Appendix E – Statements

E.3 V Tremaine

IN THE FEDERAL COURT OF AUSTRALIA
NEW SOUTH WALES
DISTRICT REGISTRY

NO NSD 1703 OF 2007

AUSTRALIAN COMPETITION AND CONSUMER COMMISSION
Applicant

PRK CORPORATION PTY LTD
First Respondent
and others

STATEMENT OF VINCENT TREMAINE

Contents

On 13 November 2008, I Vincent Tremaine, of 296 St Vincent Street, Port Adelaide, in the State of South Australia, state:

Personal Background

1 I am currently employed as Chief Executive Officer of Flinders Ports Pty Ltd A.C.N. 097 377 172 (**Flinders Ports**), a position I have held for nearly 6 years.

2. Prior to this, I was employed as a Toll Logistics General Manager, responsible for the Ports of Geelong and Hastings and bulk and general stevedoring operations in Melbourne and Portland. I have also held positions with the Port of Geelong Authority.

3. I am also Chairman of the SA Freight Council, Deputy President of Business SA, a member of the Australian Logistics Council and a director of Ports Australia (formerly the Association of Australian Ports and Marine Authorities Inc), which is the peak body representing the interests of ports and marine authorities in Australia.

Filed on behalf of the Applicant by:
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Background to Flinders Ports

4. Flinders Ports is a private corporation which has leased part of the port land and operated part of the port waters of Port Adelaide and six other regional ports in South Australia since 2 November 2001. Prior to that, the land and waters in Port Adelaide were managed by the South Australian Ports Corporation. Flinders Ports took over the business after being selected as the successful tenderer, following the decision of the South Australian government to privatise the business of the South Australian Ports Corporation.

5 As the successful tenderer, Flinders Ports acquired a 99-year lease of land (including port infrastructure) and a port operating agreement on 2 November 2001 for the following ports in the Adelaide area:

5.1. Port Adelaide which is the main commercial port for South Australia. It consists of an Inner and Outer Harbor and contains over 20 berths. It contains the only terminal currently used for automotive vehicle imports and exports in South Australia. A Port User Guide which outlines the layout of Port Adelaide is marked and attached as **VT-1**:

5.2. Port Lincoln which is located approximately 280 km west of Adelaide;

5.3. Port Pirie which is located approximately 223 km north of Adelaide;

5.4. Port Giles which is located on the eastern side of Yorke Peninsula, approximately 217km by road or 35 nautical miles from Adelaide;

5.5. Klein Point which is located on the south eastern coast of Yorke Peninsula, approximately 200km by road from Adelaide;

5.6. Thevenard which is located approximately 793km west of Adelaide; and

5.7. Wallaroo which is located approximately 158km northwest of Adelaide

6. Flinders Ports owns other parcels of freehold land in Port Adelaide, abutting some of its leasehold land, which it purchased from the South Australian Government.

7. Flinders Ports has an agreement to operate the berths and specified waterways in Port Adelaide and other regional ports which are adjacent to the land it leases. These berths are owned by the South Australian government.

8. Flinders Ports' business includes the following:

8.1. the provision of port-related services and infrastructure;

8.2. the provision of port consultancy services; and

8.3. the subleasing of land, berths and infrastructure (e.g sheds)

9 Flinders Ports' mission is to provide port related services and infrastructure to satisfy the needs of the market and to achieve or exceed shareholders' ongoing financial expectations.

10. Flinders Ports' revenue consists of the following charges :

10.1. Cargo service charges to the importer or exporter. For automotive cargo, this is a charge per vehicle;

10.2. Harbour service charges (including mooring) to the shipping lines;

10.3. Pilotage charges to the shipping lines;

10.4. Navigation charges to the shipping lines;

10.5. Rent on berths and land sub-leased by Flinders Ports;

10 6. Rent on infrastructure (e.g sheds) leased by Flinders Ports

11 Cargo service charges on automotive cargo accounts for a minor percentage of the total turnover of Flinders Ports.

12. Flinders Ports sets cargo service charges differently depending on the type of cargo that is handled. For example, like other ports in Australia, Flinders Ports sets cargo service charges for containers higher than charges for bulk cargo. However, container terminals are more expensive to construct and operate than other types of terminals and the higher cargo service charges reflect the need for a return on this investment.

13. The shareholding of Flinders Ports is as follows:

13.1. MTAA Superannuation (Flinders Ports) Utilities Fund Pty Limited – 35.7%;

13.2. Galaxy S.a.r.l. – 35.7%;

13.3. Svitzer Marine Investments (JV) Pty Limited – 14.3%;

13.4. Egis Projects South Australia SPV Pty Limited – 7 1%; and

13.5. National Australia Trustees Ltd – 7.1%

Regulation of Flinders Ports

14. Flinders Ports is subject to the state based access regime under the *Maritime Services (Access) Act 2000 (SA)* (**the MSA**) which provides for access to South Australian ports and maritime services on fair commercial terms and for the monitoring of pricing of essential maritime services.

15. Under the MSA, Flinders Ports must provide, amongst others, the following regulated services:

15.1. Providing, or allowing for, access of vessels to the ports;

15.2. Pilotage services facilitating access to the ports;

15.3. Providing berths for vessels at the common user berths at Berths 1 to 4, 16 to 20 and 29 at Port Adelaide Outer Harbor; and

15.4. Access to land in connection with the provision of the above services.

16. The 2007 Ports Price Determination, made pursuant to the MSA, requires Flinders Ports to set and publish on its website a comprehensive list of prices for the provision of essential maritime services. These services are those:

16.1. providing or allowing for access of vessels to the ports;

16.2. providing port facilities for loading or unloading vessels at the ports; and

16.3. providing berths for vessels at the ports

17. Accordingly, this covers Flinders Ports' cargo service charges, harbour service charges, pilotage charges and navigation charges but does not cover rent charged by Flinders Ports on sub-leases of land or infrastructure to third parties.

18. **Flinders Ports must provide a copy of the published prices to the Essential Services** Commission of South Australia (**ESCOSA**). ESCOSA monitors the pricing of Flinders Ports and reports to the South Australian government but does not regulate pricing. ESCOSA may publish reports on the prices charged by Flinders Ports and seek information relating to those prices from Flinders Ports.

Use of Land at Port Adelaide

19. Flinders Ports generally manages the port land it controls according to its own internal strategic policies. Under its lease Flinders Ports is required to prepare a Strategic Development Plan relating, inter alia, to its use and intended use of the leased land for the South Australian government every 2 years. Flinders Ports does not operate under a public port plan.

20. In managing the supply of rights over land to users, Flinders Ports' principal objective is to maximise the volume of cargo (per square metre of land) handled through its ports **and the utilization of port land and facilities. Port Adelaide currently has capacity for more trade.**

21. Customer demand determines the mix of cargo that is handled across the berths at Port Adelaide. In my experience, Flinders Ports has accepted almost all types of cargo that users have sought to move across Port Adelaide, with the exception of cargo that may get in the way of other vessels or the movement of other cargo (such as small passenger ferries). Presently the cargo handled at Port Adelaide includes: containers, motor vehicles, grains and seeds, limestone, petroleum, soda ash, metals and scrap metal, cement, fertilisers, agricultural commodities, livestock, mineral sands, mineral concentrates various break bulk and general cargo.

22. Many of Flinders Ports' berths and land areas are dedicated to particular cargoes or types of cargo. Some of the land and berths were dedicated as to their use prior to Flinders Ports taking control of the land because leases already existed over this land or berths. On expiration of these leases, Flinders Ports will decide the use of the land. From time to time, Flinders Ports encourages cargo to be loaded or unloaded at a berth designated for another type of cargo. This may be done in order to manage usage of the berths so as to maximise the volume of cargo being moved through its ports. For example, Berths 3 and 4 in the Outer Harbor at Port Adelaide are primarily used for the import and export of motor vehicles as there is strong demand. However in the past, break bulk vessels (carrying cargo such as paper or steel) have also berthed there and navy and passenger vessels regularly use berths 3 and 4

23. Some of the land owned or controlled by Flinders Ports is not currently used for the movement of cargo Flinders Ports is able to develop this land, where it is suitable, to create new berths and port land. The investment required to create a new berth depends on the intended use of the berth.

24. The requirements for a terminal will depend on the type of cargo being loaded and unloaded. For instance:

    24.1. A container terminal requires a large area of land on which to store the containers with hardstand strong enough to hold containers stacked five high Cranes and other expensive equipment are required. The berth needs to be sufficiently deep for a container vessel.

    24.2. Little infrastructure is required for an automotive terminal. A concrete surface is required for the cars to drive on and a sufficiently large space to store the vehicles. The berth needs to be sufficiently deep for a pure car carrier or roll on roll off vessel. In comparison, a container terminal requires a greater degree of infrastructure. A container terminal could be transformed into an automotive terminal by removing the infrastructure, but not vice versa.

    24.3. A general or break bulk terminal would not require as much land as a container or automotive terminal The depth of the berth would depend on the size of the vessels using the berth. Break bulk cargo generally requires storage in sheds on wharf and requires high weight bearing hardstand

25. Dredging may also be required as part of the development of a new terminal to ensure the channels and berths are an appropriate depth for the relevant types of vessels that will be using the channels and mooring at the berths. This can make development of the terminal far more costly.

Restrictions on Land Uses

26. The land owned and leased by Flinders Ports at Port Adelaide is zoned Port Industrial which restricts the use of the land to industrial uses that are port related. This prevents Flinders Ports from using the land for any other purpose (eg residential purposes) in the absence of a change in zoning.

27. In addition, in respect of the land leased by Flinders Ports from the South Australian government, the lease provides that the land must be used for the operation of a commercial port, including port-related uses, the operation and maintenance of port facilities, maritime and maritime related activities and harbour services. If Flinders Ports used or allowed the land to be used for other purposes, it would be in breach of its lease.

28. In relation to the land purchased by Flinders Ports from the South Australian government, there is a registered encumbrance on the land which provides that the land must be used for port-related uses, defined to mean uses that are directly or indirectly related to the import or export of goods or cargo through the port.

29. In any event, Flinders Ports would be unlikely to seek to use the land for any other purpose as Flinders Ports derives revenue from having its land used as a working port. Moreover, the land is currently more valuable due to its permitted and existing uses, than other uses of the land. Flinders Ports would currently not choose to use the land for residential uses, because from experience, urban encroachment on port land has resulted in disputes with residents concerning noise, odour and pollution from the port

Supply of Rights to Berths

30. In accordance with its obligations under the MSA, Flinders Ports operates a number of its berths as common user berths, including Berths 3 and 4 in the Outer Harbor. Flinders Ports determines which port users may use the common user berths. To access the common user berths, Flinders Ports generally requires stevedores to provide an indemnity and release. Flinders Ports manages the common user berths and determines the priorities of vessels generally on a first come, first served basis.

31. The advantage of common user berths is that Flinders Ports can ensure that they are utilised effectively. This is important because Flinders Ports' main revenue is from cargo service charges levied on cargo that comes through its ports.

32. Flinders Ports manages the remaining berths on a first in first served basis and as the landlord of leases which grant exclusive rights to lessees to use specific berths. For example, Flinders Ports grants rights over Berths H and K in the Inner Harbour to Adelaide Brighton Cement, a cement manufacturer, such that access can only be gained by arrangement with Adelaide Brighton Cement. Flinders Ports has also granted rights to operate the Adelaide Container Terminal at Berths 6 and 7 in the Outer Harbor to DP World Adelaide for container operations.

Supply of Rights to Land

33. The land adjacent to the berths is generally used for the handling and storage of cargo. Flinders Ports provides rights to land adjacent to berths to port users in two ways: mainly by sub-lease; and in some cases by providing access to common user areas.

34. Flinders Ports sub-leases land mainly by way of direct negotiation with users. However on occasions Flinders Ports will put land out to the market for tender

35. Under a sub-lease, Flinders Ports will provide exclusive use of that land to the sublessee. However, use of the land will be restricted to the permitted use as stipulated in the sub-lease and the permitted use will be consistent with the permitted use stipulated in Flinders Ports' lease with the South Australian government and zoning requirements. Generally, the permitted use will specify the type of cargo that can be handled on the leased area.

36. The rent charged by Flinders Ports for sub-leased land is negotiated between the parties and may vary considerably from lease to lease. Flinders Ports may have the land independently valued and will take that into consideration. Flinders Ports will also take into consideration a number of other factors including:

36.1. What historically has been charged;

36.2. The capacity of the market to pay at the time;

36.3. The volume of cargo predicted over the term of the lease; and

36.4. Consideration of what other port corporations are charging

37. Flinders Ports typically includes a provision for annual rental reviews in its sub-leases.

38 While the rent charged by Flinders Ports is not regulated it is important for Flinders Ports to charge reasonably in order to protect its reputation. Flinders Ports does not want a perception that its ports are generally expensive as this may dissuade potential new customers. In addition the South Australian government owns land that could be used to develop alternative port facilities if Flinders Ports' pricing was prohibitive.

39. Flinders Ports also provides common user areas at all but one of its ports (Klein Point) and in some ports at multiple locations. These common user areas are owned and managed by Flinders Ports and are used for the handling of a variety of cargo by port users.

40. To access the common user areas, stevedores and cargo owners must provide Flinders Ports with an indemnity and release. Flinders Ports may charge a site occupation fee to the cargo owner but generally provides a period of free storage prior to loading or following discharge in order to facilitate the transfer of cargo to and from the ship Beyond this free period Flinders Ports will levy a storage charge on the cargo owner as an incentive for the cargo to be removed as quickly as possible. Access is generally provided to the common user areas on a first come first served basis.

Automotive cargo at Port Adelaide

41. Automotive cargo has historically provided good volumes for Flinders Ports, particularly as Holden, and previously Mitsubishi, exports vehicles from Port Adelaide. Since Flinders Ports began operations, there has been growth in the volume of vehicle imports into Adelaide and a reduction in exports, substantially as a result of the exit of Mitsubishi from the export market. The statistics kept by Flinders Ports on imports and exports are as follows:

Calendar year	Imported vehicles	Exported vehicles
2001	17,577	45,651
2002	20,503	52,468
2003	26,370	45,329
2004	27,009	54,549
2005	32,083	55,122
2006	33,566	46,423
2007	36,733	36,864

42. Since Flinders Ports began operating, motor vehicle exports and imports have mainly been loaded and unloaded from the common user Outer Harbor Berths 3 and 4. Berths 3 and 4 are approximately 720 metres in length and are capable of accommodating 2 vessels simultaneously. As discussed in paragraph 22, Berths 3 and 4 can be used to load and unload other types of cargo however the demand for motor vehicle exports and imports means that this is increasingly rare. On occasions, Berths 1 and 2 have also been used for loading and unloading motor vehicles.

43. The Inner Harbour at Port Adelaide is unsuitable for a vehicle terminal because it is too difficult to navigate car carriers into the Inner Harbour

44. Flinders Ports sub-leases part of the land adjacent to Berths 3 & 4 to Australian Amalgamated Terminals Pty Ltd (**AAT**). The sub-lease commenced on 10 May 2004. The sub-lease came about as a result of Dean Wells and Don Smithwick approaching Flinders Ports with the proposal for AAT on or about 3 April 2002. A copy of AAT's proposal to Flinders Ports is marked and attached at **VT-2**. AAT was the only entity to seek a sub-lease of the land. To my knowledge, P&O and Patrick did not approach Flinders Ports in their own rights.

45. Prior to the sub lease to AAT, the area was divided and sub-leased separately to Flag Transport (a related company of P&O) and TDG Transport (a related company of Patrick). The TDG Transport lease was for a five year term (with a three year option) and commenced on 13 February 1999. The Flag Transport lease was for a six year term and commenced on 1 July 1996. The larger area was leased to the company that held the Holden export contract and the other area was leased to the company that held the Mitsubishi export contract. This arrangement was an inefficient use of the limited land available because one area could reach capacity whilst the other the other area could have spare capacity. The two leases to Flag Transport and TDG Transport were surrendered on 9 May 2004 in order for AAT to take the sub-lease of the total area.

46. At one stage prior to the formation of AAT, CSX World Terminals Adelaide Pty Ltd (unrelated to P&O at that time), which had a sub-lease with Flinders Ports on the land for use as a container terminal was involved in the loading or unloading of car carriers. During this time, the volume of container trade was relatively low, resulting in sufficient excess capacity to allow the use of the berths and land for the handling and storage of export vehicles. Since this time, the container trade in Adelaide has increased and the berths and the land are currently being utilised for container storage and handling

47. Flinders Ports' sub-lease to AAT contains standard lease terms, including allowing AAT to assign its rights and also sub-lease to entities with Flinders Ports' permission. In July 2007, AAT entered into a sub-lease with Patrick Autocare

48. The other land behind Berths 3 and 4 is currently designated by Flinders Ports as a common user area (**the Common User Area**). The Common User Area is primarily used for automotive imports, including Holden, Toyota, Honda and Mazda.

49 AAT's area is primarily used for automotive exports by Holden (and previously Mitsubishi). It will also be used for imports where a vessel is unloading import vehicles and loading export vehicles. Further, due to the increase in automotive imports, on occasions Flinders Ports has had to arrange for importers to use surplus capacity in AAT's terminal because the Common User Area is at capacity. In these situations, AAT has invoiced a site occupation charge to Flinders Ports.

50. At present, Flinders Ports does not levy an additional charge on importers for use of the Common User Area. However in the future, Flinders Ports will levy a site occupancy fee to encourage importers to move the vehicles quickly from the area.

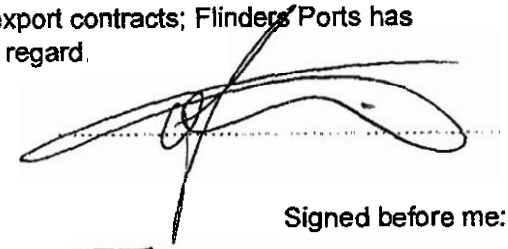
51. Pre-Delivery and Inspection (PDI) operators do not operate within the Common User Area.

52. Flinders Ports would consider supplying land to other automotive terminal operators if approached. Flinders Ports would need some certainty that volumes justify the allocation of the land.

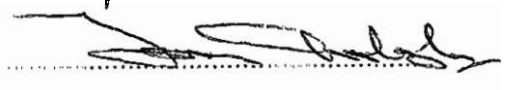
Competition with other port authorities

53. The decision as to where a ship will call is determined by the shipping lines and its customers. While Flinders Ports actively tries to attract the business of shipping lines into its ports by providing competitive pricing and suitable berth facilities, ultimately the decision rests with shipping lines. There are many other variables that shipping lines take into account when decided where to berth, such as the location of customers, volumes, scheduling, and fuel costs.

54. In relation to land for an automotive terminal in Adelaide, Flinders Ports has always leased land to the entity which has held the export contracts; Flinders Ports has supplied land to both Patrick and P&O in this regard.



Signed before me:



LEON NICHOLAS CHOLSH

"VT-1"

Contents

Flinders Ports
SOUTH AUSTRALIA

Flinders Ports
SOUTH AUSTRALIA

1 Welcome

Flinders Ports
SOUTH AUSTRALIA

Welcome to Flinders Ports

Flinders Ports is a private company operating seven of the South Australian ports of Port Adelaide, Port Lincoln, Port Pirie, Thevenard, Port Giles, Wallaroo and Klein Point.

Our seven ports are equipped to handle a range of containerised, bulk and bulk break cargoes

Flinders Ports is committed to improving port services to the benefit of existing trades and assisting in the development of new business and continues to expand its port facilities to meet the demands of its customers.

The construction of a 149m extension to the existing Container Berth Wharf has commenced Scheduled for completion in August 2008, the extension will provide 660m of quayline

The paving of three new hardstand areas at the Container Terminal has recently been completed, providing an extra 21,000m^2 of storage

In addition, DP World is expected to install 2 new post-panamax cranes at the terminal during the 2nd quarter 2009

The Port Adelaide Container Terminal is also benefiting from the deepening of the Outer Harbor Channel to 14 2 metres with larger vessels now including Adelaide on their schedules

With South Australia fast developing one of Australia's, indeed one of the world's, most exciting resources and energy sectors, Flinders Ports is preparing to undertake future developments for this mining boom

Flinders Ports proposes to develop a multi-user bulk handling port facility known as the Port Adelaide River Bulk Precinct (PARBP) on a portion of land beside the existing Berth 29 in the inner harbour of Port Adelaide. Design briefs for the key infrastructure elements of the project have been prepared covering:

- Bulk Storage
- Bulk Transfer
- Rail Terminal
- Civil and Pavements
- Environment and
- Site Services

The mobile ship loader, commissioned in 2007, will be part of the Port Adelaide River Bulk Precinct

In addition, following preliminary discussions with the State Government, Flinders Ports is investigating the feasibility of constructing port facilities for the mining industry at Port Bonython, situated near Whyalla in the State's Eyre Peninsula region

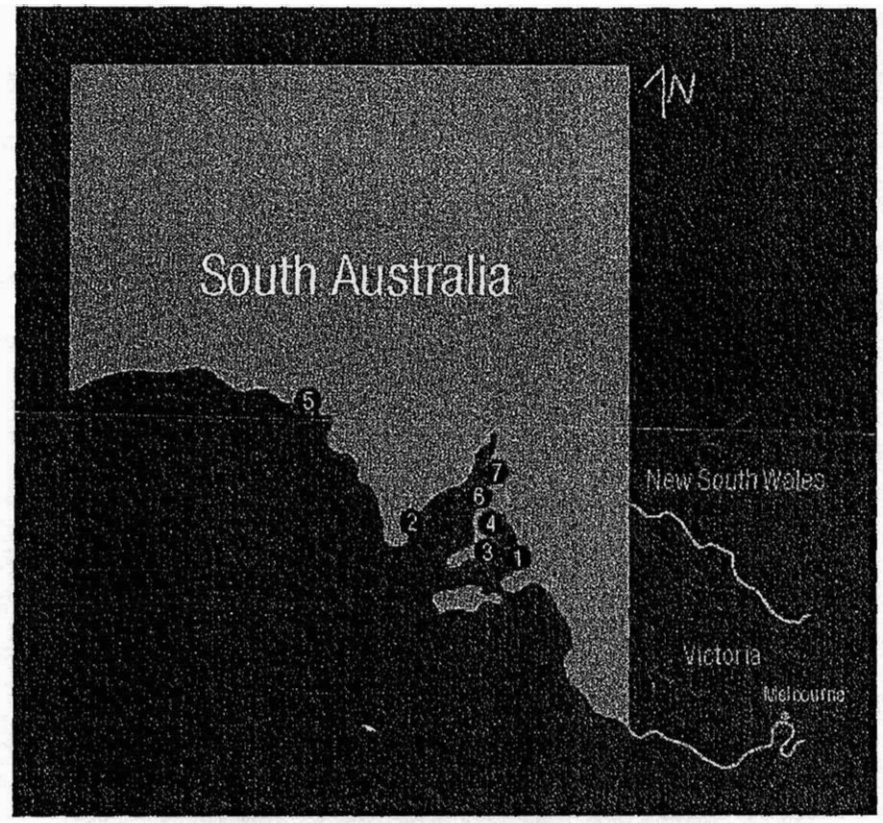
Two options for Port Bonython are being investigated:

1. A new jetty
2. Redevelopment of the jetty currently used by Santos

Rail, shed facilities and conveyors to ships would need to be constructed in both options.

