated with the new terminal, Sydney Ports Corporation would undertake works within the public recreation area adjacent to the proposed Port Botany Expansion as described in **Section 7.2** of this report.

The proposed Port Botany Expansion would require the reclamation of approximately 57ha of land for port purposes and approximately 2ha for public recreation purposes from Botany Bay. The proposed Port Botany Expansion also consists of 6ha of existing land north and west of the Patrick Terminal.





**Figure 12. Plan of proposed Port Botany Expansion**  
Source: Sydney Ports Corporation

The elements of the new terminal namely cranes, containers, terminal deck, train line, road and pedestrian access, administration buildings, tug berth and boat ramp are described in further detail below.

### **Cranes**

During full operation times up to 10 cranes will operate from the terminal. The cranes are proposed to a maximum height of ~ 51m LAT and horizontal in form and orientation, whilst lower in level than the existing cranes.

The proposed cranes will be painted in similar colours to the existing cranes on the Patrick and P&O Ports' terminals. The design of the cranes will act to minimise their visual impact as they will blend in with the existing cranes and other Port related structures. The brightly coloured cranes complement the colours of containers and ships and contribute to the industrial character of the Port Botany environment. The cranes will contribute to the visually interesting skyline of port related views when viewed from the immediate vicinity of the port.

### **Containers**

Containers would be stored towards the centre of the terminal deck. The containers will be stacked in zones to control the overall mass. Containers can be stacked vertically up to 6 high (maximum height 18m) in designated areas on the deck.

### **Terminal deck**

The proposed terminal deck has a long dimension facing west to the airport runways of approximately 1,300m and a short dimension facing south of approximately 550m. The terminal deck will be predominantly used for container storage. The deck will be constructed of land fill with hard standing areas forming a flat surface 3.5m-4m LAT.

### **Train line**

A new train line is proposed to link the new terminal at Port Botany to the existing rail network. As illustrated in **Figure 12** the train line accesses the new terminal deck via a new rail bridge.

### **Road access**

The main road access to the new terminal is via Foreshore Road and a road bridge across the channel. Secondary road access will be by an inter-terminal access road connecting to Penrhyn Road.

### **Buildings**

A number of buildings would be required by the terminal operator on the new terminal and these would include a 2 to 3 storey administration and operation centre, workshop, gatehouse, sub-station and minor site buildings. An administration office and workshop will be constructed for the tug berths located on the new boat ramp reclamation area to the north of the new terminal. The frame of the buildings would be either concrete or steel columns and beams with masonry walls.

The main equipment maintenance workshop would be constructed with a steel frame and metal cladding.

### **Tug berths**

The tug berthing facilities will consist of two separate tug berth areas. One tug berth area is proposed to be located adjacent to the proposed boat ramp and car park, and will be capable of accommodating three tugs at a time. The second berth area will be adjacent to the proposed container

berths and will also be capable of accommodating three tugs at a time.

**Boat ramp**

A publicly accessible four lane boat ramp is proposed at the western end of the tug berth area.

**Pedestrian access**

A low-level pedestrian bridge across Foreshore Road will link Sir Joseph Banks Park to Foreshore Beach.

## 6.2 Public Recreation & Ecological Plan

After a long process of community and stakeholder consultation a design for the public domain interface to the proposed Port Botany Expansion on the foreshores of Botany Bay has been prepared. The Public Recreation & Ecological Plan divides the open space plan into two separate precincts as follows:

1. Foreshore Road/Bay-side Interface (west); and
2. Penrhyn Estuary (east).

Foreshore Road/Bay-side Interface precinct is proposed as a linear corridor with a recreation focus. Penrhyn Estuary precinct focuses on the restoration of natural heritage values. The restored landscape within this precinct of extensive intertidal sand/mudflats and saltmarshes would provide a habitat for threatened species. The precinct will include a boardwalk and viewing platform linked to the pedestrian/cycleway and is located at the western edge of the proposed inter-tidal sand/mudflats adjacent to the remains of the former Government Pier.

The main landscape components of these precincts are described in detail in the outline of the Public Recreation & Ecological Plan in the EIS.



## 7 Visual impact assessment

**Section 5** of this report describes the existing Port Botany visual catchment in terms of views from the following locations:

- Immediate vicinity (< 1.5km);
- Local area (1.5km - 3km);
- Regional area (3km - 6km).
- From the air; and
- From the water.

**Figure 6** illustrates these existing locations within the visual catchment. **Sections 8.1 to 8.5** of this report assess the visual impact of the proposed Port Botany Expansion on the existing visual environment using the above visual catchment and viewing distances.

### 7.1 Visual impact on views in the immediate vicinity

Significant views identified in the immediate vicinity of the proposed Port Botany Expansion include:

- Foreshore Road, Banksmeadow;
- Sir Joseph Banks Park lookout, Banksmeadow;
- Foreshore Beach, Foreshore Road;
- Molineux Point, Prince of Wales Drive, Port Botany; and
- Penrhyn Estuary

**Figure 7** illustrates the location of views in the immediate vicinity of the proposed Port Botany Expansion.

The visual impact assessment on views in the immediate vicinity of the proposed Port Expansion considered views from important publicly accessible open spaces. The visual impact of the proposed Port Botany Expansion on views in the immediate vicinity of Port Botany is low, moderate and high.

Elevated dune areas vegetated with trees and shrubs, within Sir Joseph Banks Park screen the proposed new terminal from the open space and residential areas from the north. Coastal heath and shrubs behind Foreshore Beach partially obscure views to the proposed site from Foreshore Road. New landscaping of native species will further screen views of the new terminal from Foreshore Road.

Views from existing elevated viewing platforms at Sir Joseph Banks Park, Molineux Point and the proposed boardwalk and lookout at Penrhyn Estuary provide opportunities for visitors to view the operation of Port Botany.

The visual impact on views in the immediate vicinity is further discussed below.

## Visual impact from Foreshore Road, Banksmeadow



**Figure 13. Existing view, Foreshore Road**

View looking south west showing the Botany Bay beachfront vegetation and distant cranes at Port Botany.



**Figure 14. View of proposed Port Botany Expansion, Foreshore Road**

The yellow arrow indicates the location of the existing Port Botany. The red arrow indicates the location of the proposed Port Botany Expansion.

## Visual impact rating

Viewing situation	Foreshore Road looking south east
Category of view	Motorists
Context of view	Glimpses of Botany Bay from moving vehicles
Likely period of view	Short term
Relative number of viewers	High
Distance of view	< 1.5km
Visual absorption capacity	Moderate
Visual impact rating	Moderate
Comment	<p>The proposed Port Botany Expansion will have a moderate visual impact on views of motorists using Foreshore Road. The new cranes and administration buildings on the new terminal will be partially visible through existing and new planting on the western side of Foreshore Road forming part of the open space plan for the Foreshore Road/Bay-side interface (Refer to <b>Figure 14</b>). While a high number of motorists will view the Proposed Port Expansion from this vantage point, their likely period of view is low and expected to be less than 1 minute.</p> <p>The visual absorption capacity of the Foreshore Road environment is moderate when viewed by motorists travelling south. In the background the existing Port Botany cranes are visible above vegetation and Foreshore Road. The degree of visual contrast between the proposed administration buildings and cranes and Foreshore Beach would be relatively high. The proposed planting of vegetation along Foreshore Road will screen the visual contrast between new Port related structures and the existing visual environment.</p> <p>The pedestrian bridge between Sir Josephs Banks Park and the Botany Bay beachfront over Foreshore Road will be visible to motorists on Foreshore Road. The proposed low level horizontal form of the bridge would minimise the visual impact of the bridge.</p> <p>Partial glimpses of the railway corridor and vehicle bridge crossing from the existing Botany Bay beachfront to the proposed deck will be available to vehicle users through existing and proposed vegetation forming part of the open space plan for Foreshore Road/Bay-side interface. The planting of dense vegetation would mitigate this visual impact.</p>

## Impact on views from Sir Joseph Banks Park lookout, Banksmeadow



**Figure 15. Existing view, Sir Joseph Banks Park**

View looking west over Botany Bay showing the Sydney Airport runways, Foreshore Road and Botany Bay beachfront and Port Botany.



**Figure 16. View of proposed Port Botany Expansion Sir Joseph Banks Park**

The yellow arrow indicates the location of the existing Port Botany. The red arrow indicates the location of the proposed Port Botany Expansion.

### Visual impact rating

Viewing situation	Sir Joseph Banks Park lookout, Banksmeadow looking South West
Category of view	Visitors to Park
Context of view	Elevated panoramic views of Botany Bay, existing Port Botany terminals and Sydney Airport runways
Likely period of view	Moderate term
Relative number of viewers	Low
Distance of view	< 1.5km
Visual absorption capacity	Low
Visual impact rating	Moderate
Comment	<p>The Port Botany Expansion will have a moderate visual impact when viewed from Sir Joseph Banks Park lookout. The visual impact is due to the close proximity of the new terminal to the lookout and the elevated position of this view. However, relatively few people visit the lookout and their likely period of view is moderate.</p> <p>Views from this location would partially displace existing panoramic views of Botany Bay to the south west. The new terminal and related structures such as the cranes, containers, container ships and port related activity will be visible from this vantage point above the existing and proposed vegetation forming part of the open space plan for Foreshore Road/Bay-side interface. Views south to Penrhyn Estuary and the Foreshore Beach will be screened from this view by vegetation. (Refer to <b>Figure 16</b>).</p> <p>The new terminal will be viewed in the context of the existing Patrick and P&amp;O Ports terminals with similar visible structures. Visitors to the lookout will have the opportunity to view the increased activity at Port Botany resulting from the proposed Port Botany Expansion. The potential visual impact would be reduced by the vegetation proposed as part of the open space plan, which when grown to maturity would help to partially screen the new terminal and port related structures from this vantage point.</p> <p>The design of the proposed cranes would minimise their visual impact. The new cranes would be more horizontal in design than the existing cranes installed at both the Patrick Stevedores and P&amp;O Ports terminals.</p> <p>The visual impact of the proposed Port Botany Expansion could increase when container ships are moored at the new terminal.</p>

## Impact on view from Foreshore Beach, Foreshore Road



**Figure 17. Existing view from Foreshore Beach**

View looking south toward the existing Patrick Terminal and bulk liquid storage tanks (white structures in centre of view) at Port Botany.



**Figure 18. View of proposed Port Botany Expansion, Foreshore Beach**

The yellow arrow indicates the location of the existing Port Botany. The red arrow indicates the location of the proposed Port Botany Expansion.

### Visual impact rating

Viewing situation	Foreshore Beach, Foreshore Road looking south east
Category of view	Visitors to Foreshore Beach
Context of view	Low level panoramic views of Botany Bay, existing Port Botany terminals and Sydney Airport Parallel runway
Likely period of view	Long term
Relative number of viewers	Low
Distance of view	< 1.5km
Visual absorption capacity	Low
Visual impact rating	High
Comment	<p>The visual impact of the proposed Port Botany Expansion from the Botany Bay beachfront will be high when viewed from Foreshore Beach. The high visual impact from this vantage point is due to the close proximity of the new terminal to this vantage point, the moderate number of viewers and the long term likely period of view. (Refer to <b>Figure 18</b>).</p> <p>Views of Botany Bay between the existing Sydney Airport's Parallel Runway and Port Botany terminals would be partially screened by the proposed Port Botany Expansion. The visual impact of the port could increase when container ships are moored at the new terminal.</p> <p>The new terminal and associated buildings and structures and will be seen within a family of existing port related structures on the Patrick and P&amp;O Ports terminals. When viewed from this vantage point viewers will see the increased activity generated by the proposed Port Botany Expansion within the context of enhancements to the public domain. The activity at the Port and the brightly coloured cranes and containers will draw the attention of the viewer.</p> <p>The edge treatment to the new terminal would include a 4m LAT with a 4m high acoustic wall to 8.0 LAT. The acoustic wall will consist of a 2m obscured bottom section and a 2m transparent top section to shield from port related noise. The low acoustic wall would also partially screen illumination from lights from the new terminal, port vehicles and ships when viewed from this vantage point.</p>

# Impact on views from Molineux Point, Prince of Wales Drive, Botany Bay



**Figure 19. Existing view from Molineux Point**

View looking north over the existing P&O Ports Terminal. Containers, storage tanks and cranes are visible.



**Figure 20. View of proposed Port Botany Expansion, Molineux Point**

The yellow arrow indicates the location of the existing Port Botany. The red arrow indicates the location of the proposed Port Botany Expansion



### Visual impact rating

Viewing situation	Molineux Point looking north west
Category of view	Visitors to Molineux Point
Context of view	Panoramic views of Botany Bay and existing P&O Ports terminal
Likely period of view	Moderate term
Relative number of viewers	Low
Distance of view	< 1.5km
Visual absorption capacity	Moderate
Visual impact rating	Moderate
Comment	<p>The visual impact of the Port Botany Expansion from Molineux Point would be moderate. The new terminal and related structures would be viewed in the context of the facility of existing Port related structures. The new terminal deck will be partially screened by existing port structures. The new cranes will be visible. The existing port related structures draw the viewers attention to the foreground and away from the proposed Port Botany Expansion (Refer to <b>Figure 20</b>).</p> <p>While a portion of the proposed new port will be visible relatively few people visit Molineux Point and those that do stay for a Moderate period (1-120 minutes).</p> <p>The design of the cranes would minimise their visual impact. The new cranes would be more horizontal in design than the existing cranes installed at both the Patrick Stevedores and P&amp;O Ports terminals. Low lux (intensity) lighting will be designed to be mounted with the light projecting landwards of the site and ground wards to mitigate the visual impact of light spill when viewed from this vantage point at night is to be used.</p>

## Impact on views from Penrhyn Estuary



**Figure 21. Existing view, Penrhyn Estuary**

View looking west over Botany Bay showing the Sydney Airport runways and Port Botany from Foreshore Beach at the historic remains of Government Pier.



**Figure 22. View of proposed Port Botany Expansion, Penrhyn Estuary**

The yellow arrow indicates the location of the existing Port Botany. The red arrow indicates the location of the proposed Port Botany Expansion.

## Visual impact rating

Viewing situation	Penrhyn Estuary from location of historic remains of Government Pier
Category of view	Visitors to proposed boardwalk and viewing platform
Context of view	Panoramic views of Botany Bay, existing Port Botany terminals and Sydney Airport runways and historic remains of Government Pier
Likely period of view	Moderate term
Relative number of viewers	Low
Distance of view	< 1.5km
Visual absorption capacity	Low
Visual impact rating	Moderate
Comment	<p>The Port Botany Expansion will have a moderate visual impact when viewed from this vantage point. The visual impact is due to the close proximity of the new terminal to Penrhyn Estuary and the prominent location on Foreshore Beach of this vantagepoint. This point on Foreshore Beach juts out into Botany Bay in the location of the Government Pier. However, relatively few people visit this vantagepoint and their likely period of view is moderate.</p> <p>When viewed from this vantagepoint, the proposed Port Expansion would displace existing panoramic views of Botany Bay to the west and south west. The proposed boardwalk and viewing platform will give viewers at this vantagepoint the opportunity to see Port related activities. The new Port terminal and related structure such as the cranes, containers, container ships and port related activity would be visible from this vantage point. (Refer to <b>Figure 16</b>).</p> <p>The new terminal will be viewed in the context of the existing Patrick and P&amp;O Ports terminals with similar visible structures. Visitors to the lookout will have the opportunity to view the increased activity at Port Botany resulting from the proposed Port Botany Expansion. The multi-coloured containers, ships and cranes will provide visual interest for viewers from this vantagepoint.</p> <p>The design of the proposed cranes would minimise their visual impact. The new cranes would be more horizontal in design than the existing cranes installed at both the Patrick Stevedores and P&amp;O Ports terminals. The natural finish to the proposed terminal rock wall and acoustic wall would assist in blending the new terminal with the Penrhyn Estuary environment.</p> <p>The visual impact of the proposed Port Botany Expansion would increase when container ships are moored at the new terminal. However container ships moored at the new terminal will be partially obscured by new cranes and containers on the terminal deck.</p>

## 7.2 Visual impact on local views

Significant local views of the Port Botany Expansion include:

- Koorringai Ave, Yarra Bay Bicentennial Park;
- Elaroo Ave, Phillip Bay;
- Beauchamp Road, Hillsdale; and
- Beauchamp Road, Matraville.

**Figure 8** illustrates the location of local significant views.

Based on the assessment of visibility and visual absorption capacity the potential visual impact of the proposed Port Botany Expansion on views from the local area is assessed in this section of the report. Visual simulations of the proposed Port Botany Expansion have not been prepared to assess the visual impact on these local views.

Generally, glimpses of the Port Botany Expansion will be visible but generally obscured by distance and obstructed by vegetation and buildings in the streetscape. Also the topography is flat, further screening views of the Proposed Port Expansion. The proposed cranes will be the most prominent structures from these views. The potential visual impact would be partially reduced by the vegetation buffer fronting Foreshore Road and the low level and horizontal disposition of the new terminal deck and recommended limit on the height of container stacking.

The assessment of visual impacts from individual residential properties is not assessed because it is considered that the views from points in the public domain sufficiently represent views from residential areas. The assessment considers the impact along streets forming view corridors within the local area and from important public open spaces.

Based on the above, the visual impact of the proposed Port Botany Expansion on local views is low.

### Koorngai Ave, Yarra Bay Bicentennial Park



Figure 23. View from Koorngai Ave, Yarra Bay Bicentennial Park

### Visual impact rating

Viewing situation	Koorngai Ave, Yarra Bay Bicentennial Park looking north west
Category of view	Visitors to Yarra Bay Bicentennial Park
Context of view	Existing Banks Wall, P&O Ports terminal and bulk liquid storage tanks visible
Likely period of view	Moderate term
Relative number of viewers	Moderate
Distance of view	1.5km–3km
Visual absorption capacity	High
Visual impact rating	Low
Comment	The visual impact of the proposed Port Botany Expansion when viewed from Koorngai Ave, Yarra Bay Bicentennial Park would be low. The new terminal and related structures will be viewed behind the existing P&O Ports and Patrick terminals and within a family of existing port related structures including cranes, containers and bulk liquid storage tanks. The existing structures and landscape elements draw the viewer's attention to the foreground (Refer to <b>Figure 23</b> ).

## Elaroo Ave, Phillip Bay



**Figure 24. View from Elaroo Avenue**

Crane structures and containers of the Patrick Terminal visible. Proposed cranes will be seen within this collection of existing port related structures.

## Visual impact rating

Viewing situation	Elaroo Ave, Phillip Bay looking north west
Category of view	Motorists and pedestrians
Context of view	Existing port related structures terminate view corridor
Likely period of view	Short term
Relative number of viewers	Moderate
Distance of view	1.5km–3km
Visual absorption capacity	High
Visual impact rating	Low
Comment	The visual impact of the Port Botany Expansion from Elaroo Ave, Phillip Bay would be low. The new terminal and related structures will be viewed behind the existing P&O Ports and Patrick terminals and within a family of existing port related structures including cranes, containers and bulk liquid storage tanks. The existing structures draw the viewer's attention to the foreground. The proposed Port Botany Expansion will also be obscured by buildings and vegetation in the streetscape (refer to <b>Figure 24</b> ).

## Beauchamp Road, Hillsdale



**Figure 25. View from Beauchamp Road, Hillsdale**  
Proposed cranes will be seen within this collection of existing port structures.

## Visual impact rating

Viewing situation	Beauchamp Road, Hillsdale looking south west
Category of view	Motorists and pedestrians
Context of view	Existing port related structures terminate view corridor
Likely period of view	Short term
Relative number of viewers	High
Distance of view	1.5km–3km
Visual absorption capacity	High
Visual impact rating	Low
Comment	The visual impact of the proposed Port Botany Expansion from Beauchamp Road, Hillsdale would be low. The new terminal and related structures will be viewed behind the existing P&O Ports and Patrick terminals and would be obstructed by buildings and vegetation in the streetscape which draws the viewers attention to the foreground (Refer to <b>Figure 25</b> ).



## Beauchamp Road, Matraville



**Figure 26. View from Beauchamp Road, Matraville**  
Existing port related structures terminate the view corridor.

## Visual impact rating

Viewing situation	Beauchamp Road, Matraville looking south west
Category of view	Motorists and pedestrians
Context of view	Existing port related structures terminate view corridor
Likely period of view	Short term
Relative number of viewers	High
Distance of view	1.5km–3km
Visual absorption capacity	High
Visual impact rating	Low
Comment	The visual impact of the proposed Port Botany Expansion from Beauchamp Road, Matraville would be low. The new terminal and related structures will be viewed behind the existing P&O Ports and Patrick terminals and within a family of existing port related structures including cranes, containers and bulk liquid storage tanks. Views of the proposed Port Botany Expansion will be obstructed by existing buildings and vegetation in the streetscape drawing the viewers' attention to the foreground (Refer to <b>Figure 26</b> ).



### 7.3 Visual impact on regional views

Significant views identified at the regional scale include:

- Lady Robinsons Beach/Cook Park, Brighton-le-Sands.
- Silver Beach, Kurnell
- Botany Bay National Park, La Perouse
- Sydney Park, St Peters

**Figure 9** illustrates the location of these important vantage points.

When viewed from these significant regional vantage points, the proposed Port Botany Expansion will be viewed within a family of port related structures, as the new terminal is proposed as an extension of the Patrick terminal.

Distant views are available from elevated urban areas surrounding Botany Bay. However, the long distance and urban obstructions reduce these views to glimpses, which have less significance than the distant shore views from Lady Robinsons Beach/Cook Park, Brighton-le-Sands, Silver Beach, Kurnell, Botany Bay National Park, La Perouse and Sydney Park, St Peters, a significant regional public open space.

Therefore the proposed Port Botany Expansion will not radically alter regional views, as the proposed Port Botany Expansion will be located in a position that minimises and complements its form.

Based on the above, the visual impact of the proposed Port Botany Expansion, when viewed from important regional vantage points, is assessed as exhibiting low to moderate visual impact. It is noted that the existence of container ships may increase the visual presence of the port environment as a whole when viewed from Lady Robinsons Beach.

## Impact on view from Lady Robinsons Beach, Brighton-le-Sands



**Figure 27. Existing view from Lady Robinsons Beach**

View looking east over Botany Bay showing Sydney Airport runways, and existing Port Botany terminals. The horizontal expanse of Botany Bay characterises the landform. La Perouse headland breaks the horizon. The verticality of cranes extends above the horizon.



**Figure 28. View of proposed Port Botany Expansion, Lady Robinsons Beach**

The yellow arrow indicates the location of the existing Port Botany. The red arrow indicates the location of the proposed Port Botany Expansion.

### Visual impact rating

Viewing situation	Lady Robinsons Beach looking east
Category of view	Motorists and visitors to the beach
Context of view	Low level panoramic views of Botany Bay from moving vehicles
Likely period of view	Long term
Relative number of viewers	High
Distance of view	3km–6km
Visual absorption capacity	Low
Visual impact rating	Moderate
Comment	<p>The visual impact of the proposed Port Botany Expansion from Lady Robinsons Beach would be moderate. While high numbers of people use Lady Robinsons Beach and environs for long periods, the great distance of the view ensures that the proposed Port Expansion will mute with the landscape. Also, the proposed Port Botany Expansion would be considerably screened by the existing North-South and Parallel Runways from this vantage point. The new terminal deck sits below the level of the existing runway and will not be located further south than the end of Sydney Airport's Parallel Runways. Only the crane elements would be discernible. However, they will visually be part of an existing family of port related structures (Refer to <b>Figure 28</b>).</p> <p>The use of lower more horizontal cranes would minimise their visual impact. Lower cranes would sit below the line of the existing cranes and visually integrate with the horizontal form of the distant northern headland at the entrance to Botany Bay.</p> <p>At the southern end of Lady Robinsons Beach, views towards the proposed Port Botany Expansion are more distant. The long viewing distance would minimise the visual impact of the proposed Port Botany Expansion. From this view the proposed Port Botany Expansion would not be discernible within an existing family of port related structures and would tend to mute with the landscape.</p>

## Impact on view from Silver Beach, Kurnell



**Figure 29. Existing view from Silver Beach, Kurnell**  
View looking north over Botany Bay showing Port Botany. Existing port related structures including the bulk liquid storage tanks and P&O Ports Terminal are visible but blur into the landscape given the long distance of this vantage point from Port Botany.



**Figure 30. View of proposed Port Botany Expansion from Silver Beach**  
The yellow arrow indicates the location of the existing Port Botany. The red arrow indicates the location of the proposed Port Botany Expansion.

### Visual impact rating

Viewing situation	Silver Beach, Kurnell looking north
Category of view	Visitors to Silver Beach, Kurnell
Context of view	Low level panoramic views of Botany Bay
Likely period of view	Long term
Relative number of viewers	Low
Distance of view	3km-6km
Visual absorption capacity	Low
Visual impact rating	Low
Comment	<p>The visual impact of the proposed Port Botany Expansion from Silver Beach, Kurnell would be moderate. The low visual impact rating is due to the great distance and relatively low number of viewers from this vantage point. Also, the new terminal would be partially screened by the existing Banks Wall and port related structures including cranes on the P&amp;O Port's terminal and bulk liquids storage tanks on the (Refer to <b>Figure 30</b>).</p> <p>The proposed cranes will be visible from this vantage point. The height of the new cranes will be lower than the existing cranes to better relate to the horizontal form of the landscape. The stacking of containers will be limited to 6 high to minimise their visual impact. Low lux (intensity) lighting directed landwards and groundwards would further minimise the visual impact of light spill from this vantage point.</p>

## Impact on view from Botany Bay National Park, La Perouse



**Figure 31. Existing view from Botany Bay National Park, La Perouse**

The existing port facility can be seen from this important vantage point. The Banks Wall, bulk liquids storage tanks and cranes on both the P&O Ports and Patrick Stevedores Terminals are visible from this vantage point.



**Figure 32. View of proposed Port Botany Expansion, Botany Bay National Park**

The yellow arrow indicates the location of the existing Port Botany. The red arrow indicates the location of the proposed Port Botany Expansion.

### Visual impact rating

Viewing situation	Botany National Park, La Perouse looking north west
Category of view	Visitors to Botany Bay National Park, La Perouse
Context of view	Elevated panoramic views of Botany Bay and the existing port
Likely period of view	Long term
Relative number of viewers	Moderate
Distance of view	3km-6km
Visual absorption capacity	Moderate
Visual impact rating	Moderate
Comment	<p>The visual impact of the Proposed Port Expansion from Botany Bay National Park, La Perouse would be moderate. The moderate visual impact rating from this vantage point is due to the long viewing distance. Also, the new terminal would be partially screened by the existing port related structures on Patrick and P&amp;O Ports terminals. The proposed cranes would be visible within a family of existing cranes and other port related structures on the Patrick and P&amp;O Ports terminals therefore blending in with existing port related structures (Refer to <b>Figure 32</b>).</p> <p>The horizontal design of the cranes, limiting the stacking height of containers and the selection of appropriate low lux lighting that is directed landwards and groundwards will assist in mitigating the visual impact of lightspill from this vantage point.</p>



## Impact on view from Sydney Park, St Peters



**Figure 33. Existing view, Sydney Park**

View from a high point in Sydney Park. View showing existing Port Botany structures in the background visible on the horizon in the centre of the view. Source: Architectus



**Figure 34. View of Port Botany Expansion, Sydney Park**

The proposed Port Botany Expansion will be obscured by the existing commercial and industrial buildings in Botany sited at the centre and right of the image. The yellow arrow indicates the location of the existing Port Botany. The Red arrow indicates the approximate location of the propose Port Botany Expansion.



### Visual impact rating

Viewing situation	Sydney Park, St Peters looking south
Category of view	Visitors to Sydney Park, St Peters
Context of view	Elevated panoramic view of Botany Industrial and residential areas and existing Port Botany related structures
Likely period of view	Long term
Relative number of viewers	Low
Distance of view	3km-6km
Visual absorption capacity	High
Visual impact rating	Low
Comment	The visual impact of the Port Botany Expansion from this important vantage point will be low. The low visual impact rating is due to the great distance of the vantage point from the Port Botany Expansion Area and the relatively low numbers of viewers. Also, existing buildings and vegetation in Botany and Mascot largely impede views of the Port Botany Expansion area. (Refer to <b>Figure 34</b> ).



#### 7.4 Visual impact aerial views

The following significant aerial views of the proposed Port Botany Expansion have been assessed:

- View of proposed Port Botany Expansion looking south east
- View of proposed Port Botany Expansion looking west

**Figure 10** illustrates the location of this important vantage point.

The new terminal will be visible from the air on approach and departure from Sydney. **Figures 34 to Figure 38** show views of the proposed Port Botany Expansion looking south east and looking west.

The visual impact of the proposed Port Botany Expansion on aerial views is high.

### View of Port Botany Expansion looking south east



**Figure 35. Existing aerial view of Port Botany**

The approximate view of visitors arriving at Sydney Airport from the north looking south east. The existing Patrick and P&O Ports Terminals are visible.



**Figure 36. Aerial view of Port Botany Expansion**

View looking west of proposed Port Botany Expansion showing containers and ships lining the new terminal. The new terminal follows the general line of the airport runways.

### Visual impact rating

Viewing situation	Aerial view looking west
Category of view	Passengers on aeroplanes arriving at and departing from Sydney Airport
Context of view	Aerial view from moving aeroplanes
Likely period of view	Short term
Relative number of viewers	High
Distance of view	< 1.5km
Visual absorption capacity	Low
Visual impact rating	High
Comment	<p>The visual impact of the Port Botany Expansion when viewed from the air from the east would be high. The high visual impact rating from this vantage point is due to the high number of viewers and close proximity of the view. While there is a high number of viewers the likely period of their view is relatively low (&lt; 1 minute).</p> <p>From this vantage point the Port Botany Expansion will be seen as part of an existing family of industrial uses in the northern and eastern sides of Botany Bay. The proposed Port Botany Expansion will add to the visual interest of arriving in Sydney by air and will further enhance Sydney's reputation as a city of global importance.</p>

## View of Port Botany Expansion looking South



**Figure 37. Existing aerial view of Port Botany**

View looking south showing existing Patrick and P&O Ports Terminals. Foreshore Beach and Sydney Airport runways in the midground and Silver Beach, Kurnell in the background.



**Figure 38. Aerial view of proposed Port Botany Expansion**

View of proposed Port Botany Expansion showing containers and ships lining the new terminal looking south. Public domain improvements including a boat ramp and car parking facility, vehicle and rail access to the terminal would be visible. Pedestrian access between the Botany Bay beachfront and Sir Joseph Banks Park over Foreshore Road would be visible.

### Visual impact rating

Viewing situation	Aerial view looking south east
Category of view	Passengers on aeroplanes arriving at and departing Sydney Airport
Context of view	Aerial view from moving aeroplanes
Likely period of view	Short term
Relative number of viewers	High
Distance of view	<1.5km
Visual absorption capacity	Low
Visual impact rating	High
Comment	<p>The visual impact of the proposed Port Botany Expansion when viewed from the air from the south east would be high. The high visual impact rating from this vantage point is due to the high number of viewers, close proximity of the view and the low ability of the landscape to visually absorb the proposed development. While there is a high number of viewers the likely period of their view is relatively low (&lt; 1 minute).</p> <p>From this vantage point the Port Botany Expansion will be seen as part of an existing family of industrial uses in the northern and eastern sides of Botany Bay. Natural planting along the foreshore open space and the preservation of Penrhyn Reserve will assist in integrating the Proposed Port Expansion into the existing visual environment when viewed from the air.</p>





## 7.5 Visual impact on views from the water

Views assessed are as follows:

- View from the immediate vicinity looking north east (< 1.5km);
- View from the immediate vicinity looking south west (<1.5km);
- Local view (1.5km-3km); and
- Regional view (3km-6km)

Based on the assessment of visibility and visual absorption capacity together with the visual simulations the potential visual impact of the proposed Port Botany Expansion on views from the immediate vicinity assessed as follows.

The port expansion will be visible from various locations from the waters of Botany Bay. The distance of the view is a major determinant of the visual impact of the proposed Port Botany Expansion when viewed from the water. The greater the distance the viewer is from the proposed Port Botany Expansion the lesser the visual impact. At a greater distance away from the proposed Port Botany Expansion the new terminal tends to blur with the landscape and existing port terminals.

Botany Bay has a relatively low visual absorption capacity. Any change to the landscape would need to consider the horizontal form of the landscape.

In all views from the waters of Botany Bay the level of visual impact would increase when ships are moored at the wharf. The scale of this increase will depend on the size of individual ships, their colour and the period that they are moored.

The visual impact of the proposed Port Botany Expansion on views from the waters of Botany Bay is low and moderate. The greater the distance the viewer is from the proposed Port Botany Expansion the lesser the visual impact.

**View from Botany Bay in the immediate vicinity looking north east (< 1.5km)**



**Figure 39. View from the immediate vicinity from Botany Bay (< 1.5km)**  
Existing port related structures at Patrick Terminal and Foreshore Beach and revegetation area are visible. Source: Architectus



**Figure 40. View of the proposed Port Botany Expansion**

### Visual impact rating

Viewing situation	Botany Bay from west of Sydney Airport's Parallel Runway looking East
Category of view	Passengers on vessels
Context of view	Low level panoramic views of Botany Bay, existing Patrick and P&O Ports terminals and Foreshore Beach from stationary and moving vessels
Likely period of view	Moderate
Relative number of viewers	Low
Distance of view	<1.5km
Visual absorption capacity	Low
Visual impact rating	Moderate
Comment	<p>The proposed Port Botany Expansion will have a moderate level of visual impact from this vantage point. The moderate rating is due to the close proximity of the Proposed Port Expansion to this vantage point and the low capacity of the existing landscape to visually absorb development. While the proposed Port Botany Expansion will be highly visible from this vantage point, the relative number of viewers from Botany Bay is low.</p> <p>To minimise the visual impact of the Proposed Port Expansion the stacking of containers will be limited in height to 6 (maximum height 18m), their colour varied to match containers on the existing terminals. Lighting would be low lux and directed downwards and ground wards would further minimise the visual impact from the waters of Botany Bay at night. Other mitigation measures are described in <b>Section 8</b> of this report.</p>

**View from Botany Bay in the immediate vicinity looking south west (< 1.5km)**



**Figure 41. View from the immediate vicinity from Botany Bay (< 1.5km)**  
Existing port related structures at Patrick Terminal and Foreshore Beach and revegetation area are visible. Source: Architectus



**Figure 42. View of the proposed Port Botany Expansion**

### Visual impact rating

Viewing situation	Botany Bay between proposed Port Botany Expansion and Sydney Airport's Parallel Runway looking East.
Category of view	Passengers on vessels
Context of view	Low level panoramic views of Botany Bay, existing Patrick and P&O Ports terminals and Foreshore Beach from stationary and moving vessels.
Likely period of view	Moderate
Relative number of viewers	Low
Distance of view	<1.5km
Visual absorption capacity	Low
Visual impact rating	Moderate
Comment	<p>The proposed Port Botany Expansion will have a moderate level of visual impact from this vantagepoint. The moderate rating is due to the close proximity of the Proposed Port Expansion to this vantage point and the low capacity of the existing landscape to visually absorb development. While the proposed Port Botany Expansion will be highly visible from this vantage point, the relative number of viewers from Botany Bay is low. Also, the proposed new terminal and related structures would be seen within the context of existing Port related structures to the south.</p> <p>To minimise the visual impact of the Proposed Port Expansion the stacking of containers will be limited in height to 6 (maximum height 18m), their colour varied to match containers on the existing terminals. Lighting would be low lux and directed downwards and ground wards would further minimise the visual impact from the waters of Botany Bay at night. Other mitigation measures are described in <b>Section 8</b> of this report.</p>

### Local view from Botany Bay (1.5km-3km)



**Figure 43. Local view from Botany Bay (1.5km-3km)**



**Figure 44. Local view of proposed Port Expansion from Botany Bay**

The proposed Port Botany Expansion will have a moderate level visual impact from this vantage point. Foreshore Beach would be partially screened by the new terminal from this vantage point. The proposed Port Botany Expansion will be viewed within a family of port related uses. Existing port related structures at Patrick Terminal are visible. The yellow arrow indicates the location of the existing Port Botany. The red arrow indicates the location of the proposed Port Botany Expansion.

### Visual impact rating

Viewing situation	Botany Bay from west of Sydney Airport's Parallel Runway looking east
Category of view	Passengers on vessels
Context of view	Low level panoramic views of Botany Bay, existing Patrick and P&O Ports terminals and Foreshore Beach from stationary and moving vessels
Likely period of view	Long term
Relative number of viewers	Low
Distance of view	1.5km-3km
Visual absorption capacity	Moderate
Visual impact rating	Moderate
Comment	<p>The proposed Port Botany Expansion will have a moderate level of visual impact from this vantage point. While the proposed Port Botany Expansion will be visible from this vantage point the relative number of viewers is low.</p> <p>The landform of Botany Bay is generally flat with some variation in the existing cranes at Port Botany. At a greater distance away from the proposed Port Botany Expansion (1.5km-3km) the new terminal would blur with the landscape and existing port related structures. The wall of Sydney Airport's Parallel Runway, visible at the right of the image would partially impede views of the proposed Port Botany Expansion. (Refer to <b>Figure 43</b>)</p> <p>The horizontal design of the cranes, limiting the stacking height of containers and the selection of appropriate low lux lighting that is directed landwards and groundwards would further mitigate the visual impact of light spill from this vantage point. Colours and materials for the terminal deck, administration buildings, and cranes would be selected to minimise contrast and reflectivity.</p>

### Regional view from Botany Bay (3km-6km)



**Figure 45. Regional view from Botany Bay (3km-6km)**



**Figure 46. View of proposed Port Expansion from Botany Bay**

The yellow arrow indicates the location of the existing Port Botany. The red arrow indicates the location of the proposed Port Botany Expansion.



### Visual impact rating

Viewing situation	Botany Bay from west of Sydney Airport's Parallel Runway looking east
Category of view	Passengers on vessels
<b>Context of view</b>	Low level panoramic views of Botany Bay, existing Patrick and P&O Ports Terminals and Foreshore Beach from stationary and moving vessels
Likely period of view	Long term
Relative number of viewers	Low
Distance of view	3km-6km
Visual absorption capacity	Low
Visual impact rating	Low
Comment	<p>The proposed Port Botany Expansion will have a moderate level of visual impact from this vantage point. The low visual impact rating is due to the low visible absorption capacity of the Botany Bay environment, the long distance of the view and the relatively low number of viewers.</p> <p>The Proposed Port Expansion would be seen within a family of existing industrial and port related uses. (Refer to <b>Figure 45</b>). The horizontal design of the cranes, limiting the stacking height of containers and the selection of appropriate low lux lighting that is directed landwards and groundwards will help to mitigate the visual impact of light spill from this vantage point. Colours and materials and colours for the terminal deck, administration buildings, and cranes would be selected to minimise contrast and reflectivity.</p>

## 7.6 Visual impact during construction

Visual impacts would be created by the following elements during construction:

- Construction work areas;
- Construction equipment
- Dredging equipment; and
- Reclaimed surface.

Construction activity would be visible from the immediate vicinity of the project site, from the air and from the water, all of which would afford direct views. Potential impacts would be moderated by the reduction in visual contrast offered by the existing port facilities.

Turbidity is not anticipated to create a visual impact outside of the immediate dredging and reclamation area due to turbidity controls measures as described in the EIS. Likewise, dust emissions would be controlled and would not be expected to create visual impacts as described in the EIS.

Nighttime construction equipment would not stand out in the context of port shipping traffic. Night lighting would be limited to dredging and reclamation offshore and to security lighting of construction work areas onshore. Light spill toward residential and industrial areas to the north and northeast would be partially screened by the existing vegetation and elevated dunes to the north of Foreshore Road. Construction lighting when viewed from the distant foreshores of Botany Bay would not be expected to significantly add to the lighting from the existing terminals and ships.

From a regional scale, fill and other construction materials and equipment will be seen within the context of existing port and airport related structures. The visual impact from regional views would be nil and low during construction. When viewed from the immediate vicinity the proposed Port Botany Expansion would be visible during construction. The open space plan for the Foreshore Road/Bay-side interface and Penrhyn Estuary precincts will partially screen the stockpiles of fill and construction equipment when viewed from Foreshore Road. Construction activities will be visible from Sir Joseph Banks Park and Foreshore Beach.

When viewed from the water construction activities will be visible. The further the viewer is from the port environment, the less the visual impact will be and the more the construction materials and equipment will blur with buildings and structures in the Port Botany environment.

Phasing the construction process will allow sections of the beach and waters edge to be retained and made accessible maintaining public viewing and recreation opportunities.

## 8 Mitigation measures

The degree of contrast between the elements of the proposed Port Botany Expansion and the existing natural landscape can be reduced by careful consideration of the issues of colour, shape, scale, texture and reflectivity. These issues have been addressed in the design of the proposed Port Botany Expansion. The following measures are recommended in consultation with the consultant team to minimise the visual impact of the proposed Port Botany Expansion.

### Public Recreation & Ecological Plan

The potential visual impact of the proposed Port Botany Expansion when viewed from Foreshore Road would be mitigated provided vegetation is planted as a buffer on the Foreshore Road/Bay-side Interface. The proposed open space plan should revegetate the foreshore of Botany Bay to screen potential views from Foreshore Road. Vegetation would be of adequate density, cover and height to screen views.

Planting should reinforce the visual and environmental qualities of the proposed recreation areas and reinforce the visual character of the Foreshore Road that is vegetated on the eastern and western sides of the road. The landscape design of the Foreshore Road/Bay-side interface will incorporate a mix of native species planted informally in a similar character to existing vegetation. The benefit afforded from the informal planting of native and exotic species will be to reinforce the character of the existing landscape and to screen the proposed Port Expansion from view. Maintaining the vegetation buffer on Foreshore Road would reduce the visual impact of the proposed Port Botany Expansion from views in the immediate vicinity.

The open space plan would be completed as part of the first stage of the proposed Port Botany Expansion to encourage new vegetation to grow to maturity to assist in screening the visual impact of the proposed Port Botany Expansion during construction and operational phases.

### Lighting

Use of low profile, low lux (intensity) lighting designed to be mounted with the light projecting landwards of the site and ground wards would reduce the visual impact of light spill when viewed from Botany Bay and from the distant western shoreline at night. Light spill into Penrhyn Estuary and Foreshore Beach would be minimised by designing high mast lighting to focus illumination on the terminal, preventing light spill over these areas.

Lighting designed to illuminate the new terminal will not spill into residential areas in closest proximity to the new terminal. Elevated dune areas vegetated with trees and shrubs, within Sir Joseph Banks Park screen the proposed site from the open space and residential areas from the north. Also, coastal heath and shrubs behind Foreshore Beach partially obscure views to the proposed site from Foreshore Road.

### **Cranes**

The design of the cranes would minimise their visual impact. Quay cranes for the new terminal would be approximately 51m LAT. The new cranes would be more horizontal in design than the existing cranes installed at both the Patrick Stevedores and P&O Ports terminals, which are about 64m high when working and 86m when stowed (as the arm of the crane is raised into the air). The design of the new cranes would mitigate their visual impact. It is desirable to reduce the verticality of the proposed cranes, so that the cranes do not significantly break the horizon line when viewed from distant foreshores across Botany Bay from the west and other important vantage point enunciated in this report.

### **Containers**

Containers would not be stacked greater than 6 high (18m). This suggested mitigation measure would limit the verticality of the proposed Port Botany Expansion and help the proposed Port Botany Expansion respond to the generally horizontal form of the natural landscape of Botany Bay and the La Perouse headland and the horizontal form of the airport runways and existing Port Botany terminal decks.

### **Pedestrian bridge design**

The proposed pedestrian walkway crossing Foreshore Road from Sir Joseph Banks Park to the eastern shore of Botany Bay would be low in height and of horizontal form to minimise its visual impact. Colours and materials should be selected to minimise contrast with the vegetated character of both the eastern and western sides of Foreshore Road.

Colours selected for the pedestrian bridge over Foreshore Road should be chosen having regard for naturally occurring colours in the area. Colours should be used which are neutral or natural or mid tones to blend with naturally occurring colours of vegetation and landscape. Primary, vibrant, strong and bright colours are to be avoided. Large areas of white are to be avoided, due to its higher reflection value.

Materials selected for the pedestrian bridge over Foreshore Road should be predominantly 'light weight' steel and timber. The predominant use of 'heavy' materials such as masonry is to be avoided to minimise contrast with the natural landscape.

### **Colour and materials**

Select materials and colours for the terminal deck, administration buildings, and cranes would be selected to minimise contrast and reflectivity. Where reflective materials are necessary such as for metal roofing and cladding for the proposed terminal administration buildings they would be treated with a mat finish to minimise their reflectivity.

Colours and materials of port related structures generally should be selected to blend with the bright colours of the existing port related structures on the Patrick Stevedores and P&O Ports terminals. Large areas of white are to be avoided. White used to colour the bulk liquids storage tanks stand out against the existing structures in the Port environment and the natural landscape.

### Acoustic wall

The proposed acoustic wall is designed to blend with the rock wall surrounding the proposed new terminal and natural character of Penrhyn Estuary. The low level (4m) and horizontal form of the acoustic wall would respond to the horizontal form of the new terminal deck. The top 2m of the acoustic wall would be opaque to partially screen lightspill into Penrhyn Estuary but reduce the visual prominence of the wall.

### Viewing opportunities

The prominence of Port Botany on the eastern side of Botany Bay means that the new terminal may have a high public profile. Viewing opportunities have been designed to provide visitors to the area with ability to view the increased port related activities and to gain an appreciation of Port Botany. Proposed viewing locations are:

- The proposed foreshore open space area (near mouth of the Mill Stream) would include an elevated viewing platform on a landscaped mound (up to 10m LAT);
- Public access/promenade along the rock face wall at the new boat ramp would link to a public viewing area at the end nearest the new terminal;
- A timber viewing platform would be constructed west of the Government Pier remains. The viewing platform would allow observation of wildlife within Penrhyn Estuary; and
- The pedestrian overpass (over Foreshore Road) would provide viewing opportunities over Botany Bay.

Public interpretation and education strategies would assist in educating visitors of Port Botany and the environmental initiatives proposed by the EIS. Proposed interpretation facilities may include:

- An integrated signage system would be developed to assist visitors in orientation and planning their itinerary, identification of landmarks, environmental issues and initiatives and guiding appropriate low-impact behaviour;
- Opportunities would be provided to engage the public in community art/cultural elements; and
- The historic remains of Government Pier would be retained with opportunities to provide interpretive signage.

## 9 Conclusion

The visual impact of the proposed Port Botany Expansion will vary depending on the visual absorption capacity of the landscape, viewing distance, relative number of viewers and period of view. From regional views, the proposed Port Botany Expansion will generally have at most a low visual impact due to the long viewing distance. The Proposed Port Botany Expansion will be seen within a family of port and Airport related buildings and structures and will blend into the horizon. From the local area views of the proposed Port Botany Expansion will be impeded by existing vegetation and structures. The landform will to some extent mitigate the visual impact of development. From the immediate vicinity the Proposed Port Botany Expansion the new terminal will partially impede views of Botany Bay.

When viewed from the air, the proposed Port Expansion will be highly visible and unimpeded. The Proposed Port Botany Expansion will be viewed within the context of the existing Port and other Industrial uses, residential areas and foreshore public open space. Viewers will see an increase in visually interesting Port related activities including the movement of container ships, cranes and containers.

When viewed from Botany Bay, the Port Expansion will be visible. The further the distance away from the proposed Port Expansion Area the less the visual impact and the more the new terminal and related structures blend within the family of existing Port related structures.