The Flinders Ports owned regional ports of Port Lincoln, Thevenard and Port Pirie are also being considered for development to meet the demands of the mining industries in these regions

South Australia is moving into an era of unprecedented economic growth, underpinned by the mining industry. Flinders Ports aims to ensure that the cargoes associated with this growth are provided with suitable facilities in the right locations



Principal Commodities Handled

1 Port Adelaide
Grains & Seeds
Limestone
Petroleum Products
Soda Ash
Motor Vehicles
Containers
Metals & Metal Scrap
Cement/Cement Clinker
Fertilisers
Agricultural Commodities
Iron & Steel
Livestock
Break Bulk & General Cargoes
Mineral Sands
Mineral Concentrates

2 Port Lincoln
Grains & Seeds
Petroleum Products
Fertilisers

3 Port Giles
Grains & Seeds

4 Klein Point
Limestone

5 Thevenard
Gypsum
Grains & Seeds
Salt

6 Wallaroo
Grains & Seeds
Fertilisers

7 Port Pirie
Grains & Seeds
Mineral Concentrates
Coal
Smelter Outputs
Zinc and Lead
General Cargo

About Us

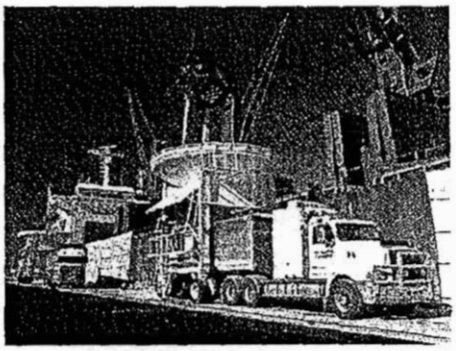
In 2000, the State of South Australia announced its intention to privatise the South Australian Ports Corporation. Following a competitive bid process, Flinders Ports Pty Ltd ('Flinders Ports') was announced as the preferred bidder and the acquisition of the business was completed on 2 November 2001

Flinders Ports shareholders include the Motor Trades Association of Australia Superannuation Fund, Galaxy S a r l, Svitzer, Egis Projects and Equipsuper.

In addition to the acquisition of the port infrastructure, Flinders Ports also acquired a 99-year land lease and port operating license for Port Adelaide and the six regional ports of Port Lincoln, Port Pirie, Port Giles, Klein Point, Thevenard and Wallaroo.

Bulk / Break Bulk & General Cargoes

Our seven ports are equipped to handle a range of bulk, break bulk and general cargoes Bulk cargoes include grain; cement; petroleum; gypsum; limestone; mineral sands and fertilisers while break bulk cargoes include motor vehicles; iron; steel; lead; zinc; livestock and fruit.



Container Cargoes

DP World Adelaide is the container terminal servicing South Australia. The terminal boasts excellent direct on-dock road and rail links with two berths providing 510m length and 14.2mLAT water depth alongside at low water. Flinders Ports has commenced the construction of a 149m extension to the existing Container Berth Wharf. The project is scheduled for completion in August 2008, providing 649m of quayline.

A transition area provides storage for 5,000 TEUs and includes 380 reefer plugs. The terminal is equipped to handle container vessels, car carriers and ro-ro vessels and offers ready access to wine packing facilities

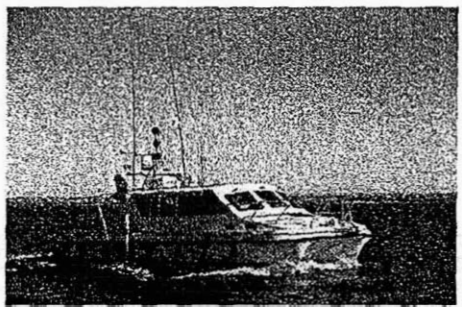
A full range of quarantine, customs, fumigation and cleaning facilities is available

Port Consultancy Services

With experienced staff and organisational expertise in port management, coupled with the extensive consulting expertise of parent shareholders, Flinders Ports is equipped to provide port consultancy services

Flinders Ports Survey group HydroSurvey Australia undertakes contract hydrographic surveys of harbours, channels and coastal areas for private clients as well as contract bathymetric surveys to assist with the modelling of coastal and migration. These services have been enhanced with the purchase of an interferometric wide swath survey system that allows rapid coverage over large areas resulting in significant productivity gains and efficiencies.

www hydrosurvey.com.au



Environmentally Aware

As a responsible port operator, Flinders Ports works to ensure that commercial shipping activities are balanced with consideration for the surrounding environment

Flinders Ports' responsibilities relating to environmental management are clearly defined by legislation The organisation has implemented an Environmental Management System and is certified to ISO 14001 Flinders Ports, its tenants, contractors and stevedores all conform to a wide range of policies introduced under this management system that includes the following areas:-

- *Ballast water management*
- *Dredging and reclamation*
- *Work from maintenance barges*
- *Emergency response plans*
- *Loading and unloading of ships*
- *Land contamination*
- *Stormwater management*
- *Purchase and disposal of plant*
- *Sewage and trade waste systems*

The Environmental Management System provides a framework to identify, review and assess environmental risks associated with port activities which may impact on water, land, air and noise quality Following an assessment of potential environmental impact, mitigating procedures are put into place accordingly

2 Port Facilities

Flinders Ports
SOUTH AUSTRALIA

Port Adelaide

Latitude 34 degrees-51 minutes South
Longitude 138 degrees-30 minutes East

Located just 14 kilometres north-west of the State's capital city Adelaide, Port Adelaide is a sea port city and the historic maritime heart of South Australia. The Port was one of South Australia's earliest settlements and represents South Australia's first State Heritage area.

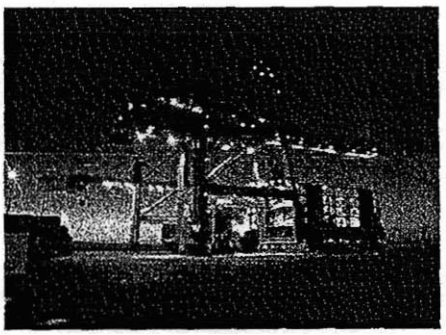
Principal Commodities Handled

- *Grains & Seeds*
- *Limestone*
- *Petroleum Products*
- *Soda Ash*
- *Motor Vehicles*
- *Containers*
- *Metals & Metal Scrap*
- *Cement/Cement Clinker*
- *Fertilisers*
- *Agricultural Commodities*
- *Iron & Steel*
- *Livestock*
- *Break-Bulk and General Cargoes*
- *Mineral Sands*
- *Mineral Concentrates*

Adelaide Container Terminal

Location
Outer Harbor Berth 6, 7

Operational Facilities
- 505m Swinging Basin
- Container handling capacity: approx 250,000 lifts per year
- Quay length 510m with a crane coverage of 490m
- Terminal space: 23 hectares
- Warehouse on dock: 3000 square metres
- 14 straddle carriers
- 2 Reach Stackers
- 9 Forklifts
- 1 Heavy Forklift
- Reefer Plugs – 380x440 volt 3 phase dual Wilco/C-Form plugs
- Two 900m long dual gauge (broad and standard) tracks to accommodate trains up to 750m in length linked directly with the national rail network for intermodal container traffic



Mechanical Cargo Handling Equipment
The Adelaide Container Terminal has four travelling single-lift container handling cranes.

Crane 1
- Manufacturer: Deer Park Engineering
- Maximum Lift: Spreader-48t, Hook-60t
- Maximum Outreach from the Wharf Edge: 35m

Crane 2
- Manufacturer: Boral Johns Perry
- Maximum Lift: Spreader-36t, Hook-46t
- Maximum Outreach from the Wharf Edge: 32.9m

Crane 3
- Manufacturer: Mitsui/Paceco
- Maximum Lift: Spreader-36t, Hook-N/A
- Maximum Outreach from the Wharf Edge: 32.3m

Crane 4
- Manufacturer: Mitsui/Paceco
- Maximum Lift: Spreader-40t, Hook-N/A
- Maximum Outreach from the Wharf Edge: 31.6m

Hours of operation
- Ship exchange:
- 0700-1500, 1500-2300 and 2300-0700
- Gate receival/delivery: 0700-2100 Monday to Friday

Contact
DP World Adelaide Pty Ltd
ABN 24 004 898 828
Berth 6, Coghlan Road, Outer Harbor
South Australia 5018
ANL House
306 St Vincent Street
Port Adelaide
South Australia 5015
PO Box 207, Port Adelaide BC 5015
Phone +61 8 8248 9300
Fax +61 8 8248 9370
Email: serviceadl@dpworld.com.au

Shipping Information

References
- Australia Pilot volume 1:p 125-130
- Charts: AUS 137, AUS 138, AUS 780, AUS 345, AUS 444, AUS 781
- Vertical Datum: LAT
- Horizontal Datum: WGS84

Communications
- VHF radio telephone
- Channels: 6, 8, 12, 16, 67
- Call sign: Adelaide Outer Harbor

Tidal Data
- Mean high water springs: 2.4m
- Mean high water neaps: 1.3m

Ship Limitations

Outer Harbor
- Maximum length overall (LOA):
  - Daylight: in or out 300m
  - Darkness: in our out 300m

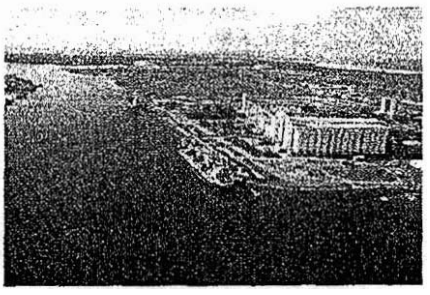
Osborne
- Maximum length overall (LOA):
  - Daylight: in or out 206m
  - Darkness: in or out 183m

Inner Harbour
- Maximum length overall (LOA):
  - Daylight: in or out 206m
  - Darkness: in or out 206m
  - Limitations exist for departures during darkness from No 2 dock

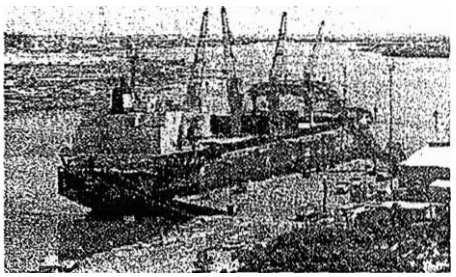
Depths in Approach Channels
(Below Lowest Astronomical Tide)
- Entrance Beacon to No 8 Outer Harbor berth: 14.2m
- No 8 Outer Harbor berth to No 18 berth: 9.3m

Nature of Bottom
Clay

Bulk Cargo Handling Facilities
No 27 Berth, Bulk Grain Loader
- Two travelling loading booms with spouts
- Maximum outreach from wharf edge: South boom-18.1m, North boom-17.7m
- Potential gross loading rate for wheat: 1450tph
- Boom clearance at wharf edge: 14.9m above LAT



No 29 Berth, Common User Ship Loader
- Mobile Snake Sandwich Conveyor
- Design rate up to 1000Tph depending on product
- Belt Width 1 2m
- Belt Speed 2m/s-3m/s depending on product
- Clearance under boom 19 23m above LAT
- Length of 50m
- Conveying Angle 45%
  Boom Reach 16 25m

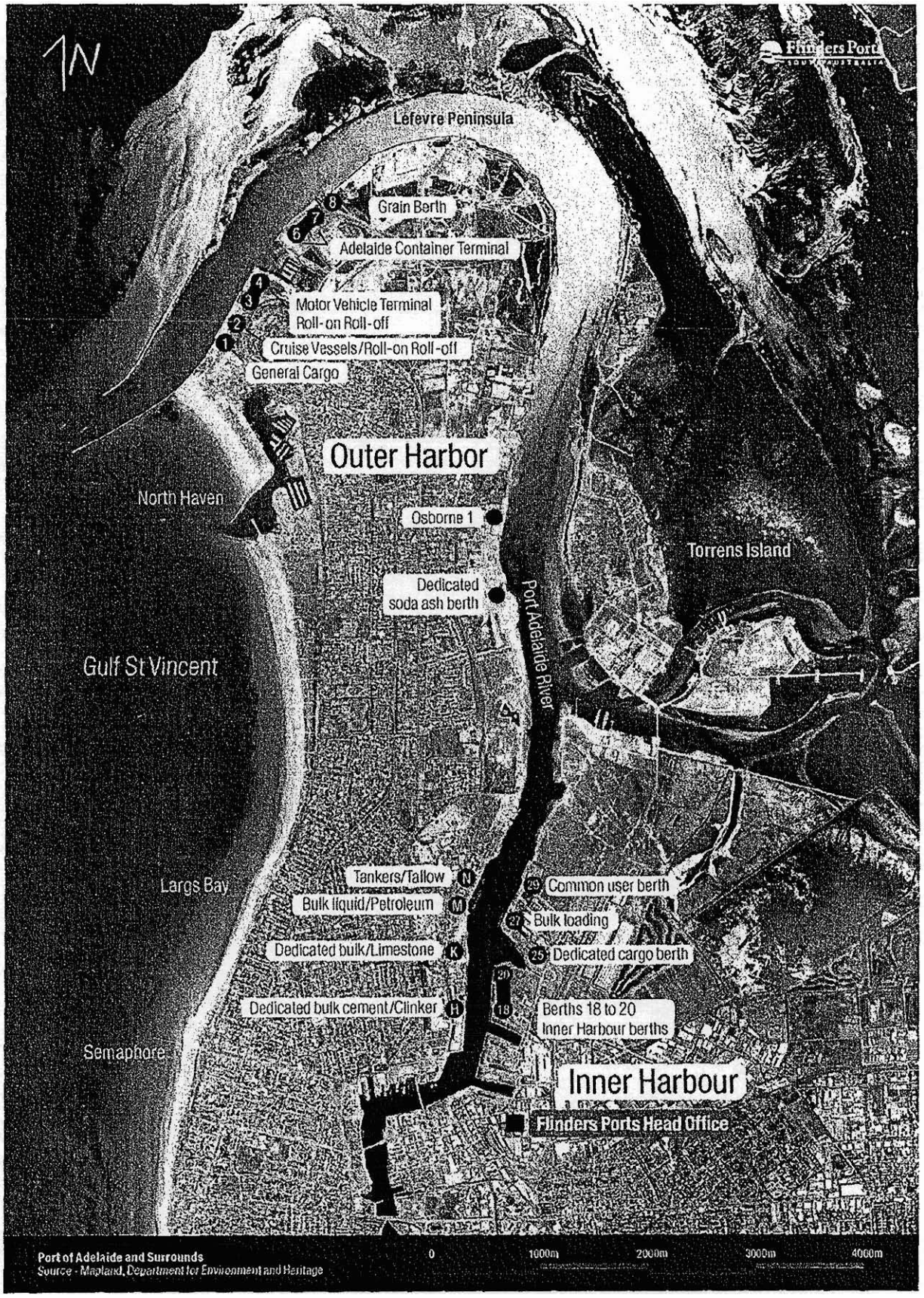


Bulk Cargo Handling Facilities
'H' Berth, Cement/Clinker loading berth
- Fixed loader with luffing and slewing boom Vessels shift along wharf during loading
- Maximum outreach from wharf edge: 17m
- Boom clearance at wharf edge above LAT
  Clinker: 20 2m
  Cement: 14 2m

Potable Water
- Available at all berths
- Rate of flow at most berths: 15tph
- inner harbour berths vary from 6 to 12tph depending on time of day
- Outer Harbor berths 1-4: 120tph

Bunker Facilities
- Bunkering of diesel and heavy fuel from road tankers available at some berths

Ship Repair Services
Structural and engineering repairs are undertaken by local engineering contractors


N
Flinders Ports
Lefevre Peninsula
8
Grain Berth
6
7
Adelaide Container Terminal
4
3
Motor Vehicle Terminal
Roll-on Roll-off
2
1
Cruise Vessels/Roll-on Roll-off
General Cargo
Outer Harbor
North Haven
Osborne 1
Torrens Island
Dedicated
soda ash berth
Port Adelaide River
Gulf St Vincent
Largs Bay
Tankers/Tallow
N
Bulk liquid/Petroleum
M
Dedicated bulk/Limestone
K
Dedicated bulk cement/Clinker
H
Semaphore
20
19
18
Common user berth
Bulk loading
Dedicated cargo berth
Berths 18 to 20
Inner Harbour berths
Inner Harbour
Flinders Ports Head Office
Port of Adelaide and Surrounds
Source - Mapland, Department for Environment and Heritage
0
1000m
2000m
3000m
4000m

Berth Information Port Adelaide

Berth	Length	Depth	Wharf Height	Axle Load	Remarks
Inner Harbor					
18	178m	10.0m	4.6m	20t	
19	168m	10.0m	4.6m	50t	
20	163m	10.0m	4.6m	50t	
25	240m	10 2m	4 4m	50t	- Ro-Ro shore ramp - Length of solid wharf 122m - Currently leased to BHP Billiton (not available)
27	204m	10 9m	4 6m	20t	- Bulk Grain Loading Berth - Length of solid wharf 142m
29	245m	10.0m	4 4m	50t	- Length of solid wharf 169m - Bulk Loading Berth
'H'	304m	11.2m	4.4m	6.5t	- Bulk Cement Loading Berth
'K'	171m	7 5m	4 4m		- Bulk Limestone Discharge Berth
'M'	218m	10.7m	4.4m		- Common User Tanker Berth
'N'	150m	8 7m	4 4m		- Bulk Liquid Berth (Non Flammable Cargoes)
Osborne					
Penrice	120m	7.5m	4.6m		- Bulk Soda Ash Loading Berth
Osb 1	208m	10.0m	4.4m	20t	
Osb 2	159m	9.6m	4.4m		
Outer Harbor					
OH 1	185m	11.5m	5.6m	8-50t*	- General Cargo
OH 2	183m	11 2m	5 4m	8-12t*	- Passenger Terminal/Ro-Ro Ship's Ramp
OH 3	150m	11.2m	5.7m	8-100t*	- Motor Vehicle Terminal
OH 4	214m	11.2m	5.7m	0-100t*	- Motor Vehicle Terminal
OH 6	300m	14.2m	5 3m	8-50t*	- Adelaide Container Terminal - 1 x 46-60 tonne Portainer - 1 x 36 tonne Portainer
OH 7	300m	14.2m	5.3m	30-50t*	- Adelaide Container Terminal - 1 x 35.5 tonne Portainer - 1 x 40.6 tonne Portainer
OH 8	320m	16.2m	5.3m		

OH 6&7 are special berths and acceptable for the loading/discharge of dangerous goods in accordance with the Australian Standard AS3846 – 2005

* Axle loads are variable Please contact Flinders Ports for further information

Port Lincoln

Latitude 34 degrees-43 minutes South
Longitude 135 degrees-50 minutes East

Situated on the southern tip of Eyre Peninsula, Port Lincoln is 682km by road from Adelaide, or about 280km west of Adelaide by air. A natural deep water harbour makes Port Lincoln attractive to large bulk grain carriers for topping up loads from shallow ports in South Australia and Victoria. Grains and seeds are the principal exports and fertiliser and petroleum products are the major imports.

Principal Commodities Handled

Grains & Seeds
- *Petroleum Products*
Fertilisers

Shipping Information

References
- Australia Pilot volume 1: p87-89
- Charts: AUS 134, AUS 776, AUS 343, AUS 345, AUS 444
- Vertical Datum: LAT (Lowest Astronomical Tide)
- Horizontal Datum: AGD66

Depth in Approach Channels
(Below Chart Datum)
- Boston Bay: 14 6m

Ship Limitations
Daylight berthing only
Sailing day or night
- Largest vessels to use the port:
- Maximum length overall (LOA):
  - *Oil tankers: LOA 182m*
  - *Grain Carriers. LOA 262m*
  - *Deepest draft. 14 7m*
  - *Fertiliser carriers: LOA 196m*

Communications
- VHF radio telephone
- Channels: 6, 8, 12, 16, 67
- Call sign: Port Lincoln Harbour
- Watch kept during office hours: 0845 - 1700, weekdays or by arrangement

Tidal Data
- Mean high water springs: 1 34m
- Mean high water neaps: 0 87m

Road and Rail Access
Shipping pier connected to railway system

Bulk Cargo Handling Facilities
- Privately owned: ABB Grain Ltd
- No 4 and No 5 berths: Bulk Grain Loader
Two travelling loaders service these berths
- Gross loading rate: Wheat 2,000tph, Barley 1750tph, Oats 1250tph
Maximum loading rate: 3600tph using two loaders
Boom clearance at wharf edge: 22 3m above chart datum
- Maximum outreach from wharf edge: 35 5m

Nature of Bottom
Limestone, clay and sand

Mechanical Cargo Handling Equipment
Mobile Cranes:
- 1 x 9t capacity
- 2 x 20t capacity
- 1 x 33t capacity

Potable Water
- Available at all berths
- Rate of flow: 15tph
- International ship-to-shore connection available

Port Manager
Flinders Ports:
Phone (08) 8682 3633

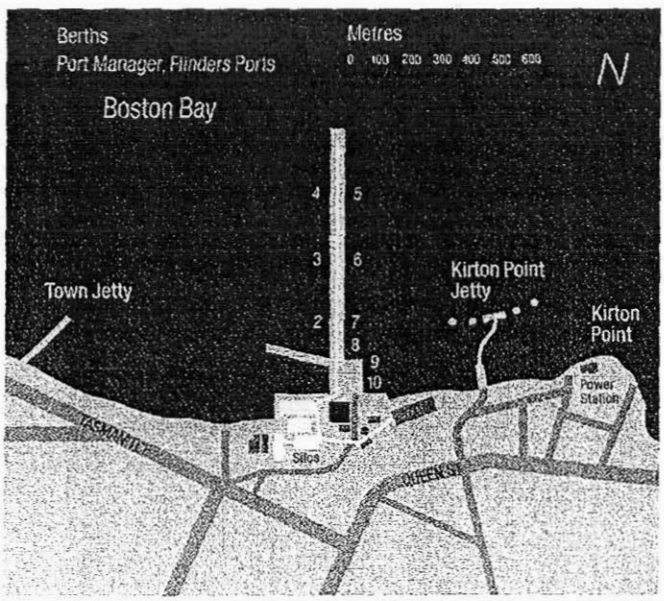
PORT FACILITIES

Berth Information Port Lincoln

Berth	Length	Breadth	Depth	Wharf Height	Axle Load	Remarks
2	190m	25m	8 7m	4 5m	No vehicle access	Closed: recreational fishing only
3	246m			4 5m	8T axle design vehicles	Fishing Boats
4*	330m		15 2m	4 5m	8T axle design vehicles	Bulk Loading Grain*
5*	330m		15 2m	4 5m	8T axle design vehicles	Bulk Loading Grain*
6	250m	46m	12 2m	4 5m	8T axle design vehicles	Fertiliser
7	183m	25m	8 4m	4 5m	8T axle design vehicles	Fishing Boats
8	77m	25m	5 7m	4 5m	8T axle design vehicles	Fishing Boats
9	107m	25m	4 6m	4 5m	8T axle design vehicles	Roll-on Roll-off
10	56m	18m	0 2m	4 5m	8T axle design vehicles	Fishing
Kirton Point	280m	40m	9 9m	4 7m	Light vehicle access only	Kirton Point Oil Berth Only

* Berth No's 4 & 5 capable of loading same time *Please contact Flinders Ports for further information*