Attention has been given to the design of the various elements of the proposed Port Botany Expansion including the proposed cranes, lighting, pedestrian walkways, the containers and public recreation and ecological improvements within the Port Botany environment. The careful consideration of the elements of the new terminal and public recreation and ecological plan will ensure the best possible outcome to minimise visual impact from views in the immediate vicinity of the port and local views.

The proposed Port Botany Expansion is in character with the existing visual context provided by the Port Botany environment. The new terminal will have localised impact but this will be lessened by mitigation measures to improve assimilation into its immediate and wider surroundings.

# **Proposed Port Botany Expansion**

Social Impact Assessment  
Final Report

# Proposed Port Botany Expansion

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## Social Impact Assessment

## Final Report

### QUALITY CONTROL

Version Number	8
Prepared by	ET/AM
Reviewed by	PM
Approved by Production Manager	LF
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# 1 Introduction

## 1.1 BACKGROUND

Sydney Ports Corporation (Sydney Ports) is the port authority managing the ports of Sydney Harbour and Botany Bay. Sydney Ports' key business responsibilities are port management and development, trade facilitation, navigational and operational safety needs, and protection of the environment (Sydney Ports, 2002).

Sydney Ports' proposed expansion of Port Botany includes additional infrastructure to meet the anticipated container trade growth in Sydney over the next 25 to 30 years, in line with consumer demand and a growing population (Sydney Ports, 2002).

In November 2001, Sydney Ports began preparing an Environmental Impact Statement (EIS) for the proposed port expansion. In February 2002, Manidis Roberts was engaged by Sydney Ports to assess the social impact of the proposed expansion of port facilities at Port Botany, to provide input into the EIS. This report documents the social impact assessment.

### 1.1.1 What is social impact assessment?

Environmental impact statements prepared for large developments tend to focus on the physical and biological aspects of the environment and a development's potential impact on it (Cox, 1994). Social impact assessments focus on the human dimension of environments. They address the question: What are the impacts of a project or development on people in an affected community? (Cox, 1994), and form part of an environmental impact assessment.

Social impact assessment focuses on the positive and negative impacts arising from a development as well as the measures to mitigate any negative impacts and opportunities for enhancing the social and physical environment. Positive and negative impacts often need to be weighed up. Local interests often need to be balanced with regional or national interests or the wider 'public good' (Cox, 1994).

## 1.2 OBJECTIVES OF SOCIAL IMPACT ASSESSMENT

The objectives of this social impact assessment are to:

- Assess the social impact of the proposed port expansion on affected communities.
- Comment on the significance of the social impact.
- Describe measures to mitigate any potential adverse impacts.

These objectives were determined following a review of *Assessing Social Impacts* (A draft chapter of the *EIS Manual*, Department of Urban Affairs and Planning, 1997).

### 1.3 SCOPE AND METHODOLOGY

A social impact assessment is required for the EIS under the following:

- The Environmental Planning and Assessment Act 1979.
- Clause 73(1) of the Environmental Planning and Assessment Regulation 2000.
- The Director-General's requirements for the EIS.

The social impact of the proposed port expansion has been assessed by examining the social characteristics of the areas surrounding the port, both in a qualitative and quantitative sense.

One component of the social impact assessment is the social profiles of the local government areas adjacent to the port development. These social profiles are based on data from the Australian Bureau of Statistics 2001 Census. This data provides a description of the social characteristics of the local government areas (LGAs) adjacent to Port Botany compared with the social characteristics of the overall Sydney region.

Data for the social infrastructure component was based on inquiries, internet and desktop research.

The character, values, and structure of the communities likely to be affected by the proposal are based on consultations with the community, which included focus group sessions, planning workshops, direct consultations and submissions. These consultations also provided an overview of the potential impacts and mitigation measures to ameliorate impacts.

Examination of the proposal and potential impacts indicated that many of the social impacts would be felt by communities in close proximity to Port Botany. The majority of this report therefore discusses the potential impacts of the proposed expansion on the local community. Consideration was given to the social impact of the proposal at the metropolitan and State level, and these impacts are discussed where relevant.

### 1.4 STRUCTURE OF THE REPORT

Chapter 1 outlines the objectives, scope and methodology used to undertake this social impact assessment.

Chapter 2 presents a description of the proposal.

Chapter 3 describes the existing social environment potentially affected by the port expansion.

Chapter 4 outlines the community involvement techniques used in this social impact assessment and issues raised.

Chapter 5 provides a detailed assessment of the potential social impacts generated by the proposal.

Chapter 6 recommends a number of measures to mitigate the impacts identified in Chapter 5. Chapter 7 summarises the conclusions drawn throughout the report.

## 1.5 THE STUDY AREA

Port Botany is located on the north-eastern edge of Botany Bay and is the centre of Sydney's containerised trade. The southern side of the port is located within Randwick City Council and the northern side, where the expansion is proposed, falls within the City of Botany Bay.

Sydney Ports has a number of tenants in the port. These tenants are:

- Australian Customs Service
- Caltex Refining Co Pty Ltd
- Elgas Limited.
- Orica Australia Pty Ltd.
- Origin Energy LPG Ltd.
- P&O Ports.
- P&O Trans Australia.
- Patrick Port Services (formerly Port Botany Container Park Group).
- Patrick The Australian Stevedore.
- Smith Bros.
- Stannard Brothers Launch Services Pty Ltd (Adsteam).
- Terminals Pty Ltd.
- Vopak Terminals Australia Pty Ltd.

Surrounding land uses are a mix of open space, industrial, residential and transport-related land uses. Open space areas nearby include Penrhyn Estuary, Botany Wetlands and Sir Joseph Banks Park. Mobil Oil Terminal, Caltex Oil Terminal, Orica and numerous other industrial facilities are located in the vicinity of the site. Sydney Airport is within close proximity to the port. Nearby residential precincts include Botany, East Botany, Banksmeadow, Hillsdale, Matraville, Maroubra and Phillip Bay.

## 2 The proposal

The proposed new container handling terminal would extend approximately 550m west and 1,300 metres north of the existing Patrick Stevedores' Container Terminal.

The proposal includes reclamation of approximately 60 hectares of land to create a new terminal area. The new terminal area would provide for five additional container ship berths. It is anticipated that the new terminal would incorporate standard port container handling infrastructure such as quay cranes, straddle carriers, administration, workshop and gatehouse building, rail sidings, truck handling facilities, container stacking areas and general site services. Development of terminal facilities, including container handling equipment, would be the responsibility of the operator of the new terminal, following completion of the construction works by Sydney Ports.

A ship-maneuvring basin would be created adjacent to the new wharf to facilitate the movement of vessels to and from the new berths. Material would be dredged from this area to meet the depth and length requirements for the safe movement of vessels and suitable dredged material would be placed behind the new wharf as fill (URS, 2002).

Dedicated road access would be provided from Foreshore Road to the new terminal via a road bridge across the channel leading into Penrhyn Estuary. A rail bridge would also be constructed to provide dedicated rail freight access to the new terminal.

The proposal would also involve the reshaping of Foreshore Beach, enhancement of saltmarsh and seagrass habitat in Penrhyn Estuary and the relocation of the existing boat ramp facility.

## 3 Existing social environment

### 3.1 PHYSICAL AND ECONOMIC CONDITIONS

#### 3.1.1 Physical characteristics

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Port Botany is located within Botany Bay, Sydney's 'second harbour'. Botany Bay is located 12km south of Sydney's Central Business District. Its catchment extends to a third of the area of metropolitan Sydney (Colman et al 2002).

The Bay is an oval shaped enclosed embayment with a waterway area of 80 square kilometres and a catchment area of 1,100 square kilometres. Its open entrance and deep shipping channels allow for all weather access. Generally, the Bay is relatively shallow with a typical water depth of about five metres. Its northern shoreline has historically been subject to significant transformation including recent developments associated with the airport and Port Botany (Colman et al 2002).

The Bay receives water from the Georges and Cooks Rivers and their various tributaries as well as the underlying Botany aquifer.

The Bay accommodates habitats for seagrass, mangroves, salt marsh species and a variety of birds and marine fauna. Towra Point, on the southern shore of the Bay, is a declared RAMSAR wetland area.

#### 3.1.2 Economic activities

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The Bay is the hub of much of the state's maritime and transport activity. It accommodates the biggest crude oil importing port and the largest container port in NSW as well as the nation's largest airport, Sydney Airport. The Georges River supports water-based recreation for residents of the Bay and riverside suburbs (Colman et al 2002).

The bayside suburbs of Mascot, Botany and Kurnell accommodate large industrial enterprises including stevedoring services, paper manufacturing, plastics, petrochemicals and food processing. Many smaller companies and support businesses are also located in these and neighbouring areas (Colman et al 2002).

### 3.2 POTENTIALLY AFFECTED COMMUNITIES

The proposed expansion of Port Botany has the potential to have social impacts from the local to the metropolitan level. Four 'levels' of potentially affected communities have been identified. The first of these is the community of people that use Foreshore Beach and Botany Bay for recreation activities, such as walking, fishing and boating. These people may live locally or come from other areas within the Sydney metropolitan region. The second community, who live and/or work in immediate proximity to the proposed

expansion, is the local Port Botany community. This area is contained within the third community, the City of Botany Bay and Randwick City local government areas (LGAs), the two councils within which the Port is located. The fourth identified community is the Sydney metropolitan and State-wide community. Each of these communities would be affected in different ways by the proposed expansion.

### 3.2.1 Recreational area users

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Foreshore Beach users and the Botany Bay fishing and boating community are the main users of facilities surrounding the port likely to be impacted by the proposal.

Foreshore Beach users include individuals, families, dog walkers, runners, swimmers, windsurfers, paddle and surf skiers from within and beyond the Botany and Randwick City LGAs, including the LGAs of Marrickville, Rockdale, Bankstown and Campbelltown.

A focus group held with users of Foreshore Beach found that Foreshore Beach's lack of surf appeals to and attracts people from Maori, Tongan and Asian ethnic background. The lack of built concrete structures at Foreshore Beach and its relative length are other key features, which attract users. Unlike the majority of Sydney's beaches, Foreshore Beach is a dog friendly beach. This feature appeals to the many dog walkers using the beach, as dogs are banned or have restricted access on most Sydney beaches.

Submissions from the community have indicated that windsurfers use the section of the Bay between the existing Port and the Parallel Runway, and use Foreshore Beach as a launching spot.

The fishing and boating community are active users of the boat ramp adjacent to the port. This community includes many formally organised groups as well as lone fishermen. Groups include the South Sydney Amateur Fishing Association, ANSA Recreational Fishing Alliance NSW, Botany Bay Yacht Club, Botany Bay Fin Fishermen, St George and Sutherland Shire Anglers Club, Sutherland Shire Fishing Club, Botany RSL Fishing Club, Brighton-Le Sands Amateur Fishermen's Association, Caringbah Anglers Club and Kurnell Catamaran Club.

### 3.2.2 Local Port Botany community

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The local Port Botany community is the community of people residing and/or working in the area adjacent to the proposed port extension. This area is bound by Foreshore Road, Southern Cross Drive, Botany Freight Line, Stephen Road, McPherson Street, Beauchamp Road and Botany Road. This is the community most likely to be directly affected by the proposal.

The local Port Botany area is a mixed use area including residential and industrial land. Recreational land uses in this area include Sir Joseph Banks Park, Boralee Park, Foreshore Beach and Botany Public Golf Course. Industrial developments in the local Port Botany area include Port-air Industrial Estate, Discovery Cove Business Park, Sir Joseph Banks Corporate Park and Lakes Business Park. Other industrial facilities adjoining the



area include the Kellogs facility, Mobil Oil Terminals, BP Oil Terminal, Caltex Oil Terminal, Australian Paper facility and the Orica plant.

There are a number of community groups in the local Port Botany area who have an active interest in the proposal. These groups include Botany Environment Watch, BEREPA, Botany Bay Planning and Protection Council, Botany Business Enterprise Centre, Port Botany Community Consultative Group and Save Botany Beach.

### 3.2.3 Communities of Randwick City and the City of Botany Bay LGAs

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The existing port facility is located within the LGAs of Randwick City and City of Botany Bay. These communities comprise residents, businesses and groups located in the suburbs of Banksmeadow, Botany, Daceyville, Eastgardens, Eastlakes, Hillsdale, Mascot, Daceyville, Rosebery, Clovelly, Randwick, Kensington, Kingsford, Coogee, Maroubra, Matraville, Chifley, Malabar, Little Bay, Phillip Bay and La Perouse.

A demographic profile of these communities is provided in Section 3.4.

Relevant community groups active in these areas include Botany Environment Watch, BEREPA, Botany Bay Planning and Protection Council, Botany Bay Catchment Alliance, Botany Business Enterprise Centre, Botany Historic Trust, Randwick and District Historical Society, Port Botany Community Consultative Group, Save Botany Beach, South Ward Action Group, Prince Henry Hospital Group, La Perouse Precinct Committee, Friends of La Perouse Museum, La Perouse Land Council, AMCOR Community Consultative Group, Randwick Botany Harriers, Mascot Main Street and the Senior Citizens Advisory Committee.

### 3.2.4 Sydney metropolitan and State-wide community

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The proposed expansion has the potential to affect the community in the Sydney metropolitan area. Port facilities are an integral part of the regional economy, so that any change to these facilities would have economic consequences for the region and the State.

### 3.3 HISTORICAL CONTEXT

Botany Bay has played an important part in the non-indigenous history of both Sydney and Australia. Prior to colonisation, the areas around the Bay were occupied by indigenous people, and the area has continued to be an important place for Aboriginal people to the present day. An historical description of Botany Bay and Port Botany is provided below.

#### 3.3.1 History of Botany Bay

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##### ***Indigenous history***

There is extensive evidence of pre-contact Aboriginal occupation of the Botany Bay area, known as Kamay (Kai'mia), with a number of significant sites identified at Kurnell. Captain Cook regularly encountered Aboriginal people during his eight-day stay in Botany Bay in 1770 (Hinkson, 2001, p.101). Following the establishment of the penal colony at Port Jackson, smallpox and other diseases decimated the Botany Aboriginal population.

The Gweagal clan of the Dharawal nation are the traditional owners of the area on the southern shore of the Bay (Botany Bay Program, 2001, p.90). Inscription Point at Kurnell was a regular camping and fishing spot for the Gweagal before European settlement. Middens containing evidence of human burials and hunting and fishing equipment have been discovered there (Hinkson, 2001, p.103).

The La Perouse Aboriginal community also lies within the Dharawal area. Throughout the nineteenth century, indigenous people used the site as a base for fishing, and by the 1870s, it had become a permanent settlement for about five Aboriginal families. In the 1880s, La Perouse was used by the government for the relocation of Aboriginal people from the metropolitan area. A Methodist mission operated from the 1890s until 1931. Around the turn of the century, La Perouse was a popular weekend tourist destination, and Aboriginal people participated in the tourist trade by making boomerangs and shellwork, and gathering wild flowers and honey for sale to the tourists (Nugent, 2000, p.622).

In 1984, the La Perouse Aboriginal community had a historic victory when it became the first Aboriginal community in Sydney to win freehold title to part of its own land under the NSW Aboriginal Land Rights Act. Recently, La Perouse has been central in reconciliation events, with the Survival Day concerts held there on 26th January for a number of years.

##### ***European settlement***

On 29 April 1770, Captain (Lieutenant) James Cook anchored in Botany Bay and went ashore at Kurnell. Cook's party remained in the Bay for eight days. Cook named the Bay Stingray Harbour, but this was later changed to Botany Bay because of the many exotic plants botanist Sir Joseph Banks collected there (City of Botany Bay Council, 2001). Cook's enthusiastic descriptions of the fertile land that he saw convinced the British Government that New South Wales would be the ideal place to set up a penal colony. However, when Captain Phillip and the First Fleet arrived on 18 January 1788, Port

Jackson (Sydney Harbour) was thought to be a more suitable location for colonisation because of Botany Bay's shallow water and exposure to easterly winds. On 24 January 1788, two French ships led by explorer La Perouse arrived in the Bay where they remained for six weeks before making their fatal voyage to the South Pacific. Phillip's fleet left Botany Bay for Port Jackson on 25th January, and went ashore there on 26th January.

### ***Residential and recreational development***

Simeon Lord was the first person to be officially granted land in the Botany area, when he received 135 acres in 1812, adjacent to the Cooks River. However, many settlers had already begun industrial ventures in the area, Lord included. His grant included the pond where his mill was situated. His house built nearby was reputed to be the first in Botany. Other settlers were granted land in the 1820s and 30s. A large area of land in Botany was originally set aside as the Church and School Estate to be sold off later to provide revenue to pay clergy and teachers. This land, now bounded by Stephen Road and Denison Street, began to be subdivided in the 1830s for members of the NSW Veteran Corps. The area became known as the Veterans' Swamp, although most of the allotments were never occupied. Further subdivision of this area occurred in the 1850s, when many market gardeners purchased allotments (Larcombe 1970, p.9-11).

In 1844, businessman Thomas Kellett opened the Sir Joseph Banks Hotel near the foreshore in the vicinity of Anniversary Street. The stunning natural location, along with the zoo and gardens later built around the hotel, made it one of the most popular day trip and holiday resorts for Sydneysiders. By Boxing Day 1851, the hotel was so popular that of a Sydney population of 60,000 people, 5000 attended the hotel's annual fete. During the 1850s and 60s, sports grounds were added and more gardens were created. At this time, the Hotel was considered one of the leading sporting arenas of the colony. The first game of representative rugby played in Australia took place there on 21 March 1908. In 1920, a new hotel was built on the corner of Waratah and Botany Roads and the name Sir Joseph Banks Hotel and the licence were transferred to this new hotel, which is still in operation. The old hotel is still standing today on Anniversary Street and is used as private accommodation. The present-day Sir Joseph Banks Park along the foreshore is located on the site of the original gardens (Larcombe 1970, p.21-23; Hall, 1988, p.33-35).

In the 1850s, Sydney's local water sources such as the Tank Stream had become clogged and polluted. From 1859 to 1886, pumps supplied water from the Botany Swamps to a reservoir in Crown Street, for use in the city. However, the Botany area was not supplied with water mains until the 1890s, before which local residents had to rely on natural sources and tanks for domestic water (Larcombe, 1970, p.2001).

By 1864, Botany had its own post office, churches, schools, police constable and Temperance Hall. At this time, the suggestion for Botany to be incorporated as a municipality was first heard. Residents were anxious about the taxation powers of potential local government, but state government legislation and the need for coordinated provision of local services added to the push.

The Botany Progress Association was formed in 1885 by local businessmen and residents. It worked towards various improvements in the area such as gas supplies, improved

sanitation and roads. When the first Botany Council was elected in June 1888, the Association disbanded, considering its work to be over (Larcombe, 1970, p.37-44).

In 1912, work began on the 'garden suburb' of Daceyville. The suburb was based on the model developed by Englishman Ebenezer Howard, and provision was made for shops, churches and schools, with the idea being that suburb should be self-contained. The development gave working class families affordable accommodation away from the slums of the inner city, as the suburb remained in public hands (City of Botany Bay Council, 2001). Development of a second garden suburb, originally called Daceyville No.2 (now Pagewood) commenced in 1919. The rate of residential development continued to rise during the 1920s, but declined during the depression years. Industrial and residential development continued side by side throughout the last century.

### ***Industrial development***

Soldiers, ex-convicts and free immigrants settled in the Botany area soon after the establishment of the penal colony at Port Jackson. The first industry was the manufacture of shell lime, which was produced from the piles of shells that had accumulated along the shore where Aboriginal people collected shellfish. Many of the other initial industrial ventures in the area were also set up because of the abundant water supply. The isolation of Botany from the settlement at Port Jackson made it a favoured location for noxious industries like tanning and wool-scouring.

In 1815, ex-convict Simeon Lord dammed a stream running into the Bay and established the first privately run woollen mill. He also built a flour mill a short distance away and the two ponds he created are now local landmarks, known as the Mill Pond and the Engine Pond (Botany Bay Council, 2001). In the 1830s, market gardeners set up farms in the area, and cut trenches in the soft soil to irrigate their crops. Fishing settlements emerged in the Bay area at this time, and the fishing community remained intact for over 100 years. A 1938 article in the Sydney Morning Herald described the area:

'A few miles outside of the city, off the Botany Road...there is a remarkable little community, which has sturdily resisted the encroachment of the bustling world about it...In the last 10 or 15 years the folk of Fishing Town, after a comparatively prosperous period of 100 years, have suffered some reverses. The breakwater, they say, has interfered with the favourite routes that were taken by the great shoals of mullet. The competition of 'depression' fishermen who, thrown on the dole, cast their nets to amplify their slender income...now quite a number of the younger generation come into the city to work.' (Flack & Jervis, 1938, p.59-60)

The first road from the Sydney settlement to Botany was built in 1813, but it terminated at a point on the Cooks River in an area then known as Mudbank, now Mascot. By 1833, a road had been built all the way to Botany – the present Bunnerong Road. As residential and industrial development continued, roads were upgraded and extended to service scattered communities and to carry products to Sydney's growing population. In 1925, after more than 10 years of planning and manoeuvring, the Botany freight rail line was finally opened. The line still carries goods to and from local industrial sites, including the port.

Bunnerong Power Station was built in 1929 by the Sydney Municipal Council and was Sydney's major source of electricity for the next 20 years. In the 1950s, Sydney's electricity consumption rose dramatically and larger power stations were built at Lake Macquarie leaving Bunnerong in use only as a standby. The power station was demolished in 1987.

The opening of the Mascot Aerodrome (now Kingsford Smith Airport) in 1920 was a major development in the Botany Bay area. The site has been developed continuously since then, with the north-south runway built out into the harbour on reclaimed land in 1964, and extended in 1968. A new international terminal was also built on reclaimed land in 1966. In 1994, a third runway (parallel runway) was opened, once again protruding into the Bay on reclaimed land ([www.sydneyairport.com.au](http://www.sydneyairport.com.au)).

### ***History of Port Botany***

Botany Bay first began to be used as a port in 1880. At this time the demand for coal in the Botany community, for both residential and industrial purposes, was high and the government decided to erect a jetty for the discharging of coal. The structure, known as the Government Pier (Long Pier), was located near Botany Road, close to the western boundary of the original Banksmeadow Park. Trade at the jetty increased over the years, especially with the opening of the Bunnerong Power Station in 1929. However, by the end of the 1930s, most of the coal for the power station was being delivered by rail, and the jetty ceased to be used for trade. It was then used for the 'winning' of sand from the Bay. (Larcombe, 1970, p.117-118). Demolition of the jetty began in 1970 but was never completed.

Botany Bay was officially proclaimed as a port in 1930, when the motor tanker, Mexico, chartered by Australian company HC Sleight, anchored in the Bay. Barges were used to transfer its cargo of petrol to a storage facility on the banks of Sheas Creek (now Alexandria Canal).

The establishment of oil refineries in the Bay area was a major contribution towards development of a major port at Botany. When Boral began looking for a refinery site in the 1940s, they were forced to look outside Sydney Harbour. A policy was adopted in 1947 by the NSW State Government requiring oil installations to be segregated from residential areas due to wartime concerns about oil installations becoming military targets. This led to Boral establishing their refinery at Matraville in 1948. Crude oil was pumped ashore through submarine pipelines from tankers anchored in the Bay. This was followed by the development of the Australian Oil Refinery at Kurnell, which commenced operations in 1955. Two berths were provided to service the import and export trade, and in 1960, a submarine terminal was constructed. (Hayes, 2001, p.3-4; Costelloe, 1988, p.54-55).

On 1 May 1961, the Maritime Services Board (MSB) (the predecessor to Sydney Ports Corporation), assumed responsibility for the development of Botany Bay as a port. In 1958, the Botany Bay Land Reclamation Committee had been established to investigate proposals for reclamation of areas along the northern foreshores of the Bay. Between 1961 and 1968, the MSB undertook studies examining how the port might be developed. The growth in sea trade, the increasing size of ships, and the limitations of the natural and built

environment of the Sydney Harbour port sites necessitated development of a new port outside of Sydney Harbour. In 1969, the MSB proposed a major development in Botany Bay, which was approved by the NSW State Government. The Port Botany concept plan proposed a four stage development involving reclamation of land in the northern part of the Bay, from Bumborah Point in the east to General Holmes Drive in the west, adjoining the proposed extension to the Kingsford Smith Airport Runway. Development of each stage would be triggered by trade milestones, with the overall area to be reclaimed equalling 1,500 acres (600 ha).

In 1976, after development of the port had begun, the NSW Government established a Botany Bay Port and Environment Inquiry conducted by Mr S H Simblist QC. The Simblist inquiry recommended some limitations to the MSB's plans: that development should not proceed beyond what it described as 'phase 1', which included much of the development set out in stages 1 and 2 of the MSB proposal. Specifically, it recommended that: both container terminals should proceed; the Bulk Liquids Berth should proceed; the coal loader should not proceed at that time; the proposed Very Large Crude Carrier Berth and Storage should not proceed unless imposed by national policy; Dry Bulk Berths and Facilities should proceed when required. The parallel runway was constructed in the area, which was designated for stage 4 port development under the MSB's original plans.

Extensive dredging and land reclamation occurred in Botany Bay between 1971 and 1978, resulting in the present Foreshore Beach. In 1978, the Bulk Liquids Berth opened, and container terminals at Brotherson Dock were opened in 1979, operated by ANL (now Patrick Stevedores). CTAL opened their container terminal in 1982, which is now operated by P&O Ports.

### 3.3.2 Implications of historical context for the social impact of the proposed expansion

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Reviewing the historical context of Port Botany shows that for over 200 years the area has incorporated competing land uses, and has played a role in providing essential services to metropolitan Sydney. Since European settlement, the shores of the Bay have been developed for industrial, residential and recreational uses simultaneously. The area has played an important metropolitan role during this time, from providing a water supply to the whole city in the 1850s to the development of industrial businesses to the more recent development of Port Botany as the hub of metropolitan container trade.

In this historical context, the proposed expansion of Port Botany is in keeping with previous development.. The area proposed for the new terminal is part of the area of the Bay originally identified for future reclamation for port facilities under the MSB plans of the 1960s. Tensions between industrial and other land uses are part of the history of the area, and community concerns expressed about the proposed expansion indicate that these tensions are still present.

The communities within the Bay have demonstrated a strong historical connection with the Bay, its indigenous history, and its place in non-indigenous Australia's history – "birthplace of the nation". This link is evident by the activity of groups such as the Botany Historic

Trust and the Randwick District Historical Society. The historical connection is one of the reasons for the value the local community places on Botany Bay.

### 3.4 SOCIAL PROFILE

A social profile for the City of Botany Bay and Randwick City LGAs has been developed to provide cohesive information about the socio-demographic makeup of the community surrounding Port Botany, and place it in context with the surrounding Sydney region. Specific data was not available for the local Port Botany community. The social profile is based on the 2001 census.

A summary of the socio-demographic characteristics of the City of Botany Bay and Randwick City LGAs is presented below, and a detailed social profile is contained in Appendix A.

#### 3.4.1 The City of Botany Bay

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In 2001, the City of Botany Bay had a population of 35,897. The age-sex structure of the population was generally similar to the Sydney region and had not undergone significant change in the last four years.

The LGA had a small Aboriginal and Torres Strait Islander population in 2001, approximately 560 people, or 1.6%. Botany Bay is a very multicultural area, with 51% of people born overseas. Ethnicities represented include British, Greek, Philippino and Chinese.

The mean household size in the city of Botany Bay is 2.7 persons. Compared with the regional average, Botany Bay had a slightly larger proportion of sole parent families and 'other families'.

In 2001, Botany Bay had a below average level of ownership for the Sydney region, with 54% of occupied private dwellings being either fully owned or being purchased. In 2001, Botany Bay had a slight larger rental sector than the Sydney average, with 36.6% of dwellings being rented.

In 2001, Botany Bay residents of 15 years and over had a median weekly individual income of \$300-\$399 per week. This is lower than the Sydney median income of \$400-\$499 per week.

In 2001, 16,001 people were employed in the City of Botany Bay, which represents 94% of the workforce. The retail and trade industry rated as the largest employment sector (14%) followed by manufacturing (13%), and property and business services (11%).

The unemployment rate for the City of Botany Bay in 2001 was 6%, which is similar to the Sydney region average.

### 3.4.2 Randwick City Local Government Area

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In 2001, Randwick City had a population of 121,497. The male to female ratio is similar to the Sydney average. Randwick City has a much larger proportion of younger adults (18-44 years) than the Sydney average, which is related to the presence of the University of NSW.

Randwick City has an Aboriginal and Torres Strait Islander population of 1,351, or 1%. Randwick City's proportion of Australian born people is lower than the Sydney average, with 56% of the population being Australian born. English was stated as the only language spoken at home by 64% of Randwick City residents.

The mean household size in Randwick City is 2.4 persons, which is lower than the Sydney average of 2.7 persons. Compared to the Sydney average, Randwick City has more 'other families', sole parent families and couples without children, and a smaller proportion of couples with children.

In 2001, Randwick City had a low level of home ownership compared to the Sydney average, with 49% of dwellings either fully owned or being purchased. In 2001, 42% of dwellings in Randwick City were being rented, which is much higher than the Sydney average.

In 2001, Randwick City residents aged 15 plus had a median weekly income of \$400-\$499 per week, which is the same as the median for Sydney as a whole.

In 2001, 58,322 people were employed in Randwick City, which represents 95% of the labour force. Property and business services rated as the largest employment industry (16%) followed by retail trade (11%), and health and community services (11%).

The unemployment rate in Randwick City is 5%, which is similar to the Sydney average.

### 3.4.3 Implications of the social profile for the social impact of the proposed expansion

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The social profiles indicate that the City of Botany Bay and Randwick City LGAs generally have similar social characteristics to the average Sydney demographic. However, the social profile does indicate that the City of Botany Bay has a slightly less prosperous population than the Sydney average, in terms of income and employment levels.

The social profile indicates that the proposed expansion would not impact significantly on people in the Randwick and Botany LGAs due to their socio-demographic status. As discussed later in this report, the nature of impacts on the community would be determined by residents' proximity to the port and/or their preferred recreational activities.

The proposed expansion would also not have a discernible impact on the social profiles of the two local government areas. Although the proposed port expansion is a large infrastructure project, with large employment effects, the existing industrial and employment base is very substantial. Increased employment would be accommodated in a



wide region around the port without substantial effects on the adjacent local government areas and their social profiles.

### 3.5 SOCIAL INFRASTRUCTURE

The level of social infrastructure within or available to a community is a reflection of the age, religious beliefs, health and education status of the community.

A wide range of community services and facilities exist to serve the diverse populations of the City of Botany Bay and Randwick City LGAs. These two LGAs accommodate a number of facilities required for the effective daily functioning of any community eg banks, post offices, police stations, child care centres, primary and secondary schools.

The social and recreational needs of the populations residing within these LGAs are also well catered for, as is demonstrated by the many parks, golf courses, clubs, community halls and spiritual centres located within these LGAs.

Major community services and facilities within the study area are listed in **Appendix B**.

The only area of social infrastructure affected by the proposal is recreational facilities. The proposal would result in a change to the form of the open space areas of Foreshore Beach and Penrhyn Estuary, and the removal of the Penrhyn Road boat ramp. The proposal includes a replacement boat ramp, which would ensure that recreational boating and fishing activities would not be limited. As the existing boat ramp is an important regional facility and other facilities in the Botany Bay area are limited, maintaining the use of this facility is an important contribution to regional social infrastructure.

Public access to Penrhyn Estuary would be restricted in order to support the ecological functions of the area. However enhancement work on Foreshore Beach would ensure all existing uses of the beach would be able to continue. Additional recreational facilities would be provided by the proposal in the form of a new pedestrian/cycle path.

### 3.6 COMMUNITY CHARACTERISTICS

#### 3.6.1 Community cohesion

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Community cohesion is demonstrated by the existence of, and participation in, social and community facilities, organisations, and structures, which bring people and groups together. It is essentially a qualitative factor, but one which has a crucial effect on the experience of living in a particular locality. Where there is cohesion, people generally say they like living there, and they exhibit loyalty to the local community.

The absence of facilities for community interaction, or indications of social disharmony would, conversely, suggest poor community cohesion.

The communities of the City of Botany Bay and Randwick City LGAs are cohesive communities. They are both vibrant Sydney suburbs and would be similar to other inner Sydney suburbs in terms of community cohesion. People in these communities would generally say they like living there and they exhibit loyalty to the local community. They both have plentiful and well used community facilities as well as active community organisations. The local Port Botany community would also be described as a cohesive community. The formation of the Save Botany Beach group is one example of this. The local Port Botany community has also suggested they are a tightly knit community with evident networks who “join together for a cause”.

The community of people who use Foreshore Beach is not a cohesive community. This is common for many beach areas in Sydney which attract individuals from a wider region. The other recreational users of the Port Botany area, the fishing and boating community, display a high level of activity and coordination within their community.

### 3.6.2 Local values

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In focus groups sessions, local residents, Foreshore Beach users, members of the fishing and boating community, and members of environment groups identified what they value about the Botany Bay area.

The most prevalent local values include:

- Pride in the fame of Botany Bay, and its place in Australian history.
- The essentially natural looking character of the Foreshore Beach area, which is not overwhelmed by patrons.
- The opportunity provided by Foreshore Beach for recreational walking and unrestricted dog walking and swimming.
- The Penrhyn Estuary because of its ecological significance and habitat for shore birds and waders.
- The suitability of the Bay for recreational boating, fishing, windsurfing, activities which are seen to be part of the local and regional culture.
- The Bay’s long-standing history and the community’s access to the waters of the Bay and surrounding foreshore environment.

### 3.6.3 Local attitudes to change

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There has been some community opposition to Port Botany since it was established in the 1970s. Community opposition to changing the character of the Bay and its surrounds continues today. Submissions from the community indicate that opposition to the proposed expansion is partly based on concern about the cumulative impact of industrial development in the Botany Bay region, on both the natural and social environment. It has been suggested that the State Government needs to assess the cumulative impact of

development in the area, and the Botany Bay Planning Framework being developed by PlanningNSW would address this issue.

### 3.7 EXISTING RELATIONSHIP BETWEEN PORT BOTANY AND THE COMMUNITY

Container operations at Port Botany have been carried out since 1979. Sydney Ports' relationship with the community over this period has included:

- Providing and maintaining the popular public area of Prince of Wales Drive and Molineux Point Reserve. This was recently enhanced with a viewing platform.
- Sponsoring and funding of local events and projects such as the Botany Bay Regatta, Golf Days, Sabot National and Sabot Week Regatta Botany Bay, Botany Bay Community Safety Team Bus; Beach and Boatramp Restoration – Georges River.
- Continuing to focus on the efficiency of rail freight links to Port Botany in concert with the Rail Infrastructure Corporation, stevedores and rail operators.
- Forming the Port Botany Neighbourhood Consultative Group, which regularly meets with community representatives to share information about port activities and developments.
- Forming the First Port Club. This club comprises individuals associated with Botany Bay, both civic and commercial. The club's aim is to promote and facilitate communications of mutual interest.
- Participating in the Botany Business Enterprise Centre (BBEC) and Bizwatch. A Sydney Ports executive is a Director of BBEC. BBEC is an organisation which provides the Botany business community with the opportunity to meet and discuss issues relevant to the Botany area. BBEC also assists small businesses in the area by providing advice and an intensive support system/network.
- Sponsoring the Randwick City Awards for Business Excellence.
- Providing the Mission to Seafarers with a building from which to conduct their work. The Mission to Seafarers assists seafarers when they come into port.
- Chairing Botany Bay Coastal Management Committee meetings. The committee comprises representatives from the community, local government and other government agencies with an interest in the foreshores of the Bay.
- Providing an emergency response unit on duty 24 hours a day for incidents on the Bay including marine rescues, oil spill responses, and small boat fires.
- Regulating dangerous goods through the port to ensure the safety of workers and residential areas in proximity to the port.

- Collaborating with the police, fire brigade and lessees on emergency response operations.
- Upgrading local roads.
- Making improvements to the look of the port.
- Landscaping around the port.
- Providing signage around the port. The placement of directional and identification signage at Port Botany was part of a submission to the City of Botany Bay's Botany Business Excellence Awards that won Sydney Ports an award in the Industrial/Port Related category.

## 4 Community involvement

### 4.1 COMMUNITY INVOLVEMENT TECHNIQUES

Community involvement during the preparation of this social impact assessment commenced in April 2002. A range of consultation activities were conducted to encourage local community and stakeholder participation and assist with identifying key social impacts. These activities include:

- Planning focus meetings – government and community.
- Community information evenings.
- Focus group sessions.
- Public response mechanisms (freecall number, email, reply paid address, fax number).
- Newsletter 3 feedback form and the broad distribution of newsletters.
- Public open space planning workshops.
- Key stakeholder briefings.
- Meetings with key community members.
- Sydney Ports' website.
- Sydney Ports' attendance at community group meetings and events.

### 4.2 COMMUNITY SOCIAL ISSUES

The key community social issues identified by the community through the techniques described above are:

- Impact on recreational use of Foreshore Beach.
- Cumulative impacts.
- Traffic impacts on local roads.
- Impact on the boat ramp at Penrhyn Estuary.
- Noise impacts.
- Visual impacts.

- Water Pollution.
- Hazard and Risk.
- Air Pollution.
- Impact of Botany freight rail line.
- Property flooding.
- Property values.
- Heritage and archaeology.
- Economic impact.
- Port employment.

## 5 Social impacts and mitigation measures

### 5.1 INTRODUCTION

There are a number of potential social impacts of the proposed Port Botany Expansion, which may affect one or several of the communities identified in section 3.2.

A project has social impacts if it causes any change in the areas of human health and safety eg access to clean water; human systems of interaction and organisation eg transport or education; and human viewpoints eg attitudes and beliefs. A project may have both positive and negative social impacts (DUAP, 1997).

This social impact assessment draws on feedback from stakeholders during the consultation process and on the impacts and mitigation measures described in various chapters of the EIS.

### 5.2 CONSTRUCTION AND OPERATION ACTIVITIES

#### 5.2.1 Construction

The construction of a new container handling terminal, involving the reclamation of about 60ha of land, is a major construction project, and is expected to take at least five years to complete.

Development of the new terminal, berths and major port infrastructure would be undertaken by Sydney Ports, who would then lease the terminal to the terminal operator(s). Construction of certain terminal facilities (eg buildings) would be undertaken by the terminal operators.

Most construction activities would be limited to daylight hours Monday to Saturday (7am to 6pm) although dredging, reclamation and marine work would occur 24 hours a day, 7 days a week for a period of 12 – 15 months. Construction activities would not normally be undertaken on Sundays or public holidays, although equipment maintenance and some environmental protection works may be undertaken on these days. If the project requires construction activities outside these hours, the regulatory authorities and affected stakeholders would be consulted accordingly. Works may occur outside these hours in order to minimise disruption to other operations and traffic.

A detailed Construction Environmental Management Plan would be prepared prior to any construction activities being commenced at the site of the proposed expansion. This plan would include the following:

- Traffic management.
- Erosion and sediment control.
- Flora and fauna.
- Construction noise impact statements.
- Waste management.
- Emergency and incident response.
- Stakeholder consultation.

The community would be consulted during the development of the construction program to ensure that staging, schedules and work methods would be least disruptive to the amenity in the residential, commercial and recreational areas around the project site.

The details of many of the mitigation measures discussed in this section would be developed fully in the Construction Environmental Management Plan.

#### 5.2.2 Operation

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It is anticipated that the new terminal would operate in a similar manner to the two existing terminals. It would operate 24 hours a day, 7 days a week, as do the two existing terminals.

An Operational Environmental Management Plan would be developed to ensure that operation of the new terminal was carried out in accordance with any environmental goals and requirements identified as part of the conditions of consent. The Operational Environmental Management Plan would identify the environmental monitoring and management tools to be used during operation of the new terminal.



### 5.3 AREAS OF POTENTIAL SOCIAL IMPACT

All areas of social impact that could potentially result from the proposed expansion of Port Botany are assessed in this section. For each area of potential impact, the community views obtained during consultation activities are described; the anticipated impacts and proposed mitigation measures are summarised, and conclusions are drawn about the significance of the social impact in that area. References to 'the consultations' refers to all consultation activities described in section 4.1.

#### 5.3.1 Public open space and recreational facilities

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##### ***Community views***

In the consultations, community members emphasised the importance of Foreshore Beach, Penrhyn Estuary, the Penrhyn Road boat ramp and the waters of Botany Bay for recreational activities and as regional open space sites. Foreshore Beach is a popular recreational location for both the local and regional communities. Foreshore Beach users include individuals, families, dog walkers, runners, swimmers, windsurfers, paddle and surf skiers. Swimming and fishing currently occur in Penrhyn Estuary and from Foreshore Beach despite signage in the area which indicates that the water in the vicinity is not suitable for swimming or fishing, due to pollution and/or contamination. A recreational study undertaken by Kinhill Engineers indicated that the most popular activities on Foreshore Beach were walking (including dog-walking), sunbathing and swimming (Kinhill Engineers, 1995). The Penrhyn Road boat ramp caters for recreational fishing and boating users from the local and regional communities. Penrhyn Estuary is valued for its recreational and ecological attributes. The recreational study indicated that users of both the boat ramp and the beach came from both the local and regional area (Kinhill Engineers, 1995).

During consultation, members of the fishing and boating community saw the proposed expansion as an opportunity to improve the existing boat ramp facilities, but expressed concern about the capacity of the proposed new ramp. It was suggested that the ramp should have at least four lanes instead of the proposed two, and that there should be input from the fishing and boating community into the detailed design of the boat ramp. Concerns were also raised about the capacity of the proposed new carpark to accommodate both the traffic related to the boat ramp and the traffic generated by Foreshore Beach users.

Community members raised concerns about how changes to the form of Foreshore Beach would affect its function as a recreational facility. Particular concerns included continuation of dog-walking opportunities, restriction on access to areas of the beach and estuary, the impact of the new terminal and associated infrastructure on the ambience of the beach, the location of the boat ramp in the centre of the beach, and the impact of the reclamation work and development of road and rail bridges on the ecology of Penrhyn Estuary. The suitability of the existing water quality for swimming and fishing was also of concern.

Responsibility for maintenance of the public areas was raised as an issue by community members. Some community members expressed the view that these areas are not adequately maintained at present and feared that enhanced open space areas would also not be adequately maintained.

### **Construction**

The dredging and construction work associated with the proposal would temporarily restrict access to areas of Foreshore Beach, Penrhyn Estuary, and Botany Bay. Access restrictions would impact on Foreshore Beach users who undertake walking, windsurfing and swimming activities in these areas. Overall construction of the new terminal would take approximately five years, but access restrictions would only be in effect for a proportion of this time. The impact of these restrictions would be mitigated by providing information about restricted access to affected beach and Bay users prior to the restrictions taking effect.

Public access to Penrhyn Estuary would be restricted during construction of the new terminal and enhancement of the ecological habitat in the estuary.

The boat ramp in Penrhyn Estuary would no longer be useable once the new terminal is in operation. The proposal includes a replacement boat ramp and associated facilities in a new location in the middle region of Foreshore Beach. The impact on boat ramp users would be minimised by constructing the new ramp as early as possible in the construction process. Boat ramp facilities would be available throughout the construction period, through the continued use of the existing facility until the new one is complete, or by the provision of alternative facilities for a short period if required.

### **Operation**

Operation of the new terminal would impact upon the form of, and access to, Foreshore Beach, Penrhyn Estuary and areas of Botany Bay. The water quality issues which currently affect the suitability of the water for swimming and fishing are not a result of Port Botany's operations but are caused by upstream sources of pollution.

The proposed plan for the Foreshore Beach area retains the majority of the existing beach, so that recreational activities, which currently occur on the beach, would still occur once the new terminal is in operation.

Walking and cycling opportunities would be enhanced by the creation of a pedestrian/cyclist path in the dune area along the length of Foreshore Beach and Penrhyn Estuary. People would be able to continue walking their dogs. Windsurfing and swimming would still be possible from some areas of Foreshore Beach, so the adverse impact on people who currently undertake these activities would be limited.

A strong feature of the plan is its nature emphasis. This reflects the high values placed on the ecological features of Penrhyn Estuary and public open space of Foreshore Beach by the community, and local and State government representatives. Specialist studies have found that Penrhyn Estuary is an important habitat for shorebirds. The plan would expand

the existing habitat for shorebirds, providing additional tidal flats and saltmarsh for feeding and roosting. It would also increase the existing area of seagrass habitat. Public access to the area would be restricted to a boardwalk and viewing platform in the Estuary, in order to prevent people and dogs impacting on the ecological habitat

Sydney Ports would work with the City of Botany Bay, Waterways, the RTA, NPWS and Fisheries to manage maintenance responsibility for Foreshore Beach and Penrhyn Estuary to ensure that these areas are maintained adequately once the terminal was in operation. A plan of management would be prepared for these areas and it would include maintenance requirements and responsibilities.

The impact of the proposal on other recreational areas in the Botany Bay region must also be considered. Residents have made submissions relating to the detrimental effect that the parallel runway has had on beaches and wetlands around the Bay eg Lady Robinsons Beach and Towra Point. Their concern is that the reclamation work for the new terminal would cause damage to these areas. However, the results of numerical modelling show that the proposed Port Botany Expansion would have little impact on the hydrodynamics and coastal processes beyond the immediate area of the development.

### **Conclusions**

The construction of the new terminal would result in minimal adverse impact on boat ramp users during the construction period as boat ramp facilities and access to the Bay would be maintained throughout the construction period. Once the new boat ramp is constructed, the fishing and boating community would benefit from enhanced facilities. Sydney Ports would consider providing a four lane boat ramp to meet the demand for the facility, and involve representatives of the fishing and boating community in the detailed design process to ensure that the boat ramp meets the needs of this community.

The impact of the expansion on the public open space and recreational facilities in the port vicinity would have several aspects. During construction of the new terminal, access to certain parts of the beach would be restricted for periods, but these restrictions would be only temporary. Once the construction works are complete, there would be changes to the form and ambience of Foreshore Beach and the estuary, but all recreational activities would be able to continue in the area.

Restricted access to Penrhyn Estuary would mean that people would no longer be able to access areas which are currently accessible. On the other hand, opportunities for nature-based recreation would be improved by enhanced ecological habitat, paths and viewing platforms.

Foreshore Beach would be enhanced by beach reshaping works, provision of a pedestrian/cycle path and viewing platforms, provision of crossings of Foreshore Road, parking and public amenities. As current recreational activities would be able to continue, the enhancement would not have a major adverse impact on Foreshore Beach users. Sydney Ports would work with the local community and Foreshore Beach users during the

detailed design process to ensure that the enhancement of the open space areas provides the maximum opportunity to meet the needs of these groups.

### 5.3.2 Visual

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#### ***Community views***

The visual impact of the proposed new terminal from nearby areas was raised as an issue during consultation activities. Community members expressed concern that the proximity of the new terminal to the beach would have a negative impact on the current ambience of the beach, as it would impact on views of the Bay from the beach. It was suggested that consideration be given to the appearance of the noise wall, and that the height of cranes should be less than those presently used at the port.

Concern was also expressed about the appearance of the vegetated area between Foreshore Road and the beach. It was suggested this area be vegetated in such a way that there were views of the beach from Foreshore Road and that security was maximised.