2 belts capable of carrying 2,000 tonnes per hour each



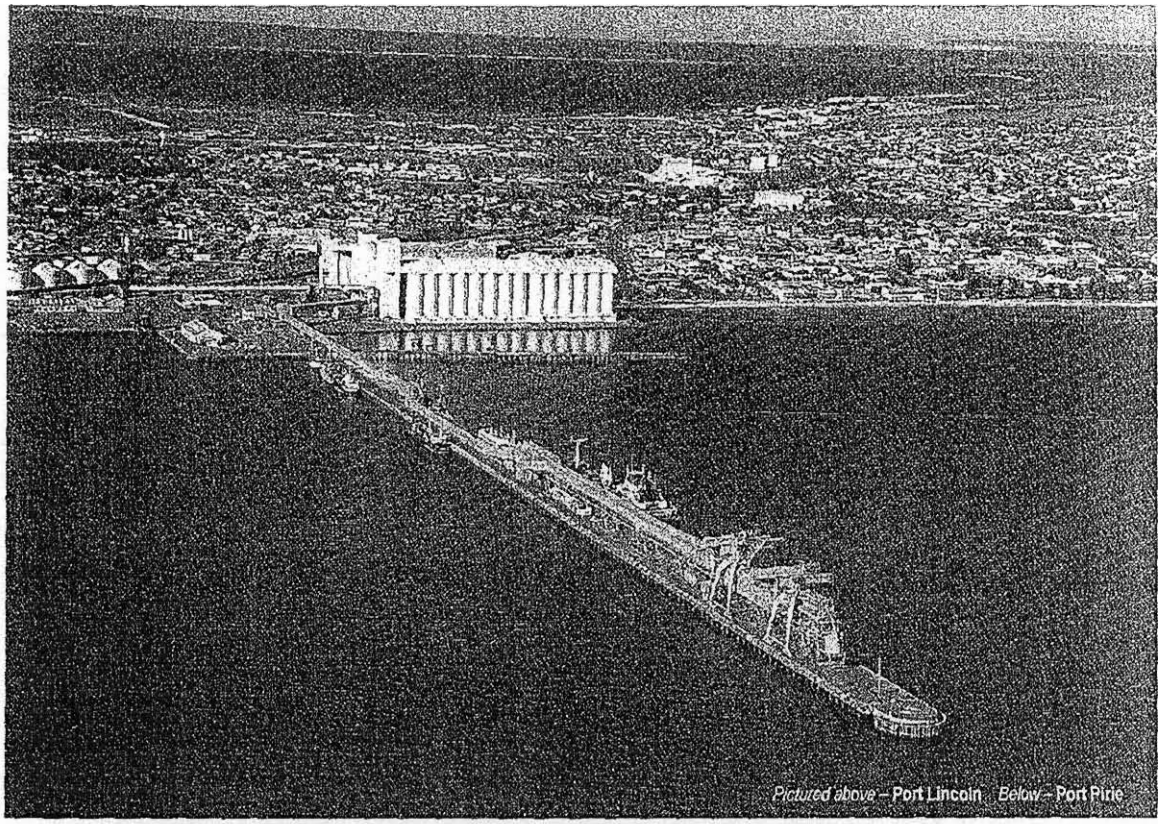
Shipping Agents
- AAL Shipping Agencies
  Phone (03) 9861 1300
- Asia World Shipping Services
  Phone (08) 8447 7855
- Gulf Agency Company (Australia) Pty Ltd
  Phone (08) 8240 4096
- Hetherington Kingsbury Shipping Agency
  Phone (08) 8240 1414
  Inchcape Shipping Services Port Lincoln
  Phone (08) 8682 1011
- Monson Agencies Australia Pty Ltd
  Phone (08) 8341 2450
- NYK Line (Australia) Pty Ltd
  Phone (08) 8447 3066
- Wilhelmsen Ship Services
  Phone (08) 8341 0466

Ship Repair Services
Slipway for vessels up to 60m LOA with 1800t maximum

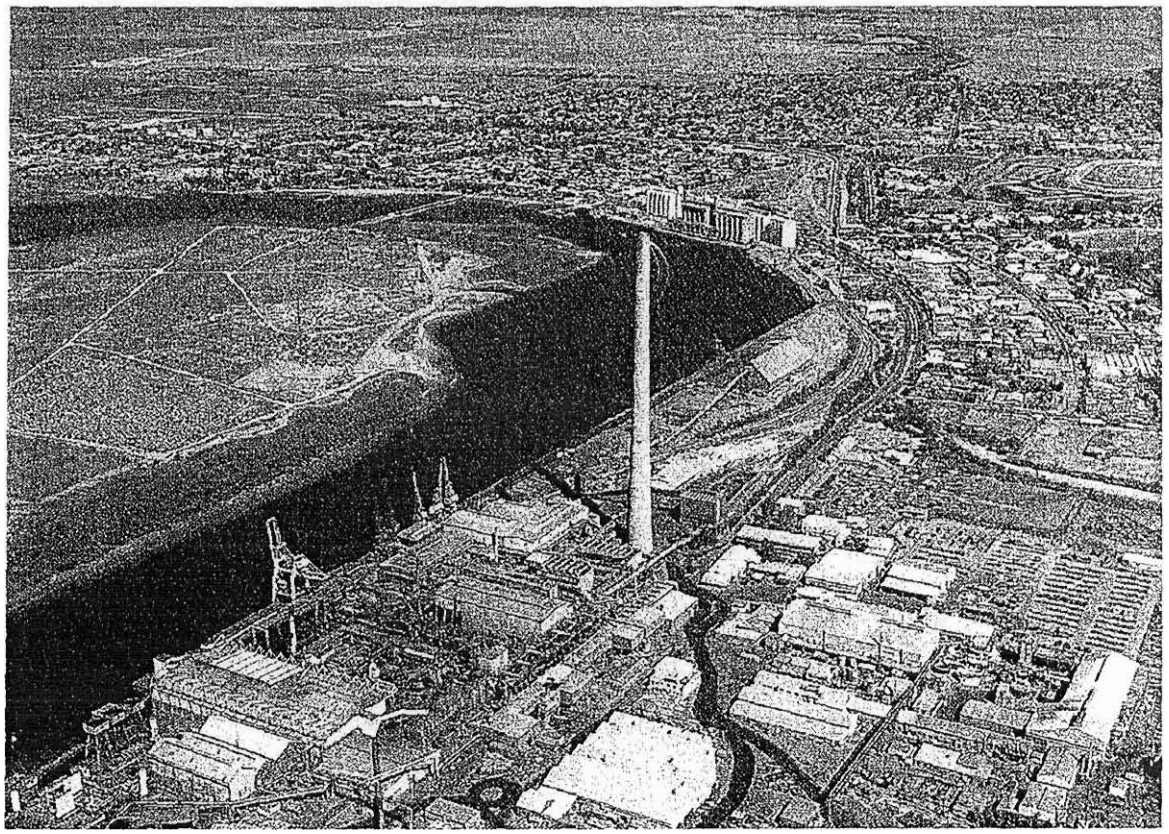
Road and Rail Access
Shipping pier connected to railway system

Bunker Facilities
- By road tanker to bulk berth
- Minor vessel berths have pipeline

Channel
Boston Bay: 14 6m



Pictured above – **Port Lincoln** *Below* – **Port Pirie**



Port Pirie

Latitude 33 degrees-10 minutes South
Longitude 138 degrees-02 minutes East

Situated 223km north of Adelaide, Port Pirie has a population of over 16,000. NyrStar operates one of the largest smelters in the world, exporting large quantities of zinc concentrates and lead. Other exports include grains and seeds, with principal imports comprising minerals, coal and ores.

Principal Commodities Handled

- *Grains & Seeds*
- *Mineral concentrates*
- *Coal*
- *Smelter outputs: zinc & lead*
- *General Cargo*

Shipping Information

References
- Australia Pilot volume 1: p105, 106
- Charts: AUS 136, AUS 778, AUS 344, AUS 444
- Vertical Datum: ISLW (Indian Spring Low Water)
- Horizontal Datum: WGS84

Nature of Bottom
Clay

Mechanical Cargo Handling Equipment
- Privately owned: NyrStar Port Pirie Smelter Pty Ltd
- One ship unloader
- Safe working load: 29t
- Maximum outreach from wharf edge 26.5m

Bulk Cargo Handling Facilities
No 2 Berth: Bulk Loading – ABB Grain Ltd
- Five identical slewing loading booms with spouts
- Maximum outreach from wharf edge: 17.2m
- Gross loading rate: 800tph (one boom, 400tph)
- Boom clearance at wharf edge: 19.9m above chart datum

Bulk Cargo Handling Facilities
No 6 Berth: Zinc Concentrates
- Gantry loader from stockpile
- Gross loading rate: 550/600tph
- Discharge slinger clearance: 12.8m above chart datum

Communications
- VHF radio telephone
- Channels: 6, 8, 12, 16, 67
- Call sign: Port Pirie Harbour
- Watch kept during office hours: 0845 – 1700, weekdays or by arrangement

Port Manager
Flinders Ports: Phone: (08) 8632 1455
Fax: (08) 8632 5918

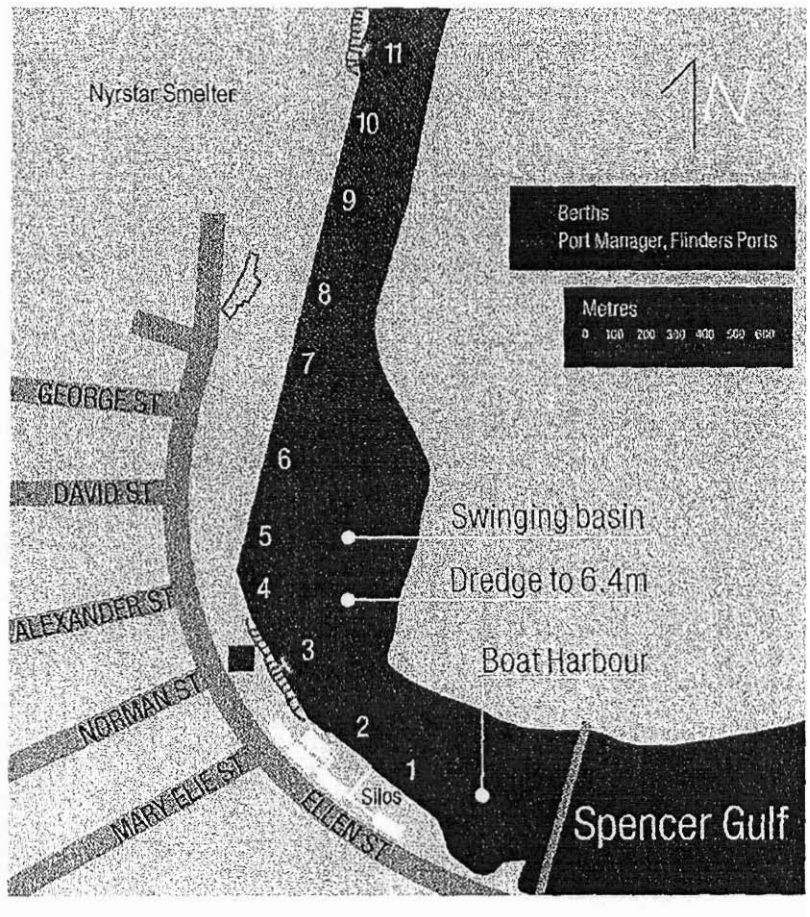
Shipping Agents
- AAL Shipping Agencies
  Ph (03) 9861 1300
- Asia World Shipping Services
  Ph (08) 8447 7855
- Gulf Agency Company (Australia) Pty Ltd
  Phone (08) 8240 4096
  Hetherington Kingsbury Shipping Agency
  Phone (08) 8240 1414
- Inchcape Shipping Services
  Phone (08) 8447 4655
- Monson Agencies Australia Pty Ltd
  Phone (08) 8341 2450
- NYK Line (Australia) Pty Ltd
  Phone (08) 8447 3066
- Wilhelmsen Ship Services
  Phone (08) 8341 0466

Stevedore
Capital Stevedores, 32 Ellen Street,
Port Pirie, South Australia 5540
Phone (08) 8633 2708

Channel
6.4m @ datum depth x 90m wide x 9 miles to entrance beacon

Berth Information Port Pirie

Berth	Length	Breadth	Depth	Wharf Height	Remarks
1	152m	30m	5.3m	4.8m	Fishing/Recreational vessels
2	190m	30m	8.2m	4.8m	Grain
4	107m	25m	4.9m	4.8m	Tug berth
5	198m	30m	8.2m	4.8m	General
6	183m	30m	8.2m	4.8m	Ore Exports
7	145m	30m	8.2m	4.8m	General/Container
8	180m	30m	8.2m	4.8m	Lead Export
9	180m	30m	8.2m	4.8m	Lead Export/Coal Import
10	158m	30m	8.2m	4.8m	Bulk Imports



Wallaroo

Latitude 33 degrees-56 minutes South
Longitude 137 degrees-37 minutes East

Wallaroo (population 2,500) is situated on the eastern side of Spencer Gulf, 158km northwest of Adelaide. Principal commodities handled through the port are fertiliser imports and grain and seed exports.

Principal Commodities Handled

- *Grains & Seeds*
- *Fertilisers*

Shipping Information

References
- Australia Pilot volume 1: p97, 98
- Charts: AUS 777, AUS 344, AUS 444
- Vertical Datum: LAT (Lowest Astronomical Tide)
- Horizontal Datum: AGD66

Communications
- VHF radio telephone
- Channels: 6, 8, 12, 16, 67
- Call sign: Wallaroo Harbour
- 24 hour watch kept (through Adelaide, Outer Harbor)

Tidal Data
- Mean high water springs: 1 21m
- Mean high water neaps: 0 88m

Ship Limitations
- Maximum length overall (LOA): 230m with a beam of 32m
  Berthing daylight only
  Sailing daylight or darkness

Depth in Approach Channels
(Below Chart Datum)
- Approaches: 8 4m
- Swinging Basin: 8 4m

Nature of Bottom - Sand

Bulk Cargo Handling Facilities
- Privately owned: ABB Grain Ltd
- No 2 Berth: Bulk grain loader
- Five identical slewing loading booms with spouts attached
- Boom clearance at wharf edge: 17 2m (above chart datum)
- Maximum outreach from wharf edge: 20 1m
- Maximum LOA of ship: 230m
- Gross loading rate for wheat: 800tph (one boom 400tph)

Road and Rail Access
Road access only

Potable Water
- Available at all berths
- Rate of flow: 15tph
- International ship-to-shore connection available

Port Manager
Flinders Ports: Phone (08) 8447 0623
Fax (08) 8447 0603

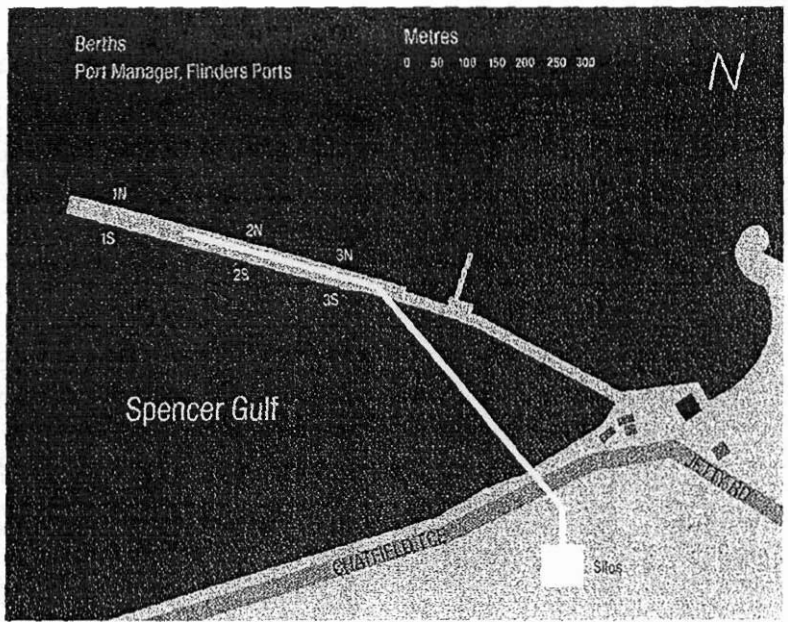
Shipping Agents
- AAL Shipping Agencies
  Phone (03) 9861 1300
- Asia World Shipping Services
  Phone (08) 8447 7855
- Barry Taylor Agencies
  Phone (08) 8823 3700
- Gulf Agency Company (Australia) Pty Ltd
  Phone (08) 8240 4096
- Hetherington Kingsbury Shipping Agency
  Phone (08) 8240 1414
- Inchcape Shipping Services
  Phone (08) 8447 4655
- Monson Agencies Australia Pty Ltd
  Phone (08) 8341 2450
- Noel Simpson Agencies
  Phone (08) 8823 2789
  NYK Line (Australia) Pty Ltd
  Phone (08) 8447 3066
  Wilhelmsen Ship Services
  Phone (08) 8341 0466

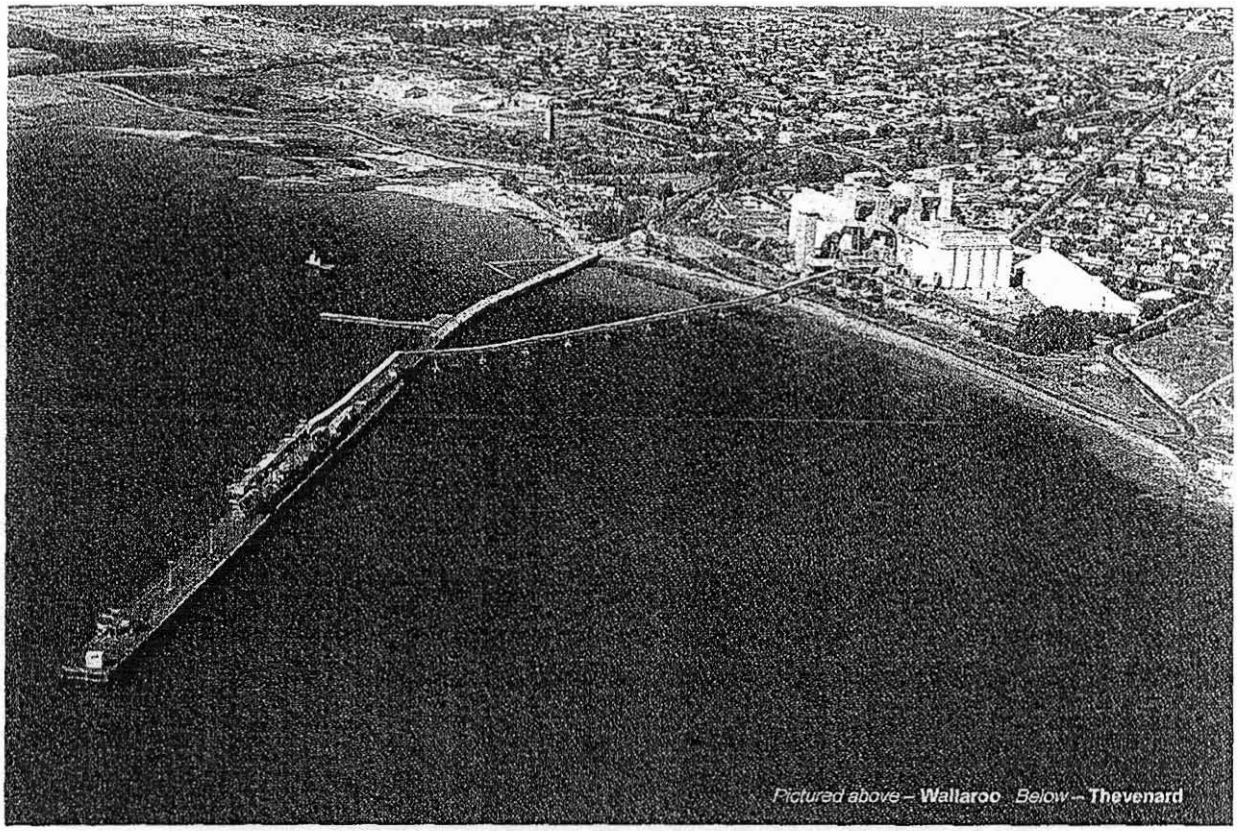
Channel
90m x wide

Berth Information Wallaroo

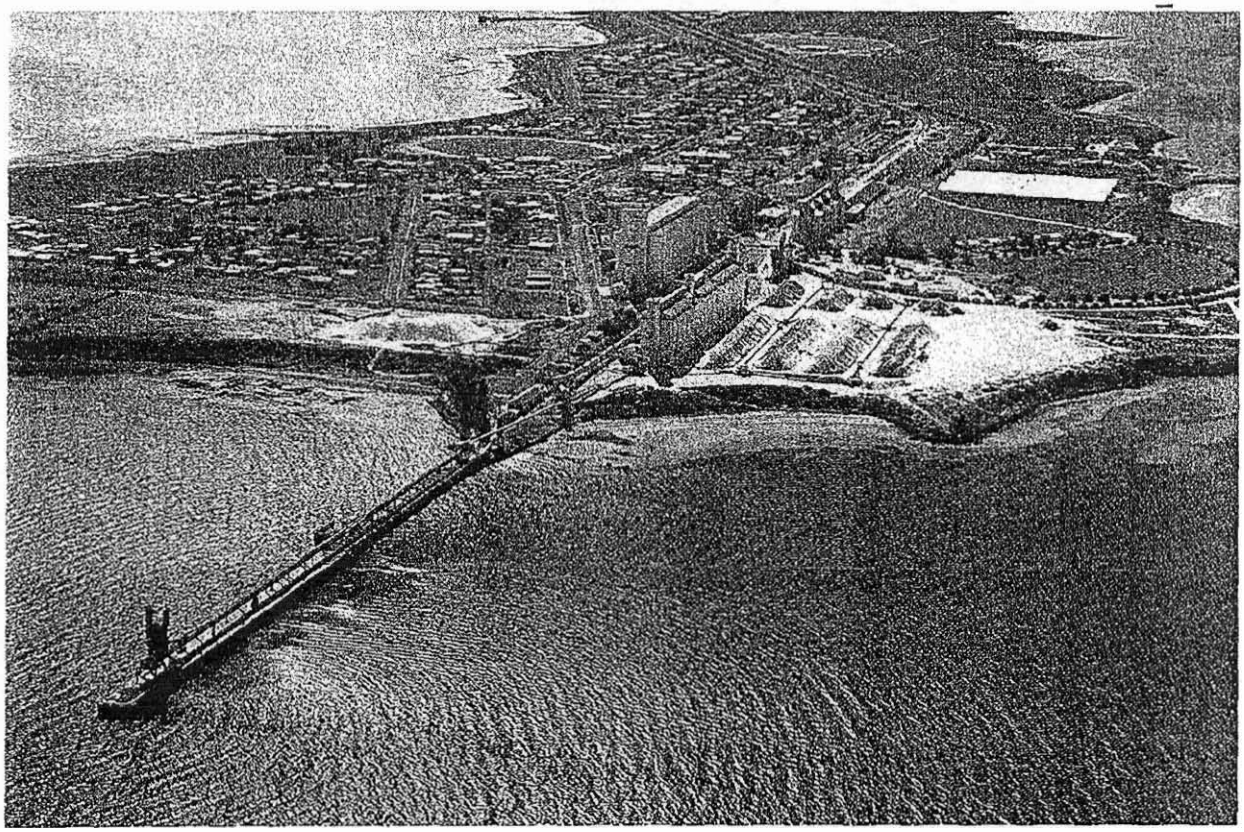
Berth	Length	Breadth	Depth	Wharf Height	Axle Load	Remarks
1N	84m	25m	8.7m*	5.1m	4T single axle (nominal)	
	290m	36m	8.7m*	5.1m	4T single axle (nominal)	Grain
3N	68m	25m	7.2m	5.1m	4T single axle (nominal)	
1S	168m	25m	8.7m*	5.1m	8T axle between yellow lines only	Fertiliser imports
2S	198m	30m	8.1m	5.1m		Disused
3S	76m	25m	7.3m	5.1m		
Spur Jetty						Fishing Wharf

* Working Depth





Pictured above – **Wallaroo** *Below –* **Thevenard**



Thevenard

Latitude 32 degrees-09 minutes South
Longitude 133 degrees-39 minutes East

Thevenard is 793km west of Adelaide, and 3km from the centre of Ceduna, a town with a population of over 4,000. Major export cargoes handled through the port include gypsum, grains, seeds and salt exports, and fertiliser imports.