#### ***Construction impacts and mitigation***

During construction, large quantities of fill would be stockpiled in the two proposed works areas at the western end of Brotherson Dock and at the site of the new tug berths. These stockpiles and the presence of construction equipment would have a visual impact on views of Port Botany. The visual amenity from the land, including Foreshore Beach, Penrhyn Estuary, the existing boat ramp and to some extent Botany Golf Course and Sir Joseph Banks Park; from the water (Botany Bay); and from the air (Sydney Airport) would be affected. While the impact on visual amenity during construction would be temporary, it would be substantial in areas close to the construction site. This would have an adverse impact on the community of Foreshore Beach users and residents in the local Port Botany area due to reduced visual amenity.

In order to mitigate the visual impact of the construction of the new terminal, Sydney Ports would ensure that stockpiling of fill was minimised, and that revegetation of open space areas would be undertaken as soon as possible in the construction process.

#### ***Operational impacts and mitigation***

The visual impact of the proposed port expansion would vary with distance from the port. From regional views, the proposed expansion would generally have a low visual impact due to the long viewing distances. The proposed expansion would be seen within a family of port and airport related buildings and structures. From the surrounding local residential areas, views of the proposed expansion would be impeded by existing vegetation and structures. From the immediate vicinity, the expansion would impede views of the Bay.

When viewed from the air, the proposed expansion would be visible. However, it would be set within the context of the surrounding port and airport which are similar developments..

While the proposed port expansion fits within the visual context provided by surrounding land uses, the new terminal would impact on views of Foreshore Beach users.

The visual impact of the proposed expansion would be mitigated by incorporating the following elements into the design of the new terminal:

- Revegetating the open space areas surrounding the port.
- Limiting the height of the new cranes so that they are more horizontal in orientation and design than the existing cranes.
- Designing the proposed pedestrian walkway crossing Foreshore Road from Sir Joseph Banks Park to the eastern shore of Botany Bay to be low in height and of horizontal form to minimise its visual impact. Colours and materials would be selected to minimise contrast with the vegetated character of both the eastern and western sides of Foreshore Road.
- Selecting materials and colours for the terminal deck, administration buildings, and cranes to minimise reflectivity.
- Selecting colours and materials to minimise reflectivity and to blend with the bright colours of the existing port related structures on the Patrick's and P&O Ports terminals.

### ***Conclusions***

The new terminal would have a visual impact on users of Foreshore Beach and Penrhyn Estuary, due to its size and proximity. Views of the Bay from the Beach and Estuary would be altered by the new terminal. The proposed mitigation measures would reduce the severity of the impact. The proposed expansion would have minimal impact on regional views, eg from the southern shore of the Bay.

Further details on the assessment of the impacts of the proposal on visual amenity are provided in the visual impact assessment chapter in the EIS.

### 5.3.3 Air quality

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#### ***Community views***

During community consultations, members raised concerns about air pollution from more diesel machinery operating on the expanded port. The community also raised concerns about increased air pollution from the increased traffic generated by the expanded port.

#### ***Construction impacts and mitigation***

Dispersion modelling of dust emissions from construction of the proposed new terminal shows that there would be a low likelihood that dust deposition at residences would exceed EPA criteria during construction.

Although no adverse impact on air quality would result from the construction of the new terminal, normal earthworks and construction dust mitigation practices would be incorporated into the Construction Environmental Management Plan to ensure that acceptable air quality is maintained. These measures include the use of wind breaks along the northern edge of the beach on Foreshore Road, and dust suppression practices including regular watering of exposed work areas. During the stabilisation of the reclaimed area, wind blown dust emissions would need to be controlled with the placement of a temporary bituminous membrane emulsion (or equivalent).

### ***Operational impacts and mitigation***

The potential for adverse air quality impacts from the operation of the proposed new terminal, combined with the P&O and Patrick Stevedores terminals, when at capacity, would be minimal. There are expected to be only marginal increases in particulate matter, nitrogen dioxide, sulphur dioxide and carbon monoxide concentrations in surrounding areas, with modelling results showing no exceedances of the site criteria within residential areas or at sensitive receivers such as schools or hospitals.

While no mitigation measures are required for operational air quality impacts, Sydney Ports should continue to investigate ways to reduce emissions from their operations. For example, consideration could be given to using alternative technologies for on-site power requirements.

### ***Conclusions***

With the proposed mitigation measures, there should be no social impacts in terms of changes to air quality in the port precinct.

Further details on the assessment of air quality impacts are presented in the air quality chapter of the EIS.

## **5.3.4 Water quality**

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### ***Community views***

Feedback obtained during community consultation activities indicates that the community is concerned about changes to water quality related to the Port Botany expansion, specifically management of existing contaminants in the estuary, and potential effects on the flows through Penrhyn Estuary.

Community members are concerned that the construction activity may disturb existing contaminants, both in the Penrhyn Estuary area and areas of the Bay, which would be dredged. They are concerned that this disturbance may result in water quality impacts in the estuary or the area of the Bay in front of Foreshore Beach, which is currently used for swimming, boating and other water borne activities. Swimming and fishing currently occur in Penrhyn Estuary and from Foreshore Beach despite signage in the area which indicates that the water in the vicinity is not suitable for swimming or fishing, due to pollution and/or

contamination. Faecal coliform levels in both the Estuary and along Foreshore Beach currently exceed guidelines for primary and secondary recreational contact, particularly following rain.

The importance of sufficient flushing of Penrhyn Estuary was raised during consultation activities. Community members expressed concern that the new terminal could inhibit the ability of the estuary to flush out the flows of the Springvale and Floodvale drains, and that this could result in sedimentation and concentration of pollutants in the estuary.

### ***Construction impacts and mitigation***

Construction of the new terminal requires the relocation of 7.5 million m<sup>3</sup> of sediment from the bed of Botany Bay. The dredging work would cause some turbidity in the Bay.

A range of mitigation measures would ensure that water quality effects were minimised during construction. Examples would include:

- Silt curtain to reduce turbidity and sedimentation related to dredging.
- Use of cutter suction dredge and placement of dredged material directly at the required location would also reduce turbidity.
- Maintenance of a 130 metre channel through to Penrhyn Estuary to ensure tidal flushing during construction.
- Sediment contamination in Penrhyn Estuary left intact or capped.

### ***Operational impacts and mitigation***

The quality of the water in Penrhyn Estuary and in the area of the Bay near the mouth of the Mill Stream is currently affected by various pollution sources in the catchment. Flows from the Springvale and Floodvale drains have resulted in the build up of contaminated sediment. The flow from the Mill Stream contains high levels of nutrients and low dissolved oxygen. Faecal coliform levels in both the estuary and along Foreshore Beach exceed guidelines for both primary and secondary recreation contact. They reflect sewer overflow sources. There is currently signage which indicates that the water in the vicinity is not suitable for swimming or fishing, due to pollution.

There would be a marginal increase in nutrient concentrations (nitrogen and phosphorus) in Penrhyn Estuary as a result of reduced flushing. Nutrient concentrations would not exceed ANZECC guidelines in ambient conditions.

The proposed new terminal would not impact upon water quality as it would have a first flush capture and treatment system to minimise contaminated stormwater discharging into the Bay.

There is an opportunity to install sediment traps on the Springvale and Floodvale drains to reduce the amount of litter and sediment entering the estuary, subject to detailed assessment of the functioning of the drains. The water quality of Penrhyn Estuary would be

monitored to ensure that nutrient concentrations did not exceed the predictions in the EIS. The marine biology in Penrhyn Estuary would also be observed to ensure that there were no impacts from increased nutrient concentrations. Measures would also be taken to ensure that the tidal flushing of Penrhyn Estuary was maintained at predicted EIS levels.

### ***Conclusions***

The construction of the new terminal would have minimal social impact in terms of changes to water quality with the implementation of the proposed mitigation measures.

Operation of the new terminal would not have an adverse impact on people who use the Bay or Foreshore Beach in terms of water quality, as long as the mitigation measures ensured the water quality in Penrhyn Estuary remained within ANZECC guidelines. The existing water quality situation presents an opportunity for Sydney Ports to work with other State Government agencies to improve the quality of the water entering Penrhyn Estuary and Botany Bay.

Further details on the assessment of water quality impacts are presented in the water quality chapter of the EIS.

#### 5.3.5 Waste

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### ***Community views***

Community concerns about waste management focussed on the management of waste from ships.

### ***Construction impacts and mitigation***

Waste materials that would be generated during the construction of the new terminal would include construction materials, road and rail waste, dredged material, domestic waste, human waste, green waste, excavated soil and some contaminated material.

The Construction Environmental Management Plan would include a Construction Waste Management Plan to achieve waste minimisation and responsible waste disposal during construction of the new terminal. This would include initiatives such as reusing all vegetation waste to mulch rehabilitated areas and storing of all waste materials to leave the site in dedicated and secure storage skips.

### ***Operational impacts and mitigation***

A variety of waste materials would be generated during the operation of the new terminal. All solid waste and wastewater discharged by ships at the new terminal would be managed through the established waste management streams.

In general, waste management practice for the operation of the new terminal would be the duty of the future lessees or operators of the site. An Operational Waste Management Plan



would be developed and implemented for the new terminal and would include initiatives for sustainable waste management.

If these materials were to build up on the site, this could have a negative impact on the health and visual amenity of the local Port Botany community and people using Foreshore Beach and Botany Bay.

### ***Conclusions***

It is not anticipated that waste generated by the construction or operation of the new terminal would have any adverse social impacts.

Further details of the types and quantities of waste and waste management measures are provided in the waste chapter of the EIS.

#### 5.3.6 Employment opportunities

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##### ***Community views***

During community consultation, participants expressed the view that the new terminal would not require many staff due to increased automation of container handling operations. They also commented that jobs created by the expansion would probably not be filled by local residents.

##### ***Construction impacts and mitigation***

The construction phase would result in new employment opportunities. The average number of employees and contractors on site during construction would be approximately 60 people. The maximum number of employees and contractors on site is expected to be in the order of 160 people. This maximum would occur during periods of intense construction activity, which would occur during the second year of construction. This does not include any jobs created indirectly eg workers in the industries supplying materials to the project.

##### ***Operational impacts and mitigation***

The new terminal is expected to generate a substantial number of jobs, which is an important social benefit. The number of people employed directly in the operation of the new terminal has been estimated at more than 1,100 by 2010, building up to more than 3,700 by 2025. This does not include any jobs created indirectly eg workers in the industries supplying materials to the port. The total number of jobs generated both directly and indirectly by the operations of the new terminal is estimated to be more than 2,800 by 2010 building up to more than 9,100 by 2025.

Economic benefits from the operation of the new terminal would be in the order of a direct total household income of about \$65 million by 2010, and over \$200 million by 2025. Total household income would be over \$120 million by 2010 and over \$390 million by 2025.

## **Conclusions**

The port expansion would generate new job opportunities through direct and indirect employment in both the construction and operational phases, a positive social impact.

The benefit of jobs generated during operation would be felt at the metropolitan or regional level rather than a local level, as workers would come from throughout the metropolitan region to work at the port.

Further details on the assessment of employment impacts are presented in the economic impact assessment chapter of the EIS.

### 5.3.7 Noise

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#### **Community views**

Consultation indicated that noise generated by the port is currently an issue of concern for local residents. Sources of problematic noise include container movements (particularly when a container is dropped), ships' horns, and port vehicles' reversing sirens. The cumulative impact of noise from various sources in the Botany area is also a concern at present. The local community has expressed concern that the proposed new terminal would result in increased noise, which would impact on the amenity of the area.

The community also raised concerns about increased noise from port related rail and road traffic.

#### **Construction impacts and mitigation**

Sources of noise during construction include dredging, piling and general construction activities. Noise from dredging would take place 24 hours a day seven days a week. Dredging would meet all noise criteria including the night time criteria. Piling operations would be the loudest source of noise and would exceed noise criteria.

A series of mitigation measures would be implemented to minimise the noise from construction activities. These would include restriction of work to daylight hours for most construction activities including piling, control of piling noise by using resilient dollies and hammer shrouds, and fitting noise control kits to machinery where appropriate and practical.

#### **Operational impacts and mitigation**

##### *Port generated noise*

The predicted "average" noise levels from the new terminal would exceed EPA night time criteria levels at residences closest to the terminal by up to 5 dBA, during certain weather conditions. It is predicted that the sleep disturbance criteria would be exceeded by up to 8 dBA at residences closest to the terminal, for maximum noise from container handling.

However, the frequency of actual disturbance would depend on container handling practices at the terminal.

Noise barriers would be erected along the northern and northeastern boundary of the new terminal as a mitigation measure. The noise barrier would consist of a 2m obscured bottom section and a 2m transparent top section.

A Noise Management Plan containing environmental management measures to assess and minimise noise would be prepared for the operation of the new terminal. Options, which would be investigated as part of the noise management plan, include:

- Replacing audible safety alarms on terminal equipment with visual alarms during night hours.
- Selecting the quietest possible plant within other operational constraints.
- Operator awareness and training to minimise poor container handling practices.

#### *Truck traffic noise*

The increase in truck movements due to the proposed expansion would not cause an increase in overall noise levels of more than 0.6 dBA. This change would be unnoticeable to the human ear.

With the new terminal in operation and the whole port operating at capacity, the contribution of all port truck traffic at to overall traffic noise levels would be up to 2dBA during some night time hours. This would be barely noticeable to the human ear.

Existing traffic noise in the area already exceeds noise criteria at some locations. This noise is contributed to by cars, light vehicles and heavy vehicles including port-related trucks.

#### *Rail traffic noise*

The higher number of train movements due to the proposed expansion would not increase maximum noise levels along the goods rail line, but would increase the average noise levels by a maximum of about 2 dBA.

### **Conclusions**

Noise generated by construction would affect areas in close proximity to the construction site, generally the local Port Botany community and people using the recreation areas near the port. With the implementation of the proposed mitigation measures, the social impact from construction noise on the surrounding community would not be serious.

Noise associated with operational activities would potentially affect areas in close proximity to the port, generally the local Port Botany community and people using the recreation areas nearby. With the proposed mitigation measures in place, the increase in noise would

be minimised, but would still affect people living or those pursuing recreational activities in the local area.

Further details on the assessment of noise impacts are presented in the noise chapter of the EIS.

### 5.3.8 Traffic and transport

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#### ***Community views***

Feedback received during consultation activities indicates that the current level of truck traffic on Botany Road is a concern in terms of impacts on the safety, noise levels, air quality and visual amenity of the area. Local residents expressed concern that the proposed new terminal would result in an increased number of trucks on Botany Road. Community members also raised the issue of trucks parking illegally on local roads, Foreshore Road and in the Penrhyn boat ramp car park.

The local community expressed concern about the current impact of the Botany freight rail line on nearby residences, due to the noise and vibration from train movements on this line. There was concern that the adverse impact of the Botany freight rail line would increase as a result of the proposed new terminal. Residents suggested Sydney Ports work with Rail Infrastructure Corporation to implement noise mitigation measures along the Botany freight rail line.

#### ***Construction impacts and mitigation***

Construction of the new terminal would result in up to 110 extra trucks travelling to the port each day. Most construction traffic would be approaching the project site from the south, using Foreshore Road and Penrhyn Road. This is a very small percentage of peak traffic volumes on major arterial roads around the port.

If it is feasible to transport certain construction materials by rail, construction may also lead to an increased number of train movements on the dedicated Botany freight rail line, which services the port. As this line runs through residential areas of Banksmeadow, Botany and Mascot, it is likely that residents of these areas may experience an increase in noise and vibration impacts, although this would mean less road construction traffic. The noise chapter of the EIS discusses noise impacts generated by the proposal and ways in which such impacts can be mitigated.

#### ***Operational impacts and mitigation***

Sydney Ports aims to increase the rail modal share from the current 25% to 40% in the medium term. This would result in an average of 36 train movements per day by 2021 to service the new terminal.

Despite the increased rail modal share, there would be an increase in the number of truck movements related to port operations. Truck movements related to the existing port

currently average 2,900 per day. If the new terminal is constructed, it is estimated that by 2025 there would be an average of 1,880 direct container truck movements per day servicing the new terminal, with the forecast throughput.

There is currently limited public transport to Port Botany. The site is served by the 391, 309 and L09 bus services. These services stop at points along Botany Road and Bumborah Point Road that are more than 400 metres from the container terminals. It takes between 40-50 minutes to reach the city on these services. In addition, there are often lengthy waits between the shift changeover times and the next bus service. As a result, most port employees travel to work by private vehicle. The port expansion would therefore lead to more private cars travelling to the port. However, this would not constitute a serious social impact as it would be only a very slight increase on existing traffic levels.

The following mitigation measures would be implemented to reduce the impact of port related road and rail traffic on the local community:

- Including a number of design features to facilitate smooth movement of trucks loading and unloading containers. A new access road with a signalised intersection would be created, linking Foreshore Road to the new terminal. A truck queuing bay with capacity for up to 200 trucks would be established within the new terminal to avoid trucks queuing up on Foreshore Road and obstructing traffic movements.
- Increasing backloading to ensure efficient use of trucks.
- Increasing the number of containers per truck.
- Sydney Ports would work with the RTA to promote usage of Foreshore Drive by trucks to manage truck movements on Botany Road.
- Ensuring an increase in rail modal share. Rail infrastructure is owned and operated by RIC and the ongoing management is subject to licence arrangements between RIC and the EPA.

### **Conclusions**

There would be a negligible impact on the local community from construction related road and rail traffic due to the proportionately low numbers of traffic movements and efficient use of trucks.

Operation of the new terminal would result in approximately 1,880 direct container truck movements per day by 2025. However, the amount of truck movements from the existing port will also increase by 2025 as a result of increased trade, and the contribution the new terminal will make to overall port generated traffic must be considered in this context. The increase in truck traffic could have a negative social impact if the number of trucks using Botany Road increased. This impact would be mitigated by managing potential increases in truck movements on Botany Road and stopping inappropriate truck traffic using the road. Sydney Ports would work with the RTA and City of Botany Bay to control truck access to local roads and truck parking practices. Efficient use of trucks and incorporation

of design features to facilitate the efficient movement of trucks, such as provision of parking within the port precinct, would assist to reduce the local impact of increased truck traffic.

Operation of the new terminal would result in approximately 36 train movements per day by 2025. However, the amount of train movements from the existing port will also increase by 2025 as a result of increased trade, and the contribution the new terminal will make to noise emanating from Botany goods rail line traffic must be considered in this context. The impact of noise from increased traffic on the Botany freight rail line would have an adverse social impact on nearby residences unless noise mitigation measures were instituted.

Full details of these road and rail impacts and mitigation measures are contained in the traffic and transport chapter of the EIS.

### 5.3.9 Light

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#### ***Community views***

Community members expressed the view that light emanating from the port is an existing issue for local residents, and the concern that with the expansion the light levels would increase.

#### ***Operational impacts and mitigation***

Investigations have shown that with a number of mitigation measures in place, there would be minimal direct light spill from the new terminal onto any residential properties. There is the potential for some local residents to be able to view light sources due to the height of some port and ship structures on which lights are mounted. Residents around the shores of the Bay may notice a small increase in luminance from the port. All lighting on the new terminal would comply with the guidelines of the Civil Aviation Safety Authority.

The impact of increased luminance emanating from the Port would be minimised by adopting a series of mitigation measures related to the design and placement of light sources, as described in the energy and cumulative impacts chapters of the EIS.

#### ***Conclusions***

The design and placement of lighting on the port would minimise the amount of light emanating from the new terminal, but there would still be an increase over existing levels. This could impact on local residents and Foreshore Beach users but the impact is not anticipated to be serious.

### 5.3.10 Hazard and risk

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#### ***Community views***

In community consultations, concerns were expressed about the potential for Port Botany to be the site of an accident due to the storage of large quantities of dangerous goods. The proximity of dangerous goods cargo to residential areas was also of concern to the community.

#### ***Operational impacts and mitigation***

A hazard assessment was undertaken and concluded that the proposed port expansion is considered acceptable with respect to the PlanningNSW fatality risk criteria and the injury and irritation risk criteria. The risk to the surrounding communities along the transportation routes leading into and out of the port due to the transportation of dangerous goods has been assessed to be acceptable for the combined port operations.

The proportion of the total cargo which can be classified as dangerous goods is not anticipated to change from the present rate of about 4%.

Movement of dangerous goods on vessels and in terminal areas is governed by the NSW Dangerous Goods (General) Regulation 1999 and the associated Australian standard AS 3846 (the handling and transport of dangerous cargoes in port areas). Vessel and terminal operators are required to conform with this regulation. Sydney Ports administers the regulation on behalf of the NSW government. Sydney Ports regularly conducts audits to ensure conformance with the requirements.

The facility operator would prepare an Emergency and Incident Management Plan to deal with any potential emergencies. It would be developed in conjunction with the NSW Fire Brigade, State Emergency Services and Police. It would also be prepared in accordance with the existing Port Botany Emergency Plan (Sydney Ports Corporation 1996) and the Botany Bay Local Disaster Plan (Botany Bay Local Emergency Management Committee 2000). The Port Botany Emergency Plan is a sub-plan of the Sydney East District Disaster Plan (DISPLAN) and provides a co-ordinated response and mutual aid to any facility in the Port Botany area. Supporting plans to the Port Botany Emergency Plan are: Botany Bay City Local Disaster Plan, Randwick City Local Disaster Plan, State Enviroplan, Hazardous Materials Major Incident and Emergency Sub-plan, and Botany Bay Port Hacking Marine Emergency Sub-plan.

#### ***Conclusions***

Compliance with the dangerous goods regulations would ensure that all possible measures would be taken to maximise the safety and security of port operations. As a result, the proposed expansion would not have an adverse social impact from changes to existing hazard and risk conditions.

Further details of the emergency response plan and environmental protection measures for storing and handling of dangerous goods are provided in the emergency and incident management chapter of the EIS.

#### 5.3.11 Property Values

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##### ***Community views***

Local residents have raised concerns that further industrial development in the Botany area would have a negative impact on the value of their property. It was noted that many areas in the Botany area have been rezoned from industrial to residential in recent years, and that the character of the area has been changing. Community members suggested that the port expansion could result in a return to new industrial land use in Botany. Other community members expressed the view that property values would not decrease as a result of the port expansion but that the rate of growth in value may slow.

##### ***Operational impacts and mitigation***

Property values have been increasing in the Botany Bay community over the last 30 years, as seen in the growth in median unit prices for Botany LGA. The Real Estate Institute of NSW reported this growth to be 128% from 1993 to 2000 (Colliers Jardine 2001). During this time, there have been major developments of the port, airport and surrounding industrial developments.

##### ***Conclusions***

Demand is and would continue to be fuelled mainly by the area's proximity to Sydney's CBD and the eastern beaches and the availability of public infrastructure. The paucity of available land is expected to keep residential property prices strong. The proposed expansion is therefore unlikely to have a long term negative social impact in the form of declining property values.

#### 5.3.12 Groundwater levels

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##### ***Community views***

Previous reclamation work in Botany Bay has resulted in rises in groundwater levels close to the shoreline, which caused damage to properties in Dent Street, Banksmeadow. There is concern amongst the local community that further reclamation may have a further adverse impact on their property.

##### ***Operational impacts and mitigation***

A numerical model has demonstrated that there would be minimal impact on groundwater levels as the proposed reclamation would cause minimal change to the shoreline. The



groundwater rise would be very small, between 0.01 - 0.04 metres due to foreshore works. The changes would be a result of the enhancement work proposed for Foreshore Beach, not the reclamation required for the new terminal. The predicted changes are minor in the context of natural groundwater variations of up to five metres.

Results of modelling demonstrate that the proposed reclamation for the new terminal would have no effect on groundwater levels on the landward side of the present shoreline and no effect on volume or flow directions of groundwater.

### ***Conclusions***

The changes to groundwater levels as a result of the foreshore works would not impact on residents' property. Monitoring of groundwater levels for one year following completion of the expansion would reassure residents that their properties were not being adversely affected.

Full details of groundwater impacts are contained in the groundwater chapter of the EIS.

## 7 Conclusions

The proposed expansion of Port Botany would have a range of social impacts. At a metropolitan level, the proposal would result in an increase in economic growth and employment opportunities. However, at a local level the social impacts are more complex and potentially adverse. At the local level, the proposal would have social impacts on users of the public open space of Foreshore Beach and Penrhyn Estuary, and on the residents of the local Port Botany community.

As described in section 3, the communities in close proximity to the port, that is Randwick City and the City of Botany Bay LGAs and the local Port Botany community, are diverse yet cohesive communities, which are well serviced by most forms of social infrastructure. The local Port Botany community is a mixed use area which has contained industrial development since the area was first inhabited by non-indigenous Australians. Port Botany, the airport and a range of manufacturing and other industries are located in the area today.

The social profile indicates that the proposed expansion would not impact significantly on people in the Randwick and Botany LGAs due to their particular socio-demographic status. The proposed expansion would also not have a discernible impact on the social profiles of these local government areas.

Community feedback indicated that users of Foreshore Beach and Penrhyn Estuary, residents of the Port Botany area, and residents of the City of Botany Bay, Randwick City, and the wider Botany Bay catchment area are concerned about aspects of the proposed expansion. Particular concerns are potential loss of public open space and recreational facilities, the impact of increased traffic on the local area, increased noise, and the cumulative environmental impact of industrial facilities in the Botany Bay area.

The proposal would result in a change to the form of the open space areas of Foreshore Beach and Penrhyn Estuary, and the replacement of the Penrhyn Road boat ramp with a new facility on Foreshore Beach.

During construction of the proposed expansion, most of the social impacts would be on the local Port Botany community and the community of people using the recreational facilities near the port. Social impacts during this phase would include a partial restriction on recreational use of Foreshore Beach and areas of Botany Bay, increased traffic on local roads, and increased noise levels.

During operation of the new terminal, most of the social impacts would also be on the community of people using the recreational facilities near the port and the local Port Botany residential community. The social impacts would include changes to public open space and recreational facilities, noise impacts, and traffic impacts. The proposal would alter Foreshore Beach and Penrhyn Estuary. There would however be improvements to public open space and recreational facilities, with opportunities for all existing recreational uses to continue.

Local and State Government representatives were involved in developing ideas for the Foreshore Beach and Penrhyn Estuary areas that would result in the best outcome for the local community. The resultant concept is for an enhanced Foreshore Beach with opportunities for all existing recreational uses to continue, and for a Penrhyn Estuary largely conserved for wading birds. There would also be improved pedestrian and cycle connections across Foreshore Road and along Foreshore Beach/Penrhyn Estuary, linking in to plans for a future bay cycle/pedestrian trail.

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## A Social profile

### SOCIAL PROFILE

A social profile for the City of Botany Bay and Randwick City LGAs has been developed to provide cohesive information about the socio-demographic makeup of the community surrounding Port Botany, and place it in context with the Sydney region. Specific data was not available for the local Port Botany community.

The social profile is based on the most recent available data, in this case the 2001 census.

#### LGA of the City of Botany Bay

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The City of Botany Bay is located to the north of Botany Bay and borders Randwick City to the east (at Bunnerong and Beauchamp Roads), South Sydney City to the north at Gardeners Road and Sydney Airport, and the municipality of Marrickville and Alexandra Canal to the west (City of Botany Bay, 2001).

The City of Botany Bay is located within the Botany Basin, a natural topographical basin surrounding Botany Bay. The northern portion of the basin is drained by the Cooks River, Alexandra Canal and the Botany Wetlands ponds which flow southwards through Botany before discharging into the Bay (City of Botany Bay, 2001).

The City of Botany Bay covers an area of 2,675 hectares. Of this area, waterways account for 714 hectares.

#### ***Population and population change***

The City of Botany Bay had a population of 35,897 on Census night 2001. Since 1996, the City of Botany Bay experienced growth of 3.4%, or an increase of 1,195 people.

#### ***Age-sex structure of the population***

The City of Botany Bay's male-female ratio in 2001 was 49.4:50.6, close to the Sydney average.

In 2001, the City of Botany Bay had a slightly older population than the Sydney average with greater proportions of the population in the 45-64 and 65 and over categories, (refer to **Table 1**). The greatest age category within the City of Botany Bay was adults of 25-44 years. The proportion of all age categories was similar to the Sydney region overall and changes between the 1996 and the 2001 census were slight.

Table 1: Age categories in the City of Botany Bay, 2001

Age category	% in Sydney	% in Botany Bay
0-14 years	20.2	18.3
15-24 years	14.0	13.4
25-44 years	31.7	31.5
45-64 years	22.2	23.5
65 years and older	11.9	13.2

### ***People of Indigenous origin***

The City of Botany Bay had a small Aboriginal and Torres Strait Islander population in 2001, of approximately 560 people, or 1.6%. This was 14.3% higher than in 1996 and slightly higher than the Sydney average of 1.0%.

### ***Birthplace***

In 2001, 49% of the City of Botany Bay residents were born in Australia. This is a drop from 50.1% in 1996 and 50.9% in 1991. This proportion is lower than the Sydney average of 62.2% of people stating they are Australian born.

Of those born overseas, the three main countries of birth in 2001 were Greece (3.0%), United Kingdom (2.9%) and New Zealand (2.4%). Of those born overseas in the 1996 Census, the three main countries of birth were Greece (3.6%), United Kingdom (3.1%) and Philippines (2.7%). Of those born overseas in the 1991 Census, the three main countries of birth were Greece (4.3%), United Kingdom (3.4%) and Egypt (2.7%).

### ***Language spoken at home***

English was stated as the only language spoken at home by 47.6% of the 2001 population. This represents a decrease from 47.9% in the 1996 Census and 48.1% in 1991. This is lower than the Sydney average of 66.5% of homes having English as the only language spoken.

The three most common languages spoken at home other than English in the 2001 Census were Greek (7.4%), Chinese languages (5.0%) and Spanish (4.5%). The three most common languages spoken at home other than English in the 1996 Census were Greek (8.5%), Spanish (5.4%) and Chinese languages (5.4%). In 1991 this was Greek (10.2%), Spanish (6.2%) and Chinese languages (4.4%).

### ***Families and households***

The mean household size in the City of Botany Bay is 2.7 persons, which is the same as the Sydney average.

In 2001, 49.8% of families occupying private dwellings consisted of couple families with children, 28.5% were couples without children, 18.9% were one parent families and 2.7% other families.

**Table 2** shows that, compared with the Sydney average, the City of Botany Bay has a higher proportion of sole parent families and 'other families', and a lower proportion of couples both with and without children.

Table 2: Household types in the City of Botany Bay, 2001

Household type	% in Botany Bay	% in Sydney
Couples without children	28.5	32.4
Couples with children	49.8	50.5
Sole parent families	18.9	15.0
Other families	2.7	2.1

In 2001, 49.5% of the population of the City of Botany Bay aged 15 years and over (excluding overseas visitors) were married, 3.9% were separated, 7.5% were divorced, 7.0% were widowed and 32.1% had never been married. These proportions are close to the Sydney average. There has been a steady increase in the proportion of separated and divorced people, and people who have never been married, since 1996 and 1991.

### ***Home ownership***

In 2001, 54.2% of all occupied private dwellings were either fully owned or being purchased by the occupier, while 36.6% were being rented. The City of Botany Bay has a lower level of home ownership than the Sydney region generally, which averages 62.7%, and a higher than average rental sector, which is 29.0% in the Sydney region as a whole. The level of home ownership in the City of Botany Bay has decreased slightly from 55.8% in 1996 and 55.3% in 1991.

### ***Income distribution***

In 2001, the City of Botany Bay residents aged 15 years and over had median weekly individual incomes of \$300-\$399 per week. This is lower than the Sydney average of \$400-\$499 per week.

### ***Employment***

In 2001, 16,001 people were employed in the City of Botany Bay (8,863 males and 7,138 females). This represents 94% of the labour force, which is an increase from 91.8% in 1996 and 87.7% in 1991. Of these, 68.6% (6,764 males and 4,212 females) were working full time and 27.7% (1,775 males and 2,656 females) were working part time. The remaining 6.0% of the labour force are unemployed. Of these, 69.1% (489 males and 217 females) were looking for full time work and 30.9% people (141 males and 217 females)

were looking for part time work. These proportions are all similar to the Sydney region figures.

### ***Occupation***

In the 2001 Census, 5.3% employed persons aged 15 years and over (595 males and 255 females) were employed as managers and administrators, which represents an increase from 4.4% in 1996 and 3.4% in 1991. There were 12.8% people (971 males and 1,082 females) employed as professionals in 2001, which represents a rise from 11.3% in 1996 and 7.8% in 1991.

There were 10.0% people (936 males and 659 females) employed as Associate Professionals in 2001, which represents an increase from 8.6% in 1996 and 6.0% in 1991. There were 11.8% people (1677 males and 218 females) employed as tradespersons and related workers in 2001, which is a drop from 12.9% in 1996 and 15.0% in 1991.

In 2001 19.0% people (836 males and 2,179 females) were employed as intermediate clerical, sales and service workers, which is a rise from 18.5% in 1996 and 12.6% in 1991. There were 11.1% people (1,116 males and 655 females) employed as labourers and related workers in 2001, which is a drop from 12.4% in 1996 and 13.9% in 1991.

Compared to the Sydney region figures, there is a lower proportion of people in the City of Botany Bay working as managers and administrators, professionals and associate professionals. There is a higher proportion of people working as tradespersons and related workers, intermediate clerical, sales and service workers, and labourers and related workers.

### ***Industry of employment***

In the 2001 Census, 13.2% employed persons aged 15 years and older (1,453 males and 659 females) were employed in the manufacturing industry, which is a drop from 17.1% in 1996 and 19.3% in 1991. There were 5.2% people (735 males and 89 females) employed in the construction industry in 2001, which is higher than 4.7% in 1996 and 4.3% in 1991.

There were 14.2% people (1,167 males and 1,098 females) employed in the retail trade industry in the 2001 Census, which is an increase compared with 13.2% in 1996 and 11.9% in 1991. There were 11.0% people (890 males and 869 females) employed in the property and business services industry in the 2001 census, a rise from 8.9% in 1996 and 6.2% in 1991.

In the 2001 Census, there were 5.1% people (266 males and 544 females) employed in the education industry, which represents an increase from 4.5% people in 1996 and 3.9% in 1991. There were 8.5% (291 males and 1,062 females) people employed in the health and community services industry, which is higher than 8.1% people in 1996 and 6.6% in 1991.



There is a slightly higher proportion of people employed in the manufacturing, and retail and trade industries in the City of Botany Bay compared to the Sydney region as a whole, and a slightly lower proportion of people working in all other industries.

## Randwick City LGA

Randwick City is located in the eastern suburbs of the Sydney Metropolitan Region. It is bounded by Centennial Park to the north, the Pacific Ocean to the east and the City of Botany Bay to the south. The western boundary is defined generally by a line of open space and golf courses developed over low lying land known as the Lachlan Swamp and Botany Wetlands (Randwick City Council, 1999).

Randwick City extends over 36,000 square kilometres and has approximately 25 kilometres of coastline which strongly influences the area's character and function from seaside residential developments, open space and tourist destinations to industrial developments and port facilities (Randwick City Council, 1999).

### ***Population and population change***

Randwick City had a population of 121,497 people (59,448 males and 62,049 females) on Census night 2001. This represents an increase of 2.2% since 1996 and 5.3% since 1991. This is a slower growth rate than the Sydney average of 6.8% population growth since 1996 and 13.0% since 1991.

### ***Age-sex structure of the population***

Randwick City's male-female ratio was 48.9:51.1, which is close to the Sydney region average.

Randwick City has a much larger proportion of younger adults than the Sydney average, but lower proportions of school aged children, (refer to **Table 3**). The high number of young adults is understandable given the presence of the University of NSW.

Table 3: Age categories in Randwick City, 2001

Age category	% in Sydney	% in Randwick City
0-14 years	20.2	14.5
15-24 years	14.0	16.7
25-44 years	31.7	34.7
45-64 years	22.2	20.8
65 years and older	11.9	13.2

### ***People of Indigenous origin***

There were 1,351 people (1.1%) who identified as being of Indigenous origin in the 2001 Census. This represents a decrease from 1.2% since 1996 and an increase from 0.9% since 1991. This is similar to the Sydney region average.

### ***Birthplace***

In 2001, 56.0% of Randwick City residents were born in Australia. This compares with 59.0% in 1996 and 60.8% in 1991. This proportion is lower than the Sydney average of 62.2% of people stating they are Australian born.

Of those born overseas, the three main countries of birth in the 2001 Census were United Kingdom (5.0%), Indonesia (2.8%) and New Zealand (2.6%). Of those born overseas in the 1996 Census, the three main countries of birth were United Kingdom (5.3%), New Zealand (2.4%) and Greece (2.2%). Of those born overseas in the 1991 Census, the three main countries of birth were United Kingdom (5.8%), Greece (2.6%) and New Zealand (2.5%).

### ***Language spoken at home***

English was stated as the only language spoken at home by 63.6% of Randwick City residents in 2001. This compares with 65.6% in 1996 and 66.4% in 1991. This is slightly lower than the Sydney average of 66.5% of homes having English as the only language spoken.

The three most common languages spoken at home other than English in the 2001 Census were Chinese languages (7.3%), Greek (4.8%) and Indonesian (2.6%). The three most common languages spoken at home other than English in the 1996 Census were Chinese languages (6.4%), Greek (5.2%) and Indonesian (1.9%). The three most common languages spoken at home other than English in the 1991 Census were Greek (6.2%), Chinese languages (5.7%) and Italian (2.1%).

### ***Family and households***

The mean household size in Randwick City is 2.4 persons, which is lower than the Sydney average of 2.7 persons.

In 2001, 42.3% of all families in occupied private dwellings consisted of couple families with children, 36.8% couples without children, 15.9% one parent families and 5.0% other families.

**Table 4** shows that compared with the Sydney average, Randwick City has more 'other families', sole parent families and couples without children, and a smaller proportion of couples with children.

Table 4: Household types in Randwick City, 2001

Household type	% in Randwick City	% in Sydney
Couples without children	36.8	32.4
Couples with children	42.3	50.5
Sole parent families	15.9	15.0
Other families	5.0	2.1

In 2001, 41.0% of the population of Randwick City aged 15 years and over (excluding overseas visitors) were married, 2.8% separated, 7.0% divorced, 5.9% widowed and 43.4% never been married. Compared to the Sydney average, a larger proportion of people in Randwick City have never been married, and a smaller proportion of people are married. Since the 1996 and 1991 Censuses there has been a higher proportion of people who have never been married or divorced, and a lower proportion of people who are married.

### ***Home ownership***

In 2001, 49.0% of all occupied private dwellings were either fully owned or being purchased by the occupier, while 41.8% were being rented. Randwick City has a lower level of home ownership than the Sydney region generally, which averages 62.7%, and a higher than average rental sector, which is 29.0% in the Sydney region as a whole. The level of home ownership in Randwick City has decreased from 50.0% in 1996 and 50.9% in 1991.

### ***Income distribution***

In 2001, Randwick City residents aged 15 years and over had median weekly individual incomes of \$400-\$499 per week. This is the same as the Sydney average.

### ***Employment***

In the 2001 Census, 58,322 people in Randwick City were employed (30,260 males and 8,062 females). This represents 94.6% of the labour force. Of these, 67.5% (22,884 males and 16,495 females) were working full time and 29.9% (6,549 males and 10,915 females) were working part time. This represents a rise in employment levels from 93.5% of people being employed in the 1996 Census and 90.7% in the 1991 Census.

The remaining 5.4% of the labour force are unemployed. Of these, 57.8% (1,267 males and 643 females) are looking for full time work and 42.2% (650 males and 743 females) are looking for part time work. These proportions are all similar to the Sydney region figures.

### ***Occupation***

In the 2001 Census, 8.8% of Randwick City residents over the age of 15 (3,69 males and 1,884 females) were employed as managers and administrators, which is higher than 7.2% in the 1996 Census and 6.7% in 1991. There were 27.2% people (7,521 males and 8,20 females) employed as professionals in the 2001 Census, which is higher than 23.9% in 1996 and 20.1% in 1991.

There were 13.1% people (4,399 males and 3,253 females) employed as associate professionals in the 2001 Census, which represents a rise from 12.3% in 1996 and 8.2% in 1991. There were 8.7% people (4,458 males and 644 females) employed as tradespersons and related workers in 2001, which is less than 9.8% in 1996 and 11.2% in 1991.

There were 17.2% people (3,287 males and 6,767 females) employed as intermediate clerical, sales and service workers, compared to 18.6% in 1996 and 14.0% in 1991. There were 4.6% people (1,822 males and 846 females) employed as labourers and related workers in the 2001 Census, which is a drop from 5.4% in 1996 and 6.7% in 1991.

Randwick City has a higher proportion of people working as professionals and associate professionals than the Sydney average, and a lower proportion of people working as tradespersons, labourers and related workers.

### ***Industry of employment***

In the 2001 Census, 7.3% employed persons aged 15 years and over (2,792 males and 1,486 females) were employed in the manufacturing industry, which is a drop from 7.9% in 1996 and 9.4% in 1991. There were 5.3% people (2,724 males and 339 females) employed in the construction industry in 2001, which is a rise from 4.7% in 1996 and 4.5% in 1991.

There were 11.4% people (3,245 males and 3,421 females) employed in the retail trade industry in 2001, which is similar to 11.4% in 1996 and 11.6% in 1991. There were 16.0% people (4,870 males and 4,433 females) employed in the property and business services industry in the 2001 Census, which is a rise from 13.0% in 1996 and 9.4% in 1991.

In the 2001 Census, there were 8.5% people (1,755 males and 3,175 females) employed in the education industry, which is similar to 8.5% in 1996 and 7.9% in 1991. There were 10.5% people (1,497 males and 4,611 females) employed in the health and community services industry, which is similar to 10.9% in 1996 and 10.6% in 1991.

Randwick City has a lower proportion of people working in the manufacturing, construction and retail trade industries than Sydney generally, and a higher proportion of people working in the property and business services, education and health and community services industries.

## B Social Infrastructure

The level of social infrastructure within or available to a community is a reflection of the type of community. A community with a high level of social infrastructure may reflect a sophisticated and complex community engaging in a multitude of diverse activities. It may also reflect the age, religious beliefs, health and education status of the community.

Major community services and facilities within the study area are summarised in **Table 5** and **6** below.

Information in this section was sourced from desktop research using sources such as the White Pages and council websites. The research was undertaken in June 2002 and reflects the social infrastructure existing at that time.

Table 5: Services and facilities within the City of Botany Bay

Service/Facility	Number	Name, Location
<b>Health Services</b>		
Hospitals	0	-
Ambulance	1	■ Air Ambulance Base, Mascot
<b>Care Services</b>		
Nursing homes	1	■ Sir Joseph Banks Aged Care, 31 Edgehill Ave, Botany
Hostels	0	-
Meals on Wheels	1	■ Hillsdale Community Centre, 236 Bunnerong Rd, Hillsdale
Child Care Centres/ Family Day Care Centres/ Kindergartens/ Pre-schools	5	<ul style="list-style-type: none"> <li>■ Botany Family Day Care, 149 Coward St, Mascot</li> <li>■ Cinderella Kindergarten, 118 Coward St, Mascot</li> <li>■ Flint Street, cnr Tierney Avenue, Hillsdale</li> <li>■ Southpoint Kindergarten, 238 Bunnerong Rd, Hillsdale</li> <li>■ 51 Coward St, Mascot</li> </ul>
Community Health Centres	3	<ul style="list-style-type: none"> <li>■ Eastgardens Childhood Health Centre, Shop 131A, Bunnerong Rd, Pagewood</li> <li>■ Early Childhood Health Centre, Botany Road (cnr Chelmsford Ave), Botany</li> <li>■ Early Childhood Health Centre, 51 Coward St, Mascot</li> </ul>
Youth Services	0	-

Community Facilities		
Youth Centres	3	<ul style="list-style-type: none"> <li>■ Eastlakes Youth Centre, Eastlakes Community Hall, Florence Ave, Eastlakes</li> <li>■ Hillsdale Youth Centre, Hillsdale Community Centre, 236 Bunnerong Rd, Hillsdale</li> <li>■ Maroubra Police and Community Youth Club, Daceyville</li> </ul>
Scout Halls	2	<ul style="list-style-type: none"> <li>■ 1<sup>st</sup> Scouts, Daceyville</li> <li>■ 2<sup>nd</sup> Scouts, Mascot</li> </ul>
Guides	0	-
Community Centres and Halls	3	<ul style="list-style-type: none"> <li>■ Coronation Hall, cnr Coward St, Mascot</li> <li>■ Botany Town Hall, 423 Botany Rd, Mascot</li> <li>■ Eastlakes Community Hall, Florence Avenue, Eastlakes</li> </ul>
Libraries	2	<ul style="list-style-type: none"> <li>■ Mascot Library, Hatfield St, Mascot</li> <li>■ Central Library (Westfield Shoppingtown), Banks Ave, Eastgardens</li> </ul>
Swimming Pools	1	<ul style="list-style-type: none"> <li>■ Olympic Pool, Myrtle Street, Botany</li> </ul>
Sport Centres	2	<ul style="list-style-type: none"> <li>■ Hillsdale Community Centre, 236 Bunnerong Rd, Hillsdale</li> <li>■ Hensley Athletic Field, Corish Cir, Pagewood</li> </ul>
Parks, Reserves, Ovals	19	<ul style="list-style-type: none"> <li>■ Botany – Sir Joseph Banks Park, Garnet Jackson Reserve, Booralee Park</li> <li>■ Daceyville - Rowland Park</li> <li>■ Eastlakes – Eastlakes Reserve, Jerome Dowling Reserve</li> <li>■ Hillsdale – CD Hensley Field, Muller Reserve</li> <li>■ Mascot – Mascot Park, Mascot Oval, Mascot Memorial Park, High St Reserve, John Curtin Reserve, L'Estrange Park</li> <li>■ Pagewood – Mutch Park, Astrolabe Park, Jellicoe Park, Gaiairine Gardens</li> <li>■ Rosebery – Lauriston Park</li> </ul>
Clubs	3	<ul style="list-style-type: none"> <li>■ Botany RSL, 1421 Botany Rd, Botany</li> <li>■ South Sydney Graphic Arts Club, 182 Coward St, Mascot</li> <li>■ South Sydney Businessmens Club, 182 Coward Street Mascot</li> </ul>
Town Halls	1	<ul style="list-style-type: none"> <li>■ Botany Town Hall, 423 Botany Road, Mascot</li> </ul>
Bowling Clubs	2	<ul style="list-style-type: none"> <li>■ 49 Rhodes St, Hillsdale</li> <li>■ Wentworth Avenue, Mascot</li> </ul>
Museums	1	<ul style="list-style-type: none"> <li>■ George Hanna Memorial Museum, Hatfield St, Mascot</li> </ul>
Correctional Centres	0	-
Golf Courses	3	<ul style="list-style-type: none"> <li>■ The Lakes Golf Course, Eastlakes</li> <li>■ Botany Public Golf Course, Botany</li> <li>■ Bonnie Doon Golf Course, Botany</li> </ul>
Racecourses	0	-