Principal Commodities Handled

- *Gypsum*
- *Grains & Seeds*
- *Salt*

Shipping Information

References
- Australia Pilot volume 1: p72-74
  Charts: AUS 120, AUS 341
- Vertical Datum: ISLW (Indian Spring Low Water)
- Horizontal Datum: AGD66

Communications
- VHF radio telephone
- Channels: 6, 8, 12, 16, 67
- Call sign: Thevenard Port Control
- A listening watch kept during office hours (0845-1700), weekdays or by arrangement on channel 16

Tidal Data
- Mean high water springs: 1.67m
- Mean high water neaps: 1.08m

Ship Limitations
- Maximum length overall (LOA): 180m with a beam of 28m
- Sailing day or night, although berthing daylight only to ships not equipped with bowthruster
- Vessels equipped with bowthruster may berth at night with prior approval of Flinders Ports

Depth in Approach Channels
(Below Chart Datum)
- Yatala Channel: 8.2m

Nature of Bottom
Clay/sandstone

Bulk Cargo Handling Facilities
- Privately owned: ABB Grain Ltd
- Thevenard jetty: Serving both sides
- Boom clearance at wharf edge: 16m above chart datum
  A travelling gantry loader with retractable boom and spout attached
- Length of travel: 160.5m
- Maximum outreach from wharf edge: 13.4m
- Gross loading rates:
  Wheat: 550/750tph, Barley: 550tph
  Oats: 500tph, Gypsum: 1050tph

Port Manager
Flinders Ports: Phone (08) 8625 2617
Fax (08) 8625 3100
- Pilot based in Port Lincoln:
  Mobile 0427 010 035

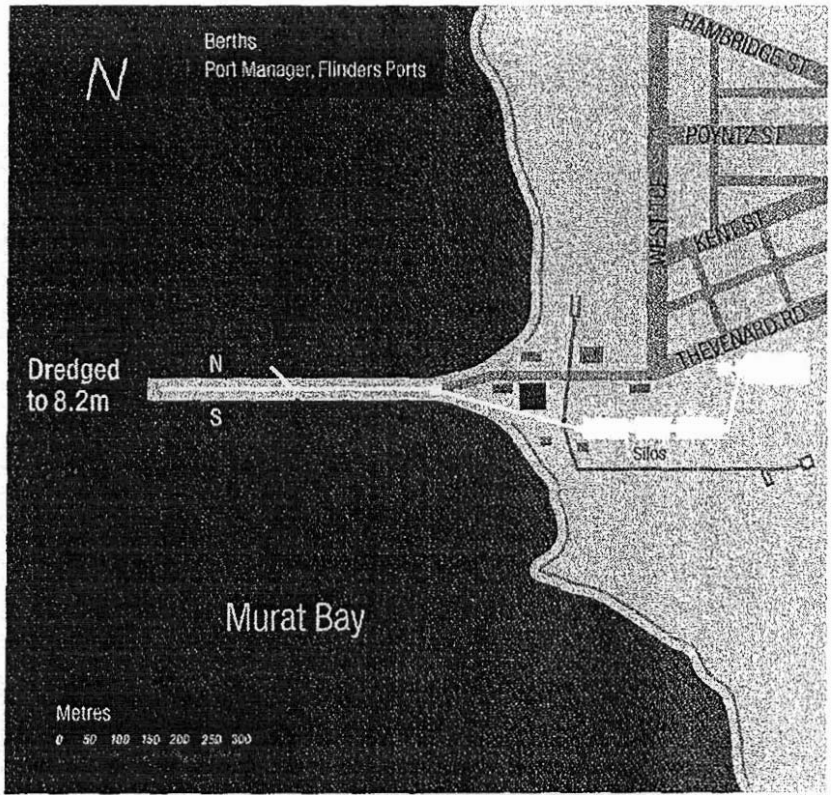
Shipping Agents
- AAL Shipping Agencies
  Phone (03) 9861 1300
- Asia World Shipping Services
  Phone (08) 8447 7855
- EA Moseley Pty Ltd
  Phone (08) 8625 3080
- Gulf Agency Company (Australia) Pty Ltd
  Phone (08) 8240 4096
- Hetherington Kingsbury Shipping Agency
  Phone (08) 8240 1414
- Inchcape Shipping Services
  Phone (08) 8447 4655
- Monson Agencies Australia Pty Ltd
  Phone (08) 8341 2450
- NYK Line (Australia) Pty Ltd
  Phone (08) 8447 3066
- Thevenard Shipping Agency
  Phone (08) 8625 2085
- Wilhelmsen Ship Services
  Phone (08) 8341 0466

Berth Information Thevenard

Berth	Length	Breadth	Depth	Wharf Height	Axle Load	Remarks
Jetty	198m	30m each side	9 8m	5 2m	*	Berth services both sides Capable of loading only one side at a time

* Single axle 7 tons
* Single axle, dual wheels 8 tons
* Tandem axles, dual wheels 8 tons

2 Berths: capable of loading one side at a time



Port Giles

Latitude 35 degrees-02 minutes South
Longitude 137 degrees-46 minutes East

Port Giles is located on the eastern side of Yorke Peninsula, 217km by road from Adelaide. It was established in 1970 to export grain and seeds from the lower section of the peninsula.

Principal Commodities Handled

- *Grains & Seeds*

Shipping Information

References
- Australia Pilot volume 1: p131, 132
- Charts: AUS 125, AUS 780, AUS 345, AUS 444
- Vertical Datum: LAT (Lowest Astronomical Tide)
- Horizontal Datum: AGD66

Communications
- VHF radio telephone
- Channels: 6, 8, 12, 16, 67
- Call sign: Adelaide Outer Harbor
- If Port Giles radio not available use Outer Harbor Radio
- Watch kept 24 hrs

Tidal Data
- Mean high water springs: 2m
- Mean high water neaps: 1 2m

Ship Limitations
Daylight berthing only
- Sailing day or night
- Maximum length overall (LOA): 228m
- Conditions may be suitable for longer vessels at Port Manager's discretion

Depth in Approach Channels
(Below Chart Datum)
Depth: 13.5m

Nature of Bottom
Limestone and sand

Bulk Cargo Handling Facilities
- Privately owned: ABB Grain Ltd
- For loading bulk grain
- Five identical slewing loading booms with spouts attached
- Maximum outreach from wharf edge: 9 8m
- Gross handling rate: 1,000tph
- One boom: 500tph
- Boom clearance at wharf edge: 19 2m above chart datum

Road and Rail Access
Road access only

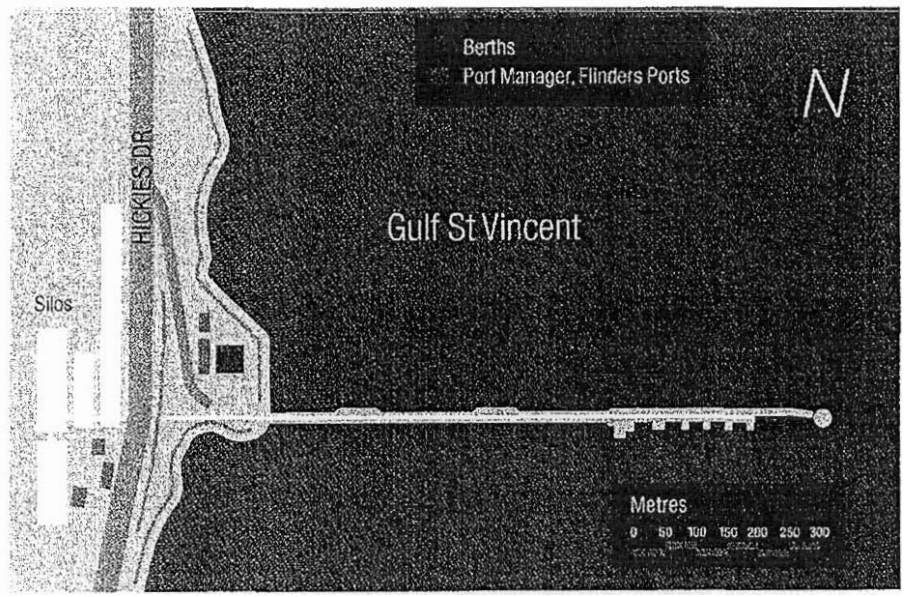
Port Manager
Flinders Ports
Phone (08) 8447 0623
Fax (08) 8447 0603

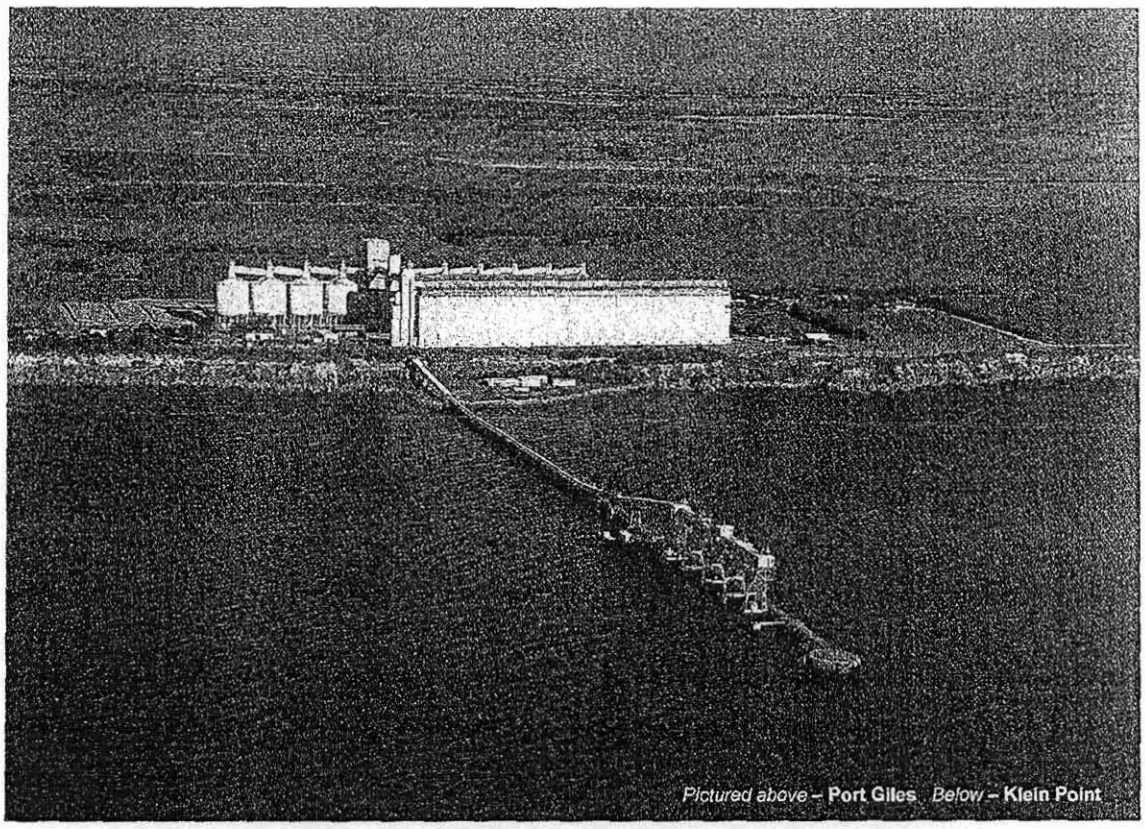
Shipping Agents
- AAL Shipping Agencies
  Phone (03) 9861 1300
- Asia World Shipping Services
  Phone (08) 8447 7855
- Barry Taylor Agencies
  Phone (08) 8823 3700
- Bullpit Shipping Agency
  Phone (08) 8837 3227
- Gulf Agency Company (Australia) Pty Ltd
  Phone (08) 8240 4096
- Hetherington Kingsbury Shipping Agency
  Phone (08) 8240 1414
- Inchcape Shipping Services
  Phone (08) 8447 4655
- Monson Agencies Australia Pty Ltd
  Phone (08) 8341 2450
  Noel Simpson Agencies
  Phone (08) 8823 2789
- NYK Line (Australia) Pty Ltd
  Phone (08) 8447 3066
- Wilhelmsen Ship Services
  Phone (08) 8341 0466

Berth Information Port Giles

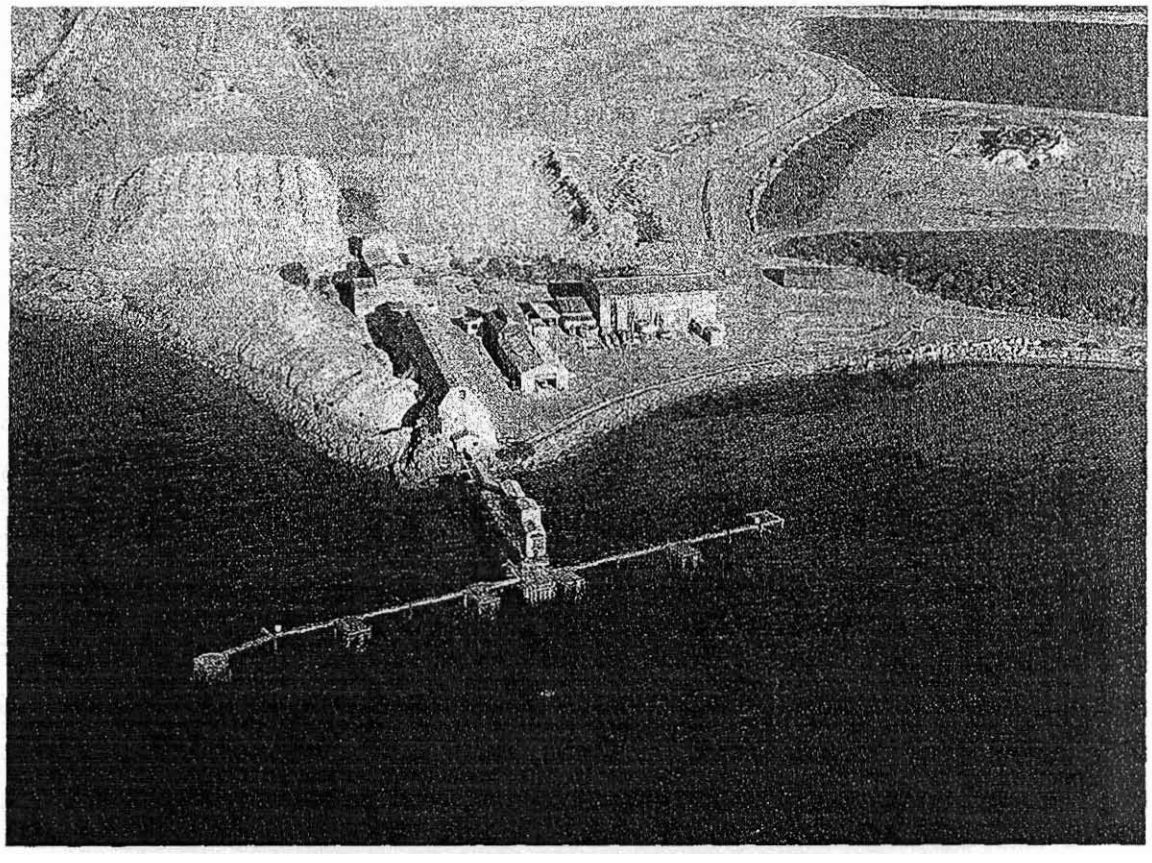
Berth	Length	Breadth	Depth	Wharf Height	Axle Load	Remarks
Jetty	340m	40m	14 7m	5 15m	8T*	Keel clearance 10% of vessel draft

* Single axle design vehicle
N.B. Height of jetty above datum 5.15m





Pictured above – **Port Giles** *Below* – **Klein Point**



Klein Point

Latitude 34 degrees-58 minutes South
Longitude 137 degrees-46 minutes East

Klein Point is a single-purpose port on the south eastern coast of Yorke Peninsula, established to handle shipments of limestone. Access to the port area is restricted.

Principal Commodities Handled

Limestone

Shipping Information

References
- Australia Pilot volume 1: p132
- Charts: AUS 125, AUS 345, AUS 444, AUS 780
- Vertical Datum: LAT (Lowest Astronomical Tide)
  Horizontal Datum: AGD66

Communications
- VHF

Tidal Data
- Mean high water springs: Not applicable
- Mean high water neaps: Not applicable

Depth in Approach Channels
(Below Chart Datum)
Entrance channel and harbour 6 5m

Nature of Bottom
Limestone

Mechanical Cargo Handling Equipment
Privately owned: Adelaide Brighton Cement

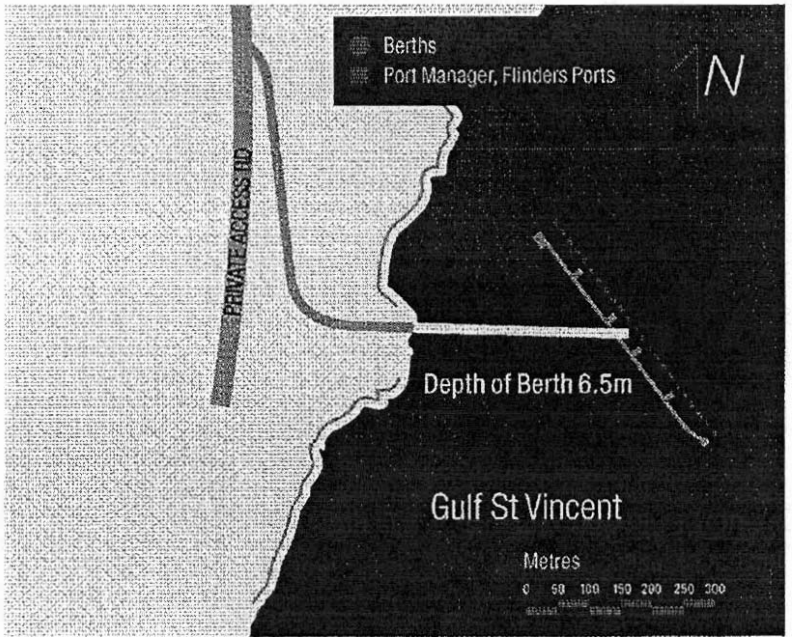
Bulk Cargo Handling Facilities
Privately owned: Adelaide Brighton Cement

Port Manager
Flinders Ports, Client Services/Marine Traffic
Phone (08) 8447 0623
Fax (08) 8447 0603

Channel
Natural Water

Berth Information Klein Point

Berth	Length	Breadth	Depth	Axle Load	Remarks
	150m	30m	6.5m	No vehicle access	Dedicated berth



3 Port Services

Flinders Ports
SOUTH AUSTRALIA

One Stop Shop

Flinders Ports provides your single point of contact for the coordination of port services including tugs, pilotage, mooring labour, berth allocations, harbour services and the handling of dangerous goods for all seven Flinders Ports controlled ports.

To notify Flinders Ports of your requirements for port services simply:

- Submit a fully completed Vessel Entry Form not less than 2 clear working days of vessel arrival to the Client Services Officers/Marine Traffic in Port Adelaide A response is activated which will determine the berth allocation, services and facilities to be provided.

- *To submit electronically, visit the Flinders Ports website at;* ***www.flindersports.com.au*** *and complete the online Application for use of Port Facilities*

- Advise Client Services Officers/Marine Traffic of shipping orders by 1500 Monday to Friday. Operational requirements will be processed for towage in Adelaide and towage and mooring in the Regional Ports by 1530.

A daily shipping schedule will be processed and distributed to port operations service providers in all ports

Outside of normal hours (Monday to Friday 0900 – 1700) agents should contact the Signal Station for any changes to the current shipping schedule in all ports.

Client Services Officers/Marine Traffic will process any changes within Flinders Ports and notify port service providers.

Pilotage Information

Port Adelaide

Port Adelaide Pilotage services available 24 hours

Pilot Boarding Ground
- 2 miles west of fairway beacon
- Lat 34 deg 47.4' South
- Long 138 deg 22.1' East

Pilotage to Outer Harbor
Port Limit, vessels up to 300m LOA (oversize vessels by negotiation)
- Approach Channel: 14.2m
- Distance: 8 nautical miles
- Approximate time: 1 to 1.5 hours
- Keel clearance: 10% draft of vessel

Pilotage to Osborne
Port Limit, vessels up to 206m LOA
- Channel: 9.3m
- Distance: 12 nautical miles
- Approximate time: 1.5 to 2 hours
- Keel clearance: 7.5% of draft of vessel

Pilotage to Inner Harbour
Port Limit, vessels up to 206m LOA (Oversize vessels by negotiation)
- Channel depth: 9 3m
- Distance: 14.5 nautical miles
- Approximate time: 2 to 2 5 hours
- Keel clearance: 7.5% to 10% of draft of vessel (check with Flinders Ports office)

Regional Ports

- Berthing during daylight hours only most ports: (Port Pirie and Thevenard refer to Flinders Ports office)
- Departure 24 hours
- Keel clearance up to 10% draft of vessel (check with Flinders Ports office)

Security

Flinders Ports has in place security plans for its ports of Port Adelaide, Port Lincoln, Port Giles, Wallaroo, Port Pirie and Thevenard effective since 1/7/2004.

A Flinders Ports Security Access Card AND a Maritime Security Identification Card (MSIC) is required to gain entry to all of Flinders Ports berths in Port Adelaide, Port Lincoln, Port Giles, Wallaroo, Port Pirie and Thevenard.

The Australian Government has introduced stronger maritime security laws to protect all Australians from the threat of terrorists and others who would disrupt our maritime operations The MSIC is part of the Australian Government's stronger maritime security laws, which are called the Maritime Transport and Offshore Facilities Security Act 2003 and the Maritime Transport and Offshore Facilities Security Regulations 2003

You could be fined if you don't display your MSIC when you are in maritime security zone Individual fines of $550 could apply

Port Adelaide
Access to the inner harbour berths can be gained through a number of electronic access gates. At Berths 29, 27 and 18-20 you will find electronic entry and exit gates.

M Berth, Adelaide's only oil berth, is classed as critical infrastructure and as such has a number of security measures in place When a vessel is berthed, a security guard controls access to the berth When there are no vessels at the berth, access is controlled through the electronic access card

Outer Harbor Berths 1 – 4 as well as the Signal Station and the Marine Services office can be accessed through electronic entry and exit gates located off the roundabout on Lady Ruthven Drive

There are a number of dedicated berths in Port Adelaide Port Facility Operators such as those who operate these berths are required to implement their own Maritime Security Plan and therefore control access to the berth directly.