<b>Educational Facilities</b>		
Primary Schools	11	<ul style="list-style-type: none"> <li>■ Daceyville Primary School, Joffre Cr, Daceyville</li> <li>■ Banksmeadow Primary School, cnr Wiggins &amp; Trevelyan Sts, Botany</li> <li>■ Botany Primary School, 1076 Botany Rd, Botany</li> <li>■ St Bernard's Primary School, Ramsgate St, Botany</li> <li>■ Eastlakes Primary School, Page St, Eastlakes</li> <li>■ Pagewood Primary School, Page St, Pagewood</li> <li>■ Mascot Primary School, King St, Mascot</li> <li>■ Matraville Primary School, Beauchamp Rd, Hillsdale</li> <li>■ St Thereses Primary School, Sutherland St, Rosebery</li> <li>■ Gardeners Road Primary School, cnr Botany Rd and Gardeners Rd , Rosebery</li> <li>■ St Michaels Primary School, Banks Ave, Daceyville</li> </ul>
High Schools	1	<ul style="list-style-type: none"> <li>■ JJ Cahill Memorial High School, Sutherland St, Mascot</li> </ul>
TAFEs	0	-
Universities	0	-
<b>Community Services</b>		
Post Offices	8	<ul style="list-style-type: none"> <li>■ Sydney Airport Qantas Domestic Terminal, Shop 22, opp Gate 7</li> <li>■ Sydney International Airport Departure Level 1 (2<sup>nd</sup> Floor)</li> <li>■ 2 Banksia St, Botany</li> <li>■ 972 Botany Rd, Mascot</li> <li>■ 66 Mentmore St, Rosebery</li> <li>■ 369 Gardeners Rd, Rosebery,</li> <li>■ Westfield Eastgardens, Pagewood, Wentworth Ave, Pagewood</li> <li>■ Eastlakes Shopping Centre, Shop 9, Evans Ave, Eastlakes</li> </ul>
Banks	13	<ul style="list-style-type: none"> <li>■ ANZ Bank, 1191 Botany Rd, Mascot</li> <li>■ ANZ Bank, Westfield Eastgardens, Wentworth Ave, Pagewood</li> <li>■ Commonwealth Bank, 1377 Botany Rd, Botany</li> <li>■ Commonwealth Bank, 902 Botany Rd, Mascot</li> <li>■ Commonwealth Bank, Constellation Rd, Mascot</li> <li>■ Commonwealth Bank, Westfield Eastgardens, Wentworth Ave, Pagewood</li> <li>■ National Australia Bank, 142 O'Riordan St, Mascot</li> <li>■ St George Bank, 1193 Botany Rd, Mascot</li> <li>■ St George Bank, Westfield Eastgardens, Wentworth Ave, Pagewood</li> <li>■ Westpac Bank, 1116 Botany Rd, Botany</li> <li>■ Westpac Bank, 1125 Botany Rd, Mascot</li> <li>■ Westpac Bank, Westfield Eastgardens, Wentworth Ave, Pagewood</li> <li>■ Westpac Bank, 23b The Parade, Eastlakes</li> </ul>
Police Stations	2	<ul style="list-style-type: none"> <li>■ Mascot Police Station, 965 Botany Rd, Mascot</li> <li>■ Sydney Airport, Seventh Ave, Mascot</li> </ul>

Fire Stations	4	<ul style="list-style-type: none"> <li>■ 3 Banksia St, Botany</li> <li>■ 139 Coward St, Mascot</li> <li>■ Sydney International Airport, Mascot</li> <li>■ Sydney Domestic Airport, Mascot</li> </ul>
State Emergency Services	1	<ul style="list-style-type: none"> <li>■ State Emergency Services, 1355 Botany Rd, Botany</li> </ul>

Other		
Places of worship	13	<ul style="list-style-type: none"> <li>■ Christian Brethren Church, 40 King St, Eastlakes</li> <li>■ Church of Jesus Christ Latter Day Saints, 70 Mascot Dr, Eastlakes</li> <li>■ St Matthews Anglican Church, cnr Botany Rd and Lord St, Botany</li> <li>■ St Michaels Anglican Church, 29 Banks Avenue, Daceyville</li> <li>■ St Stephens Anglican Church, 6 Harry St, Eastlakes</li> <li>■ Antiochian Orthodox Church, 5 Dalley Avenue, Pagewood</li> <li>■ St Bernards Catholic Church, 6 Ramsgate St, Botany</li> <li>■ St Josephs Catholic Church, Morley Ave, Rosebery</li> <li>■ St Thereses Catholic Church, Sutherland St, Rosebery</li> <li>■ St Catherines Greek Orthodox Church, 180 Coward St, Mascot</li> <li>■ Presbyterian Church, 1561 Botany Rd, Botany</li> <li>■ Knox Presbyterian Church, 768 Botany Rd, Mascot</li> <li>■ Uniting Churches, 118 Coward St and 1293 Botany Rd, Mascot</li> </ul>
Masonic Centres	0	-
Shopping Centres	3	<ul style="list-style-type: none"> <li>■ Westfield Eastgardens, Wentworth Ave, Pagewood</li> <li>■ Eastlakes Shopping Centre, 85 Evans Ave, Eastlakes</li> <li>■ Southpoint Shopping Centre, Bunnerong Rd, Hillsdale</li> </ul>
Cinema Complexes	1	<ul style="list-style-type: none"> <li>■ Hoyts 6, Westfield Eastgardens, Wentworth Ave, Pagewood</li> </ul>
Cemeteries and Crematoria	0	-
Hotels and Motels	3	<ul style="list-style-type: none"> <li>■ Hotel Ibis Sydney Airport, O'Riordan St, Mascot</li> <li>■ Stamford Sydney Airport O'Riordan St (cnr Robey St) Mascot</li> <li>■ Sydney Airport Holiday Inn, Bourke Rd (cnr O'Riordan St ), Mascot</li> </ul>
Airports	2	<ul style="list-style-type: none"> <li>■ Sydney International Airport</li> <li>■ Sydney Domestic Airport</li> </ul>



Table 6: Services and facilities within Randwick City

Service/Facility	Number	Name, Location
<b>Health Services</b>		
Hospitals	8	<ul style="list-style-type: none"> <li>■ Sydney Children's Hospital, High Street, Randwick</li> <li>■ Royal Hospital for Women, Barker St, Randwick</li> <li>■ Prince of Wales Hospital, cnr High &amp; Avoca Sts, Randwick</li> <li>■ Prince Henry Hospital, Anzac Pde, Little Bay (closing late 2002)</li> <li>■ Prince of Wales Private, Barker St, Randwick</li> <li>■ Eastern Suburbs Private Hospital, 8 Chapel St, Randwick</li> <li>■ Roma Private, 9 William St, Randwick</li> <li>■ Kensington Private Hospital, Alison Rd, Kensington</li> </ul>
Ambulance	0	-
<b>Care Services</b>		
Nursing homes	9	<ul style="list-style-type: none"> <li>■ Camelot, 770 Anzac Pde, Maroubra</li> <li>■ Castellorizian Nursing Home, 95 Todman Ave, Kensington</li> <li>■ Daintrey Nursing Home, 14 Daintrey Cr, Randwick</li> <li>■ Frenchmans Lodge Nursing Home, 15 Frenchmans Rd, Randwick</li> <li>■ Kia-Ora Nursing Home, 34 Avoca St, Randwick</li> <li>■ Lochinvar, 98 Mount St, Coogee</li> <li>■ Milford House Nursing Home, 183 Avoca St, Randwick</li> <li>■ Penycraig, 37 Rae St, Randwick</li> <li>■ 288 Maroubra Rd, Maroubra Junction</li> </ul>
Hostels	1	<ul style="list-style-type: none"> <li>■ Mount St Josephs, 70 Market St, Randwick</li> </ul>
Meals on Wheels	1	<ul style="list-style-type: none"> <li>■ Randwick Meals on Wheels, Municipal Markets, Kingsford</li> </ul>

Child Care Centres/ Family Day Care Centres/ Kindergartens/ Pre-schools	54	<ul style="list-style-type: none"> <li>■ Bears Den, 177 Franklin St, Matraville</li> <li>■ Beulah Matumbi Child Care Centre, 186 Clovelly Rd,</li> <li>■ Blue Gum Cottage, 49 Mawson Pde, Chifley</li> <li>■ Bubs Child Care Centre, 339 Maroubra Rd, Maroubra</li> <li>■ Care-A-Lot Long Day Care Centre, 32 Carnegie Ct, Chifley</li> <li>■ Centennial Parklands Children's Centre, Cnr. Dacey Ave &amp; Anzac Pde, Centennial Park</li> <li>■ Chester House Child Care Centre, 1 Blacklion Pl, Kensington</li> <li>■ Clovelly Child Care Centre, 40 Arden St, Clovelly</li> <li>■ Coogee Bear Day Care, 135B Brook St, Coogee</li> <li>■ Coogee Synagogue Batory Kindergarten, 121 Brook St, Coogee</li> <li>■ Duffy's Corner Occasional Child Care Centre, 419A Beauchamp Rd, Maroubra</li> <li>■ Glen Mervyn Child Care Centre, 24 Coogee Bay Rd, Randwick</li> <li>■ Green Gables Children's Centre, 24 Houston Rd, Kingsford</li> <li>■ Gujaga MACS, 1 Elaroo Ave, Phillip Bay</li> <li>■ Hibiscus Children's Centre and Pre-School, Joffre Cres, Daceyville</li> </ul>
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Child Care Centres/ Family Day Care Centres/ Kindergartens/ Pre-schools (continued)		<ul style="list-style-type: none"> <li>■ Hillel Kindergarten, 86-100 King St, Randwick</li> <li>■ House at Pooh Corner, UNSW, Barker St, Kensington</li> <li>■ Jack &amp; Julie Child Care Centre, 3 Moorina Ave, Matraville</li> <li>■ John Mewburn Child Care Centre, 2 Austral St, Malabar</li> <li>■ Kangas House, 52 Barker St, Kingsford</li> <li>■ Kindaburra Children Centre, 1 Jersey La, Matraville</li> <li>■ Malabar Occasional Care Centre Inc., 1B Prince Edward St, Malabar</li> <li>■ Maroubra Junction Kindergarten, 132 Garden St, Maroubra</li> <li>■ Maroubra Montessori Long Day Care Centre, 469 Malabar Rd, Maroubra</li> <li>■ Maroubra Montessori Preschool, 469 Malabar Rd, Maroubra</li> <li>■ Maroubra Neighbourhood Children's Centre, 49 Bond St, Maroubra</li> <li>■ Maroubra Playtime Child Care Centre, 270 Malabar Rd, Maroubra</li> <li>■ Mary Campbell Preschool, 291 Storey St, Maroubra</li> <li>■ Moriah College Preschool, 86-100 King St, Randwick</li> <li>■ Mount Sinai College Preschool, 21 Apsley Ave, Kingsford</li> <li>■ Moverly Children's Centre, Cnr. Argyle &amp; Cedar Crs, Maroubra</li> <li>■ Munchkins Kindergarten, 59 Jennings St, Matraville</li> <li>■ Once Upon a Time Rudolf Steiner Child Care Centre, 80 Botany St, Randwick</li> <li>■ Peter Pan Kindergarten, 30 Canara Ave, La Perouse</li> <li>■ Peter Rabbit's Cottage, 25 Poziers Ave, Matraville</li> <li>■ POW Place Community Child Care Centre, Barker St, Randwick</li> <li>■ Rainbow Street Child Care Centre, 100 Rainbow Street, Randwick</li> <li>■ Randwick – Coogee Kindergarten, Frances St, Randwick</li> <li>■ Randwick Montessori Preschool, 1 Rae St, Randwick</li> <li>■ Randwick Open Care for Kids Inc. (ROCK), 30 Waratah Ave, Randwick</li> <li>■ Rivendell Child Care Centre, 33 Todman Ave, Kensington</li> <li>■ Royal Randwick Shopping Centre Child Care Centre, Belmore Rd, Randwick</li> <li>■ Soldier's Settlement Preschool, Menin Rd, Matraville</li> <li>■ SOS Preschool, 83 Bundock St, Randwick</li> <li>■ South Coogee Learning Centre, Cnr. Tucabia St &amp; Moverly Rd, South Coogee</li> <li>■ Stella Maris Child Care Centre, 35 Dowling St, Kensington</li> <li>■ The French Australian Preschool Long Day Care, 88 Cooper St, Maroubra</li> <li>■ The Kornmehl –Emanuel Preschool, cnr Chepstow &amp; Stephen Sts, Randwick</li> <li>■ The Spot Pre-School, 84 Perouse Rd, Randwick</li> <li>■ Tigger's Place Child Care Centre, 22-24 Botany St, Randwick</li> </ul>
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Child Care Centres/ Family Day Care Centres/ Kindergartens/ Pre-schools (continued)	54	<ul style="list-style-type: none"> <li>■ Wee Wonders Child Care Centre, 1 Myrtle St, Kensington</li> <li>■ Widget's Pre-School Centre, 16 McNair Ave, Kingsford</li> <li>■ Wind in the Willows, 8 Sturt St, Kingsford</li> </ul>
Community Health Centres	3	<ul style="list-style-type: none"> <li>■ Randwick Annabel House (Dementia Therapy), 33 Bundock St, Randwick</li> <li>■ Early Childhood Health Centre, Royal Randwick Shopping Centre</li> <li>■ Early Childhood Health Centre, 40 Arden St, Clovelly</li> </ul>
Youth Services	7	<ul style="list-style-type: none"> <li>■ National Childrens and Youth Law Centre, 32 Botany St, Randwick</li> <li>■ Ted Noffs Foundation PALM – East, 150 Avoca St, Randwick</li> <li>■ CanTeen NSW Division, Residence 2, Prince of Wales Hospital, Barker St, Randwick</li> <li>■ Australian Red Cross, Young Womens Health Program, 24 Coogee Bay Rd, Randwick</li> <li>■ Adolescent Mental Health Service, Superintendents Cottage, POW Hospital, High &amp; Avoca Sts, Randwick</li> <li>■ Randwick Youth Worker Support Network, 30 Frances St, Randwick</li> <li>■ Waverley Action for Youth Services, Randwick Youth Service, 1/203 Avoca St, Randwick</li> </ul>
<b>Community Facilities</b>		
Youth Centres	2	<ul style="list-style-type: none"> <li>■ Randwick Botany Police Citizens Youth Club, 26A Bunnerong Rd, Randwick</li> <li>■ The Shack Youth Services, 184 Maroubra Rd, Maroubra</li> </ul>
Scout Halls	4	<ul style="list-style-type: none"> <li>■ 1st Scouts, Little Bay</li> <li>■ 1st Scouts, Maroubra</li> <li>■ 2nd Scouts, Randwick</li> <li>■ 3rd/4th Scouts, Kensington</li> </ul>
Guides	3	<ul style="list-style-type: none"> <li>■ Randwick, Maroubra, Matraville</li> </ul>
Community Centres and Halls	4	<ul style="list-style-type: none"> <li>■ Randwick Community Centre, 33 Bundock St, Randwick</li> <li>■ AJC Convention Centre, Royal Randwick Racecourse, Alison Rd, Randwick</li> <li>■ Latham Park Community Amenities Building, South Coogee</li> <li>■ Kooloora Community Centre, 167 Billa Crescent, Malabar</li> </ul>
Libraries	4	<ul style="list-style-type: none"> <li>■ Bowen Library, 669-673 Anzac Pde, Maroubra</li> <li>■ Matraville Branch Library, 1203 Anzac Pde, Matraville</li> <li>■ Randwick Branch Library, Royal Randwick Shopping Centre, Avoca St, Randwick</li> <li>■ University of NSW Library, Kensington</li> </ul>

Swimming Pools	5	<ul style="list-style-type: none"> <li>■ Coogee Baths, Coogee</li> <li>■ Des Renford Aquatic Centre, cnr Jersey Rd &amp; Robey St, Maroubra</li> <li>■ Heffron Park Swimming Pool, Maroubra</li> <li>■ University of NSW Aquatic Centre, cnr Anzac Pde and High St, Kensington</li> <li>■ Wylies Baths, Neptune St, Coogee</li> </ul>
Sport Centres	7	<ul style="list-style-type: none"> <li>■ Anzac Rifle Range, Malabar</li> <li>■ Little Bay Sports Field, Little Bay</li> <li>■ Matraville Sports Centre, 441 Bunnerong Rd, Matraville</li> <li>■ Sydney Pistol Club, La Perouse</li> <li>■ Womens Athletic Fields, Chifley</li> <li>■ Wyvern Basketball Club, 245 Avoca St, Randwick</li> <li>■ University of NSW Oval and Athletics Centre</li> </ul>
Parks, Reserves, Ovals	65	<ul style="list-style-type: none"> <li>■ Centennial Park - Centennial Park, Lachlan Reserve, Mission Fields, Sandstone Ridge</li> <li>■ Chifley - Woomera Reserve</li> <li>■ Clovelly - Burnie Park, Burrows Park, Bundock Park</li> <li>■ Coogee – Baker Park, Bangor Park, Bardon Park, Barker Park, Blenheim Reserve, Coogee Oval Park, Dunningham Reserve, Grant Reserve, Trennery Reserve</li> <li>■ Kensington – Fitzpatrick Park, Kensington Park, Kokoda Park, Wills Playground, Les Bridge Playground, Michael Birt Gardens, Raleigh Park</li> <li>■ Kingsford – M Kenzie Field, Navy Oval, Paine Reserve</li> <li>■ La Perouse - Botany Bay National Park</li> <li>■ Little Bay – Woomera Reserve</li> <li>■ Malabar - Cromwell Park, Duri Reserve, Pioneers Park, Rubie Reserve</li> <li>■ Matraville – Baird Reserve, Burke Reserve, Memorial Park, Purcell Park, Rabaul Reserve</li> <li>■ Maroubra – Arthur Byrne Reserve, Broadarrow Reserve, Central Park, Coral Sea Park, Fenton Ave Reserve, Heffron Park, Jack Vanny Memorial Park, John Shore Park, Lake Malabar Park, Matraville Park, Snape Park, Nagle Park, Ocean View Reserve, Quarry Reserve</li> <li>■ Phillip Bay - Yarra Bay Bicentennial Park, Yarra Recreation Reserve</li> <li>■ Randwick –Alison Park, Govett Park, Frank Doyle Park, Writtle Park, Paine Reserve, Fred Hollows Reserve</li> <li>■ South Coogee - Emily McCarthy Park, Gollan Park, Latham Park, Popplewell Park,</li> <li>■ South Maroubra – Burrows Reserve</li> </ul>

Clubs	14	<ul style="list-style-type: none"> <li>■ Randwick Labour Club, 135 Alison Rd, Randwick</li> </ul>
	14	<ul style="list-style-type: none"> <li>■ Maroubra Seals Sports &amp; Community Club, 212 Marine Pde, Maroubra</li> <li>■ Clovelly RSL &amp; Airforce Club Ltd, Clovelly Rd, Clovelly</li> <li>■ Kensington RSL War Memorial Club Ltd, 2 Goodwood St, Kensington</li> <li>■ Australian Jockey, Alison Rd, Randwick</li> <li>■ Coogee Randwick Returned Servicemen's, Carr St, Coogee</li> <li>■ Coogee Legion, 266a Coogee Bay Rd, Coogee</li> <li>■</li> <li>■ Randwick Rugby, 104 Brook St, Coogee</li> <li>■ Malabar RSL, Ireton St, Malabar</li> <li>■ Castellorizian Club, 448 Anzac Pde, Kingsford</li> <li>■ South Sydney Junior Rugby League Club, 558a Anzac Pde, Maroubra</li> <li>■ Maroubra RSL, Haig St, Maroubra</li> <li>■ Matraville RSL, Norfolk Pde, Matraville</li> <li>■ Yarra Bay Sailing Club, Yarra Rd, Phillip Bay</li> </ul>
Town Halls	1	<ul style="list-style-type: none"> <li>■ Randwick Town Hall, 39 Frances St, Randwick</li> </ul>
Bowling Clubs	8	<ul style="list-style-type: none"> <li>■ Maroubra RSL, cnr Malabar Rd &amp; Mons Avenue, Maroubra</li> <li>■ Matraville RSL, Norfolk Ave, Matraville</li> <li>■ The Avenue, Randwick</li> <li>■ Moverly Rd, South Coogee</li> <li>■ Dolphin St, Coogee</li> <li>■ Cnr Ocean and Boundary Sts, Clovelly</li> <li>■ Coogee Randwick RSL, cnr Carr and Byron Sts, Coogee</li> <li>■ Doncaster Avenue, Kensington</li> </ul>
Museums	1	<ul style="list-style-type: none"> <li>■ La Perouse Museum, Anzac Pde, La Perouse</li> </ul>
Correctional Centres	1	<ul style="list-style-type: none"> <li>■ Long Bay Correctional Centre, Malabar</li> </ul>
Golf Courses	5	<ul style="list-style-type: none"> <li>■ The Australian Golf Course, Kensington</li> <li>■ Randwick Golf Course, Malabar</li> <li>■ St Michaels Golf Course, Little Bay</li> <li>■ The Coast Golf Course, Little Bay</li> <li>■ NSW Golf Course, La Perouse</li> </ul>
Racecourse	1	<ul style="list-style-type: none"> <li>■ Royal Randwick Racecourse, Randwick</li> </ul>

Educational Facilities		
Primary Schools	29	<ul style="list-style-type: none"> <li>■ Autistic Childrens Special School, Bundock St, Randwick</li> <li>■ Chifley Primary School, Mitchell St, Chifley</li> <li>■ Coogee Boys Preparatory School, cnr Alison &amp; Cook St, Randwick</li> <li>■ Coogee Primary School, Byron St, Coogee</li> <li>■ Kensington Primary School, Doncaster/Todman/Bowral Sts, Kensington</li> <li>■ La Perouse Primary School, Yarra Rd, Phillip Bay</li> <li>■ Malabar Primary School, Franklin St, Malabar</li> <li>■ Maroubra Bay Primary School, Duncan St, Maroubra</li> <li>■ Maroubra Junction Primary School, cnr Anzac Pde &amp; Storey St, Maroubra Junction</li> <li>■ Matraville Soldiers Settlement Primary School, Menin Rd, Matraville</li> <li>■ Our Lady of the Annunciation, 31 Donovan Ave, Maroubra,</li> <li>■ Our Lady of the Rosary School, Kensington Rd, Kensington</li> <li>■ Rainbow Street Primary School, 90 Rainbow St, Randwick</li> <li>■ Randwick Montessori School, 1 Rae St, Randwick</li> <li>■ Randwick Primary School, Cowper St, Randwick</li> <li>■ South Coogee Public School, Moverly Rd, South Coogee</li> <li>■ St Agnes Primary School, 509 Bunnerong Rd, Matraville</li> <li>■ St Aidans Primary School, 214 Maroubra Rd, Maroubra Junction</li> <li>■ St Andrews Primary School, cnr Ireton St &amp; Prince Edward St, Malabar</li> <li>■ St Anthonys Primary School, Arden St, Clovelly</li> <li>■ St Brigids Primary School, 160 Coogee Bay Rd, Coogee</li> <li>■ St Margaret Mary's School, cnr Clovelly Rd &amp; Avoca St, Randwick North</li> <li>■ St Mary &amp; St Joseph Primary School, cnr Malabar Rd &amp; Fitzgerald Ave, Maroubra</li> <li>■ St Michaels Convent School, Kingsford</li> <li>■ St Spyridon Primary College, Gardeners Rd, Kingsford</li> <li>■ The Emanuel School, cnr Avoca &amp; Stanley St, Randwick</li> <li>■ The French School of Sydney, 88 Cooper St, Maroubra</li> <li>■ The Special Joseph Varga School, 128 Alison Rd, Randwick</li> <li>■ Claremont College, 30 Coogee Bay Rd, Coogee</li> </ul>

High Schools	14	<ul style="list-style-type: none"> <li>■ Brigidine College, Coogee Bay Rd, Randwick</li> <li>■ Marcellin College, 195 Alison Rd, Randwick</li> <li>■ Marist Brothers High School, Donovan Ave, Maroubra</li> <li>■ Maroubra High School, cnr Moverly Rd &amp; Anzac Pde, Maroubra</li> <li>■ Matraville High School, Anzac Pde, Matraville</li> <li>■ Mount Sinai College, Runic La, Maroubra</li> <li>■ Open High School, 78 Avoca St, Randwick</li> <li>■ Our Lady of the Sacred Heart College, 36 Addison St, Kensington</li> <li>■ Randwick Boys High School, cnr Rainbow &amp; Avoca St, Randwick</li> <li>■ Randwick Girls Technology High, Barker St, Randwick</li> <li>■ Randwick North High School, cnr Avoca &amp; Cowper Sts, Randwick</li> <li>■ South Sydney High School, O'Sullivan/Walsh/Wild Sts, Maroubra</li> <li>■ St Spyridon College, Anzac Pde, Maroubra</li> <li>■ The French School of Sydney, 88 Cooper St, Maroubra</li> </ul>
TAFEs	1	<ul style="list-style-type: none"> <li>■ East Sydney College of TAFE, cnr Darley Rd &amp; King St, Randwick</li> </ul>
Universities	1	<ul style="list-style-type: none"> <li>■ University of New South Wales, Kensington and Little Bay campuses</li> </ul>
<b>Community Services</b>		
Post Offices	9	<ul style="list-style-type: none"> <li>■ 495 Bunnerong Rd, Matraville</li> <li>■ Shop 72b, 73 Belmore Rd, Randwick</li> <li>■ Shop 4, 229 Clovelly Rd, Clovelly West</li> <li>■ 120 Brook St, Coogee</li> <li>■ 168 Anzac Pde, Kensington</li> <li>■ 1a Prince Edward St, Malabar</li> <li>■ 205 Maroubra Rd, Maroubra</li> <li>■ Shop 3, 21 Lexington Pl, Maroubra South</li> <li>■ 12 Gardeners Rd, Kingsford</li> </ul>



Banks	16	<ul style="list-style-type: none"> <li>■ ANZ Bank, 749 Anzac Pde, Maroubra</li> <li>■ Commonwealth Bank, University of NSW, Kensington</li> <li>■ Commonwealth Bank, 375 Anzac Pde, Kingsford</li> <li>■ Commonwealth Bank, 199 Coogee Bay Rd, Coogee</li> <li>■ Commonwealth Bank, 22 Belmore Rd, Randwick</li> <li>■ Commonwealth Bank, 492 Bunnerong Rd, Matraville</li> <li>■ HSBC Bank, 201 Maroubra Rd, Maroubra</li> <li>■ National Australia Bank, 111-115 Belmore Rd, Randwick</li> <li>■ National Australia Bank, Stockland Mall, 707 Anzac Pde, Maroubra Junction</li> <li>■ National Australia Bank, 327-329 Anzac Pde, Kingsford</li> <li>■ St George Bank, 707 and 755 Anzac Pde, Maroubra</li> <li>■ St George Bank, 373 Anzac Pde, Kingsford</li> <li>■ Westpac Bank, 49-51 Belmore Rd, Randwick</li> <li>■ Westpac Bank, 225 Coogee Bay rd, Coogee ANZ Bank, 12-14 Belmore Rd, Randwick</li> <li>■ Westpac Bank, 494 Anzac Pde, Kingsford</li> <li>■ Westpac Bank, 207 Maroubra Rd, Maroubra</li> </ul>
Police Stations	3	<ul style="list-style-type: none"> <li>■ Malabar Police Station, 1234 Anzac Pde, Malabar</li> <li>■ Maroubra Police Station, 136 Maroubra Rd, Maroubra</li> <li>■ Randwick Police Station, 196 Alison Rd, Randwick</li> </ul>
Fire Stations	3	<ul style="list-style-type: none"> <li>■ cnr Beauchamp and Bunnerong Roads, Matraville</li> <li>■ 4 The Avenue, Randwick</li> <li>■ cnr Maroubra Rd &amp; Flower St, Maroubra</li> </ul>
State Emergency Services	1	Randwick

Other		
Places of worship	38	<ul style="list-style-type: none"> <li>■ Aboriginal Evangelist, cnr Elaroo and Adina Avenues, La Perouse</li> <li>■ Holy Trinity Anglican Church, cnr Todman Ave, Kingsford</li> <li>■ St Edmunds Anglican Church, cnr Wild &amp; Holden Sts, Maroubra</li> <li>■ St Johns Anglican Church, Maroubra Rd, Maroubra</li> <li>■ St Judes Anglican Church, 108 Avoca St, Randwick</li> <li>■ St Lukes Anglican Church, cnr Arden and Vama Sts, Clovelly</li> <li>■ St Martins Anglican Church, cnr Todman Ave &amp; Balfour Rd, Kensington</li> <li>■ St Marks Anglican Church, Franklin St, Malabar</li> <li>■ St Nicholas Anglican Church, 125 Brook St, Coogee</li> <li>■ St Pauls Anglican Church, cnr Gregory &amp; Nymboida Sts, South Coogee</li> <li>■ Antiochian Orthodox Church, 219 Alison Rd, Randwick</li> <li>■ Baptist Church, 1 Australia Ave, Matraville</li> <li>■ Baptist Church, 139 Garden St, Maroubra</li> <li>■ Baptist Church, 10 Soudan St, Randwick</li> <li>■ St Agnes Catholic Church, 509 Bunnerong Rd, Matraville</li> <li>■ St Andrews Catholic Church, 6 Prince Edward St, Malabar</li> <li>■ St Anthonys of Padua Catholic Church, 58 Arden St, Clovelly</li> <li>■ St Brigids Catholic Church, Brook St, Coogee</li> <li>■ St Andrews Catholic Church, 6 Prince Edward St, Malabar</li> <li>■ Holy Family Catholic Church, 214 Maroubra rd, Maroubra</li> <li>■ Our Lady of the Good Counsel Catholic Church, Yarra Rd, Phillip Bay</li> <li>■ Our Lady of the Rosary Catholic Church, 4 Roma Cr, Kensington</li> <li>■ Our Lady of the Sacred Heart Catholic Church, 193 Avoca St, Randwick</li> <li>■ St Margaret Mary Catholic Church, 58a Clovelly Rd, Randwick North</li> <li>■ St Marys &amp; St Josephs Catholic Churches, 246 Malabar Rd, South Coogee</li> <li>■ St Georges Coptic Orthodox Church, 5 Bowral St, Kensington</li> <li>■ Churches of Christ Associated Church, 399 Anzac Pde, Kingsford</li> <li>■ St Spyridon Greek Orthodox Church, Kingsford</li> <li>■ Jehovahs Witnesses, 603 Bunnerong Rd, Matraville</li> <li>■ Jewish Synagogue, 121 Brook St, Coogee</li> <li>■ Jewish Synagogue, 635 Anzac Pde, Maroubra</li> <li>■ Presbyterian Church, cnr Alison Rd &amp; Cook St, Randwick</li> </ul>

Places of worship (continued)	38	<ul style="list-style-type: none"> <li>■ St Andrews Presbyterian Church, 8 Robey St, Maroubra</li> <li>■ St Georges Presbyterian Church, Houston Rd, Kingsford</li> <li>■ Our Lady of the Assumption, 27 Donovan Ave, Maroubra</li> <li>■ Salvation Army Church, 100 Boyce Rd, Maroubra</li> <li>■ Uniting Church, 827 Anzac Pde, Maroubra</li> <li>■ Uniting Church, 1 Rae St, Randwick</li> </ul>
Masonic Centres	1	<ul style="list-style-type: none"> <li>■ 199 Anzac Pde, Kensington</li> </ul>
Shopping Centres	4	<ul style="list-style-type: none"> <li>■ Royal Randwick Shopping Centre, 73 Belmore Rd (cnr Short St), Randwick</li> <li>■ Randwick Plaza, Bemore Rd, Randwick</li> <li>■ Stockland Mall Shopping Centre, Anzac Pde, Maroubra</li> <li>■ Doncaster Shopping Centre, Anzac Pde, Kensington</li> </ul>
Cinemas	1	<ul style="list-style-type: none"> <li>■ Randwick Ritz Cinemas, 43 St Paul St, Randwick</li> </ul>
Cemeteries and Crematoria	3	<ul style="list-style-type: none"> <li>■ St Judes Cemetery, Randwick</li> <li>■ Randwick Cemetery, Coogee</li> <li>■ Botany Cemetery and Eastern Suburbs Crematorium, Matraville</li> </ul>
Hotels and Motels	10	<ul style="list-style-type: none"> <li>■ Crowne Plaza Coogee Beach, cnr Arden &amp; Carr Sts, Coogee Beach</li> <li>■ The Clovelly, Clovelly Rd, Clovelly</li> <li>■ Tradewinds Hotel, Maroubra Rd, Maroubra</li> <li>■ Coogee Bay Hotel, Coogee Bay Rd, Coogee</li> <li>■ Coogee Sands Motor Inn, 161 Dolphin St, Coogee</li> <li>■ Coogee Bay Boutique Hotel, 9 Vicar St, Coogee</li> <li>■ Coogee Bayside Private Hotel, 213 Coogee Bay Rd, Coogee</li> <li>■ Sands Hotel/Motel, 32-40 Curtin Crs, Maroubra</li> <li>■ Gemini Hotel, 65-71 Belmore Rd, Randwick</li> <li>■ Glensynd Motor Inn, Alison Rd, Kensington</li> </ul>
Airport	0	-

**Tables 5 and 6** show that a wide range of community services and facilities exist to serve the diverse populations of the the City of Botany Bay and Randwick City LGAs. These two LGAs accommodate a number of facilities required for the effective daily functioning of any community eg banks, post offices, police stations, child care centres, primary and secondary schools.

The social and recreational needs of the populations residing within these LGAs, are also well catered for, as is demonstrated by the many parks, golf courses, clubs, community halls and spiritual centres located within these LGAs.

## **C Focus group notes**

## ENVIRONMENTAL FOCUS GROUP SESSION NOTES



SUBJECT	Port Botany – Social Impact Assessment and Open Space Concept Planning	DATE	21/5/02
HELD	Tuesday 30 April 2002, Graphic Arts Club, Mascot	OUR REF.	01036

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### General:

The purpose of the focus group session was to identify:

- The structure and values of the community potentially impacted by the proposal;
- Community views and issues regarding the proposal;
- Opportunities arising from the proposal; and
- Mitigative measures to be considered for the proposal.

Focus group discussion was broad and did not necessarily correspond with agenda items or was not provided to the desired level of detail. We also found that there was repetition in participant responses.

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### Community structure

- Lack of connectivity across environmental groups within the Bay.

### Community values

- Environmental community values Port Botany area because it accommodates an important wader habitat in NSW.
- Environmental community values Penrhyn estuary because it is a “hot ecological spot – last spot where congregate before extinction (of shore birds)”.
- Environmental community values Botany Bay because it is the gateway to Sydney.

### Community views and issues

- There is not enough consultation and connectivity across groups around the Bay. Some community apathy.
- BBACA participation in process does not mean support of the proposal.
- Environmental groups want to feel part of process.
- Proposal social catchment is wider than those just in Botany ie. Miranda and Enfield are both affected by port activity.
- Lack of strategic planning of Bay.
- Alternative sites must be considered.
- Bay already under pressure.

- Impact on environment vs jobs and the economy.
- Port development is expected to result in:

the Bay being filled in essentially losing its primary function. Water will be gone.

loss of seagrass beds.

loss of marine environment.

loss of thin silt marshes.

changes to tidal movements and flushing.

visual impacts.

change in ambience at Penrhyn Estuary.

### **Opportunities**

- Education awareness centres.
- Landscaping around the port.
- Painting of containers.

### **Mitigation measures**

- Compensatory habitat for loss of habitat eg. at Taren Point.
- Alternative sites.

## LOCAL COMMUNITY FOCUS GROUP SESSION NOTES



SUBJECT	Port Botany – Social Impact Assessment and Open Space Concept Planning	DATE	21/5/02
HELD	Wednesday 1 May 2002, Graphic Arts Club, Mascot	OUR REF.	01036

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### Community structure

- Community shift from working class to middle-class residential.
- Community is close knit with evident networks. Community joins together for a cause.

### Community values

- Community values natural environment.
- Strong historical connection – ‘birthplace of the nation’.
- Need to preserve area for future generations.

### Community views and issues

- Sense of pride for area and Council.
- Sense of loss of area.
- Development creates physical split in the community eg. train line, port, airport.
- Marine life destroyed by development / progress.
- Lack of strategic planning of Bay. Need to consider alternative sites.
- Lack of faith in the approvals process.

- Port Botany is a naturally shallow port – not a proper port.
- Port development is expected to:
  - pose risks and hazards given port's proximity to the airport.
  - generate cumulative effects on Botany – rail link, noise and vibration.
  - create visual impacts.
    - cause beach erosion due to dredging.
    - result in loss of seagrasses.
    - change groundwater levels and hydraulics.
    - reduce size of Foreshore Beach.
    - render certain areas unusable ie. restrict access.
    - result in increased shipping and hence will increase pollution of Bay.
    - impact on fishing industry.
- impact on community structure.

#### **Opportunities**

- Compensation.

#### **Mitigation measures**



## FISHING AND BOATING COMMUNITY FOCUS GROUP SESSION NOTES



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SUBJECT	Port Botany – Social Impact Assessment and Open Space Concept Planning	DATE	21/5/02
HELD	Thursday 2 May 2002, Graphic Arts Club, Mascot	OUR REF.	01036

### General:

The purpose of the focus group session was to identify:

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- community views and issues regarding the proposal;
- opportunities arising from the proposal; and
- mitigative measures to be considered for the proposal.

Focus group discussion was broad and did not necessarily correspond with agenda items or was not provided to the desired level of detail. We also found that there was repetition in participant responses.

In order for the notes to serve their intended purpose for our social impact assessment and open space concept planning processes, responses have been summarised and categorised into our desired headings (refer below).

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### Community structure

- Bay used by many different groups – kids, local community, fishermen, gay people, local businesses. Competitions are staged at the Bay.
- Sense of community within the Bay.
- Boating and fishing groups using the Bay are formally organised and make contact.
- Largely labor voting area.

### Community values

- Boating and fishing activities in the Bay are part of the 'Aussie' culture.
- Botany Bay valued as a local and regional fishing and boating resource.

### Community views and issues

- Port development is expected to:
  - change Bay from naturally shallow port to a deep water port and reduce the size of the Bay.

- require dredging. Dredging results in negative impacts:
  - loss of seagrasses.
  - loss of fish stock.
  - kills oysters.
  - ecosystem changes.
  - disturb potential acid sulphate soils.
  - render a certain good fishing area unusable and will restrict access to certain passages.
  - add to cumulative impacts. Botany Bay is the subject of much development and is already highly developed. Botany Bay is highly industrial.
  - generate visual impacts.
  - generate noise impacts.
  - generate air impacts.
  - increase traffic.
  - impact on the existing boat ramp. There are a limited number of boat ramps throughout Sydney. Bestic Street ramp threatened for closure. No ramp at Kurnell.
- Lack of support for proposal from Botany, Randwick, Rockdale LGAs.
- Lack of faith in approvals process.

### Opportunities

- Provision of new, safer boat ramp, with:
  - access for emergency vehicles;
  - multiple lanes;
  - safe lighting;
  - signage;
  - slip lanes;
  - piers;
  - groynes;
  - amenities (rubbish bins, toilet facilities). New boat ramp design to incorporate user knowledge of boat ramp design and function. User fees would contribute to boat ramp maintenance.
- Enhancement of habitat eg. artificial reefs.
- Provision of additional ramp elsewhere in the Bay eg. Kurnell.

### Mitigation measures

- Improved boat ramp facility.

## FORESHORE BEACH USER FOCUS GROUP SESSION NOTES



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SUBJECT	Port Botany – Social Impact Assessment and Open Space Concept Planning	DATE	21/5/02
HELD	Tuesday 7 May 2002, Graphic Arts Club, Mascot	OUR REF.	01036

### General:

The purpose of the focus group session was to identify:

- the structure and values of the community potentially impacted by the proposal;
- community views and issues regarding the proposal;
- opportunities arising from the proposal; and
- mitigative measures to be considered for the proposal.

Focus group discussion was broad and did not necessarily correspond with agenda items or was not provided to the desired level of detail. We also found that there was repetition in participant responses.

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Please note that the notes do not necessarily reflect the views of Sydney Ports, Manidis Roberts or the group itself.

### Community structure

- Foreshore Beach community comprises a number of users (families, dog walkers, runners, swimmers, paddle and surf skiers, birdwatchers) from beyond the Botany LGA eg. Bankstown, Campbelltown, Rockdale LGAs.

### Community values

- Foreshore Beach is important resource for mental health, fitness and social activity for both humans and dogs.
- Foreshore Beach is only beach where you don't have to pay to walk dogs (at boat Harbour, pay \$10 to walk dog / across beach).
- Historical aspect of Bay highly valued.
- Foreshore Beach valued by the community because of its lack of concrete structures unlike Maroubra or Coogee.
- Beaches and Bay are finite Sydney resources.
- Foreshore Beach users value safe environment.

### Community views and issues

- Port Botany development impacts upon whole community not just those adjacent to the beach/port.
- Water at Foreshore Beach perceived to be clean.
- Length of Foreshore Beach appealing to dog walkers.
- Lots of families, particularly Maoris, Tongans and Asians use the beach maybe because there is no surf.
- Beach appealing for its combing aspects – shells, driftwood.

- Property prices have risen in Botany in recent times. Port proposal likely to impact upon prices.
- No understanding of proposal - just that will lose the whole beach.
- Lack of faith in assessment of alternatives.
- Port development is expected to result in:
  - increased traffic.
  - loss of seagrass.
  - stormwater and groundwater impacts;
  - pollution of Foreshore Beach due to more ships in narrower Bay.

### **Opportunities**

### **Mitigation measures**

## MEETING NOTES



SUBJECT	Proposed Port Botany Expansion Social Impact Assessment  Foreshore Beach Users Focus Group	DATE	28 April 2003
HELD	Graphic Arts Club	OUR REF.	01036
FROM	6.00 – 8.30pm		
ATTENDEES	5 representatives, including: ■ Botany Environment Watch Sydney Ports Manidis Roberts		

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### General

The purpose of the focus group session was to:

- Present information about the proposal concept layout and the public open space design.
- Receive feedback on the proposal concept layout and the public open space design.
- Present the potential impacts and proposed mitigation measures of the proposal.
- Receive feedback on the potential impacts and proposed mitigation measures of the proposal.

These notes are a summary record of the comments made by individuals during the session. The statements recorded here do not necessarily reflect the views of Sydney Ports, Manidis Roberts or all members of the group. Sydney Ports provided verbal responses to all comments and questions during the session..

In order for the notes to serve their intended purpose for our social impact assessment, responses have been summarised and categorised into relevant headings (refer below).

### Issues raised by participants included:

- Existing natural appearance of the landscaping between Foreshore Road and the beach is valued.
- Importance of dog walking on Foreshore Beach.
- Swimming risks on the beach related to sewage pollution.
- Restricted access to Penrhyn Estuary.
- The size and location of the boat ramp.
- Maintenance of the public open space areas is important, currently not maintained.
  - Visual impacts of container stacks and the noise wall around the new terminal, height of container stacks and height of cranes.
- Ownership and management responsibility for the viewing platforms.
- Noise from containers being dropped and noise from the Botany freight rail line is an issue.
- Traffic on Foreshore Road and truck queuing on roads.
- Recreational boating channel and exclusion zones.

- Marine ecology and the dynamics of the whole Bay.
- A description of the salt marsh.
- Employment opportunities.
- Schedule for dredging works.
- Methods for capping of contaminants.
- The form of the windbreaks.
- Risk management plans and management of dangerous goods.
- Property values.
- Cycleway would attract more people to the area.
- Management plan required for recreational area.
- Digging for bait in the Penrhyn Estuary would not be allowed.
- Would encourage more industry to locate in the area.
- Mixing of boat ramp and Foreshore Beach users and dog walkers.
- Groundwater and flooding.

**Suggestions made by the community included:**

- Wheelchair accessible Foreshore Road overpass.
- Sydney Ports could work with freight companies to encourage truck traffic to avoid the port during morning and evening peak hours
- An area for truck trailers.
- Vegetation to reduce the visual impact of the noise wall.
- Improve the maintenance.

## MEETING NOTES



SUBJECT	Proposed Port Botany Expansion Social Impact Assessment  Fishing and Boating community Focus Group	DATE	30 April 2003
HELD	Graphic Arts Club	OUR REF.	01036
FROM	6.00 – 8.30pm		
ATTENDEES	6 representatives, including: <ul style="list-style-type: none"> <li>■ La Perouse Windsurfing Association</li> <li>■ South Sydney Amateur Fishing Association</li> <li>■ Australian National Sports Fishing Association NSW</li> <li>■ Amateur Fisherman Association of NSW</li> </ul> Sydney Ports Manidis Roberts		

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In order for the notes to serve their intended purpose for our social impact assessment, responses have been summarised and categorised into relevant headings (refer below).

### Issues raised by participants included:

- Water quality in Penrhyn Estuary.
- The size of the boat ramp, proposed boarding jetty, car park and lighting.
- The number of other boat ramps in the area and emergency response requirements.
- The orientation of the boat ramp in relation to wind.
- Maintenance of the public recreation areas.
- Demand for the overhead bridge between Sir Joseph Banks Park and Foreshore Beach.
- The proximity of the tug berths to the boat ramp would provide good security – a 24 hour presence.

- Swimming risk at the Mill Stream end of the beach from the Southern and Western Suburbs Ocean Outfall Sewer.
- Fishing access, removal of commercial fishing and impact on fish stocks.
- Access to the boat ramp for emergency vessels.
- The visual impact of the expansion from Kurnell and on users of Foreshore Beach.
- Truck access to local roads.
- Luminance from the expanded port.
- Employment for the local community.
- Traffic management on Foreshore Road.
- Entering and exiting proposed new carpark/boat ramp.
- Details of the schedule for dredging.
- Terminal construction and rail noise.
- Details of the frequency of risk audits.
- The location and dimensions of the recreational boating channel.
- Utilisation of port facilities at Port Kembla and Newcastle.

**Suggestions made by participants included:**

- Alternative/additional parking in a number of 10-space bays along Foreshore Road, closer to the beach.
- Input from the boating community into the detailed design of the boat ramp.
- Provision of amenities and parking at the Mill Stream end of the beach and closer to the boat ramp.
- Location of coast guard facility at the boat ramp to improve safety.
- A speed limit for tugs in the vicinity of the boat ramp.
- A locked gate at the entrance to the boat ramp carpark to prevent the area being used for drag racing etc.
- Establish maintenance procedures for proposed sediment traps on drains.
- Use of native species of low shrubs, sparse pattern in public areas to enhance security and allow for views of the beach from Foreshore Road.



## MEETING NOTES



SUBJECT	Proposed Port Botany Expansion Social Impact Assessment  Local community/environment Focus Group	DATE	1 May 2003
HELD	Graphic Arts Club	OUR REF.	01036
FROM	6.00 – 8.30pm		
ATTENDEES	14 representatives, including: <ul style="list-style-type: none"> <li>■ Botany Environment Watch</li> <li>■ Mascot Main Street</li> <li>■ Save Botany Beach</li> <li>■ Sir Joseph Banks Park Group</li> <li>■ South Ward Action Group</li> </ul> Sydney Ports Manidis Roberts		

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### Issues raised by participants included:

- Importance of Penrhyn Estuary as wader bird habitat.
- Height of the pedestrian overpass.
- RTA involvement in the proposed crossings of Foreshore Road and other road work associated with the proposal.
- Capacity of car park.
- Traffic management on Foreshore Road and local roads.
- Maintenance of Foreshore Beach.
- Visibility of cranes from residences.
- Truck traffic on Botany Road.

- Increased rail traffic on Botany freight rail line.
- Trucks parking on local roads.
- Water pollution from the Southern and Western Suburbs Ocean Outfall Sewer.
- Light from the port reflected off low clouds.
- Security.
- Employment opportunities.
- On-site truck queuing.
- Details of the hydrological modeling.
- Number, size and type of ships expected to be berthed at the new terminal.
- The unloading infrastructure.
- Location of dredging.
- The operations of the proposed third terminal.
- Access restrictions during construction.
- Timeframe for the proposal.
- Type and location of stockpiles.
- Process of sediment capping.
- Definition of dangerous goods cargo.

**Suggestions made by participants included:**

- Double glazing for houses affected by noise.
- Noise barrier between Foreshore Road and Sir Joseph Banks Park.