H and K Berths in the inner harbour are dedicated to Adelaide Brighton Cement and access can only be gained by arrangement with Adelaide Brighton Cement

Penrice Soda Products operates a dedicated berth also in the inner harbour Access is controlled directly by Penrice

Berths 6 & 7 at Outer Harbor are dedicated to DP World Adelaide, the Adelaide container terminal operator Access to these berths is controlled directly by DP World Adelaide through on site security guards by arrangement only

Port Pirie
Access to the Flinders Ports berths in Port Pirie can be gained through an electronic access gate

Port Lincoln, Wallaroo, Port Giles and Thevenard
Access can be gained to the Flinders Ports berths in Port Lincoln, Wallaroo, Port Giles and Thevenard with a Flinders Ports Security Access Card and a key or PIN code

Harbour Services

All Ports

Bunkers
Fuel oils, distillates and lubricating oils are available and can be supplied by road tanker. Permission to bunker is given by the Client Services Officers/Marine Traffic on receipt of a bunker application form

Quarantine Waste Disposal
- Garbage is collected by a contractor whose vehicles call at all ships from 1000 hours each day in Port Adelaide and by request in Regional Ports
- Oily water and sludge may also be discharged into road tankers for disposal
- Facilities for rat riddance are available in accordance with international health requirements, including inspection and fumigation services

Welding Permits
Permits for hot and cold work aboard vessels by ship's staff or port engineering firms are available from the Client Services Officers/Marine Traffic in Adelaide Duty Pilot and Port Operations Supervisors all other ports

Water & Power
- Fresh water available at all berths at 15 to 100 tonnes per hour depending on berth
- Electric power at 415/240 Volts (415V, 3 phase, up to 60 amps) is available from supply points at most commercial berths

Undercover storage
At most berths up to 2000 square metres (Port Adelaide only): Various lease options available

Agents can notify requirements for water, power and quarantine waste on the "Vessel Entry Form" which must be filled out 2 working days prior to vessel entering port

Towage Services

Port Adelaide Tug Usage Guidelines Only

Outer Harbor

L.O.A of vessel	Manoeuvre	Number of tugs
Up to 90 metres	IN/OUT Not Turning	Nil
Up to 90 metres	IN/OUT When Turning	1
90 metres to 120 metres	IN/OUT	1
Over 120 metres	IN/OUT	2
Over 206 metres	IN/OUT Not Turning	2
Over 206 metres*	IN/OUT When Turning	3

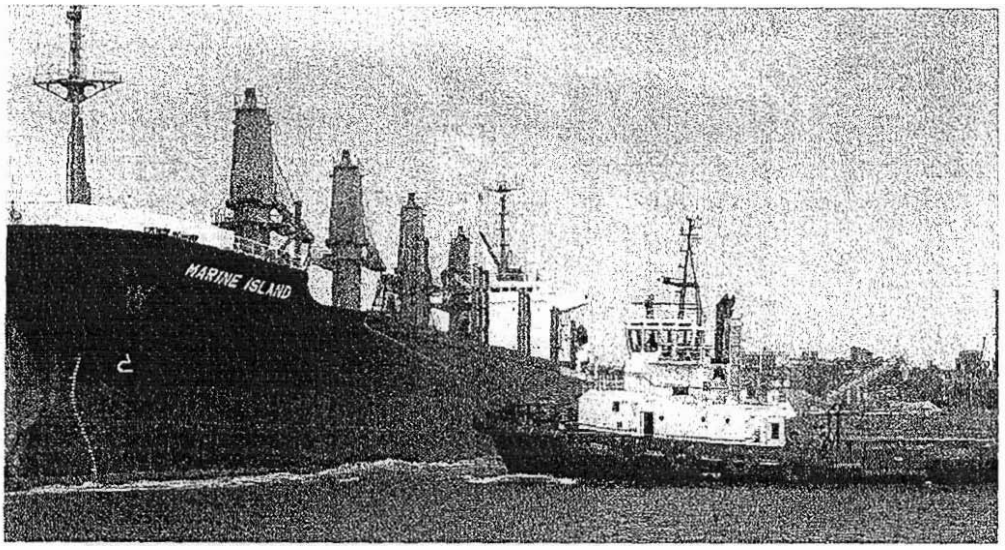
- N B Livestock and Car Carriers exceeding 183 metres may require 3 tugs to turn in strong wind conditions Vessel with bow thrusters and regular calling vessels may have varying tug usage after assessment

  Car Carriers swinging on departure with bow thrusters exceeding 1000hp and wind less than 15 knots may require 1 tug

*Vessels over 206m may use 2 Z peller tugs in lieu of 3 tugs when turning

- N B Bow thrusters may replace tugs on regular calling vessels after assessment
- Vessels over 183 metres may use 2 Z peller tugs in lieu of 3 tugs when turning

Minimum tug requirement may be reduced after assessment of bow thrusters by Pilots



Inner Harbour and Osborne

L.O.A. of Vessel	Manoeuvre	Number of tugs
Up to 90 metres	IN/OUT Not Turning	NIL
Up to 90 metres	IN/OUT When Turning	1
90 metres to 120 metres	IN/OUT	1
120 metres to 183 metres	IN/OUT	2
Over 183 metres	IN/OUT Not Turning	2
Over 183 metres	IN/OUT When Turning	3

Tug Agents

Port Adelaide & Port Giles

Svitzer
4 Victoria Road, Birkenhead
South Australia 5015
Phone (08) 8449 8466
Fax (08) 8449 1149

Tug Operations
Normal working hours are: 0830 hours to 1700 hours Monday to Friday

Availability
Tugs available for 20 hours: provided a 6 hour break is given after 1200 hours

Ordering
Orders for tugs must be lodged with berthing applications via the Flinders Ports Client Services Officers/Marine Traffic no later than 1530 hours Monday to Friday excluding holidays.

Changes
- Prior to 1900 hours for following day
- Prior to 1630 hours for recall same day following earlier towage No charge applies for change of orders prior to 1030 hours on Saturday for Sunday, Monday and Tuesday (if Monday public holiday)

Tugs
- Tarpan: *50T Bollard Pull*
- Corsair: *43.3T Bollard Pull*
- Tapir: *43.4T Bollard Pull*
- Tingari: *60T Bollard Pull*

Port Lincoln

Port Lincoln Tugs Pty Ltd
Mobile 0428 256 644
Phone (08) 8682 2654

Tugs
- MT Kioloa: *40T Bollard Pull*
- Launch available to run lines

Port Pirie

Port Lincoln Tugs Pty Ltd
Phone (08) 8240 4096
Mobile 0420 962 072

Tugs
- MT Lucinda: *27T Bollard Pull*

Wallaroo

Port Lincoln Tugs Pty Ltd
Phone (08) 8240 4096
Mobile 0420 962 072

Thevenard

Port Lincoln Tugs Pty Ltd
Phone (08) 8625 7051
Mobile 0400 402 241

Tugs
- MT Warren: *27T Bollard Pull*

Klein Point

Tug
- Available from Port Adelaide if required

Whyalla

Svitzer
Phone (08) 8449 8466
Mobile 0408 875 189

Tugs
MT Tanunda: *33.2T Bollard Pull*
MT Taminga: *50T Bollard Pull*
MT Marimba: *42T Bollard Pull*
MT Wooree: *42T Bollard Pull*

Port Lincoln Tugs Pty Ltd
Phone (08) 8240 4096
Mobile 0420 962 072

Tugs
- MT Ungarra: *12T Bollard Pull*

Labour Ordering Times

Mooring
- 0000-2400 hours

Ordering time(s): Normal Hours
- Monday to Friday 2 hrs notice of alteration of booking

Ordering time(s): Outside Normal Hours
- Saturday/Sunday/Public Holidays 5 hours notice of alteration of booking

Launches
- 0000-2400 hours

Ordering time(s) – Normal Hours
- Monday to Friday 2 hrs notice of alteration of booking

Ordering time(s) – Outside Normal Hours
- Saturday/Sunday/Public Holidays 5 hours notice of alteration of booking

Pilots
- 0000-2400 hours

Ordering time(s) – Normal Hours
- Monday to Friday 2 hrs notice of alteration of booking

Ordering time(s) – Outside Normal Hours
- Saturday/Sunday/Public Holidays 5 hours notice of alteration of booking

Handling of Dangerous Goods

Procedures for the Loading, Discharging, Transhipping of Dangerous Cargoes of Dangerous Goods Class 1 (i.e. Explosives).

All dangerous cargo details i.e. U.N. number, IMDG Code and description to be delivered to the Client Service Officers/Marine Traffic at least 48 hours before vessel arrival

The Client Services Officers/Marine Traffic will then advise the agent what precautions or actions are to be taken

N.B. The handling and transport of dangerous cargoes will be in accordance with the Australian Standard AS3846-2005

Procedures for the Loading/Discharging/Transhipping of Dangerous Cargoes of Dangerous Goods Class 2, 3, 4, 5, 6, 8 or 9.

All dangerous cargo details i e U.N. number, IMDG Code and description to be delivered to the Client Services Officers/Marine Traffic at least 48 hours before vessel arrival by the ship's agent.

The Client Services Officers/Marine Traffic will then advise what precaution/action to be taken by ship/wharf/transportation. Class 1, Class 5 and Class 7 cargoes will be handled strictly in line with the Australian Standard AS3846-2005.

U N. number: United Nations Number
IMDG Code: International Maritime Dangerous Goods

Stevedores

Capital Stevedoring

Berth 8, Port Pirie Wharf
PO Box 946, Port Pirie
South Australia 5540
Phone (08) 8632 2708
Fax (08) 8363 0803
Mobile 0408 533 489

Normal Working Hours
- Working Hours are around the clock

Ordering Times
Monday to Saturday
- Labour must be ordered by 1545 hrs for the following day

DP World Adelaide

Containerised and Break-Bulk operations

PO Box 207, Port Adelaide BC 5015
Phone (08) 8248 9300
Fax (08) 8248 9370
Operational Issues
Mobile 0417 862 368 or 0419 825 378

Adelaide Container Terminal
Outer Harbor 6 & 7 Berths
Working hours Monday to Sunday –
Vessel Operations
- Day: 0700 – 1500
- Evening: 1500 – 2300
- Night: 2300 – 0700

Gate Operations Monday to Friday
- 0700 - 2100

Labour pick-up procedures
Monday to Friday
- By 1200 hrs day prior for weekends
- Indicate requirements: 1300hrs Friday

Weekends
(0700hrs Sat – 0700hrs Mon)
- Indicate requirements by: Thursday prior
- Book requirements by: 1100hrs Friday prior
- Confirm requirements by: 1300hrs Friday prior

Public Holidays
Last ordinary working day prior to a public holiday and at the same time as weekend labour

P&O Ports Ltd

Berth 19, Ocean Steamers Road,
Port Adelaide, South Australia 5015
Phone (08) 8440 3900
Fax (08) 8447 3183 or (08) 8241 0707

Port Adelaide
General Cargo
- Day: 0800 - 1500 (5hr extension)
- Evening: 1500 – 2200 (5hr extension)
- Night: 2300 – 0600 (5hr extension)

Bulk Cargo (Grain)
- Day: 0730 - 1430 (5hr extension)
- Evening: 1430 – 2130 (5hr extension)
- Night: 2300 – 0600 (5hr extension)

Regional Ports
Fertiliser Discharge (Nominal Hours)
- Day: 0800 - 1500 (5hr extension)
- Evening: 1500 – 2200 (5hr extension)
- Night: 2300 – 0600 (5hr extension)

Port Adelaide/Regional Ports
Continuous (Nominal Working Hours)
- Day: 0800 - 1500
- Evening: 1500 – 2200
- Night: 2200 – 0800

N.B. Early and late commencement times are available for all operations

Ordering times
Monday to Saturday
- 1400 hrs the previous working day
- Late labour requisitions may be expected (Other flexibilities are available)

Patrick Stevedoring

Berth 29, Port Adelaide
South Australia 5015
Phone (08) 8240 2971
Fax (08) 8240 5670
A/Hours 0438 092 732

Normal Working Hours
- Day: 0730 – 1530
- Evening: 1530 – 2330
- Midnight: 2330 – 0730

Day and Twilight shifts may be extended by 1, 2, 3 or 4 hours for any reason, whilst night shift may be extended by 1 or 2 hours.

Ordering Times
- Late requisitions may be accepted at the discretion of Management
  Day and Evening shifts advanced or retarded by 1 or 2 hours. Midnight shift by 1 hr

Monday to Thursday
- Labour to be ordered prior to 1400 hrs for the following day

Saturday and Sunday
- Labour to be ordered prior to 1400 hrs on Friday

Monday
- Labour to be ordered prior to 1400 hrs on Sunday

Confirmation time(s) will vary due to labour requirements and will be advised at time of ordering labour

Bulk Handling

P&O Ports Ltd

Berth 19, Ocean Steamers Road,
Port Adelaide, South Australia 5015
Phone (08) 8440 3900
Fax (08) 8447 3183 or (08) 8241 0707

Regional Ports – Bulk Loading Plants
Ordering of labour for shipping
- Weekdays: By 1400 day prior to shipping
- Weekends: By 1400 Friday afternoon
- *Public Holiday e.g Monday: By 1400 Friday prior*

Cancellation of labour for shipping
- Weekdays: Before 1400 on the day prior
- Weekends: Before 1400 working day prior
- Public Holiday e.g *Monday:* Before 1500 working day prior

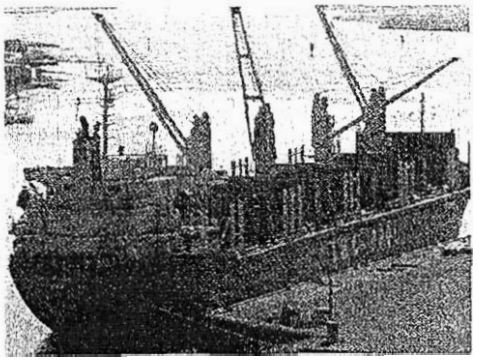
Cancellation of Evening Labour
- Weekdays: Before 1000 on the day
- Weekends: Before 1000 on working day
- Public Holiday e.g. *Monday:* Before 1500 working day prior

Evening only: Cancellation – Full Charge (unless cancelled prior day by 1500)

27 Berth Bulk Loading Plant
Port Adelaide
Monday to Sunday
- Day shift: 0730 – 1430
- Evening shift: 1430 – 2130
- Midnight shift: 0730 – 1930 : 1930 – 0730

Ordering Times
Monday to Friday
Ordered by 1400 on the preceding working day

Weekend and Monday
Ordered by Friday 1400



Labour for day following a public holiday
- Ordered on the last normal working day prior to the public holiday by the above times (e g. ordered Friday for Tuesday labour if Monday is a public holiday)
  It is required that all labour orders be confirmed from the parties, AWB, ABB etc ½ hour before this time (by 1430) to allow labour allocations to be arranged.

Ordering times for extensions
Day shift
- Ordered by 1130
- 3 hour extension (1430 – 1730) for an extended day

Evening shift
- Ordered by 1700: 2 hour extension (2200 – 2400) for an extension to finish only.

Southern Wharf Services
an ABB Grain Ltd Company

124-130 South Terrace, Adelaide
PO Box 1169, Adelaide
South Australia 5001
Phone (08) 8304 5106
Fax (08) 8425 0214

Port Adelaide
Phone (08) 8447 3695
Fax (08) 8447 3164
Port Giles
Phone (08) 8852 8135
Fax (08) 8852 8088
Port Lincoln
Phone (08) 8683 1189
Fax (08) 8683 1120

Port Pirie
Phone (08) 8632 2805
Fax (08) 8625 3215
Thevenard
Phone (08) 8625 3369
Fax (08) 8625 3215
Wallaroo
Phone (08) 8823 2238
Fax (08) 8823 3125

Port Adelaide
Working Hours
- Day shift: 0730 – 1430
- Evening shift: 1430 – 2130

24 hour loading available

Thevenard, Port Lincoln, Port Giles, Port Pirie, Wallaroo
Working Hours
- Day shift: 0800 – 1500
- Evening shift: 1500 – 2200

24 hour loading on request at Thevenard, Port Lincoln, Port Giles, Port Pirie,

24 hour loading available at Wallaroo

Ordering of labour for shipping
Southern Wharf Services Pty Ltd requests an order of labour for all shipping from the appropriate companies by 1400 hrs on the normal workday prior to the day requested plus 1100 hours on Friday

Cancellation of labour – For the evening overtime

Cancellation time
- No later than 1100 hrs on the day that the overtime was required for shipping, in order that employees can be notified before their normal lunch time

For the weekend or public holiday overtime
- No later than 1 hour prior to the normal finishing time on the normal weekday prior to the weekend or public holiday

Customs and Quarantine

Australian Customs Service

220 Commercial Road, Port Adelaide
South Australia, 5015
Phone (08) 8447 9211
Fax (08) 8447 9208
National Customs Watch Freecall
1800 061 800

Monday to Friday
- 0830 – 1700 hours

Out-of-hours
- National Communications Centre
  Phone (03) 9244 8973

Callout for Boarding/Clearance
- Available via Communications Centre

Australian Quarantine and Inspection Service

Sir Donald Bradman Drive,
Export Park, Adelaide Airport
South Australia 5950
Phone (08) 8201 6000
Fax (08) 8201 6111

Monday to Friday
- 0730 – 1700 hours

Out-of-hours
As required, contact (08) 8201 6054

Callout for shipping
- Any hour

4 Shipping Services

Flinders Ports
SOUTH AUSTRALIA

Container Shipping Services

Europe / South East Asia

Round the World Service – Suez Direct

Frequency:
- Weekly

Members/Booking Agents:
- Hapag Lloyd
- Marfret

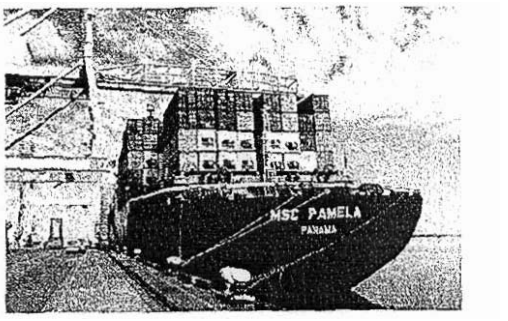
Ports of Call:
Adelaide, Singapore, Colombo, Damietta, La Spezia, Tilbury, Hamburg, Rotterdam, La Spezia, Damietta, Melbourne, Sydney, Brisbane, Auckland, Napier, Port Chalmers, Melbourne
With feeder services to most West and North European destinations, Scandinavia.

Nemo Service

Frequency:
- Weekly

Members/Booking Agents:
- CMA – CGM
- DAL Deutsche Afrika-Linien/Agents: Inchcape Shipping Services Pty Limited
- ANL Container Line Pty Ltd

Ports of Call:
Adelaide, Jakarta, Port Kelang, Chennai, Colombo, Suez, Damietta, Malta, La Spezia, Tilbury, Hamburg, Rotterdam, Le Havre.
Tilbury, Hamburg, Rotterdam, Le Havre, Fos, La Spezia, Damietta, Suez, Reunion, Port Louis, Melbourne, Sydney, Brisbane, Auckland, Tauranga, Lyttelton, Melbourne, Adelaide
With feeder services to Indonesia, Thailand, Vietnam, Mediterranean, North West Europe, Scandinavia.



Mediterranean Shipping Company (MSC Europe)

Frequency:
- Weekly

Members/Booking Agents:
- Mediterranean Shipping Company

Ports of Call:
Sydney, Melbourne, Adelaide, Fremantle, La Spezia, Tilbury, Jakarta, Singapore, Colombo, Jedah, Antwerp, Felixstowe, Lehavre, Rotterdam, Hamburg, Bremerhaven, Velencia, Fasurmer, La Spezia.
With feeder services via:
With feeder services via Antwerp to Rotterdam, Hamburg and Bremerhaven. Relay services via Durban to USA and South America and La Spezia to the Mediterranean.

USA / New Zealand

VSA

Frequency:
- Fortnightly

Members/Booking Agents:
- Hamburg SUD
- Hapag Lloyd
- Maersk

Ports of Call:
Adelaide, Auckland, Papeete, Ensenada, Los Angeles, Oakland, Seattle, Vancouver, Sydney, Melbourne

USA / New Zealand / Europe

Trident

Frequency:
- Fortnightly

Members/Booking Agents:
- Hamburg SUD

Ports of Call:
Adelaide, Timaru, Napier, Tauranga (N.Z.), Cartagena, Savannah, Philadelphia, Tilbury, Bremerhaven, Antwerp, Sydney, Melbourne

South East Asia and connecting North and East Asia

AAA (Australia Asia Alliance)

Frequency:
- Weekly

Members/Booking Agents:
- OOCL
- MOL
- MISC
- PIL (Agents – Pacific Asia Express)

Ports of Call:
Port Kelang, Singapore, Fremantle, Melbourne, Adelaide, Fremantle, Port Kelang
With feeder and relay services to/from:
Thailand, Indonesia, Hong Kong, Taiwan, Japan, Korea, Philippines, Vietnam, East and West North Africa, South Africa, Mauritius, East and West South America, Mexico, China, Reunion, Seychelles, India, Pakistan, Sri Lanka, Middle East, Egypt, Main European and Mediterranean ports

Australia Asia Express (AAX)

Frequency:
- Weekly

Members/Booking Agents:
- ANL Container Line
- NYK Line
- APL
- Djakarta Lloyd
- China Shipping
- Hyundai Merchant Marine

Ports of Call:
Port Kelang, Singapore, Fremantle, Brisbane, Sydney, Melbourne, Adelaide, Port Kelang
With feeder services to:
Jakarta, Thailand, Malaysia, Indonesia, Myanmar. Some agents offer relay services to/from Hong Kong, Taiwan, Philippines, Vietnam, China, Middle East, Egypt, Japan, Korea, the Indian sub-continent, East Africa and the USA (East & West Coast) ports, Mexico, European and Mediterranean ports via Singapore.

Maersk Australia (AU3)

Frequency:
- Weekly

Members/Booking Agents:
- Maersk
- Hamburg SUD

Ports of Call:
Adelaide, Fremantle, Tanjung, Pelepas, Singapore, Sydney, Melbourne, Adelaide
Feeder service available to all ports.

North and South East Asia

Austral Asia Line

Frequency:
- Every 18 days

Members/Booking Agents:
- AAL

Ports of Call:
Hong Kong, Kaohsiung, Busan, Mill #1, Kobe, Keelung, Inchan, Yokohama, Shanghai, Brisbane, Newcastle, Melbourne, Adelaide, Port Kembla, Townsville.
With feeder and relay services to/from: Thailand, Indonesia, Hong Kong, Taiwan, Japan, Korea, Philippines, Vietnam, East and West North Africa, South Africa, Mauritius, East and West South America, Mexico, China, Reunion, Seychelles, India, Pakistan, Sri Lanka, Middle East, Egypt, Main European and Mediterranean ports.

Agents Representing Container Lines

Agency	Contact	Services Represented
ANL Container Line Pty Ltd Port Adelaide, 306 St Vincent St South Australia 5015	Phone + 61 8 8347 5400 Fax + 61 8 8447 1870 Email: harvg@anl.com.au www.anl.com.au	AAX / NEMO
APL Lines (Australia) Suite 2 78 – 80 Dale Street, Port Adelaide South Australia 5015	Phone + 61 8 8444 1100 Fax + 61 8 8444 1147 Email: barry_hickman@apl.com www.apl.com	AAX
Austral Asia Line	Phone + 61 3 9861 1300	AAL
China Shipping (Australia) Agency Suite 4, 296 St Vincent Street Port Adelaide South Australia 5015	Phone + 61 8 8240 5077 Fax + 61 8 8240 5088 Email: ptomlinson@cnshipping.com.au www.cnshipping.com.au	AAX
CMA/CGM 306 St Vincent Street Port Adelaide South Australia 5015	Phone + 61 8 8347 5412 Fax + 61 8 8347 5415 Email: adl.lfeltrin@cma.cgm.com	NEMO
COSCO Container Line Pty Ltd Level 1, 139-145 St Vincent Street, Port Adelaide South Australia 5015	Phone + 61 8 8447 4655 Fax + 61 8 8447 6139 Email: coscoadl@ISS-shipping.com.au www.cosco.com	AAA
DAL Deutsche Afrika-Linien C/- Inchcape Shipping Services Pty Limited Level 1, 139-145 St Vincent Street, Port Adelaide South Australia 5015	Phone + 61 8 8241 0188 Fax + 61 8 8447 6139 Email: paul.phillips@iss-shipping.com.au www.rantzau.de	NEMO
Djakarta Lloyd Australia Pty Ltd 306 St Vincent Street PO Box 114, Port Adelaide South Australia 5015	Phone + 61 8 8347 5406 Fax + 61 8 8341 1854 Email: kbaker@dlloyd.com.au	AAX
Hamburg SUD Level 2, Optus Centre 431-439 King William Street Adelaide South Australia 5000	Phone + 61 8 8216 3100 Fax + 61 8 8211 9277 Email: ian.henderson@au.hamburgsud.com www.hamburgsud.com	Maersk AU3 VSA Trident
Hapag-Lloyd Container Line Level 1, 139-145 St Vincent Street, Port Adelaide South Australia 5015	Phone + 61 8 8341 2756 Fax + 61 8 8341 2790 Email: richard.brine@hlcl.com	SUEZ VSA

Hetherington Kingsbury Shipping Agency PO Box 3003 Port Adelaide South Australia 5015	Phone + 61 8 8240 1414 Fax + 61 8 8240 1417 Email: hkadl@hksa.com.au www.hmm21.com	AAX
Maersk Australia Pty Ltd Level 2, 220 Commercial Road Port Adelaide South Australia 5015	Phone + 61 8 8447 3400 Fax + 61 8 8447 4899 Email: adlmng@maersk.com www.maerskline.com	Maersk AU3 VSA
Marfret Shipping Agency 229A St Vincent Street Port Adelaide South Australia 5015	Phone + 61 8 8447 8688 Fax + 61 8 8447 8644 Email: bill.farrelly@seaway.com.au www.marfret.com	SUEZ
Mediterranean Shipping Company (Australia) Pty Ltd 19 Divett Street, Port Adelaide South Australia 5015	Phone + 61 8 8341 1644 Fax + 61 8 8341 1899 Email: terry.longbottom@msc.com.au www.msc.com.au	MSC
MISC Agencies (Australia) Pty Ltd 1st Floor, 296 St Vincent Street Port Adelaide South Australia 5015	Phone + 61 8 8241 3200 Fax + 61 8 8447 3839 Email: rod.chalmers@miscaust.com.au www.miscaust.com.au	AAA
MOL (Australia) Pty Ltd 230 St Vincent Street PO Box 2142, Port Adelaide South Australia 5015	Phone + 61 8 8341 3068 Fax + 61 8 8200 2970 Email: paul.bates@molau.com.au www.molpower.com	AAA
NYK Line (Australia) Pty Ltd 296 St Vincent Street Port Adelaide South Australia 5015	Phone + 61 8 8447 3066 Fax + 61 8 8240 0967 Email: nykship_adelaide@oc.nykline.com www.nykline.com	AAX
OOCL (Australia) Pty Ltd Level 1, 296 St Vincent Street PO Box 280, Port Adelaide South Australia 5015	Phone + 61 8 8240 1881 Fax + 61 8 8240 1883 Email: william.drewett@oocl.com www.oocl.com	AAA
Pacific Asia Express Pty Ltd Ground Floor East, 8 Butler Drive Hendon Common, Hendon South Australia 5014	Phone + 61 8 8268 5666 Fax + 61 8 8268 6577 Email: kf.pae@ilm.com.au www.pilship.com – www.pae.com.au	AAA

Agents Representing Bulk/Break Bulk

Agency	Contact	Services Represented
Austral Asia Line	Phone + 61 3 9861 1300	Port Adelaide, Port Pirie
Asia World Shipping Services Level 1, 296 St Vincent Street PO Box 376, Port Adelaide South Australia 5015	Phone + 61 8 8447 7855 Fax + 61 8 8341 1550 Email: paulp@asiaworld.com.au www.asiaworld.com.au	All ports
Barry Taylor Agencies 6 Allan Avenue, Wallaroo South Australia 5556	Phone + 61 8 8832 2340	Wallaroo
Bulpitt Shipping Agency PO Box 38, Ardrossan South Australia 5571	Phone 0438 600 115 Fax + 61 8 8837 3774 Email: bulpittshipping@bigpond.com	Port Giles
E A Moseley Pty Ltd 12 Price Street, Thevenard South Australia 5690	Phone + 61 8 8625 3080 Email: moseleylex@bigpond.com	Thevenard
Gulf Agency Company (Australia) Pty Ltd Unit 2, 171 Commercial Road, Port Adelaide South Australia 5015	Phone + 61 8 8240 4096 Fax + 61 8 8240 4984 Email: shipping.adelaide@gacworld.com www.gacworld.com	All ports
Hetherington Kingsbury Shipping Agency PO Box 3003, Port Adelaide South Australia 5015	Phone + 61 8 8240 1414 Fax + 61 8 8240 1417 Email: hkadl@hksa.com.au www.hksa.com.au	All ports
Inchcape Shipping Services Pty Ltd Level 1, 139-145 St Vincent Street, Port Adelaide South Australia 5015 Shop 7, 17 Washington Street Port Lincoln, South Australia 5606	Phone + 61 8 8447 4655 Fax + 61 8 8447 6139 Email: Adelaide@ISS-Shipping.com.au www.iss-shipping.com.au Phone + 61 8 8682 1011	All ports Port Lincoln
K Line (Australia) Pty Ltd 113-115 Lipson Street, Port Adelaide South Australia 5015	Phone + 61 8 8240 1200 Fax + 61 8 8240 1133 Email: barrier@klineaus.com.au www.kline.co.jp	Port Adelaide only
The McArthur Shipping & Agency Co Pty Ltd PO Box 330, Port Adelaide South Australia 5015	Phone + 61 8 8447 6711 Fax + 61 8 8447 8143 Email: adelaide@mcaship.com.au www.mcaship.com.au	All Ports

Monson Agencies Australia Pty Ltd 113 Lipson Street PO Box 3133, Port Adelaide South Australia 5015	Phone + 61 8 8341 2450 Fax + 61 8 8341 1495 Email: adelaide@monson.com.au www.monson.com.au	All Ports
NYK Line (Australia) Pty Ltd 296 St Vincent Street Port Adelaide South Australia 5015	Phone + 61 8 8447 3066 Fax + 61 8 8240 0967 Email: nykship_adelaide@oc.nykline.com www.nykline.com	All Ports
Simpson Shipping Agencies 3A Park Terrace PO Box 111, Wallaroo South Australia 5556	Phone + 61 8 8823 2553 Fax + 61 8 8823 2553 Email: simpsonshipping@bigpond.com	Wallaroo
Southern Wharf Services C/- ABB Grain Ltd 124-130 South Terrace PO Box 1169, Adelaide South Australia 5001	Phone + 61 8 8211 7199 Fax + 61 8 8231 1249 Email: abb@abb.com.au www.abb.com.au	All Ports
Thevenard Shipping Agency 103 Thevenard Road, Ceduna South Australia 5690	Phone + 61 8 8625 2085 Fax + 61 8 8625 2820 Email: thevshp@tpg.com.au	Thevenard
Wilhelmsen Ship Services 111 Lipson Street, Port Adelaide South Australia 5015 1 Patterson Street, Whyalla South Australia	Phone + 61 8 8341 0466 Fax + 61 8 8341 0506 Email: craig.hoffmann@wilhelmsen.com www.wilhelmsen.com Phone + 61 8 8644 0911	Port Adelaide All ports

5 Port Charges

Flinders Ports
SOUTH AUSTRALIA

Cargo Service Charges

Bulk Cargo

	Unit	Ex GST ($AUD)	Inc GST ($AUD)
Salt	Tonne	1.40	1.540
Gypsum	Tonne	1.40	1.540
Limestone	Tonne	1.40	1.540
Dolomite	Tonne	1.40	1.540
Grain	Tonne	1.72	1.892
Flour	Tonne	1.83	2.013
Liquids	Kilolitre	4.72	5.192
All other products	Tonne	3.41	3.751

Other Non-Containerised Cargo

	Unit	Ex GST ($AUD)	Inc GST ($AUD)
Live Sheep	Each	0.2655	0.29205
Live Goats	Each	0.2655	0.29205
Live Cattle	Each	1.85	2.035
Bagged Grain	Tonne	1.83	2.013
Bagged Flour	Tonne	1.83	2.013
All other Products	Tonne or cubic metre whichever is greater	3 41	3 751

Motor Vehicles Completely Built

	Unit	Ex GST ($AUD)	Inc GST ($AUD)
Volume <10m^3	Each	21.83	24.013
Volume 10m^3 < 15m^3	Each	31.52	34.672
Volume > 15m^3	Each	50.91	56.001

Containerised Cargo

	Unit	Ex GST ($AUD)	Inc GST ($AUD)
20' Container	Container	64.46	70.906
40' Container	Container	118.22	130.042
Empty Container	Container		

Channel Levy (Levies apply to Port Adelaide only)

	Unit	Ex GST ($AUD)	Inc GST ($AUD)
Grain Levy Port Adelaide	Tonne	0.3690*	0.40590*
Grain Levy Port Adelaide (applicable from 1st January 2009)	Tonne	0 3845	0 42295
20' Container Levy	Container	5.335	5.869
40' Container Levy	Container	10.67	11.737

* ***This rate will increase from the 1st January 2009***

Notes on Cargo Service Charges

- Where the Cargo Service Charge is shown in the list as payable on the mass tonnes it shall be calculated on the gross mass tonnes of the goods
- Mass or volume Cargo Service Charges will be levied on mass tonnes or cubic metres whichever is the greater

The scheduled rates represent the standard port charges compliant with statutory requirements as at publication. Potential port users may direct any further queries in relation to scheduled standard and miscellaneous port charges to the Business Development Unit, Flinders Ports, contact +61 8 8447 0611 or email flindersports@flindersports.com.au

Harbour Service Charges

Port Adelaide (includes mooring)	Ex GST ($AUD)	Inc GST ($AUD)
Base	3,151.91	3,467.101
Plus charge per GRT per hour at berth	0.0052	0.00572

Other Ports (includes mooring)	Ex GST ($AUD)	Inc GST ($AUD)
Base	2,709.42	2,980.362
Plus charge per GRT per hour at berth	0.0050	0.00550

State Trader

Tonnage Per Vessel		Ex GST ($AUD)	Inc GST ($AUD)
>40 GRT and <50 GRT		93.59	102.949
>50 GRT and <100 GRT		148.02	162.822
>100 GRT and <200 GRT		226.02	248.622
>200 GRT and <500 GRT	Base	226.02	248.622
	Plus charge per GRT	0.6516	0.71676
>500 GRT and <1000 GRT	Base	427.82	470.602
	Plus charge per GRT	3.41	3.751
>1000 GRT	Charge per GRT	6.44	7.084

Fishing Vessels		Ex GST ($AUD)	Inc GST ($AUD)
>40 GRT and <50 GRT		140.13	154.143
>50 GRT and <100 GRT		221.50	243.650
>100 GRT and <200 GRT		338.34	372.174
>200 GRT and <500 GRT	Base	338.34	372.174
	Plus charge per GRT	0.9729	1.070
>500 GRT and <1000 GRT	Base	640.45	704.495
	Plus charge per GRT	4.98	5.478
>1000 GRT	Charge per GRT	9.61	10.571

Port Lincoln Fishing Industry Facilities Maintenance Charge	Ex GST ($AUD)	Inc GST ($AUD)
<50 GRT (quarterly charge)	375.00	412.500
>50 GRT <100 GRT (quarterly charge)	500.00	550.000
>100 GRT <200 GRT (quarterly charge)	750.00	825.000
>200 GRT <500 GRT (quarterly charge	1,000.00	1,100.000
>500 GRT <1000 GRT (quarterly charge	1,250.00	1,375.000
>1000 GRT (quarterly charge)	2,500.00	2,750.000

Pilotage Charges

All Ports	Ex GST ($AUD) A	B	C
	2,239.60	1,444.54	1,203.79
	Inc GST ($AUD)		
	2,463.560	1,588.996	1,324.164

Pilotage charges movement details
A: Boarding Station or Anchorage to or from Berth
B: Boarding Station to or from Anchorage
C: Removal from one Berth to another in a harbour and warping along a wharf with a pilot in attendance

Spencer Gulf Pilotage	Ex GST ($AUD)	Inc GST ($AUD)
	6,600.00 *	7,260.000 *

Mobilisation of Pilot	Ex GST ($AUD)	Inc GST ($AUD)
Ardrossan		
Road	281.00	309.100
Additional: Detention Away from Station	244.00	268.400
Pt Bonython		
Road	316.00	347.600
Launch	1,879.00	2,066.900
Whyalla		
Road	316.00	
Launch	2,343.00	2,577.300

All Ports (excluding Whyalla)	Ex GST ($AUD)	Inc GST ($AUD)
Cancellation or delay	249 00	273 900
Detention of Pilot	825.00	907.500

Whyalla	Ex GST ($AUD)	Inc GST ($AUD)
Cancellation occurs within 3 hours in working hours or 5 hours out of working hours	220 00	242 000
Cancellation occurs within 1 hour of scheduled pilotage	1,650 00	1,815 000

Special Charges
1: Cancellation or delay of a pilotage service at all ports (excluding Whyalla) will incur a charge of $249 00 per hour or part thereof inc GST $273 900
2: Detention of a pilot at all ports (excluding Whyalla) will incur a charge of $825.00 per pilot per day or portion of a day away from station inc GST $907 500
3: Flinders Ports provides pilotage services at Ardrossan This service is offered in line with existing arrangements with current users of the port If customers require this service the applicable charge can be obtained directly from Flinders Ports

Spencer Gulf Pilotage
*Excludes costs associated with the Pilot Boarding vessel

FLINDERS PORTS PORT CHARGES AS OF 1ST JULY 2008

Navigation Service Charges

All Ports			Ex GST ($AUD)	Inc GST ($AUD)
Base	100%		1,006.20	1,106.820
	Plus charge per GRT		0.1110	0.12210

Diminishing Value			Ex GST ($AUD)	Inc GST ($AUD)
2nd call	Base	75%	754.65	830.115
	Plus charge per GRT		0.0833	0.09163
3rd call	Base	50%	503.10	553.410
	Plus charge per GRT		0.0555	0.06105
4th call	Base	25%	251.55	276.705
	Plus charge per GRT		0.0278	0.03058

Frequent Caller			Ex GST ($AUD)	Inc GST ($AUD)
	Base	230%	2,314.23	2,545.653
	Plus charge per GRT		0.2551	0.28061

State Trader		Ex GST ($AUD)	Inc GST ($AUD)
	Charge per GRT	0.3690	0.40590

Notes on Navigation Service Charges

. 1: A basic rate of $1,006.20 plus $0.1110 per gross tonne per trading voyage within South Australian water applies. There is a 25% reduction for each subsequent call of that one vessel after the first call in a six month period (that is, first call 100%, second 75%, third 50%, fourth 25%, fifth and subsequent ship calls no further charge). There is an option of a one-off up-front payment of 2.3 times the base charge for unlimited calls by the one vessel in a six month period

Rates for interstate traders, for vessels trading totally within the confines of a port and vessels not carrying cargo or passengers for reward will be subject to negotiation

Miscellaneous Charges

Moorings/Unmooring Cancellation Charges ($AUD)

Two basic charges are to apply:

1) Cancellations to events during normal hours where less than three (3) hours prior notice is given

	Ex GST ($AUD)	Inc GST ($AUD)
All ports	606.00	666.600

2) Cancellations to events outside normal hours where less than five (5) hours prior notice is given

	Ex GST ($AUD)	Inc GST ($AUD)
All ports	1,818.00	1,999.800

Notes: Normal hours Port Adelaide are 0730 to 1600 Monday to Sunday. All other ports are 0730 to 1600 Monday to Friday

- A cancellation charge will be imposed:
  - Within normal hours – Less than 3 hours notice
  - Outside normal hours – Less than 5 hours notice
- If a gang is in attendance and no lines have been handled within 2 hours of the ordered time a cancellation charge is incurred
  Cancellation outside of normal hours a charge will be raised to recover the time spent reorganising the roster at the appropriate labour charge out rate

General Labour Charge Rates (Watchman etc) ($AUD)		Ex GST ($AUD)	Inc GST ($AUD)
		Per Hour	*Per Hour*
Monday-Friday Normal Hours	Min charge equal to 3 times hourly rate	44.32	48.752
Monday-Friday Out of Hours	Min charge equal to 4 times hourly rate	81.32	89.452
Saturday	Min charge equal to 4 times hourly rate	81.32	89.452
Sunday	Min charge equal to 4 times hourly rate	101.68	111.848

Power – Commercial Ships and Property Related ($AUD)

Charges are based on electricity charges billed to Flinders Ports per kilowatt-hour

Note. Where connections are made to all vessels on a call-out basis, the appropriate labour rates will apply

Water (fresh) ($AUD)

	Ex GST ($AUD)	Inc GST ($AUD)
Per kilolitre	1.33	N/A

Note: Where connections are made to all vessels on a call out basis, the appropriate labour rates will apply.

Miscellaneous Charges

Garbage Disposal ($AUD)

Standard charges are to apply for garbage collection whenever a ship has a garbage service at the following ports

	Ex GST ($AUD)	Inc GST ($AUD)
Port Adelaide: All Waste per visit per bin	41.00	45.100
Port Pirie: Quarantine Waste per visit per bin	76.00	83.600
Port Pirie: Coastal Waste per visit per bin	46.00	50.600
Port Lincoln: Quarantine Waste per visit per service	583.00	641.300
Port Lincoln: Coastal Waste per visit per service	357.00	392.700
Thevenard: Quarantine Waste per visit per service	496.00	545.600
Thevenard: Coastal Waste per visit per service	357.00	392.700

Motor Vehicle Site Occupation Fee – Port Adelaide	Ex GST ($AUD)	Inc GST ($AUD)
Import Vehicles only (per cubic metre) – First 3 days	1.35	1.485
Storage charges:		
Import Vehicles only (per vehicle per day – Days 4-10	20.00	22.000
Import Vehicles only (per vehicle per day) – Days 11+	50.00	55.000

Survey Services ($AUD)	Ex GST ($AUD)	Inc GST ($AUD)
Draft Survey		
First Survey	990.00	1,089.000
Additional Surveys	550.00	605.000
Hold Inspection		
First Hour of Inspection	330.00	363.000
Additional charge per hour	110.00	121.000

6 General Information

Flinders Ports
SOUTH AUSTRALIA

Quick Contacts

Flinders Ports

Flinders Ports
Level 1, 296 St Vincent Street,
Port Adelaide
South Australia 5015
General Phone (08) 8447 0611
General Fax (08) 8447 0606

Client Services Officer / Marine Traffic
Phone (08) 8447 0623
Fax (08) 8447 0603

Duty Pilots – Regional Ports
Thevenard 0424 625 002 or 0419 804 248
Port Lincoln 0407 600 734
Port Pirie 0419 803 057
Whyalla 0438 834 939

Signal Station
Phone (08) 8447 0696
Fax (08) 8248 1623

Business Development
Phone (08) 8447 0611
Fax (08) 8447 0605

HydroSurvey Australia
Phone 1800 060 450
Fax (08) 8447 0606

Tug Agents

Port Adelaide & Port Giles
Svitzer
4 Victoria Road, Birkenhead
South Australia 5015
Phone (08) 8449 8466
Fax (08) 8449 1149

Port Lincoln
Port Lincoln Tugs Pty Ltd
Phone (08) 8682 2654
Mobile 0428 256 644

Port Pirie
Port Lincoln Tugs Pty Ltd
Phone (08) 8240 4096
Mobile 0420 962 072

Wallaroo
Barry Taylor Agencies
Phone (08) 8823 3700
Mobile 0417 863 755

Thevenard
Port Lincoln Tugs Pty Ltd
Phone (08) 8625 7051
Mobile 0400 402 241

Stevedores

Capital Stevedoring
PO Box 946, Port Pirie
South Australia 5540
Phone (08) 8632 2708
Fax (08) 8363 0803

DP World Adelaide Pty Ltd
PO Box 207, Port Adelaide
BC 5015
Phone (08) 8248 9300
Fax (08) 8248 9370

P&O Ports Ltd
Berth 19, Ocean Steamers
Road, Port Adelaide
South Australia 5015
Phone (08) 8440 3900
Fax (08) 8447 3183 or
(08) 8241 0707

Southern Wharf Services an ABB Grain Ltd Company
124-130 South Terrace
Adelaide, South Australia
5000

Port Adelaide
Phone (08) 8447 3695
Fax (08) 8447 3164

Port Giles
Phone (08) 8852 8135
Fax (08) 8852 8088

Port Lincoln
Phone (08) 8683 1189
Fax (08) 8683 1120

Port Pirie
Phone (08) 8632 2805
Fax (08) 8625 3215

Thevenard
Phone (08) 8625 3369
Fax (08) 8625 3215

Wallaroo
Phone (08) 8823 2238
Fax (08) 8823 3125

Toll Stevedoring
Berth 29
Port Adelaide
South Australia 5015
Phone (08) 8240 2971
Fax (08) 8240 5670
A/Hours 0438 092 732

Bulk Handling

P&O Ports Ltd
Berth 19, Ocean Steamers Road
Port Adelaide
South Australia 5015
Phone (08) 8440 3900
Fax (08) 8447 3183 or
(08) 8241 0707

ABB Grain Ltd
124-130 South Terrace
Adelaide, South Australia
5000

Port Adelaide
Phone (08) 8447 3695
Fax (08) 8447 3164

Port Giles
Phone (08) 8852 8135
Fax (08) 8852 8088

Port Lincoln
Phone (08) 8683 1189
Fax (08) 8683 1120

Port Pirie
Phone (08) 8632 2805
Fax (08) 8625 3215

Thevenard
Phone (08) 8635 3369
Fax (08) 8625 3215

Wallaroo
Phone (08) 8823 2238
Fax (08) 8823 3125

Customs and Quarantine

Australian Customs Service
220 Commercial Road
Port Adelaide
South Australia 5015
Phone (08) 8447 9211
Fax (08) 8447 9208
National Customs Watch
Freecall 1800 061 800

Australian Quarantine and Inspection Service
Export Park
Sir Donald Bradman Drive
Adelaide Airport
South Australia 5950
Phone (08) 8201 6000
Fax (08) 8201 6111

Tidal Predictions for Standard Ports

Notes

1) Tide predictions are not included in this Port User Guide. For tide predictions, please refer to the National Tidal Centre, Bureau of Meteorology website at; www.ntf.flinders.edu.au

2) The time zone is -0930 (Central Standard Time).

3) 0000 hrs is midnight, 1200 hrs is noon

4) Caution: Daylight saving operates in South Australia from 2am (SA Standard Time) on 28 October 2007 until 3am (SA Summer Time) on 06 April 2008. Daylight Saving recommences at 2am on 05 October 2008 (SA Standard Time) and continues to April 2009. During these periods times shown should be adjusted to Central Summer Standard Time i.e add 1 hour to all times shown.

5) Heights are referred to the datum of the largest scale plan of each place.

6) At some locations the Chart Datum on which the tide predictions are based has changed in previous years. See page 6.10 for more information

7) To find the height of the tide at times between high and low water, see page 6 7

8) All material is supplied in good faith and is believed to be correct. It is supplied on the condition that no warranty is given in relation thereto, that no responsibility or liability for errors or omissions is, or will be, accepted and that the recipient will hold the **Bureau of Meteorology, National Tidal Centre, Department for Transport, Energy and Infrastructure** or **Flinders Ports** free from all such responsibility and from all loss or damage incurred as a consequence of any error or omission.

9) Any enquiries relating to tide information can be forwarded to Greg Pearce, Flinders Ports Tides Officer, + 61 8 8447 0657 or email pearce.greg@flindersports.com.au

Moon Phases

New Moon		First Quarter		Full Moon		Last Quarter	
Jan	8	Jan	16	Jan	22	Jan	30
Feb	7	Feb	14	Feb	21	Feb	29
Mar	8	Mar	14	Mar	22	Mar	30
Apr	6	Apr	13	Apr	20	Apr	28
May	5	May	12	May	20	May	28
June	4	June	11	June	19	June	26
July	3	July	10	July	18	July	26
Aug	1	Aug	9	Aug	17	Aug	24
Aug	31	Sep	7	Sep	15	Sep	22
Sep	29	Oct	7	Oct	15	Oct	21
Oct	29	Nov	6	Nov	13	Nov	20
Nov	28	Dec	6	Dec	13	Dec	19
Dec	27						

Tidal Predictions for Standard Ports

Tide predictions are computed by accurate methods, but it must be borne in mind that exact agreement of the predicted with actual time and height is unusual.

The variable effects of wind and atmospheric pressure cannot be predicted, especially for a locality like Port Adelaide, where the meteorological conditions can have a large effect on the tide. Nevertheless, the predictions will be sufficiently accurate for all practical purposes.

The following remarks will be of service in estimating the meteorological effect up on tides:

- *Sea level rises as the barometer falls, about 0.1m for every 7 hectopascals*
- *Sea level falls as the barometer rises, about 0.1m for every 7 hectopascals.*

The wind also produces a considerable effect upon the tides, especially upon the height, but it is difficult to give any general rule for the effect. An easterly wind is generally associated with a high barometer, and a westerly wind with a low barometer. The effect is that with easterly winds and a high barometer the tides are lower. Westerly winds and a low barometer has the opposite effect

The shape of the two gulfs and Investigator Strait also contribute to the wind effects. At Port Adelaide, north westerly winds cause the highest tides, raising the sea level up to 1 metre above normal, while south easterly winds depress it as much as 0.5m.

In the northern part of Spencer Gulf the most marked weather effects on the tide occur with the passage of a deep depression across the Southern Ocean. As the barometer starts falling and with the onset of northerly winds the tides are below prediction, but as the wind backs to the north west, an increase in level occurs, with a gradual build-up if the wind remains steady

A strong gusty north westerly wind, with such a depression, backing to the west south west at about the time of low water, will cause a storm surge of maximum amplitude, and heights may be expected from 1m to 2m above prediction. These high levels will continue until the barometer starts to rise, and the wind backs rapidly to the south east within 12 hours, and with a rapidly rising barometer the tides return to normal (or below) in about that time

Thevenard - Caution

Easterly winds lower sea level by 0.5m to 1m, and low waters at spring tides often fall below datum in such conditions.

EXTRA TIDES FOR SOUTH AUSTRALIA – 2008

OUTER HARBOR

Month	Day	Time	Ht(m)
Feb	17	0304	1 39
		0437	1 40
Mar	17	0127	1.26
		0515	1 47
Apr	15	0136	1.23
		0515	1 38
Aug	27	0726	1 69
		1117	1.60
Sep	10	1440	1 46
		1514	1.46
	24	1310	1 31
		1654	1.48
Oct	9	1437	1.29
		1557	1 29
	23	1317	1.19
		1708	1 33

PORT LINCOLN

Month	Day	Time	Ht(m)
Feb	18	1814	0.78
		1902	0 78
Mar	16	0003	1.04
		0107	1 05
Apr	11	0154	0.79
		0207	0.79
Sep	11	0600	0.94
		0644	0 94

PORT GILES

Month	Day	Time	Ht(m)
Mar	17	0058	1 17
		0426	1.30
Apr	15	0112	1 15
		0422	1.22

PORT PIRIE

Month	Day	Time	Ht(m)
Oct	23	1619	1 60
		1704	1 60

WALLAROO

Month	Day	Time	Ht(m)
May	16	0100	0 87
		0244	0 87
	31	0014	0 90
		0237	0 92
Sep	20	1414	0 61
		1837	0 78

WHYALLA

Month	Day	Time	Ht(m)
May	1	0011	1 62
		0336	1 72
	15	0121	1 43
		0252	1 44
Oct	8	1813	1 14
		2105	1 16
	22	1730	1 16
		1827	1 16

EXTRA TIDES FOR SOUTH AUSTRALIA – 2008

THEVENARD

Month	Day	Time	Ht(m)
Jan	5	1307	0.82
		1528	0.85
	17	0605	0.76
		0728	0.77
	18	1813	1.25
		2045	1.15
Mar	1	2109	1.16
	2	0116	1.19
◖	30	1752	1.21
		1956	1.23
	31	0101	1.10
		0235	1.11
Apr	10	1958	0.93
		2239	1.00
		2339	1.00
	11	0230	1.09
◖	28	1705	1.30
		1922	1.34
	29	0049	0.94
		0345	1.09
	30	0216	0.88
		0439	0.94
May	9	1924	1.14
		2025	1.15
	10	1853	1.14
		2129	1.25
	11	0132	0.92
		0353	1.00
◗	12	0234	0.91
		0452	0.97
	13	0326	0.88
		0616	0.97
	27	1440	1.43
		1612	1.43
◖	28	1321	1.33
		1609	1.23
	29	0520	1.19
		0845	0.97

Month	Day	Time	Ht(m)
May	30	0651	1.18
		0818	1.16
Jun	8	1903	1.17
		2025	1.19
	9	1916	1.09
		2123	1.14
	10	1949	1.03
		2159	1.07
◗	11	2051	1.01
		2144	1.01
	15	0350	0.87
		0406	0.87
	27	1630	1.10
		1942	1.26
	28	0922	1.18
		1241	1.38
	29	0714	1.38
		0837	1.37
Jul	8	2219	0.87
		2334	0.86
	15	0323	0.99
		0557	0.93
	27	1749	0.83
		2010	0.90
	28	2207	0.91
	29	0111	0.84
Aug	25	1943	0.66
		2038	0.66
	27	0450	1.07
		0650	1.05
Sep	25	0125	1.07
		0621	0.87
Oct	8	1301	1.03
		1501	1.06
	19	1001	0.90
		1134	0.88

Month	Day	Time	Ht(m)
Oct	22	1834	0.71
		2024	0.68
	24	0111	1.10
		0606	0.80
Nov	6	0527	1.13
◗		0724	1.15
	7	1337	0.76
		1655	0.96
	8	1852	0.91
		1930	0.91
	9	1533	0.59
	10	0013	1.41
	18	0644	0.98
		0910	1.08
	19	1350	0.74
		1659	0.94
◖	20	1433	0.74
		1756	0.96
	21	1916	1.01
		2148	0.95
	22	0633	0.81
		1048	1.07
Dec	6	0500	1.09
◗		0719	1.14
	7	1757	1.16
		2104	0.98
	18	0711	0.84
		0929	0.91
◖	19	1028	0.87
		1310	0.75
	20	1125	0.81
		1331	0.77
	22	0959	0.73
		1005	0.73
	24	1559	0.77
		1730	0.76

Tidal Definitions

Chart Datum
A permanently established surface from which tide heights or chart soundings are referenced, usually I.S.L.W. and is the zero level of tide heights

Dodge Tide
The period when there is one small tide only, or the level remains constant for approximately one whole day

Duration
The difference in time between successive high and low waters.

High Water
The highest level reached by the surface of the sea in one oscillation

High Water Full and Change
The interval of time between the transit (upper or lower) of the moon and the next high water at a given place (Also known as Lunidtidal interval).

Highest Astronomical Tide (H.A.T.)
The highest level of tide that can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions. This is not the extreme level that can be reached as storm surges can cause considerably higher levels to occur

Indian Spring Low Water (I.S.L.W.)
The lowest level, for most practical purposes, which the tide falls Only in exceptional circumstances will the tide fall lower

Low Water
The lowest level reached by the sea in one oscillation.

Lowest Astronomical Tide (L.A.T.)
The lowest level of tide that can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions.

Mean Lower Low Water (M.L.L.W.)
The mean of the lower of the two daily low waters over a period of time (preferably 19 years). Applicable in mixed and diurnal waters

Mean Higher High Water (M.H.H.W)
The mean of the higher of the two daily high waters over a period of time (preferably 19 years) Applicable in mixed and diurnal waters

Mean High Water Springs (M.H.W.S.)
The level that is the average of all the twice-daily high tides at spring periods Corresponding levels exist for neap tides.

Mean Low Water Springs (M.L.W.S.)
The level that is the average of all the twice-daily low tides at spring periods. Corresponding levels exist for neap tides

Mean Sea Level (M.S.L.)
The average level of the surface of the sea over a long period of time in all stages of oscillation, or the average level which would exist in the absence of tides

Mean Tide Level
The average of the levels of all high and low waters.

Neap Tide
The tides which happen near the first and last quarter of the moon, when the difference between high and low water is less than at any other part of the month They are opposed to spring tides

Flinders Ports Local Datum
An arbitrary Flinders Ports South Australia datum which is nominally set to 30 metres below chart datum

Range
The difference between the levels of successive high and low waters

Slack Water
The period of negligible horizontal movement which occurs when the direction of movement is being reversed

Spring Tide
The tides which happen at, or soon after, the new or full moon, which rises higher than common tides Spring tides have the greatest range

Tidal Streams
The periodic horizontal oscillations of the sea

Tides
The periodic vertical oscillations of the sea

CALCULATION FOR FINDING THE HEIGHT OF TIDE AT TIMES BETWEEN HIGH AND LOW WATER

Example 1 – Standard Port

Wallaroo, 27th December, 2008 at 0800 hrs CSST (0700 hrs CST)

	H m		Metres
Time of nearest LW	12:37	Height of nearest LW	0 28
Time of nearest HW	04:09	Height of nearest HW	1.69
Duration of Rise or Fall	***08:28***	***Range of Tide***	***1.41***
Time at which Height is required	07:00	Height of nearest HW or LW	1 69
Time of nearest HW or LW	04:09	Correction (See notes below)	-0 40
Interval from H or LW	***02:51***	***Height of tide at 0700 hrs (CST)***	***1.29***

INSTRUCTIONS

1 Enter the table with the Duration of Rise or Fall which most nearly agrees with the actual value, and on that horizontal line find the time from the nearest High or Low water which most nearly agrees with the actual interval

2 The correction sought is in the vertical column in the lower half of the table, on the line with the Range of Tide

3 When the nearest tide is High Water, subtract the correction

4 When the nearest tide is Low Water, add the correction.

The resulting height must be regarded as approximate only, especially in the case of Secondary Ports

TABLE A

HEIGHT OF TIDE AT TIMES BETWEEN HIGH AND LOW WATER

Duration of rise or fall	INTERVAL – FROM THE NEAREST HIGH OR LOW WATER																	Duration of rise or fall
H m	H m	H m	H m	H m	H m	H m	H m	H m	H m	H m	H m	H m	H m	H m	H m	H m	H m	H m
3.00	00 07	00 10	00 12	00 15	00 17	00 20	00 22	00 25	00 27	00 30	00 32	00 35	00 37	00 40	00 42	00 45	00 47	3 00
3 20	00 08	00 11	00 13	00 17	00 19	00 22	00 25	00 28	00 30	00 33	00 36	00 39	00 41	00 44	00 47	00 50	00 52	3 20
3 40	00 09	00 12	00 16	00 16	00 21	00 24	00 27	00 31	00 33	00 37	00 39	00 43	00 45	00 49	00 51	00 55	00 58	3 40
4 00	00 10	00 13	00 17	00 20	00 23	00 27	00 30	00 33	00 37	00 40	00 43	00 47	00 50	00 53	00 57	01 00	01 03	4 00
4 20	00 10	00 14	00 18	00 22	00 25	00 29	00 32	00 36	00 39	00 43	00 46	00 50	00 54	00 58	01 01	01 05	01 09	4 20
4 40	00 11	00 15	00 19	00 23	00 27	00 31	00 35	00 39	00 42	00 47	00 50	00 54	00 58	01 02	01 06	01 10	01 14	4 40
5 00	00 12	00 16	00 21	00 25	00 29	00 33	00 38	00 42	00 46	00 50	00 54	00 59	01 02	01 06	01 11	01 15	01 19	5 00
5 20	00 13	00 17	00 22	00 27	00 31	00 36	00 40	00 44	00 48	00 53	00 57	01 02	01 06	01 11	01 15	01 20	01 24	5 20
5 40	00 14	00 19	00 23	00 28	00 33	00 38	00 42	00 47	00 51	00 57	01 01	01 06	01 10	01 15	01 20	01 25	01 30	5 40
6 00	00 15	00 20	00 25	00 30	00 35	00 40	00 45	00 50	00 55	01 00	01 05	01 10	01 15	01 20	01 25	01 30	01 35	6 00
6 20	00 15	00 21	00 26	00 32	00 36	00 42	00 48	00 53	00 59	01 03	01 08	01 13	01 19	01 24	01 29	01 35	01 40	6 20
6 40	00 16	00 22	00 27	00 33	00 39	00 44	00 50	00 56	01 01	01 07	01 12	01 17	01 23	01 29	01 34	01 40	01 45	6 40
7 00	00 17	00 23	00 29	00 35	00 40	00 46	00 52	00 58	01 04	01 10	01 16	01 22	01 28	01 33	01 39	01 45	01 50	7 00
7 20	00 18	00 24	00 30	00 37	00 42	00 49	00 56	01 01	01 07	01 13	01 19	01 25	01 31	01 38	01 43	01 50	01 55	7 20
7 40	00 19	00 25	00 31	00 38	00 44	00 51	00 58	01 04	01 10	01 17	01 23	01 29	01 35	01 42	01 48	01 55	02 01	7 40
8 00	00 20	00 26	00 33	00 40	00 46	00 53	01 00	01 06	01 13	01 20	01 26	01 33	01 40	01 46	01 53	02 00	02 06	8 00
8 20	00 20	00 27	00 34	00 42	00 48	00 56	01 03	01 09	01 16	01 23	01 30	01 36	01 44	01 51	01 58	02 05	02 11	8 20
8 40	00 21	00 28	00 36	00 43	00 50	00 58	01 05	01 12	01 19	01 27	01 33	01 40	01 48	01 56	02 02	02 10	02 17	8 40
9 00	00 22	00 29	00 37	00 45	00 52	01 00	01 08	01 15	01 22	01 30	01 37	01 44	01 52	02 00	02 07	02 15	02 22	9 00
Range	CORRECTION TO HEIGHT																	**Range**
Metres	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	Metres
0.25	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.25
0.50	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.07	0.07	0.08	0.50
0.75	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.07	0.09	0.10	0.11	0.12	0.75
1.00	0.00	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.12	0.13	0.15	0.16	1.00
1.25	0.00	0.01	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.11	0.13	0.15	0.16	0.18	0.20	1.25
1.50	0.01	0.01	0.02	0.02	0.03	0.04	0.06	0.07	0.08	0.10	0.11	0.13	0.15	0.17	0.20	0.22	0.24	1.50
1.75	0.01	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.10	0.12	0.14	0.16	0.18	0.21	0.23	0.26	0.28	1.75
2.00	0.01	0.01	0.02	0.03	0.05	0.06	0.08	0.09	0.11	0.13	0.15	0.18	0.20	0.23	0.26	0.29	0.32	2.00
2.25	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.10	0.12	0.15	0.17	0.20	0.23	0.27	0.29	0.33	0.37	2.25
2.50	0.01	0.02	0.03	0.04	0.06	0.08	0.10	0.12	0.14	0.17	0.20	0.23	0.26	0.29	0.33	0.37	0.41	2.50
2.75	0.01	0.02	0.03	0.05	0.06	0.08	0.11	0.13	0.16	0.18	0.21	0.24	0.28	0.32	0.36	0.40	0.44	2.75
3.00	0.01	0.02	0.03	0.05	0.07	0.09	0.11	0.14	0.17	0.20	0.23	0.27	0.31	0.35	0.39	0.44	0.48	3.00
3.25	0.01	0.02	0.04	0.06	0.07	0.10	0.12	0.15	0.18	0.22	0.26	0.30	0.34	0.38	0.43	0.48	0.52	3.25
3.50	0.01	0.03	0.04	0.06	0.08	0.11	0.13	0.16	0.20	0.23	0.27	0.31	0.36	0.41	0.45	0.51	0.56	3.50
3.75	0.02	0.03	0.04	0.06	0.08	0.11	0.15	0.18	0.21	0.25	0.29	0.34	0.38	0.44	0.49	0.55	0.60	3.75
4.00	0.02	0.03	0.05	0.07	0.09	0.12	0.15	0.19	0.22	0.27	0.31	0.36	0.41	0.46	0.52	0.59	0.64	4.00

TABLE B

ES BETWEEN HIGH AND LOW WATER

M THE NEAREST HIGH OR LOW WATER										Duration of rise or fall
H m	H m	H m	H m	H m	H m	H m	H m	H m	H m	H m
01 07	01 10	01 12	01 15	01 17	01 20	01 22	01 25	01 27	01 30	3 00
01 14	01 16	01 20	01 23	01 26	01 29	01 31	01 34	01 37	01 40	3 20
01 22	01 26	01 28	01 31	01 34	01 38	01 40	01 44	01 46	01 50	3 40
01 30	01 33	01 37	01 40	01 43	01 47	01 50	01 53	01 57	02 00	4 00
01 37	01 41	01 44	01 48	01 51	01 55	01 59	02 03	02 06	02 10	4 20
01 44	01 49	01 53	01 57	02 00	02 04	02 08	02 12	02 16	02 20	4 40
01 52	01 56	02 00	02 05	02 09	02 13	02 18	02 22	02 26	02 30	5 00
02 00	02 04	02 09	02 13	02 17	02 22	02 27	02 31	02 35	02 40	5 20
02 07	02 12	02 17	02 22	02 26	02 31	02 36	02 41	02 45	02 50	5 40
02 15	02 20	02 25	02 30	02 35	02 40	02 45	02 50	02 55	03 00	6 00
02 22	02 29	02 33	02 38	02 43	02 49	02 54	02 59	03 04	03 10	6 20
02 30	02 36	02 41	02 47	02 52	02 58	03 03	03 09	03 14	03 20	6 40
02 38	02 43	02 49	02 55	03 00	03 06	03 12	03 18	03 24	03 30	7 00
02 44	02 51	02 57	03 03	03 09	03 16	03 22	03 28	03 33	03 40	7 20
02 52	02 59	03 05	03 12	03 18	03 24	03 31	03 37	03 43	03 50	7 40
03 00	03 06	03 13	03 20	03 26	03 33	03 40	03 46	03 53	04 00	8 00
03 07	03 14	03 22	03 28	03 34	03 42	03 50	03 56	04 03	04 10	8 20
03 14	03 22	03 30	03 37	03 43	03 51	03 59	04 06	04 12	04 20	8 40
03 22	03 30	03 38	03 45	03 52	04 00	04 08	04 15	04 22	04 30	9 00

ORRECTION TO HEIGHT										Range
M	M	M	M	M	M	M	M	M	M	Metres
0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.13	0.25
0.15	0.16	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.50
0.23	0.25	0.26	0.28	0.29	0.31	0.33	0.34	0.36	0.38	0.75
0.31	0.33	0.35	0.37	0.39	0.41	0.44	0.46	0.48	0.50	1.00
0.38	0.41	0.44	0.46	0.49	0.52	0.55	0.57	0.60	0.63	1.25
0.46	0.49	0.53	0.56	0.59	0.62	0.65	0.68	0.72	0.75	1.50
0.54	0.58	0.61	0.65	0.68	0.72	0.76	0.80	0.83	0.88	1.75
0.61	0.66	0.70	0.74	0.78	0.83	0.87	0.91	0.95	1.00	2.00
0.69	0.74	0.78	0.83	0.88	0.93	0.98	1.03	1.07	1.13	2.25
0.77	0.82	0.88	0.93	0.98	1.03	1.09	1.14	1.19	1.25	2.50
0.85	0.90	0.97	1.02	1.07	1.14	1.20	1.26	1.31	1.38	2.75
0.92	0.99	1.05	1.11	1.17	1.24	1.31	1.37	1.43	1.50	3.00
1.00	1.07	1.14	1.20	1.27	1.34	1.42	1.48	1.55	1.63	3.25
1.08	1.15	1.23	1.30	1.37	1.45	1.53	1.60	1.67	1.75	3.50
1.15	1.23	1.32	1.39	1.46	1.55	1.64	1.71	1.79	1.88	3.75
1.23	1.32	1.40	1.48	1.56	1.65	1.74	1.83	1.91	2.00	4.00

"VT-2"

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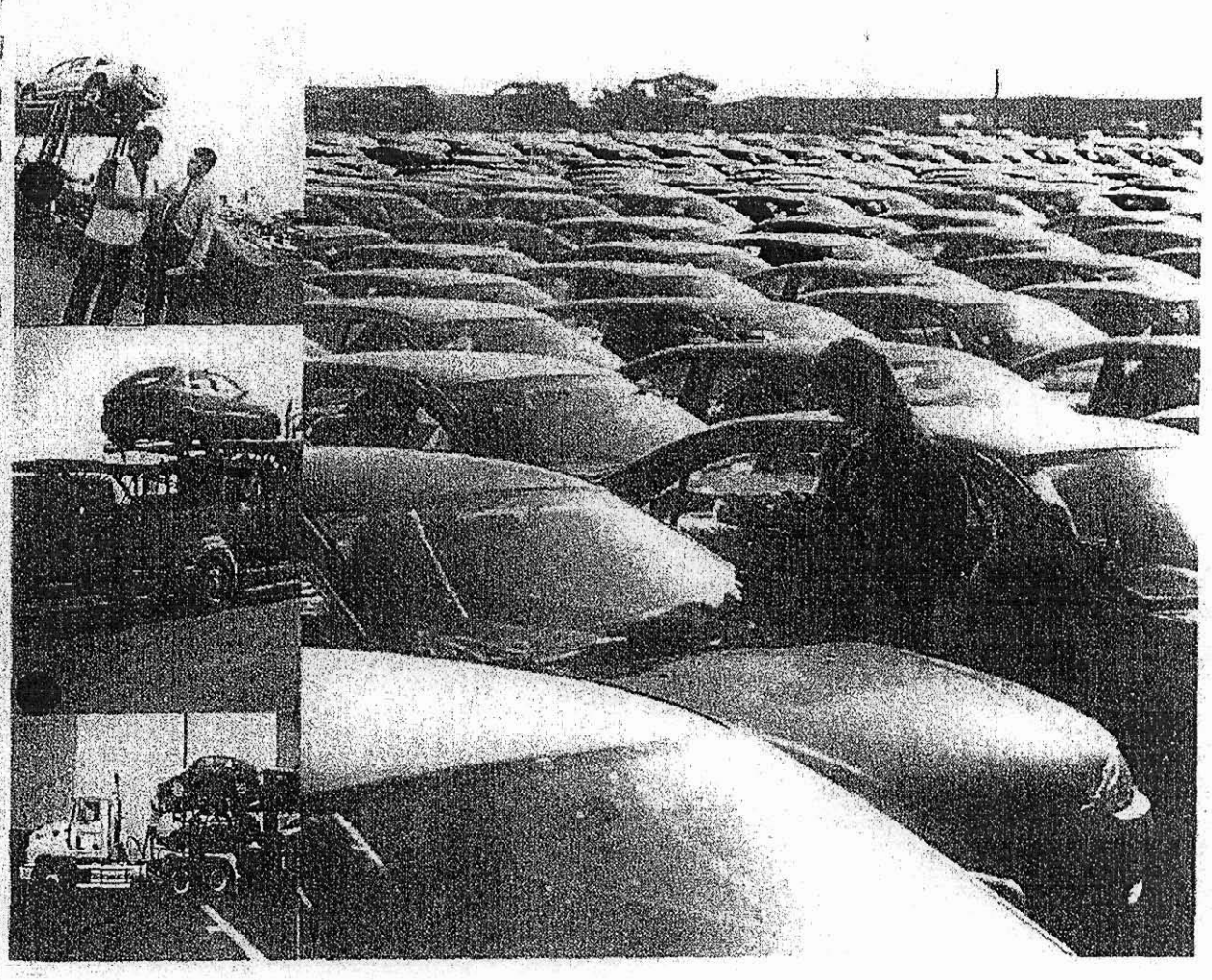
Proposal to Build and Operate a Motor Vehicle Terminal at Adelaide Outer Harbour

Australian Automotive Terminals



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Australian Automotive Terminals

AAT – Outer Harbour
Development Overview

Introduction

Australian Automotive Terminals is proposing to lease land from Flinders Ports Pty Ltd to establish, develop and manage a motor vehicle terminal for the import and export of automotive vehicles through the port of Adelaide.

The recent export success of Mitsubishi and General Motors Holden is placing pressure on the existing facility and with export growth set to continue, the existing facility does not have adequate capacity to manage the anticipated export and import trade volumes.

This paper outlines AAT's development proposal for the port

Staging

Australian Automotive Terminals proposes a two-staged development of the Outer Harbour car precinct. The steges are set out on the attached preliminary general arrangement plans Preliminary traffic flow plans have also been developed for each stage and are also enclosed with this submission

The existing facility has grown haphazardly and the ground improvements, particularly in the import area, are of low quality. The capacity of the export area is insufficient to meet the predicted industry demands and AAT propose to implement a staged development to improve the capacity and service quality of the facility.

The staging proposal is cognisant of the proposal to move the current livestock stevedoring away from Outer Harbour as well as the ongoing requirements to berth passenger ships at Berth Two

Stage one is effectively a consolidation of port land, which is currently a combination of access roads, common user and leased sites Utilising effectively the same footprint that is currently occupied by P&O Ports, Patrick Autocare and berth 3, a significant improvement in capacity is achieved. This improvement is mostly achieved through removing redundant infrastructure such as, internal fences, sheds, kerbing and the like as well as paving across the existing undeveloped areas

As a result of the proposed modification, changes are required to the traffic flows in the port for both the passenger and the live stock ships. Stage one proposes the development of a single entry and exit point for berths one and two at the existing Port entry gate at the seaward end of the site, with the existing port exit road being closed and incorporated into the car facility.

Stage Two is based upon shed one being demolished and the livestock vessels being stevedored at an alternative port precinct. The passenger ships will continue to be serviced at the site and it is proposed that a portion of the downstairs of the passenger building will be used as the vehicle processing centre and part of the first level office space leased for administration.

The following tables summarise the approximate capacities of the two stages:

Lease Areas (m2)

Land Areas	Stage One	Stage Two
Export Area	65,000	85,000
Overflow, RFT and Facilities	10,000	7,000
Import	20,000	20,000
Heritage and misc. infrastructure	2000	0
TOTAL SITE AREA	97,000	112,000
Overflow Area (common user)	-	6,000

Capacity Data

Storage Capacities	Stage One	Stage Two
Export Area	3,800	5,000
Overflow and RFT	400	350
Import	1,150	1,150
Heritage and misc. infrastructure	0	0
Total Car Storage Capacity	5,350	6,500
Overflow Area		350

DEVELOPMENT WORKS SUMMARY:

Stage One

a) General

- New secure truck lock Entry and Exit points
- Electrified Boundary Fencing - Continuity
- Wharf Access Gates as required
- Modification of existing entry port control gate to entry/exit gate
- Intersection modifications for two way traffic at roundabout

b) Export Facility:

- Relocate P&O Ports internal offices and security buildings
- Demolish internal fences
- Remove Port "Exit Gate"
- Shade mesh to remainder of P&O Ports area
- Integrate exit road into pavements
- Demolish redundant port sheds on Autocare lease
- Relocate Autocare wash bay
- Construct pavements to undeveloped Autocare lease hold
- Tidy up pavements generally
- Shade cloth to additional export area

c) Import Facility

- Convert garden area to facility car parking
- Remove kerbs and internal fences
- Develop sealed pavements across yard
- Shade mesh to yard area

Stage Two.

a) General

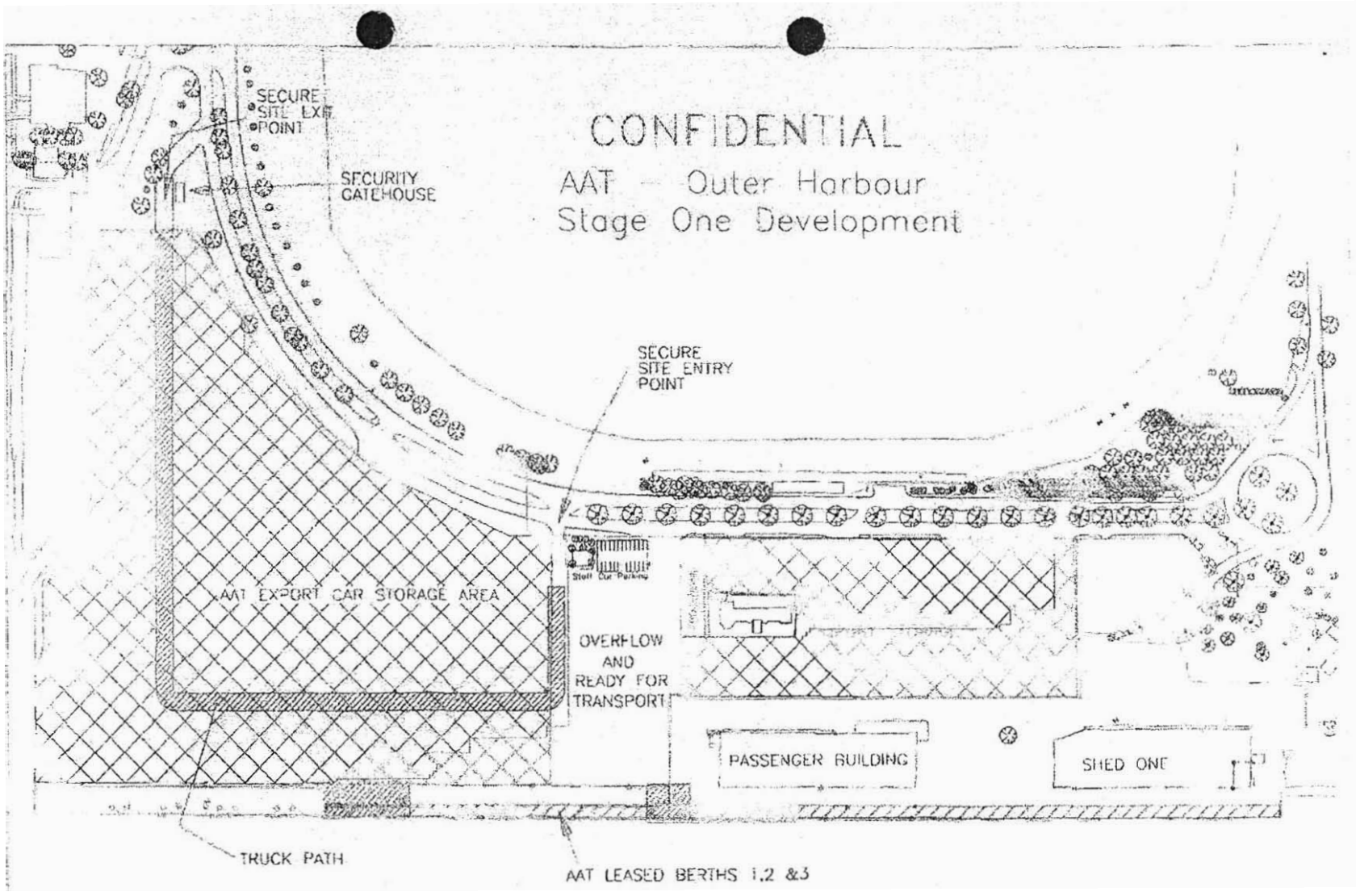
- Demolition of Shed One
- Construction two access roads off existing roundabout
- Removal/relocation of existing trees
- Relocation of port control gate to new entry/exit road
- Relocation of AAT entry Gate
- Occupation of sections of passenger building

b) Export Facility:

- Demolition of offices
- Paving to office area
- Shade mesh to overflow, RFT and office areas

b) Import Facility:

- Pave additional area
- Construct new electrified security fence to boundary
- Construct shade mesh to additional area



Fielder Engineers Pty Ltd

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SCALE 1:1000

DATE 16/1/01

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SIZE A1

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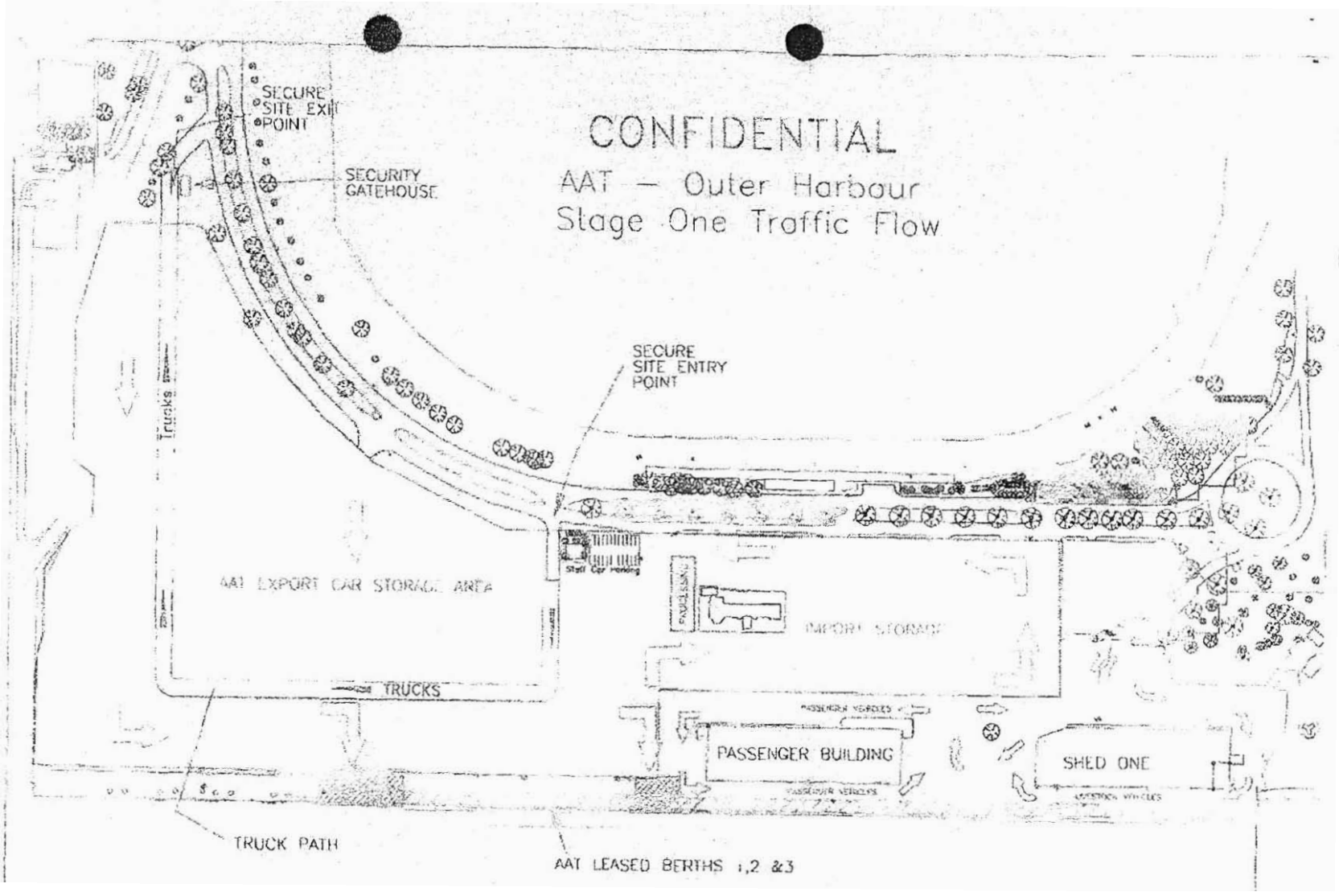
Australian Automotive Terminals
Preliminary General Arrangement Stage
Adelaide Outer Harbour

DRAWING NUMBER P185/SK1/1

SHEET NUMBER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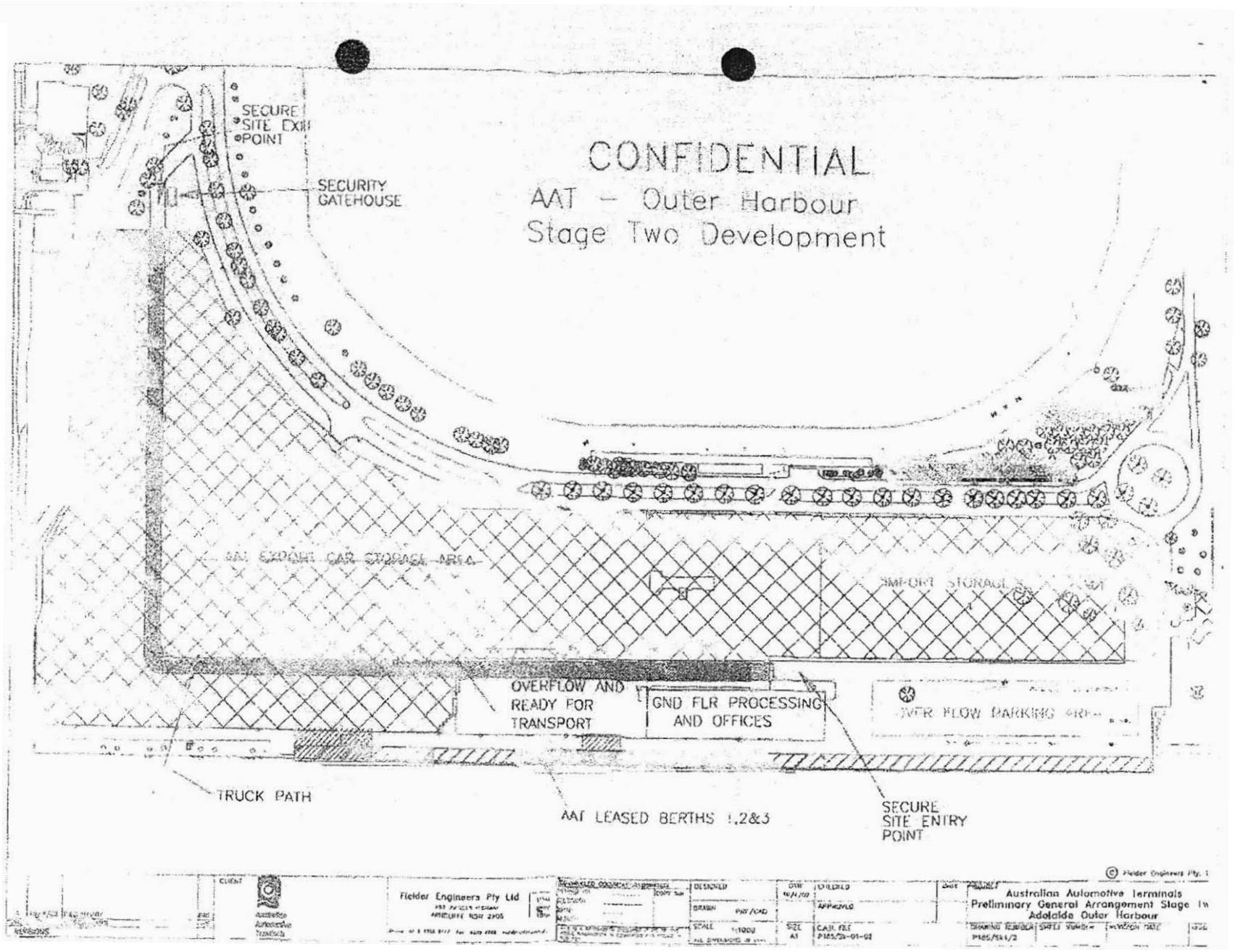
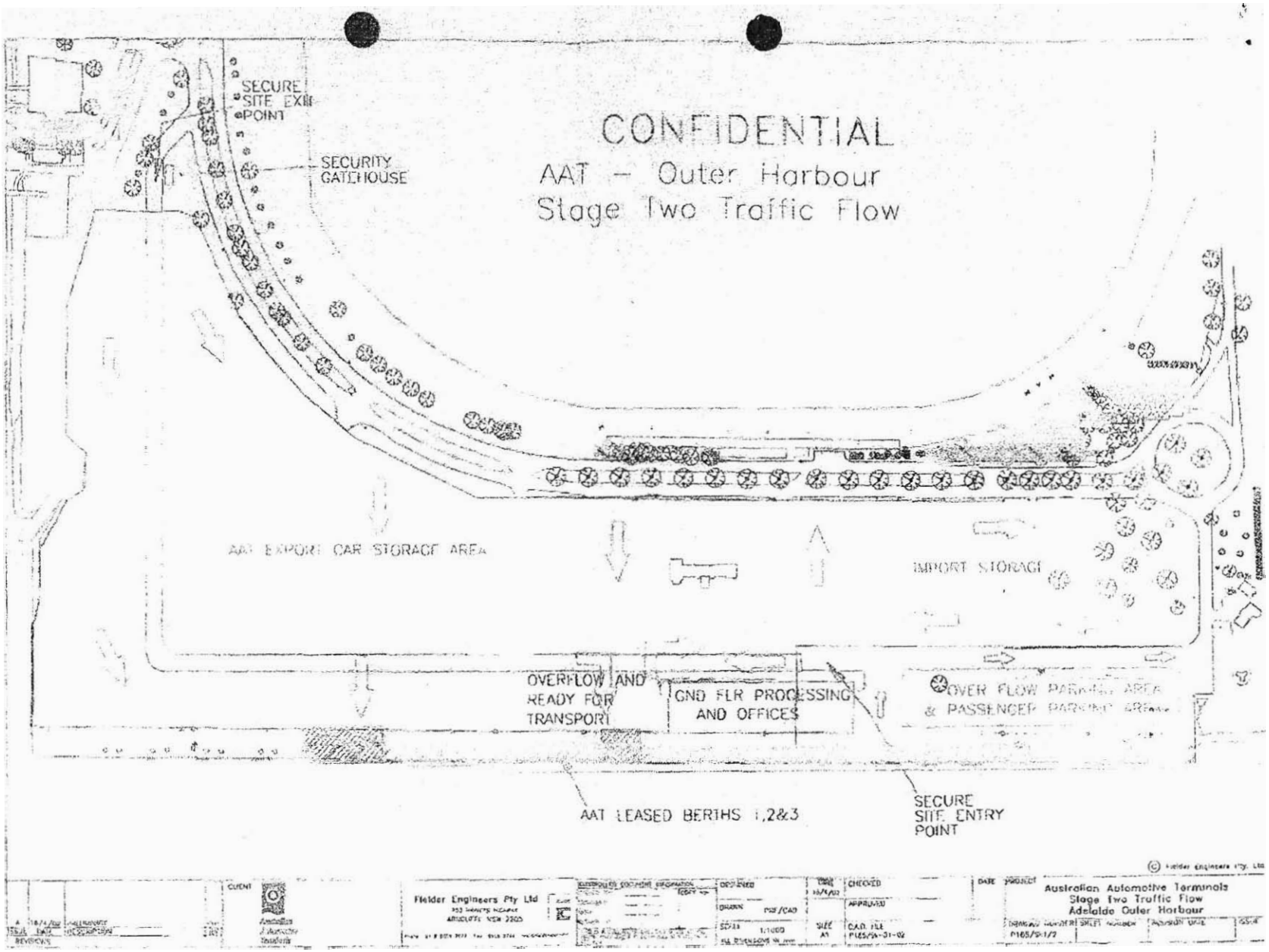
AAT – Outer Harbour
Stage One Traffic Flow
SECURE SITE EXIT POINT
SECURITY GATEHOUSE
SECURE SITE ENTRY POINT
Trucks
AAT EXPORT CAR STORAGE AREA
Staff Car Parking
EXPORT STORAGE
TRUCKS
PASSENGER BUILDING
SHED ONE
TRUCK PATH
AAT LEASED BERTHS 1,2 &3


Fielder Engineers Pty Ltd


Australian Automotive Terminals
Stage One Traffic Flow
Adelaide Outer Harbour


CONFIDENTIAL
AAT – Outer Harbour
Stage Two Development
SECURE SITE EXIT POINT
SECURITY GATEHOUSE
OVERFLOW AND READY FOR TRANSPORT
GND FLR PROCESSING AND OFFICES
TRUCK PATH
AAT LEASED BERTHS 1,2&3
SECURE SITE ENTRY POINT
Fielder Engineers Pty Ltd
Australian Automotive Terminals
Preliminary General Arrangement Stage 1a
Adelaide Outer Harbour


CONFIDENTIAL
AAT – Outer Harbour
Stage Two Traffic Flow
SECURE SITE EXIT POINT
SECURITY GATEHOUSE
AAT EXPORT CAR STORAGE AREA
IMPORT STORAGE
OVERFLOW AND READY FOR TRANSPORT
GND FLR PROCESSING AND OFFICES
OVER FLOW PARKING AREA
& PASSENGER PARKING AREAS
AAT LEASED BERTHS 1,2&3
SECURE SITE ENTRY POINT
Fielder Engineers Pty Ltd
Australian Automotive Terminals
Stage Two Traffic Flow
Adelaide Outer Harbour

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